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## Message Reframing & COVID-19 Safety Precautions

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Message Reframing & COVID-19 Safety Precautions

A thesis submitted in partial fulfillment of the requirement  
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by

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**Message Reframing and COVID-19 Safety Precautions**

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### **Abstract**

Past research found that the personality aspect Orderliness was more strongly associated with conservatism, while Compassion was more strongly associated with liberalism. The present research aimed to examine whether framing COVID-19 safety precautions (about mask wearing, social distancing, and vaccination) with an Orderliness or Compassion focus would make the message more receptive to liberals and conservatives. We hypothesized that reframing the messages to match with the participants' personality and ideological leanings would lead to greater support for the message. In our study ( $N = 679$ ), participants read a COVID-19 safety precaution message with either an Orderliness or Compassion frame for one of the three safety precautions, and completed measures of personality, political orientation, and integrated COVID-19 threat. We found that contrary to our hypotheses, there were no interactions between the personality-reframed messages and political ideology. However, there was a significant political ideology main effect, with liberals generally being more supportive of COVID-19 safety precautions. We also found that Libertarian Independence (LI), a specific type of conservatism, had a significant negative relationship with support for all three types of COVID-19 precautions. As well, those who viewed COVID-19 as a symbolic threat were also more likely to oppose the COVID-19 safety measures, compared to those who viewed COVID-19 as a realistic threat. The present findings contribute to a more comprehensive understanding of how people view and endorse COVID-19 safety precaution measures and how we implement public health messaging in the future.

## **How Ideology and Personality Impact Receptiveness Toward COVID-19 Safety**

### **Precautions**

For over a year, the COVID-19 pandemic has devastated the globe, with the United States being hit particularly hard. Past studies demonstrated that transparent, unified public health messaging was incredibly important when responding to public health crises (Hatcher, 2020; Sauer et al. 2021). However, the United States' disjointed federal response, along with widespread misinformation, has led to the distrust of public health communications and a reluctance to comply with recommended COVID-19 safety measures (Akpan et al., 2021). The country's case numbers clearly demonstrate this; the latest CDC statistics indicated that there have been over 32 million cases in the United States to date, with half a million deaths ("COVID Data Tracker," 2021).

Even early on during the pandemic, individuals' behavior around the virus were more affected by partisanship than public health concerns, especially among Republicans (Clinton et al., 2020). In June of 2020, a Pew Research Center survey found that partisan differences surrounding COVID-19 preventative measures were growing quickly. Views that the pandemic was a major health threat, and that measures such as social distancing decrease the spread of the disease, had partisan gaps of over 20 percent (Field & Tyson, 2020). Other studies have shown that self-identified conservative platforms are less likely to support a range of physical distancing measures (Gollwitzer et al., 2020). These early studies measuring the partisan views of COVID-19 were indicative of a larger problem that public health officials still struggle with now in attempting to control the spread of the virus. It has become increasingly clear that responses to the pandemic have become a partisan issue. In observing the increased partisan divide over the

COVID-19 pandemic's preventative measures, the current work aimed to examine to what extent this divide may be explained through personality and individual differences processes. Doing so would allow for a better understanding of the types of individuals who are more likely to follow COVID-19 safety precautions, as well as their potential motivations to do so.

### **Personality Predictors of Political Ideology**

Numerous studies have shown that differences in political ideology are due in part to differing personality traits (Mondak & Halperin, 2008; Carney et al., 2008, Gerber et al., 2011; Sibley et al., 2012). Using the Big Five model of trait personality, extensive work has demonstrated that political liberalism is most consistently associated with higher levels of Openness to Experience, while conservatism is associated with higher levels of Conscientiousness (Barbaranelli et al., 2007; Carney et al., 2008; Sibley et al., 2012; Xu & Peterson, 2016).

Recent work has shown that each of the Big Five traits can be broken down further into two different aspects for greater specificity and independent predictive power - known as the 'Big Ten' aspects (DeYoung et al., 2007). Work examining these personality aspect-level predictors of political ideology found that liberalism is generally predicted by higher Openness to Experience aspects, as well as the Compassion aspect of Agreeableness and the Withdrawal aspect of Neuroticism. For conservatism, the most consistent aspect-level predictors are the Orderliness aspect of Conscientiousness, as well as the Politeness aspect of Agreeableness and the Assertiveness aspect of Extraversion (Hirsh et al., 2010; Xu et al., 2016; Xu et al., in press; Osborne, Wootton, & Sibley, 2013).

Thus, it appears that on average, liberals tend to be more receptive toward new experiences and ideas, and are also more empathetic and caring, but are also prone to more

internalizing negative emotionality. Conservatives tend to be more organized and structured, as well as more polite and dominant. In our present study, we specifically focused on the Orderliness aspect of Conscientiousness and the Compassion aspect of Agreeableness, as the characteristics of these two traits can more readily be incorporated into messages supporting COVID-19 safety precautions.

### **Reframing Political Messages with Moral Foundations**

Another important notion to consider is how political messages are perceived by people from different ends of the political spectrum. What aspects of a message makes it more persuasive to liberals vs. conservatives? What do people emphasize and value when framing their political opinions? Existing studies found that one factor that individuals consider as important when making political arguments is their own moral values (Jost, 2006; Hirsh et al., 2010). That is, liberals and conservatives differ on what they consider to be important moral foundations when deliberating about issues. Specifically, liberals tend to value Harm and Fairness, whereas conservatives place more emphasis on Authority, Ingroup, and Purity (Graham & Haidt, 2007; Graham, Nosek, & Haidt, 2009). Based on these moral foundations, recent work has shown that by reframing political messages to be consistent with a person's moral values (e.g., emphasizing Purity-related values in a message aimed at conservatives), it enables people to become more receptive and supportive of the message (Xu & Petty, 2021, Feinberg & Willer, 2015; Feinberg & Willer, 2013). This 'moral reframing' effect can even affect very real-life political events. For example, conservatives reading messages that opposed Donald Trump were less likely to support him if the messages were grounded in conservative concerns such as loyalty (Voelkel & Feinberg, 2018). Thus, if messages that appeal to people's moral values aid in reducing the partisan divide of politics, could the same effect be found using personality?

### **The Present Research**

The current study tested whether reframing three different COVID-19 public safety measures (mask-wearing, social distancing, and vaccination) according to personality trait differences would significantly impact the perception of these messages by liberals and conservatives. These arguments are reframed by utilizing two different personality aspects: Compassion, an aspect of Agreeableness associated strongly with liberals; and Orderliness, an aspect of Conscientiousness associated strongly with conservatives. Each of the three supportive arguments is framed with either a Compassion or an Orderliness focus.

We hypothesized that H1) Liberal individuals will demonstrate high support overall for the different types of COVID-19 safety precaution messages compared to conservatives for both the Orderliness and Compassion conditions. We expect the same results for all three messages: mask-wearing, social distancing, and endorsement of vaccines. We also predicted that across the three types of precaution measures, liberal individuals will show greater support for the Compassion messages than the Orderliness messages (H2). Lastly, we predicted that across the three types of precaution measures, conservative individuals will show greater support for the Orderliness messages compared to the Compassion messages (H3).

### **Method**

#### **Participants and procedure**

A total of 723 participants took part in this study. Of the 723 participants, 104 were recruited through social media such as Facebook and Twitter, and free platforms including Survey Circle and Call For Participants. We excluded 27 participants for not completing the study, leaving 77 participants (16 males, 60 females, 1 undisclosed) for analyses. The remaining 619 participants were recruited through the online survey platform Prolific and received a small

payment for their participation. We excluded 17 participants for incomplete data, leaving 602 participants (309 males, 281 females, 12 undisclosed) for analyses. Overall, 679 participants (341 male, 325 female, 13 undisclosed) were included in the data analyses. The age range of the participants was 18 to 93 years ( $M = 36.92$ ,  $SD = 13.78$ ). Data collection took place from November 2020 to March 2021.

Participants were directed to the study materials online. After signing a consent form, participants were randomly assigned to one of six COVID-19 safety precaution messages. Each message argued in support of one of three COVID-19 safety precautions: mask-wearing, social distancing, and becoming vaccinated. Each message was framed to emphasize either Orderliness (i.e., supporting these measures would lead to more order in society) or Compassion (i.e., supporting these measures would lead to more compassion in society). After reading the message, participants rated on a 7-point Likert scale (“Strongly Agree” to “Strongly Disagree”) to what extent they agreed with the argument, the government extending the measure into policy, and whether or not the measure would lead to more compassion or more order in society. Participants then completed measures of Big Five personality, political ideology, and perceived COVID-19 threat. Participants were then debriefed, and Prolific participants were compensated for their time.

## **Materials**

### ***COVID-19 Safety Precaution Messages***

We created brief COVID-19 safety precaution messages supporting mask wearing, social distancing, and vaccination. For each type of safety precaution, the message was framed such that it either emphasized Orderliness or Compassion (for a total of 6 messages). The Orderliness messages focused on how compliance with the safety precautions can help society return to order

and structure more quickly, and how doing so would help things go back to how people were used to. The Compassion messages emphasized how compliance with the safety precautions would lead to increased care and wellbeing in society, and how it would help other people around us (see Appendix for the messages).

### *Personality Measures*

**Big Five personality.** Trait personality was assessed using the Big Five Aspects Scales (BFAS; DeYoung et al., 2007). It consists of 100 self-descriptive statements (e.g., “I keep things tidy”). Using a 5-point Likert scale (“Strongly disagree” to “Strongly agree”), participants indicated their agreement with each statement. The BFAS divides each trait into two aspects.

### *Political ideology measures*

**Conservatism Dimensions.** The Attitude-Based Political Orientation (ABPO) Scale is a 33-item scale measuring three factors of conservatism: Libertarian Independence (LI), Religious Traditionalism (RT), and Ethnic Separateness (ES) (Burton, 2016; Xu et al., 2021). The LI dimension of conservatism is associated with what one would consider ‘fiscal’ conservative issues, including taxation and competitive capitalism. LI also reflects a libertarian outlook, reflected by items assessing support for limited government. The RT dimension is associated with issues that are consistent or inconsistent with Christian religious beliefs, including abortion, stem cell research, and medical euthanasia. The ES dimension is concerned with how differing ethnic and racial groups relate to each other. Participants responded to items assessing each dimension on a 7-point scale from “Strongly disagree” to “Strongly agree.”

**General Political Ideology Measures.** Modeling off of previous studies, we used multiple measures to evaluate different elements of an individual’s general orientation (Xu et al., 2020, Burton et al., 2015). Participants completed the IPIP Liberalism scale, which consists of 10

items (e.g., “I believe laws should be strictly enforced”) that they rated using a 5-point Likert scale (“Strongly Agree” to “Strongly Disagree”) (Goldberg, 1999). Participants then rated how they generally felt about the two dominant political parties (“Politically, I favor the Democratic party”) on a 5-point scale from “Strongly Agree” to “Strongly Disagree.” Finally, participants rated their overall political orientation on a 7-point scale from “Very Conservative” to “Very Liberal.”

### ***COVID Threat Measures***

**Integrated Covid-19 Threat Scale.** We measured participants’ belief that COVID-19 is a threat by using a 10-item scale that assesses perceived symbolic and realistic threats of COVID-19. Realistic threat relates to physical and financial safety of a person, while symbolic threat relates to an individual’s sociocultural identity. Previous findings indicate that realistic threat predicts greater self-reported adherence to public health behaviors (Kachanoff et al., 2020).

## **Results**

For each safety precaution, we averaged together participants’ ratings for items assessing support for the safety precaution to form a composite support measure. To test our hypotheses, we conducted moderation regression analyses examining how the personality emphasis of the message interacted with political ideology to influence support for the COVID-19 safety precautions. In all models, we entered the dummy coded Orderliness vs. Compassion condition variable and the mean-centered political ideology variable as predictors in Step 1, and the interaction between the dummy coded condition variable and political ideology variable in Step 2. We conducted separate analyses for each three COVID-19 precaution messages, and for each general political ideology measure (IPIP Liberalism, party preference, overall political

orientation) (a total of 9 models were conducted). Liberalism scores were calculated using the coding instructions by Goldberg (1999), and party preference was calculated by averaging preference for the Democratic party and the reverse-scored preference for the Republican party.

### **Support for Mask Wearing**

For IPIP liberalism, our analyses found no significant effect for condition,  $F(1, 228) = .01, p = .930$ , or for the interaction,  $F(1, 228) = .57, p = .451$ . Liberalism, however, was found to have a significant effect on mask endorsement,  $F(1, 228) = 54.44, B = .91, SE = .124, p < .001$ , with higher scores on liberalism predicting higher support for mask wearing.

With regard to party preferences, our analyses found no significant effects for condition,  $F(1, 228) = .19, p = .665$ , or for the interaction,  $F(1, 228) = .28, p = .599$ . However, party preference was found to have a significant effect on the endorsement of masks,  $F(1, 228) = 63.36, B = .77, SE = .097, p < .001$ , with greater preference for the Democrats predicting higher support for mask wearing.

With regard to overall political orientation, our analyses found no significant effect for condition,  $F(1, 228) = .09, p = .765$ , or for the interaction,  $F(1, 228) = .06, p = .809$ . Overall political orientation, however, was found to have a significant effect on the endorsement of masks,  $F(1, 228) = 51.60, B = .45, SE = .062, p < .001$ . More liberal individuals were more likely to support mask wearing.

### **Support for Social Distancing**

With regard to IPIP Liberalism, we found no effect for condition  $F(1, 220) = .00, p = .948$ , or for the interaction,  $F(1, 220) = .08, p = .775$ . However, Liberalism was found to have a significant positive effect on social distancing endorsement  $F(1,220) = 18.81, B = 0.57, SE = .131, p < .001$ .

For party preference, we found no effect for condition  $F(1, 220) = .01, p = .937$ , or for the interaction,  $F(1, 220) = .11, p = .736$ . Party preference, however, was found here to have a significant effect on support for social distancing  $F(1,220) = 28.58, B = 0.44, SE = .081, p = < .001$ . Greater preference for the Democrats predicted higher support for social distancing.

For overall political orientation, we found no effect for condition  $F(1, 219) = .05, p = .824$ , or for the interaction,  $F(1, 219) = .27, p = .607$ . However, overall political orientation was found to have a significant effect on social distancing endorsement  $F(1,219) = 32.35, B = 0.34, SE = .060, p = < .001$ , again with more liberal individuals more likely to support for social distancing.

### **Support for Vaccines**

With regard to IPIP Liberalism, we found no effect for the condition  $F(1, 219) = 1.38, p = .241$ , and no effect for the interaction  $F(1, 219) = .01, p = .927$ . Liberalism however was found to have a significant positive effect on vaccine support  $F(1,219) = 25.28, B = 0.66, SE = .131, p = < .001$ .

Our analyses examining party preferences found no effect for the condition  $F(1, 219) = .25, p = .616$ , and no effect for the interaction  $F(1, 219) = .67, p = .415$ . However, party preference was found to have a significant effect on vaccine support,  $F(1,219) = 32.86, B = 0.57, SE = .099, p = < .001$ , with greater preference for the Democrats predicting higher support for vaccines.

Lastly, for overall political orientation, we found no effect for the condition  $F(1, 219) = .41, p = .523$ , and no effect for the interaction  $F(1, 219) = .01, p = .938$ . Overall political orientation did have a significant effect on vaccine support  $F(1,219) = 25.79, B = 0.35, SE = .069, p = < .001$ , with higher overall liberal orientation predicting higher support for vaccines.

### Exploratory Analyses

Overall, it appears then that reframing COVID-19 messages in terms of Orderliness or Compassion did not differentially affect people's receptiveness of them. Instead, there appears to be a strong liberal support for all types of COVID-19 safety precautions. We decided to conduct further exploratory analyses to examine how other individual differences variables related to support for COVID-19 precautions.

### Correlational Analyses

We ran correlational analyses to examine how different variables relate to mask endorsement, social distancing endorsement, and vaccine endorsement (Table 1). For the ABPO subscales, we found significant negative correlations between mask endorsement and LI ( $r = -.69, p < .001$ ), RT ( $r = -.47, p < .001$ ) and ES ( $r = -.53, p < .001$ ). There was also a smaller but significant negative correlation between mask endorsement and the symbolic threat ( $r = -.24, p < .001$ ). There was a significant positive correlation between mask endorsement and the realistic threat ( $r = .42, p < .001$ ) as well.

With regard to social distancing, there were significant negative correlations between social distancing endorsement and LI ( $r = -.55, p < .001$ ), RT ( $r = -.31, p < .001$ ), and ES ( $r = -.43, p < .001$ ). The symbolic threat was also significantly correlated negatively with social distancing endorsement ( $r = -.20, p = .003$ ). There was a significant positive correlation between the realistic threat ( $r = .33, p < .001$ ).

Lastly, for vaccine endorsement, we found significant negative correlations between vaccine endorsement and LI ( $r = -.55, p < .001$ ), RT ( $r = -.32, p < .001$ ) and ES ( $r = -.48, p < .001$ ).

There was a smaller but significant negative correlation between vaccine endorsement and the

symbolic threat ( $r = -.35, p < .001$ ). Vaccine endorsement and realistic threat were found to be positively correlated ( $r = -.39, p < .001$ ).

### **Regression Analyses**

Hierarchical regression analyses examined the degree to which of the three ABPO subscales predicted either mask endorsement, social distancing endorsement, and vaccine endorsement (Table 2). In all analyses, we controlled for age, gender and education in Step 1. We controlled for age and gender because studies have demonstrated that both factors are reliably associated with political orientation (Xu et al., 2013). In Step 2, we controlled for party preferences, and symbolic and realistic threat. In Step 3, we entered the three ABPO subscales: LI, RT, and ES.

#### ***Predicting Mask Endorsement***

Our analyses revealed that whether or not someone endorsed masks was predicted by LI ( $B = -.44, SE = .09, \beta = -.39, p < .001$ ). As well, party preference also predicted mask endorsement ( $B = .20, SE = .09, \beta = .16, p = .023$ ). Symbolic ( $B = -.28, SE = .09, \beta = -.16, p = .002$ ) and realistic threat ( $B = .63, SE = .12, \beta = .28, p < .001$ ) also predicted mask endorsement, but in opposite directions.

#### ***Predicting Social Distancing Endorsement***

Analyses predicting social distancing found that higher scores on LI negatively predicted support for social distancing ( $B = -.35, SE = .09, \beta = -.35, p < .001$ ). As well, realistic threat positively predicted support for social distancing ( $B = .44, SE = .12, \beta = .23, p < .001$ ).

#### ***Predicting Vaccine Endorsement***

Finally, we found that whether or not someone endorsed vaccines was predicted again by LI ( $B = -.27, SE = .09, \beta = -.28, p = .002$ ). Symbolic ( $B = -.35, SE = .10, \beta = -.21, p = .001$ ) and

realistic threat ( $B = .65, SE = .14, \beta = .28, p < .001$ ) again predicted support for vaccines in opposite directions. Higher education also predicted support for vaccines ( $B = .06, SE = .03, \beta = .12, p = .035$ ).

### **Discussion**

The present research examined whether reframing COVID-19 safety precaution messaging with a Compassion or Orderliness emphasis would make participants of different political orientations more receptive to that message. We first hypothesized that liberal individuals would exhibit high support overall for the COVID safety precaution messages compared to conservatives for both the Orderliness and Compassion conditions. Our findings supported this hypothesis; there was a significant partisanship effect across all types of political orientation measures used. Generally, more liberal ideologies were predictive of higher support for mask wearing, social distancing, and vaccine endorsement messaging. These results support the idea that perceptions of COVID-19 safety precautions are indeed a partisan issue, and that support for these precautions can be predicted by the political leanings of an individual.

We also predicted that across the three types of precaution measures, liberal individuals would demonstrate higher support for the Compassion messages compared to Orderliness messages, and conservative individuals will show greater support for Orderliness messages compared to the Compassion messages. Our analyses did not support these hypotheses, as there was no significant interaction between the two variables. Individuals rated the messages similarly, and their endorsement did not significantly change across the Orderliness or Compassion conditions.

In our exploratory analyses, we found a significant negative relationship between Libertarian Independence (LI) and mask endorsement, social distancing endorsement, and

vaccine endorsement. This indicates that individuals who strongly identify with the LI aspects of conservatism (e.g., decreased support for government-funded programs, higher support for limited government involvement in business, etc.) are much less likely to support any form of COVID-19 preventative measure. Furthermore, these effects remained robust even after controlling for relevant demographics, party preferences, and perceived symbolic and realistic threat of COVID-19.

It is an intriguing finding that LI alone is strongly linked to less support across all COVID-19 precautionary measures. The LI dimension of conservatism reflects a libertarian outlook with an emphasis on self-reliance (e.g., independence from any government support) (Xu et al., 2021). Conservative individuals who associate with this dimension are more likely to want minimal government interference and are less likely to support and follow mandated restrictions. This extends well to the COVID-19 safety precaution measures. Individuals would view mask mandates, enforced social distancing measures, and encouragement to become vaccinated as government interference.

This lack of support for COVID-19 safety precautions by individuals higher in LI cannot simply be explained due to partisan differences, or the view that COVID-19 is a threat. Thus, LI attitudes are clearly the main motivators that contribute to why individuals are less likely to support COVID-19 safety precautions. These results represent a direct demonstration of how breaking down political orientations into more nuanced categories can highlight motives and attitudes behind individual's reasoning that otherwise would not be seen.

There was also a significant negative relationship between symbolic threat and mask endorsement, social distancing endorsement, and vaccine endorsement. In addition, there was a positive relationship between realistic threat and mask endorsement, social distancing

endorsement, and vaccine endorsement. Taken together, these results are indicative that individuals who believe that COVID-19 is more of an existential threat (e.g., a threat to democracy and one's traditions and freedoms) are less likely to support safety precautions for the virus. Alternatively, those who believe that COVID-19 is a real and present threat (e.g., a threat to personal health, the economy, day-to-day life) are more likely to support the COVID-19 safety precaution messages.

### **Limitations & Future Directions**

One important limitation of the present research relied on self-report data, so the results are susceptible to social desirability bias. Considering the heightened political atmosphere surrounding COVID-19 in general, people may want to appear more supportive of the safety of others.

Another limitation is the timing of the study. Data collection occurred between November 2020 and March 2021. Many major debates and developments related to the pandemic occurred before that point, earlier on in the pandemic (e.g., debates about mask mandates). Many significant political events occurred during that time period as well, including the presidential election, the presidential inauguration, and the initiation of the country-wide vaccine rollout. The Prolific data, which represents about 80% of the participants, was collected in March 2021. By this point, although there may still be some debates surrounding these precautions, many people have already made their decisions and formed attitudes about them, so it would take more than a brief message to convince them otherwise. Thus, a potential explanation of why we found no significant interaction effects in our analysis may be due to the majority of our sample being collected later on during the pandemic.

Finally, compared to other studies that found significant effects of reframing political arguments (Voelkel & Feinberg, 2018), our sample size is much smaller per each reframed argument (roughly 110 participants per argument compared to around 400). The previous work that has found these effects also reported smaller effect sizes (e.g., Feinberg & Willer, 2013). Thus, our present study may have been underpowered to detect significant effects. Had our sample size been larger, then perhaps we would have found significant interactions between the Orderliness/Compassion condition and political ideology on people's support for COVID-19 safety precaution messaging.

One key finding of the present study was using the more detailed, complex political orientation scale, i.e., ABPO Scale. The ABPO subscales have previously been shown to be differentially related to endorsement for political candidates and media preferences (Xu et al., 2021). Therefore, breaking down conservatism into different dimensions can provide more nuanced insights into the political motivations that people have in their daily decision-making. The present results should encourage further research into the APBO subscales and how they may play a role in other important social outcomes. For example, revisiting previous studies that examined the differences between liberals and conservatives (e.g., Burton et al., 2015) using the ABPO subscale framework would allow researchers to potentially detect more nuanced and complex relationships.

## **Conclusion**

In the past year, the heightened partisan atmosphere and the rise of the COVID-19 pandemic has presented new problems and created many divisions between Americans today. COVID-19 safety measures in particular have been a source of strife, becoming increasingly politicized so that the measures are viewed as a political stance in lieu of a public health

precaution. Finding ways to understand people's motivations behind noncompliance and how to potentially increase compliance with these safety precautions should be a priority. The present studies confirmed that there is indeed a partisanship effect, with liberals being more likely to support COVID-19 safety precautions. We also found that the ABPO subscale Libertarian Independence significantly negatively predicted support for the COVID-19 safety precaution measures, above and beyond party differences and demographic influences. The present research contributes to a more comprehensive understanding of how and why people may or may not endorse COVID-19 safety precaution measures, and can have significant implications for how we implement public health policies in the future.

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**Table 1**

*Exploratory Correlation Results*

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Variable Name	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1. Mask Endorsement	1										
2. Social Distancing Endorsement	-	-									
3. Vaccine Endorsement	-	-									
4. Symbolic Threat	-.241*	-.200**	-.353**								
5. Realistic Threat	.417**	.328**	.398**	.237**							
6. Libertarian Independence	-.690**	-.550**	-.553**	.333**	-.323**						
7. Religious Traditionalism	-.472**	-.311**	-.320**	.320**	-.093*	.525**					
8. Ethnic Separateness	-.530**	-.426**	-.477**	.345**	-.222**	.632**	.495**				
9. Age	-.111	-.045	.046	.042	.008	.127**	.106**	.060			
10. Gender	.128	.072	-.138*	-.011	.084*	-.044	-.078*	-.141**	.080*		
11. Education	-.003	.169*	.222**	-.089*	.048	-.083*	-.117**	-.168**	.181**	.077*	1

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Notes \*p ≤ .05, \*\* p ≤ .001

**Table 2***Exploratory Regression Analyses Results for Mask, Social Distancing, & Vaccine Endorsement*

	$\beta$	<i>SE</i>	<i>p</i>
Mask Endorsement			
Libertarian Independence (LI)	<b>-.391</b>	<b>.090</b>	<b>&lt; .001</b>
Religious Traditionalism (RT)	-.025	.059	.679
Ethnic Separateness (ES)	-.055	.089	.402
Party Preference	<b>.155</b>	<b>.087</b>	<b>.023</b>
Social Distancing Endorsement			
Libertarian Independence (LI)	<b>-.349</b>	<b>.089</b>	<b>&lt; .001</b>
Religious Traditionalism (RT)	-.056	.054	.386
Ethnic Separateness (ES)	-.083	.086	.286
Party Preference	.036	.083	.671
Vaccine Endorsement			
Libertarian Independence (LI)	<b>-.275</b>	<b>.088</b>	<b>.002</b>
Religious Traditionalism (RT)	.000	.067	.994
Ethnic Separateness (ES)	-.126	.092	.086
Party Preference	.002	.096	.982

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*Note.* Coefficients and results reported from Step 3 of the regression analyses

## Appendix

**COVID-19 Safety Precaution Messages****Mask Wearing****Orderliness:**

Since the outbreak of COVID-19 in the United States earlier this year, experts have been encouraging people to implement measures in order to reduce the spread of the virus. These recommendations include washing your hands frequently, avoiding close contact with others, and wearing a face mask in public settings. The virus spreads through infected respiratory droplets, and studies show that using a face mask prevents the spread of COVID-19 virus. Wearing a face mask in public settings is recommended when social distancing is not possible. It is important for people to wear masks because they ensure a higher level of security for people in protecting themselves. Masks create a barrier to prevent the virus from spreading, which is key to stabilizing the country's COVID-19 numbers. Many people who have COVID-19 are asymptomatic, and are not aware that they are infected. That is why it is crucial for everyone to wear masks in public settings, because people who are unknowingly spreading the virus threaten what societal structure we have regained in the past few months. If we fail to stabilize the number of infections in the United States, we will be in danger of creating more chaos for the government and healthcare resources. Wearing masks will minimize the risk to both our societal and social structures, as well as the risk to people's personal safety. The sooner people start wearing masks, the sooner our society will stabilize and return to its normal order once again.

**Compassion:**

Since the outbreak of COVID-19 in the United States earlier this year, experts have been encouraging people to implement measures in order to reduce the spread of the virus. These recommendations include washing your hands frequently, avoiding close contact with others, and wearing a face mask in public settings. The virus spreads through infected respiratory droplets, and studies show that using a face mask prevents the spread of COVID-19 virus. Wearing a face mask in public settings is recommended when social distancing is not possible. It is important for people to wear masks because they help to keep themselves and others around them healthy, and preserve the wellbeing of society. Masks have been shown to be highly helpful in preventing the virus from spreading, which is key to supporting those who are already vulnerable to the disease. Many people who have COVID-19 are asymptomatic, and are not even aware that they are infected. That is why it is crucial for everyone to wear masks in public settings, because fewer innocent people will be infected, and fewer innocent deaths will be on our hands. If we fail to reduce the numbers of COVID-19 infections in the United States, we would be endangering the wellbeing and lives of millions of people. Wearing masks is not only effective, it demonstrates that we have compassion for those around us. The sooner people start showing they care about our society by wearing masks, the sooner we can all go back to our lives before the pandemic.

### **Social Distancing**

#### **Orderliness:**

Since the outbreak of COVID-19 in the United States earlier this year, experts have been encouraging people to implement measures in order to reduce the spread of the virus. These recommendations include washing your hands frequently, wearing a face mask in public settings,

and avoiding close contact with others. The virus spreads through infected respiratory droplets which land on people who are in close proximity to each other. Social distancing in public settings is recommended to reduce the spread of COVID-19.

It is important for people to social distance because it creates a higher level of security for protecting themselves. Social distancing creates a stronger barrier between oneself and others to prevent the virus from spreading, which is key to stabilizing the country's COVID-19 numbers. Many people who have COVID-19 are asymptomatic, and are not aware that they are infected. That is why it is crucial for everyone to social distance outside of their household, because people who are unknowingly spreading the virus threaten what societal structure we have regained in the past few months. If we fail to stabilize the number of infections in the United States, we will be in danger of creating more chaos for the government and healthcare resources. Practicing social distancing will minimize the risk to both our societal and social structures, as well as the risk to people's personal safety. The sooner people start social distancing, the sooner our society will stabilize and return to its normal order once again.

**Compassion:**

Since the outbreak of COVID-19 in the United States earlier this year, experts have been encouraging people to implement measures in order to reduce the spread of the virus. These recommendations include washing your hands frequently, wearing a face mask in public settings, and avoiding close contact with others. The virus spreads through infected respiratory droplets which land on people who are in close proximity to each other. Social distancing in public settings is recommended to reduce the spread of COVID-19.

It is important for people to social distance because they help to keep themselves and others around them healthy, and preserve the wellbeing of society. Social distancing has been shown to be highly helpful in preventing the virus from spreading, which is key to supporting those who are already vulnerable to the disease. Many people who have COVID-19 are asymptomatic, and are not even aware that they are infected. That is why it is crucial for everyone to social distance in public settings, because fewer innocent people will be infected, and fewer innocent deaths will be on our hands. If we fail to reduce the numbers of COVID-19 infections in the United States, we would be endangering the wellbeing and lives of millions of people. Social distancing is not only effective, but it demonstrates that we have compassion for those around us. The sooner people start showing they care about our society by practicing social distancing, the sooner we can all go back to our lives before the pandemic.

### **Vaccination**

#### **Orderliness:**

Since the outbreak of COVID-19 in the United States earlier this year, experts are encouraging people to implement measures to reduce the spread of the virus. These recommendations include washing your hands frequently, avoiding close contact with others, and wearing a face mask in public settings. In addition to these current preventative measures, development is also underway for viable vaccines against the COVID-19 virus, with four vaccine candidates currently in phase 3 clinical trials in the US. The goal is that once a vaccine has gone through the appropriate clinical trials, and been approved by the FDA, it will be utilized rapidly to prevent further spread of the virus.

Once an approved vaccine is available, it is crucial that people get vaccinated. This will prevent the virus from spreading and provide a higher level of security for people. The vaccine creates a barrier between your body and the virus by producing an immune response, therefore keeping people from contracting the virus. This is key to stabilizing the country's COVID numbers. If we fail to stabilize the number of infections in the United States, we will be in danger of creating more chaos for the government and healthcare systems. Everyone who receives the vaccine reduces the risk COVID-19 poses to both our societal and social structures, and helps keep the virus itself under control. The sooner people get vaccinated, the sooner society will return to its normal order once again.

**Compassion:**

Since the outbreak of COVID-19 in the United States earlier this year, experts are encouraging people to implement measures to reduce the spread of the virus. These recommendations include washing your hands frequently, avoiding close contact with others, and wearing a face mask in public settings. In addition to these current preventative measures, development is also underway for viable vaccines against the COVID-19 virus, with four vaccine candidates currently in phase 3 clinical trials in the US. The goal is that once a vaccine has gone through the appropriate clinical trials, and been approved by the FDA, it will be utilized rapidly to prevent further spread of the virus.

Once an approved vaccine is available, it is crucial that people get vaccinated. This will prevent the virus from spreading, keeping people healthy and preserves the wellbeing of society.

Vaccines are proven to help people develop immunity to diseases - which is key to saving those already vulnerable to COVID-19.

If we fail to minimize the number of infections in the United States, we would be endangering the wellbeing and lives of millions of people. Getting vaccinated is not only effective, but it demonstrates that we have compassion for those around us. The sooner people start showing that they care about our society by getting vaccinated, the sooner we can all go back to our lives before the pandemic.