



Psychological entitlement predicts noncompliance with the health guidelines of the COVID-19 pandemic

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ABSTRACT

In this research, we examined whether psychological entitlement predicted noncompliance with the health guidelines of the COVID-19 pandemic. People higher in psychological entitlement typically try to avoid behaviors that might cause themselves harm, but their high expectations, lack of concern about others, and distrust of authority figures could affect their perceptions of the threat of the coronavirus and their views on the benefits of following the health guidelines. Across three studies ($N = 1004$, online samples from the United States), people higher in psychological entitlement reported less compliance with the health guidelines of the COVID-19 pandemic than people lower in psychological entitlement. Moreover, people higher in psychological entitlement believed that the threat of the virus was overblown and were less concerned about harming others, views that may partly explain their noncompliance. People higher in psychological entitlement were also more likely to report that they had contracted COVID-19, and thus their refusal to follow the health guidelines may have had negative consequences for them. An appeal to self-image concerns did not lead individuals higher in entitlement to be more likely to comply with the health guidelines.

1. Introduction

Compliance with health guidelines has become a major concern since the COVID-19 pandemic began. The first case of COVID-19 was reported in the United States on January 20, 2020 (Holshue et al., 2020), and the World Health Organization declared a global pandemic on March 11, 2020 (Cucinotta & Vanelli, 2020). In the United States, people received guidance from the Centers for Disease Control and Prevention (CDC), their local governments, the federal government, and doctors about what to do to keep themselves and others healthy, such as washing their hands more often, staying home as much as possible, and keeping a distance of at least six feet from others (“social distancing”) when they had to leave their homes (CDC, 2020). Many people have followed these guidelines, but others have not. Why is this? Do some people ignore the guidelines because they are “entitled,” a description that has been used for vacationing celebrities and partying spring breakers (Goldstein, 2020; Weekman, 2020)? In this paper, we add to the growing body of research on how personality and individual differences relate to attitudes and behaviors during the pandemic (e.g., Blagov, 2020; Zajenkowski et al., 2020), and examine whether psychological entitlement predicts noncompliance with the health guidelines.

1.1. Compliance with health guidelines

According to the Health Belief Model (Champion & Skinner, 2008; Glanz & Bishop, 2010; Rosenstock, 2005; Rosenstock et al., 1988), a person’s likelihood of engaging in a particular health behavior aimed at preventing a disease can be predicted from their beliefs about the threat of the disease (the perceived susceptibility of contracting the disease and the perceived severity of the disease), the perceived benefits of and barriers to engaging in the health behavior, their self-efficacy, and the cues to action they have received. The perceived benefits of engaging in a health behavior might be protecting one’s health, protecting the health of others, or pleasing others, whereas the perceived barriers might be concerns about cost, discomfort, or inconvenience (Champion & Skinner, 2008; Rosenstock, 2005). Applying this model to the COVID-19 pandemic, it seems that people might be more likely to follow the health guidelines, such as engaging in social distancing, if they believe the threat of the virus is high, if they perceive more benefits of following the guidelines than barriers, if they are confident in their ability to follow the guidelines, and if they are exposed to more cues to action such as messages from the government or other authority figures (and respond more favorably to them).

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The Health Belief Model also proposes that personality characteristics and other individual differences can influence someone's likelihood of engaging in a health behavior through the effect they have on a person's beliefs about the disease and the consequences of the health behavior (Champion & Skinner, 2008; Glanz & Bishop, 2010; Rosenstock, 2005; Rosenstock et al., 1988). We argue that psychological entitlement is an important personality trait to study in relation to following the health guidelines of the pandemic, as people higher in psychological entitlement are more likely to have high expectations for good outcomes, a lack of concern about others, and a distrust of authority figures, which could affect their perceptions of threat, their perceptions of the benefits of following the guidelines, and their responses to the cues to action.

1.2. Psychological entitlement and reactions to health guidelines

Psychological entitlement is a personality characteristic whereby an individual feels more deserving of positive outcomes than other people (Campbell et al., 2004; Grubbs & Exline, 2016). Individuals high in psychological entitlement desire, expect, and feel that they deserve benefits (e.g., more money, a promotion, or a better grade) without concern for their actual level of merit (Fisk, 2010; Grubbs & Exline, 2016). Past research has shown that individuals relatively higher in psychological entitlement (hereafter referred to as *entitled people/individuals*, for brevity's sake) are more likely to ignore instructions such as how to complete tasks (Zitek & Jordan, 2019). Would entitled people also ignore the pandemic health guidelines, even if following the guidelines could prevent them from contracting a potentially serious illness? On the one hand, entitled individuals may believe that there are many personal benefits of following the health guidelines. Entitled individuals are especially likely to consider the probability of personal harm when deciding how to behave (Daddis & Brunell, 2015), and following the health guidelines could help them avoid harm. Moreover, entitled individuals hold self-image goals (Bushman et al., 2011; Lee et al., 2019; Moeller et al., 2009), and they might therefore follow the health guidelines so that they are viewed positively by others. On the other hand, there are a variety of reasons that entitled people might be less likely to comply with the health guidelines. As mentioned previously, perceptions of threat, anticipation of benefits (such as whether they can help others), and responses to cues to action can affect health behavior (Champion & Skinner, 2008; Glanz & Bishop, 2010; Rosenstock, 2005). Specifically, people are more likely to follow health guidelines when they are concerned about personal risk (Chon & Park, 2019), when they are concerned about their effect on others (Paek et al., 2008), and when they trust the authority figures who have given them the health advice (Krishna, 2018). Entitled individuals may not share these beliefs, thereby reducing their compliance with the pandemic health guidelines.

First, entitled people might not follow the COVID-19 health guidelines because they do not believe the virus poses a personal risk to them. Entitled individuals have high expectations for their lives (Grubbs & Exline, 2016), even expecting good luck (Zitek & Jordan, 2021), which may lead them to believe that they will not get sick. Furthermore, because entitled individuals demand special treatment (Fisk & Neville, 2011) and have extremely high standards for other people (i.e., other-oriented perfectionism; Nealis et al., 2015; Trumpeter et al., 2006), they might believe that, even if they do get sick, they will be able to access the best care available.

Second, entitled individuals may not follow the health guidelines because they are not particularly concerned about the welfare of others. Entitled people tend to be more selfish (Zitek et al., 2010). They focus on what is good for them and do not worry about how their behavior may harm others (e.g., Daddis & Brunell, 2015; Malhotra & Gino, 2011; Neville & Fisk, 2019; Rose & Anastasio, 2014; Snow et al., 2001). They are less likely to be empathetic, be socially responsible, or pursue compassionate goals (Campbell et al., 2004; Moeller et al., 2009; Watson

& Morris, 1991). Many of the COVID-19 health guidelines involve some kind of personal inconvenience that people are expected to bear in order to protect themselves and their communities. For example, people have been told to stay home and skip pleasurable activities like travelling to reduce the spread of the virus. Entitled people, while focusing on themselves and all of the personal costs and barriers to following the health guidelines, may not be focused on or concerned about how ignoring the health guidelines may put others at risk, thereby disregarding what is a key benefit of the health guidelines.

Third, entitled individuals might not follow the health guidelines because they think that the threat of the virus is overblown. Although there have been many messages about the seriousness of the virus, entitled people might not trust these messages, as entitlement is negatively correlated with trust (Pryor et al., 2008). Many messages about the virus come from authority figures, but entitled individuals often view their authority figures negatively (e.g., Chowning & Campbell, 2009; Harvey et al., 2014; Harvey & Martinko, 2009). And because entitlement is related to political conservatism (Hatemi & Fazekas, 2018), entitled individuals might be especially likely to disbelieve messages from liberal politicians, as entitled people hold more negative views of outgroups (Anastasio & Rose, 2014). If, for these reasons, entitled individuals believe that the claims about the virus have been exaggerated, they might therefore think that the health guidelines are unnecessary, an unfair imposition, and simply an attempt at controlling them. Entitled individuals do not like to be controlled (Rose & Anastasio, 2014), and they are quick to perceive injustices (e.g., Harvey et al., 2014; McCullough et al., 2003; see Grubbs & Exline, 2016, for a summary). Thus, they might not be persuaded by the calls to take action during the pandemic.

1.3. Current research

Therefore, based on theory and past research in both the entitlement literature (Campbell et al., 2004; Grubbs & Exline, 2016) and the health literature (Champion & Skinner, 2008; Glanz & Bishop, 2010; Rosenstock, 2005), we hypothesized that entitled individuals would be less likely to comply with the health guidelines during the COVID-19 pandemic, despite the fact that they are typically very concerned about avoiding negative outcomes (Campbell et al., 2004; Daddis & Brunell, 2015). We tested this hypothesis across three studies. We also explored possible explanations for this relationship in Studies 1 and 2—specifically that entitled individuals would have a lessened personal concern about getting sick, a lessened concern about harm to others, and a heightened belief that the threat of the virus was overblown—and examined in Study 3 whether appealing to their self-image concerns was a potential way to encourage entitled individuals to follow the guidelines. Our surveys and data appear on our OSF page: <https://osf.io/uj5w9/>.

2. Study 1

In our first study, we surveyed people to examine whether entitled individuals are less likely to follow the COVID-19 health guidelines, as we hypothesized. We also included questions that would enable us to learn about their other attitudes, behaviors, and beliefs related to the pandemic and their health in general.

2.1. Method

Participants from the United States ($N = 201$; 128 male, 73 female; 144 White, 21 Black, 14 Asian, 17 Hispanic, 5 other; $M_{\text{age}} = 37.5$, $SD_{\text{age}} = 11.8$) were recruited from Amazon Mechanical Turk (mTurk) on April 3, 2020. We aimed for $N = 200$ for this first study because it would allow us to detect correlations of about 0.21, the mean effect size in our field (Richard et al., 2003), with at least 80% power, even after losing a typical amount of data to attention check failure.

Participants first completed the Psychological Entitlement Scale (PES; Campbell et al., 2004), for which they rated items such as “I honestly feel I’m just more deserving than others” (1 = *strong disagreement*, 7 = *strong agreement*). Then they completed the Ten-Item Personality Inventory (TIPI; Gosling et al., 2003), indicating whether certain characteristics (“sympathetic and warm”) described them (1 = *strong disagreement*, 7 = *strong agreement*). The TIPI was originally included as a filler, but it also allowed us to examine whether any relationship between entitlement and noncompliance could be explained by their association with agreeableness (see Campbell et al., 2004; Zajenkowski et al., 2020). Next, participants were asked to respond (1 = *Not at all like me*, 5 = *Very much like me*) to the Health Behavior Checklist (Hampson et al., 2019), which includes items such as “I use dental floss regularly” (we added one item: “I wear sunscreen”). They were then asked other questions (unrelated to our main hypothesis) about their predicted future health.

Participants then answered questions about COVID-19. We first asked them to report whether they thought they had had COVID-19 yet. We included this as an exploratory measure, which would enable us to assess whether entitlement and contracting COVID-19 were related.¹ We then asked participants to rate how much they agreed with various statements about their thoughts, feelings, and behaviors in relation to the pandemic (1 = *strong disagreement*, 7 = *strong agreement*). Five items on this scale measured whether they were trying to change their behavior during the pandemic to follow the health guidelines in effect at the time (e.g., “I am engaging in social distancing”). Seven items measured a concern about getting sick, three items measured a concern for others, and two items measured a belief that the threat was overblown. There were also two other items that did not fit into any of the above categories. The complete list of items we created appears in Appendix A, along with the correlation between each individual item and entitlement. Finally, participants reported demographic information. Buried in one of the scales was an attention check asking participants to select 4 if they were reading the item. We excluded data from people who missed this item, leaving a sample size of 177 (88.1%) for our analyses.

2.2. Results and discussion

As shown in Table 1, psychological entitlement was negatively correlated with following the COVID-19 health guidelines, and it was a medium-large effect. Thus, as predicted, entitled people reported less engagement in behaviors such as washing their hands more often and social distancing. The relationship between entitlement and noncompliance was reduced when controlling for agreeableness, but it remained significant (see the Supplementary Online Materials (SOM) for more information). Interestingly, entitled people were more likely to report that they had contracted COVID-19, and therefore, it is possible that their noncompliance with the health guidelines was harming them. Moreover, entitlement was positively correlated with the general health behaviors from the Health Behavior Checklist. Thus, in this study, we found that entitled individuals’ refusal to follow health guidelines was specific to pandemic-related suggestions.

Entitlement was also correlated with the other three scales we included. Specifically, entitled people were less likely to be concerned about getting sick, less likely to be concerned about others, and more likely to believe the threat of the virus was overblown, three sets of beliefs that were in turn correlated with ignoring the health guidelines. Thus, these beliefs may explain why entitled individuals refuse to

comply with the health guidelines, something we will examine more closely in the next study.

3. Study 2

In Study 2, we examined whether we could replicate entitlement’s relationships with noncompliance and contracting COVID-19 that we found in Study 1. We also sought to better understand why entitlement predicted a reduced tendency to follow the pandemic health guidelines. Thus, we included more pointed questions that assessed one’s perceived likelihood of getting sick, one’s perceived ability to handle being sick, one’s concern about harming others, and one’s belief that the threat of the virus is overblown. This study was pre-registered at <https://aspredicted.org/yk985.pdf>.

3.1. Method

Participants from the United States ($N = 502$; 306 male, 195 female, 1 other; 327 White, 71 Black, 50 Asian, 43 Hispanic, 11 other; $M_{\text{age}} = 35.8$, $SD_{\text{age}} = 11.3$) were recruited from mTurk on May 1, 2020. We selected this sample size based on the effect sizes from Study 1, recruiting a larger sample than needed for 90% power in case the original effect sizes were overestimated.

Participants first completed the PES and TIPI. Participants were then asked if they thought they had had COVID-19 yet.² Participants were then asked to respond to various statements about their attitudes and behaviors during the COVID-19 pandemic. We reused some items from Study 1, but we also made some changes to try to improve the clarity and distinctiveness of the scales. Participants first responded to eight items that assessed whether they were engaging in behaviors that were consistent with the pandemic-related health guidelines in effect at the time. Then, to assess possible reasons that someone might follow or ignore the health guidelines, we asked participants to respond to four statements about whether they thought that they were at risk of getting sick from the coronavirus, six statements about their ability to handle the virus if they did get sick from it, four statements about their perceived likelihood of harming others if they were to get sick, and seven statements about their beliefs that the threat of the virus was overblown. Participants used a 7-point scale for all ratings (1 = *strong disagreement*, 7 = *strong agreement*). The complete list of items for each scale can be found in Appendix B, along with the correlation between each individual item and entitlement.

Finally, participants reported demographic information. Buried in one of the scales was an attention check asking participants to select 2 if they were reading the item. We excluded data from people who missed this item, leaving a sample size of 407 (81.0%) for our analyses.

3.2. Results and discussion

As shown in Table 2, psychological entitlement was negatively correlated with following the COVID-19 health guidelines. Consistent with our hypothesis and replicating the previous study, entitled individuals were again less likely to say they were engaging in behaviors such as social distancing. All individual compliance items were significantly correlated with entitlement except mask wearing (see Appendix B). Other personality research has also revealed a different pattern of results for mask wearing as compared to other pandemic health guidelines (Aschwanden et al., 2020; Shook et al., 2020).

Moreover, as in the previous study, entitled people were more likely to think that they had already had COVID-19. Entitlement was also correlated with the other four scales we included. Entitled people were less likely to think they would get sick, more likely to think they could

¹ Including this item also allowed us to examine the pattern of results when we excluded data from people who had already contracted COVID-19 (in case having the disease affected people’s attitudes and behaviors about it). In all studies, we arrived at similar conclusions if we excluded data from people who reported that they had already had COVID-19.

² See the SOM for information about follow-up questions we asked participants in Studies 2 and 3 to determine if they had contracted COVID-19.

Table 1Descriptive statistics, intercorrelations and their 95% CIs, and Cronbach's alphas (shown in bold on the diagonal) for Study 1 ($N = 177$).

Measure	<i>M (SD) or %</i>	1	2	3	4	5	6	7
1. Entitlement	3.32 (1.41)	0.93						
2. Had COVID	10.3%	0.20*	–					
		[0.05, 0.34]						
3. Follow guidelines	5.82 (1.25)	–0.42*	–0.14 [†]	0.83				
		[–0.53, –0.29]	[–0.28, 0.01]					
4. Concern about getting sick	4.01 (1.01)	–0.18*	0.02	0.35*	0.72			
		[–0.32, –0.03]	[–0.13, 0.17]	[0.21, 0.47]				
5. Concern for others	5.52 (1.12)	–0.26*	0.02	0.64*	0.26*	0.60		
		[–0.39, –0.12]	[–0.13, 0.17]	[0.54, 0.72]	[0.12, 0.39]			
6. Threat is overblown	2.36 (1.46)	0.38*	0.05	–0.77*	–0.45*	–0.59*	0.61	
		[0.25, 0.50]	[–0.10, 0.20]	[–0.82, –0.70]	[–0.56, –0.32]	[–0.68, –0.48]		
7. General health behaviors	3.49 (0.72)	0.15*	0.03	0.14 [†]	–0.10	0.26*	–0.05	0.88
		[0.00, 0.29]	[–0.12, 0.18]	[–0.01, 0.28]	[–0.24, 0.05]	[0.12, 0.39]	[–0.20, 0.10]	

* $p < .05$.† $p < .1$.**Table 2**Descriptive statistics, intercorrelations and their 95% CIs, and Cronbach's alphas (shown in bold on the diagonal) for Study 2 ($N = 407$).

Measure	<i>M (SD) or %</i>	1	2	3	4	5	6	7
1. Entitlement	3.49 (1.42)	0.93						
2. Had COVID	9.1%	0.17*	–					
		[0.07, 0.26]						
3. Follow guidelines	5.89 (1.10)	–0.41*	–0.14*	0.85				
		[–0.49, –0.33]	[–0.23, –0.04]					
4. Will get sick	3.58 (1.21)	–0.34*	0.05	0.15*	0.71			
		[–0.42, –0.25]	[–0.05, 0.15]	[0.05, 0.24]				
5. Can handle getting sick	4.47 (1.17)	0.25*	0.08	–0.21*	–0.54*	0.83		
		[0.16, 0.34]	[–0.02, 0.18]	[–0.30, –0.12]	[–0.61, –0.47]			
6. Concern about harming others	5.37 (1.22)	–0.39*	–0.02	0.54*	0.39*	–0.25*	0.74	
		[–0.47, –0.30]	[–0.12, 0.08]	[0.47, 0.61]	[0.30, 0.47]	[–0.34, –0.16]		
7. Threat is overblown	2.93 (1.75)	0.44*	0.21*	–0.63*	–0.37*	0.41*	–0.52*	0.95
		[0.36, 0.52]	[0.12, 0.30]	[–0.69, –0.57]	[–0.45, –0.28]	[0.33, 0.49]	[–0.59, –0.45]	

* $p < .05$.

handle getting sick, less likely to be concerned about harming others, and more likely to believe the threat of the virus was overblown, sets of beliefs that were in turn all related to ignoring the health guidelines.

We then ran a mediation analysis to examine which of these possible explanations could account for why entitled people were less likely to follow the COVID-19 health guidelines. In a multiple regression model predicting compliance with the health guidelines from entitlement and the four possible mechanisms (see Table 3), the effect of entitlement was reduced (but still significant), and a greater concern for others and a lesser belief that the threat was overblown were related to increased compliance. A lesser belief of participants that they would get sick was also related to increased compliance in the multiple regression, which was the opposite direction from the zero-order correlation. The indirect effects from entitlement to compliance through concern for others and the belief that the threat was overblown were significant, 95% CI =

[–0.14, –0.06] and [–0.22, –0.12], respectively (calculated via bootstrapping, Hayes, 2013). Running each mediator separately produced similar results (see the SOM). Although we cannot be confident in the causal order due to our cross-sectional correlational design, the results of the mediation analysis suggest that entitled individuals might ignore the guidelines in part because they think the threat of the virus is overblown and they are not worried about harming others if they do get sick.

In sum, consistent with the previous study, entitlement predicted noncompliance with pandemic health guidelines and reports of having contracted COVID-19. The noncompliance seemed most strongly due to entitled individuals' lack of concern about harming others and their belief that the threat is overblown. We arrived at the same conclusions after rerunning the correlations and regressions controlling for agreeableness (see the SOM), providing evidence for the importance of entitlement in particular to understanding pandemic-related attitudes and behavior.

4. Study 3

In the previous two studies, psychological entitlement predicted noncompliance with COVID-19 health guidelines. The goal of Study 3 was to learn whether we could compel the entitled individuals to follow the guidelines. Because entitled individuals are more likely to think the threat of the virus is overblown, we were not sure we could convince them to comply using arguments related to their health or the good of the community (see Chon & Park, 2019; Krishna, 2018; Paek et al., 2008). However, as mentioned earlier, entitled individuals want to maintain a positive self-image (Bushman et al., 2011; Lee et al., 2019; Moeller et al., 2009), and therefore we tried tapping into their self-image

Table 3Coefficients from an ordinary least squares multiple regression model predicting compliance with the health guidelines ($N = 407$).

	<i>b (se)</i>	<i>t</i>	<i>p</i>	Partial <i>r</i>
Step 1				
Intercept	6.99 (0.13)	53.06	0.000	
Entitlement	–0.31 (0.03)	–8.99	0.000	–0.41
Step 2				
Intercept	6.39 (0.37)	17.08	0.000	
Entitlement	–0.11 (0.03)	–3.47	0.001	–0.17
Will get sick	–0.18 (0.04)	–4.49	0.000	–0.22
Can handle getting sick	–0.01 (0.04)	–0.30	0.767	–0.01
Concern for others	0.28 (0.04)	7.03	0.000	0.33
Threat is overblown	–0.30 (0.03)	–10.57	0.000	–0.47

Note. $R^2 = 0.17, 0.50$.

concerns to increase compliance. In this study, we predicted that telling people about how others admire those who follow the health guidelines and look down upon those who do not would reduce the relationship between entitlement and noncompliance. This study was preregistered at <https://aspredicted.org/2b2vu.pdf>.

4.1. Method

Participants from the United States ($N = 301$; 168 male, 133 female; 217 White, 33 Black, 31 Asian, 17 Hispanic, 3 other; $M_{\text{age}} = 38.5$, $SD_{\text{age}} = 12.4$) were recruited from the CloudResearch Approved Participants pool of mTurk users on July 15, 2020. We selected a sample size of 300 after a power analysis using GLIMMPSE software in which we estimated possible effect sizes based on our past studies and current hypotheses.

This study started out like the previous ones. Participants first completed the PES and the TIPI. Participants were then asked if they thought they had had COVID-19 yet. Then participants were instructed to imagine that they had been invited to walk around a downtown area with a friend and report how likely they would be to engage in nine different behaviors related to the health guidelines of the pandemic while there (e.g., would they try to avoid a crowded area, wash their hands more; 1 = *very unlikely*, 7 = *very likely*). Next, participants read the self-image prompt, which stated that most people believe that following the health guidelines is important and think positively of those who follow the guidelines (“good, admirable, and responsible”) and negatively of those who do not (“bad, selfish, and irresponsible”). Participants were given two true/false questions about the prompt, which we used as attention checks. Then participants imagined that they were invited to a party, and they were asked whether they would engage in the nine behaviors there. Thus, all participants responded about their pandemic-related behavioral intentions before and after reading the self-image prompt. The order of scenarios was counterbalanced; therefore, some participants got the party scenario first and the downtown scenario second.³ See Appendix C for the self-image prompt and Appendix D for the full list of pandemic health behavior items along with their correlations with entitlement.

Finally, participants reported demographic information, including a rating of their political views (1 = *very liberal*, 11 = *very conservative*). We included this item to determine whether political conservatism could account for the relationship between entitlement and noncompliance, as political conservatism relates to noncompliance with the pandemic health guidelines (van Holm et al., 2020) and believing the virus is less threatening (Calvillo et al., 2020). We excluded data from people who missed the true/false attention check items, leaving a sample size of 285 (94.7%) for our analyses.⁴

4.2. Results and discussion

Descriptive statistics are shown in Table 4. Entitlement was again negatively correlated with following the health guidelines, but the effect sizes were smaller than in the previous studies. The relationships between entitlement and noncompliance may have been weaker because we asked participants about their hypothetical behaviors in situations in which the norms may be less clear (attending a party and walking around downtown), as opposed to their actual behaviors across all situations. Similar to the previous studies, entitled people were more likely

³ Although the counterbalancing factor did not affect our main results, there was an orderXcondition interaction such that there was a larger before-after difference when the party scenario was first.

⁴ There was a marginally significant relationship between entitlement and failing the attention check, $r = 0.10$, $p = .082$. This increased attention check failure could have been due to inattention, or it could have been a way for the entitled people to express that they did not believe the self-image prompt. The results were the same when everyone was included in the data.

Table 4

Descriptive statistics, intercorrelations and their 95% CIs, and Cronbach's alphas (shown in bold on the diagonal) for Study 3 ($N = 285$).

Measure	<i>M</i> (<i>SD</i>) or %	1	2	3	4	5
1. Entitlement	3.13 (1.30)	0.92				
2. Had COVID	8.4%	0.11 [†] [−0.01, 0.22]	–			
3. Follow guidelines before prompt	5.53 (1.20)	−0.14* [−0.25, −0.02]	−0.08 [−0.19, 0.04]	0.86		
4. Follow guidelines after prompt	5.60 (1.16)	−0.24* [−0.35, −0.13]	−0.10 [−0.21, 0.02]	0.86* [0.83, 0.89]	0.87	
5. Politically conservative	4.83 (2.92)	0.14* [0.02, 0.25]	0.07 [−0.05, 0.18]	−0.36* [−0.46, −0.25]	−0.36* [−0.46, −0.25]	–

* $p < .05$.

† $p < .1$.

to report that they had had COVID-19, but this time the correlation was only marginally significant.

To test our pre-registered hypothesis that the relationship between entitlement and noncompliance would decrease after participants read the self-image prompt, we ran a linear mixed effects regression model with a random intercept for the participant to account for the repeated observations. As shown in Table 5, we found a significant interaction between entitlement and the self-image condition (ratings before or after the prompt), but the interaction was in a different direction than predicted. There was a stronger relationship between entitlement and ignoring the guidelines *after* participants read the self-image prompt. Put another way, for people low in entitlement (1 *SD* below *M*), reading the prompt led them to increase their adherence to the guidelines ($b = 0.09$, $p < .001$), but for people high in entitlement (1 *SD* above *M*), the prompt had no effect ($b = -0.02$, $p = .374$), and for people very high in entitlement (2 *SD* above *M*), the prompt was somewhat counterproductive ($b = -0.08$, $p = .058$). The mixed model results were similar when controlling for political orientation and agreeableness, but the remaining effect of entitlement was weaker (see the SOM).

Thus, counter to our predictions, telling participants about what others would think of them did not encourage the more entitled people to be more likely to follow the health guidelines. It is possible that the more entitled people thought that our prompt was simply more propaganda from people who were making “too big of a deal” about the virus. The less entitled people, on the other hand, may have viewed the self-image prompt as information about how they should behave in ambiguous situations (at a party or downtown) when it is less clear what the norms or rules are.

Table 5

Coefficients from a linear mixed model predicting compliance with the health guidelines from entitlement (centered), condition (−1 = before self-image prompt, 1 = after self-image prompt), and their interaction, and the simple slopes.

	<i>b</i> (<i>se</i>)	<i>t</i>	<i>p</i>	Partial <i>r</i>
Intercept	5.57 (0.07)	84.03	0.000	
Entitlement	−0.17 (0.05)	−3.29	0.001	−0.19
Condition	0.03 (0.02)	1.74	0.084	0.10
Entitlement x condition	−0.04 (0.01)	−2.99	0.003	−0.18
Simple slope for before self-image prompt	−0.13 (0.05)	−2.36	0.019	−0.13
Simple slope for after self-image prompt	−0.21 (0.05)	−3.98	0.000	−0.21

5. General discussion

Consistent with our hypothesis, across three studies, entitled people were less likely to report that they were following or would follow the health guidelines during the COVID-19 pandemic. Entitled people also tended to believe that they were less likely to get sick from COVID-19, that they were more likely to be able to handle it if they did get sick, that they would not harm others if they got sick, and that the threat of the virus was overblown, and it seemed that their lack of concern about harming others and their belief that the threat of the virus was overblown could be two main reasons for their lack of compliance with the health guidelines. In Study 3, to encourage more compliance, we tried appealing to the entitled individuals' self-image goals. However, we found that telling people that they would be viewed positively if they followed the health guidelines in a certain situation (and negatively if they did not) did not lead the entitled people to increase their compliance with the health guidelines. Finally, we also found that entitled individuals were more likely to believe they had contracted COVID-19 already. Thus, it is possible that their refusal to comply with the pandemic-related health guidelines has already had negative consequences for them personally.

5.1. Implications

This research has important theoretical and practical implications. First, this research demonstrates that, although a key feature of psychological entitlement is the excessive desire for positive outcomes (Grubbs & Exline, 2016), entitled people may not always do things that lead to positive outcomes. Past research has shown that entitled individuals care about their own well-being; they are more likely to agree with statements such as "Great things should come to me" and "If I were on the Titanic, I would deserve to be on the first lifeboat!" (Campbell et al., 2004). Entitled individuals do not want to engage in behaviors that might cause themselves personal harm (Daddis & Brunell, 2015), and indeed, in Study 1, they were more likely to report engaging in general health behaviors such as using dental floss regularly. Thus, we found an interesting contradiction in our research because entitled people refused to comply with the specific health guidelines of the COVID-19 pandemic even though doing so could harm them by making them sick. Furthermore, if entitled individuals do end up contracting COVID-19, this violation of their expectation to remain healthy could actually have the ironic effect of making them even more likely to ignore the health guidelines in the future, as violations of expectations can lead to a reinforcement of entitled beliefs (see Grubbs & Exline, 2016).

Second, this research demonstrates that some cues to action may not uniformly encourage all individuals to follow the guidelines and might even be counterproductive for some. In Study 3, an appeal to self-image concerns increased the likelihood of compliance for people low in entitlement but somewhat decreased compliance for people very high in entitlement. This is an important implication given the current interest in producing messages that increase compliance.

Third, our research uncovered a variety of predictors of compliance with the COVID-19 health guidelines in addition to entitlement. Consistent with other research, political liberalism and agreeableness related to greater compliance (van Holm et al., 2020; Zajenkowski et al., 2020). Moreover, participants in our studies were more likely to report following the pandemic guidelines if they thought they had a greater chance of getting sick, if they were less likely to think they could handle getting sick, if they were more concerned about others, and if they thought the threat of the virus was more serious, which are all consistent with elements of the Health Belief Model (Champion & Skinner, 2008; Glanz & Bishop, 2010; Rosenstock, 2005) and other research on increasing compliance with health guidelines in general (Chon & Park, 2019; Krishna, 2018; Paek et al., 2008). Finding ways to increase these beliefs (especially the latter two for entitled people), perhaps through more education about the virus (see Krishna, 2018), could encourage

more people to follow the health guidelines. In the meantime, it is important to spread awareness amongst the general public that some individuals (i.e., people with an inflated sense of entitlement) are not as likely to follow the pandemic health guidelines; therefore, the general public should try to take additional precautionary measures to protect themselves when interacting with these individuals.

5.2. Limitations and future directions

This research adds to a growing body of work on how personality and individual differences predict compliance with health guidelines and other attitudes and behaviors during the pandemic (e.g., Aschwanden et al., 2020; Blagov, 2020; Nowak et al., 2020; Zajenkowski et al., 2020).⁵ We studied entitlement in this paper because past research had identified a link between entitlement and ignoring instructions (Zitek & Jordan, 2019), and because people have been quick to label those who are not following the guidelines as "entitled" (e.g., Weekman, 2020). That being said, one limitation of our work is that we are not sure of the specificity of our results to entitlement. Political orientation and (dis)agreeableness did not fully account for the relationship between entitlement and ignoring health guidelines, but it is possible that there are other variables that might account for the relationship, such as need for cognition (see Harvey & Martinko, 2009). Another limitation is that our results were fully self-reported. We were not able to examine people's actual behavior during the pandemic, and we do not know if people were correctly reporting whether they had contracted COVID-19 or not. Additionally, our participants were all from the United States, and thus we cannot generalize our results to other countries. Different countries have taken different approaches to the pandemic (Bremmer, 2020), and there are likely cultural differences in compliance with health guidelines (Biddlestone et al., 2020; Dizikes, 2020; Gebauer et al., 2014).

A final limitation of our research is that we were unable to increase entitled individuals' compliance with the pandemic health guidelines. We tried appealing to the entitled individuals' self-image goals by telling them that they would be viewed positively if they followed the guidelines, but this did not work. It is possible that entitled people might have viewed our prompt as more evidence that the threat of the virus was overblown. Appealing to entitled people's self-image goals might work better in real life if someone whose opinion they care about wants them to follow the health guidelines, or if following the guidelines could help them gain more status (see Lange et al., 2018). Future research should examine how to get entitled and unentitled people to comply with the health guidelines.

5.3. Summary and conclusions

In sum, across three studies, we found that entitled people were less likely to report that they were following or would follow the health guidelines of the COVID-19 pandemic, and they were more likely to report that they had actually contracted COVID-19. Their noncompliance seemed to be most likely due to their lessened concern about harming others and their increased belief that the threat of the virus was overblown (Study 2), and appealing to their self-image concerns did not increase their compliance (Study 3). This research makes an important contribution to the entitlement literature. In their influential model, Grubbs and Exline (2016) propose that entitled beliefs make people

⁵ Other research has identified a correlation between narcissism and noncompliance with pandemic health guidelines (Nowak et al., 2020; Zajenkowski et al., 2020). Entitlement is one component of narcissism, but the other papers did not report correlations for the entitlement facet in particular. Moreover, narcissistic rivalry but not narcissistic admiration is correlated with noncompliance (Zajenkowski et al., 2020), but both of these dimensions are correlated with entitlement (Back et al., 2013). Thus, we believe it was important to study entitlement separately.

vulnerable to psychological distress. We found that psychological entitlement can also put people at risk of contracting a potentially serious illness. Thus, being entitled may pose a danger to people both psychologically and physically.

CRediT authorship contribution statement

Emily M. Zitek: Conceptualization, Methodology, Investigation, Formal analysis, Resources, Project administration, Writing - original draft. **Rachel J. Schlund:** Conceptualization, Methodology, Investigation, Validation, Writing - review & editing.

Appendix A: Items used in the Study 1 scales and their correlations with entitlement

Scale items	Correlation with PES
Engagement in behaviors to follow health guidelines scale	
I am making an effort to wash my hands more.	−0.17*
I am engaging in social distancing.	−0.24**
If I am invited to a fun party that I want to attend, I will go. (reversed)	0.44***
I am not or would not follow a “shelter in place” order. (reversed)	0.50***
I have changed my behavior due to the pandemic.	−0.19*
Concern about getting sick scale	
I believe I am not at risk of getting sick from the coronavirus. (reversed)	0.43***
It is likely that I will stay healthy in the upcoming months. (reversed)	0.09
It is likely that I will get infected by the coronavirus.	0.08
If I catch COVID-19, I am likely to be asymptomatic. (reversed)	0.02
If I do get sick, it won't be a big deal. (reversed)	0.23**
I am worried about getting sick.	0.09
I think other people are more at risk of getting sick than I am. (reversed)	0.10
Concern for others scale	
I am worried that my family and friends will get sick.	−0.10
If I have resources someone else needs, I will share mine with them.	−0.23**
I am paying attention to how my actions could potentially put others at risk.	−0.27***
Belief that threat of COVID-19 is overblown scale	
I think the threat of the virus is exaggerated.	0.44***
I am taking the threat of the virus seriously. (reversed)	−0.17*
Other pandemic-related items (unreported in text)	
If I get sick, I deserve to be tested immediately.	0.28***
I try to stock up on limited resources.	0.14
Other health beliefs (unreported in text)	
Compared to others, how long do you think you will live? (1 = much shorter than others, 7 = much longer than others)	0.11
Compared to others your age, how healthy do you think you will be in five years? (1 = much less healthy than others, 7 = much more healthy than others)	−0.04

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Appendix B: Items used in the Study 2 scales and their correlations with entitlement

Scale items	Correlation with PES
Engagement in behaviors to follow health guidelines scale	
I am making an effort to wash my hands more.	−0.20***
I am engaging in social distancing.	−0.37***
If I am invited to a fun party that I want to attend, I will go. (reversed)	0.53***
I am not or would not follow a “shelter in place” order. (reversed)	0.51***
I have changed my behavior due to the pandemic.	−0.26***
I am following the rules put in place by my state.	−0.29***
I am wearing a mask when I can't keep my distance from other people.	−0.01
I am making an effort to disinfect and sanitize surfaces that are touched by multiple people.	−0.10*
Concern about getting sick scale	
I believe I am not at risk of getting sick from the coronavirus. (reversed)	0.42***
It is likely that I will stay healthy in the upcoming months. (reversed).	0.23***
It is likely that I will get infected by the coronavirus.	0.05
I will not catch COVID-19. (reversed)	0.37***
Perceived ability to handle COVID-19 infection scale	
I am worried about what will happen if I catch COVID-19. (reversed).	−0.04
If I do get sick, it won't be a big deal.	0.30***
If I get sick, I expect to recover well.	0.20***
If I catch COVID-19, I am likely to be asymptomatic.	0.28***
If I catch COVID-19, I will be able to handle it.	0.16**
I have the resources I need to get through COVID-19 if I catch it.	0.15**
Concern for others scale	
If I get COVID-19, I might accidentally infect others.	−0.19***
I am paying attention to how my actions could potentially put others at risk.	−0.23***
I don't think it is likely that I would pass the coronavirus to others even if I got sick. (reversed).	0.48***
I am worried about negatively affecting others if I get sick.	−0.25***
Belief that threat of COVID-19 is overblown scale	

(continued on next page)

(continued)

Scale items	Correlation with PES
I think the threat of the virus has been overblown by the media.	0.40***
This virus is a serious threat to our nation. (reversed)	−0.23***
I think the government is overly concerned about the coronavirus.	0.44***
The news makes the virus sound worse than it is.	0.39***
I don't believe a lot of what I have been hearing about how serious the virus is.	0.40***
I don't trust the information I have seen about how bad COVID-19 is.	0.39***
In general, the dangers of this virus have been exaggerated.	0.42***

Note. We divided a concern about getting sick and the perceived ability to handle getting sick into two separate scales in this study (whereas they were part of the same scale in Study 1). This is consistent with the Health Belief Model's two threat types of perceptions of susceptibility and perceptions of severity. We also asked directly about concern about harming others instead of just a concern for others in this study.

* $p < .05$.** $p < .01$.*** $p < .001$.

Appendix C

Self-image prompt (party version) used in Study 3:

You will next be asked questions about how you would behave at a friend's party. Before you answer these questions, we would like to tell you about some survey results related to COVID-19 and social gatherings.

According to several recent surveys, the majority of individuals support COVID-19 health guidelines. In fact, a recent poll revealed that 78% of respondents reported that people who fail to follow the guidelines should be fined or jailed. Furthermore, several news sources have reported that many individuals look negatively upon those who fail to follow the guidelines, using terms such as “bad,” “selfish,” and “irresponsible” to describe these individuals. On the other hand, many individuals look positively upon those who follow the guidelines, using terms such as “good,” “admirable,” and “responsible” to describe these individuals. Thus, even if you personally do not agree with the guidelines, it may be in your best interest to follow them as others around you will see you as a good, admirable, and responsible individual and not as a bad, selfish, and irresponsible individual. People are especially concerned about social gatherings such as parties, and they look down upon those who do not take precautions at social gatherings.

The news has recently been filled with pictures of unmasked people at crowded social gatherings like house parties and bars. Most people who see these pictures disapprove and think that the individuals at these parties and bars are irresponsible. However, most people also think that individuals who are taking precautions at social gatherings are very admirable.

Appendix D: Items used in the Study 3 scales and their correlations with entitlement

Scale items	Correlation with PES
Engagement in behaviors to follow health guidelines, downtown scenario ($M = 5.64$, $SD = 1.12$)	
This downtown area has no rules about masks. How likely would you be to wear a mask or other face covering while you walk around there?	−0.07
While walking around in the downtown area, how likely are you to try to maintain a distance of at least 6 ft from other people?	−0.08
You are interested in going in some shops. How likely are you to spend some time indoors while you are downtown? (reversed)	0.19**
You want to watch the concert, but the area in front of the stage is very crowded. How likely are you to watch the concert despite the crowd? (reversed)	0.28***
There is hand sanitizer available in the downtown area. How likely are you to use it?	−0.00
How likely are you to wash your hands more during and after your trip downtown?	−0.13*
How likely are you to behave as you normally would when there is no pandemic? (reversed)	0.25***
How likely are you to focus on having fun rather than on the virus while downtown? (reversed)	0.20**
How likely would you be to avoid going downtown altogether?	−0.06
Engagement in behaviors to follow health guidelines, party scenario ($M = 5.49$, $SD = 1.23$)	
Your friend's house has no rules about masks. How likely would you be to wear a mask or other face covering while you are there?	−0.05
While at your friend's party, how likely are you to try to maintain a distance of at least 6 ft from other people?	−0.02
You are interested in going inside to get out of the heat and talk to people there. How likely are you to spend some time indoors while you are at your friend's party? (reversed)	0.15*
You want to get some food and talk to the host, but the area in front of the grill is very crowded. How likely are you to hang out by the grill despite the crowd? (reversed)	0.24***
There is hand sanitizer available at your friend's house. How likely are you to use it?	0.04
How likely are you to wash your hands more during and after the party?	−0.08
How likely are you to behave as you normally would when there is no pandemic? (reversed)	0.26***
How likely are you to focus on having fun rather than on the virus while at the party? (reversed)	0.17**
How likely would you be to avoid going to the party altogether?	−0.09

* $p < .05$.** $p < .01$.*** $p < .001$.

Appendix E. Supplementary online materials

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jpaid.2020.110491>.

References

- Anastasio, P. A., & Rose, K. C. (2014). Beyond deserving more: Psychological entitlement also predicts negative attitudes toward personally relevant out-groups. *Social Psychological and Personality Science*, 5(1), 593–600. <https://doi.org/10.1177/194855061351968>.
- Aschwandon, D., Strickhouser, J. E., Sesker, A. A., Lee, J. H., Luchetti, M., Stephan, Y., ... Terracciano, A. (2020). Psychological and behavioural responses to coronavirus disease 2019: The role of personality. *European Journal of Personality*. <https://doi.org/10.1002/per.2281>.
- Back, M. D., Küfner, A. C. P., Dufner, M., Gerlach, T. M., Rauthmann, J. F., & Denissen, J. J. A. (2013). Narcissistic admiration and rivalry: Disentangling the bright and dark sides of narcissism. *Journal of Personality and Social Psychology*, 105(6), 1013–1037. <https://doi.org/10.1037/a0034431>.
- Biddlestone, M., Green, R., & Douglas, K. M. (2020). Cultural orientation, power, belief in conspiracy theories, and intentions to reduce the spread of COVID-19. *British Journal of Social Psychology*, 59(3), 663–673. <https://doi.org/10.1111/bjso.12397>.
- Blagov, P. S. (2020). Adaptive and dark personality in the COVID-19 pandemic: Predicting health-behavior endorsement and the appeal of public-health messages. *Social Psychological and Personality Science*. <https://doi.org/10.1177/1948550620936439>.
- Bremmer, I. (2020, June 12). The best global responses to COVID-19 pandemic. *Time*. <https://time.com/5851633/best-global-responses-covid-19/>.
- Bushman, B. J., Moeller, S. J., & Crocker, J. (2011). Sweets, sex, or self-esteem? Comparing the value of self-esteem boosts with other pleasant rewards. *Journal of Personality*, 79(5), 993–1012. <https://doi.org/10.1111/j.1467-6494.2011.00712.x>.
- Calvillo, D. P., Ross, B. J., Garcia, R. J. B., Smelter, T. J., & Rutchick, A. M. (2020). Political ideology predicts perceptions of the threat of COVID-19 (and susceptibility to fake news about it). *Social Psychological and Personality Science*, 11(8), 1119–1128. <https://doi.org/10.1177/1948550620940539>.
- Campbell, K., Bonacci, A., Shelton, J., Exline, J., & Bushman, B. J. (2004). Psychological entitlement: Interpersonal consequences and validation of a self-report measure. *Journal of Personality Assessment*, 83(1), 29–45. <https://doi.org/10.1207/s15327752jpa8301>.
- CDC. (2020). *How to protect yourself & others*. Centers for Disease Control and Prevention. <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html>.
- Champion, V., & Skinner, C. (2008). The health belief model. In K. Glanz, B. Rimer, & K. Viswanath (Eds.), *Health behavior and health education: Theory, research, and practice* (4th ed., pp. 45–62). John Wiley & Sons.
- Chon, M. G., & Park, H. (2019). Predicting public support for government actions in a public health crisis: Testing fear, organization-public relationship, and behavioral intention in the framework of the situational theory of problem solving. *Health Communication*, 1–11. <https://doi.org/10.1080/10410236.2019.1700439>.
- Chowning, K., & Campbell, N. J. (2009). Development and validation of a measure of academic entitlement: Individual differences in students' externalized responsibility and entitled expectations. *Journal of Educational Psychology*, 101(4), 982–997. <https://doi.org/10.1037/a0016351>.
- Cucinotta, D., & Vanelli, M. (2020). WHO declares COVID-19 a pandemic. *Acta Biomed*, 91(1), 157–160. <https://doi.org/10.23750/abm.v91i1.9397>.
- Daddis, C., & Brunell, A. B. (2015). Entitlement, exploitativeness, and reasoning about everyday transgressions: A social domain analysis. *Journal of Research in Personality*, 58, 115–126. <https://doi.org/10.1016/j.jrp.2015.07.007>.
- Dizikes, P. (2020, June 25). *When culture clashes with Covid-19*. MIT News. <http://news.mit.edu/2020/when-culture-clashes-covid-19-0625>.
- Fisk, G. M. (2010). "I want it all and I want it now!" an examination of the etiology, expression, and escalation of excessive employee entitlement. *Human Resource Management Review*, 20(2), 102–114. <https://doi.org/10.1016/j.hrmr.2009.11.001>.
- Fisk, G. M., & Neville, L. B. (2011). Effects of customer entitlement on service workers' physical and psychological well-being: A study of waitstaff employees. *Journal of Occupational Health Psychology*, 16(4), 391–405. <https://doi.org/10.1037/a0023802>.
- Gebauer, J. E., Bleidorn, W., Gosling, S. D., Rentfrow, P. J., Lamb, M. E., & Potter, J. (2014). Cross-cultural variations in Big Five relationships with religiosity: A sociocultural motives perspective. *Journal of Personality and Social Psychology*, 107(6), 1064–1091. <https://doi.org/10.1037/a0037683>.
- Glanz, K., & Bishop, D. B. (2010). The role of behavioral science theory in development and implementation of public health interventions. *Annual Review of Public Health*, 31, 399–418. <https://doi.org/10.1146/annurev.publhealth.012809.103604>.
- Goldstein, J. (2020, March 9). *Florida officials close several beaches after spring breakers continue partying despite warnings*. People. <https://people.com/human-interest/spring-break-continues-despite-warnings-florida-beaches-close/>.
- Gosling, S. D., Rentfrow, P. J., & Swann, W. B. (2003). A very brief measure of the Big-Five personality domains. *Journal of Research in Personality*, 37(6), 504–528. [https://doi.org/10.1016/S0092-6566\(03\)00046-1](https://doi.org/10.1016/S0092-6566(03)00046-1).
- Grubbs, J. B., & Exline, J. J. (2016). Trait entitlement: A cognitive-personality source of vulnerability to psychological distress. *Psychological Bulletin*, 142(11), 1204–1226. <https://doi.org/10.1037/bul0000063>.
- Hampson, S. E., Edmonds, G. W., & Goldberg, L. R. (2019). The health behavior checklist: Factor structure in community samples and validity of a revised good health practices scale. *Journal of Health Psychology*, 24(8), 1103–1109. <https://doi.org/10.1177/1359105316687629>.
- Harvey, P., Harris, K. J., Gillis, W. E., & Martinko, M. J. (2014). Abusive supervision and the entitled employee. *The Leadership Quarterly*, 25(2), 204–217. <https://doi.org/10.1016/j.leaqua.2013.08.001>.
- Harvey, P., & Martinko, M. J. (2009). An empirical examination of the role of attributions in psychological entitlement and its outcomes. *Journal of Organizational Behavior*, 30(1), 459–476. <https://doi.org/10.1002/job>.
- Hatemi, P. K., & Fazekas, Z. (2018). Narcissism and political orientations. *American Journal of Political Science*, 62(4), 873–888. <https://doi.org/10.1111/ajps.12380>.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and condition process analysis: A regression based approach*. New York: The Guilford Press. <https://doi.org/10.1111/jedm.12050>.
- Holshue, M. L., DeBolt, C., Lindquist, S., Lofy, K. H., Wiesman, J., Bruce, H., ... Pillai, S. K. (2020). First case of 2019 novel coronavirus in the United States. *New England Journal of Medicine*, 382(10), 929–936. <https://doi.org/10.1056/NEJMoa2001191>.
- Krishna, A. (2018). Poison or prevention? Understanding the linkages between vaccine-negative individuals' knowledge deficiency, motivations, and active communication behaviors. *Health Communication*, 33(9), 1088–1096. <https://doi.org/10.1080/10410236.2017.1331307>.
- Lange, J., Redford, L., & Crusius, J. (2018). A status-seeking account of psychological entitlement. *Personality and Social Psychology Bulletin*, 45(7), 1113–1128. <https://doi.org/10.1177/0146167218808501>.
- Lee, A., Schwarz, G., Newman, A., & Legood, A. (2019). Investigating when and why psychological entitlement predicts unethical pro-organizational behavior. *Journal of Business Ethics*, 154(1), 109–126. <https://doi.org/10.1007/s10551-017-3456-z>.
- Malhotra, D., & Gino, F. (2011). The pursuit of power corrupts. *Administrative Science Quarterly*, 56(4), 559–592. <https://doi.org/10.1177/0001839212441350>.
- McCullough, M. E., Emmons, R. A., Kilpatrick, S. D., & Mooney, C. N. (2003). Narcissists as "victims": The role of narcissism in the perception of transgressions. *Personality and Social Psychology Bulletin*, 29(7), 885–893. <https://doi.org/10.1177/0146167203029007007>.
- Moeller, S. J., Crocker, J., & Bushman, B. J. (2009). Creating hostility and conflict: Effects of entitlement and self-image goals. *Journal of Experimental Social Psychology*, 45(2), 448–452. <https://doi.org/10.1016/j.jesp.2008.11.005>.
- Nealis, L. J., Sherry, S. B., Sherry, D. L., Stewart, S. H., & Macneil, M. A. (2015). Toward a better understanding of narcissistic perfectionism: Evidence of factorial validity, incremental validity, and mediating mechanisms. *Journal of Research in Personality*, 57, 11–25. <https://doi.org/10.1016/j.jrp.2015.02.006>.
- Neville, L., & Fisk, G. M. (2019). Getting to excess: Psychological entitlement and negotiation attitudes. *Journal of Business and Psychology*, 34(4), 555–574. <https://doi.org/10.1007/s10869-018-9557-6>.
- Nowak, B., Brzóska, P., Piotrowski, J., Sedikides, C., Żemojtel-Piotrowska, M., & Jonason, P. K. (2020). Adaptive and maladaptive behavior during the COVID-19 pandemic: The roles of Dark Triad traits, collective narcissism, and health beliefs. *Personality and Individual Differences*, 167, 110–232. <https://doi.org/10.1016/j.paid.2020.110232>.
- Paek, H. J., Hilyard, K., Freimuth, V. S., Barge, J. K., & Mindlin, M. (2008). Public support for government actions during a flu pandemic: Lessons learned from a statewide survey. *Health Promotion Practice*, 9(4), 60–72. <https://doi.org/10.1177/1524839908322114>.
- Pryor, L. R., Miller, J. D., & Gaughan, E. T. (2008). A comparison of the Psychological Entitlement Scale and the Narcissistic Personality Inventory's entitlement scale: Relations with general personality traits and personality disorders. *Journal of Personality Assessment*, 90(5), 517–520. <https://doi.org/10.1080/00223890802248893>.
- Richard, F. D., Bond, C. F., & Stokes-Zoota, J. J. (2003). One hundred years of social psychology quantitatively described. *Review of General Psychology*, 7(4), 331–363. <https://doi.org/10.1037/1089-2680.7.4.331>.
- Rose, K. C., & Anastasio, P. A. (2014). Entitlement is about "others", narcissism is not: Relations to sociotropic and autonomous interpersonal styles. *Personality and Individual Differences*, 59, 50–53. <https://doi.org/10.1016/j.paid.2013.11.004>.
- Rosenstock, I. M. (2005). Why people use health services. *The Milbank Quarterly*, 83(4), 94–127. <https://doi.org/10.1111/j.1468-0009.2005.00425.x>.
- Rosenstock, I. M., Strecher, V., & Becker, M. (1988). Social learning theory and the health belief model. *Health Education & Behavior*, 15(2), 175–183. <https://doi.org/10.1177/109019818801500203>.
- Shook, N., Sevi, B., & Lee, J. (2020). *Who's listening? Predictors of concern about COVID-19 and preventative health behaviors* [preprint]. PsyArXiv. <https://doi.org/10.31234/osf.io/c9rfg>.
- Snow, J. N., Kern, R. M., & Cullette, W. L. (2001). Identifying personality traits associated with attrition in systematic training for effective parenting groups. *The Family Journal*, 9(2), 102–108. <https://doi.org/10.1177/1066480701092003>.
- Trumpeter, N., Watson, P. J., & O'Leary, B. J. (2006). Factors within multidimensional perfectionism scales: Complexity of relationships with self-esteem, narcissism, self-control, and self-criticism. *Personality and Individual Differences*, 41(5), 849–860. <https://doi.org/10.1016/j.paid.2006.03.014>.
- van Holm, E., Monaghan, J., Shahar, D., Messina, J., & Surprenant, C. (2020). The impact of political ideology on concern and behavior during COVID-19. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3573224>.
- Watson, P. J., & Morris, R. J. (1991). Narcissism, empathy and social desirability. *Personality and Individual Differences*, 12(6), 575–579. [https://doi.org/10.1016/0191-8869\(91\)90253-8](https://doi.org/10.1016/0191-8869(91)90253-8).
- Weekman, K. (2020, June 6). *Kardashians go on family vacation in spite of lockdown: "the entitled don't listen"*. Yahoo! Life. <https://www.yahoo.com/lifestyle/kardashians-family-vacation-wyoming-spite-182800175.html>.
- Zajenkowski, M., Jonason, P. K., Leniarska, M., & Kozakiewicz, Z. (2020). Who complies with the restrictions to reduce the spread of COVID-19? Personality and perceptions of the COVID-19 situation. *Personality and Individual Differences*, 166, 110–199.

- Zitek, E. M., & Jordan, A. H. (2019). Psychological entitlement predicts failure to follow instructions. *Social Psychological and Personality Science*, 10(2), 172–180. <https://doi.org/10.1177/1948550617729885>.
- Zitek, E. M., & Jordan, A. H. (2021). Individuals higher in psychological entitlement respond to bad luck with anger. *Personality and Individual Differences*, 168. <https://doi.org/10.1016/j.paid.2020.110306>.
- Zitek, E. M., Jordan, A. H., Monin, B., & Leach, F. R. (2010). Victim entitlement to behave selfishly. *Journal of Personality and Social Psychology*, 98(2), 245–255. <https://doi.org/10.1037/a0017168>.