

in press, *Social Psychology*

**Bullying and Conspiracy Theories: Experiences of Workplace Bullying and the
Tendency to Engage in Conspiracy Theorising**

Daniel Jolley*¹ and Anthony Lantian²

¹University of Nottingham, United Kingdom

²Univ Paris Nanterre, France

***Corresponding author information:**

Dr Daniel Jolley, School of Psychology, University of Nottingham, University Park,
Nottingham, NG7 2RD, E-mail: daniel.jolley@nottingham.ac.uk

Author contributions:

All authors were involved in all parts of the research.

Data availability statement:

The materials of our two studies, the data and the corresponding statistical code, are made
available on: https://osf.io/4t6bp/?view_only=1a5b47d4a50f4a319c3c7f9bec0efec8

Abstract

Experiences of bullying in the workplace can increase anxiety, paranoia, and hypervigilance to threat in victims. Such factors are also associated with conspiracy beliefs. Two pre-registered studies (cross-sectional and experimental) tested whether bullying experiences may be linked to the development of conspiracy beliefs. Study 1 ($n = 273$) demonstrated that experiences of workplace bullying were positively associated with conspiracy beliefs, an effect that could be explained by paranoia. In Study 2 ($n = 206$), participants who imagined being bullied (vs. supported) reported increased belief in conspiracy theories. Our research uncovers another antecedent of conspiracy beliefs: workplace bullying. Future research should endeavour to explore how best to support victims and avert the link between being bullied and conspiracy theorising emerging.

Keywords: workplace bullying, conspiracy beliefs, paranoia

Bullying and Conspiracy Theories: Experiences of Workplace Bullying and the Tendency to Engage in Conspiracy Theorising

Conspiracy theories are commonly defined as “explanations for important events that involve secret plots by powerful and malevolent groups” (Douglas et al., 2017, p. 538).

Conspiracy theories are known to accuse *any* group that can be perceived as powerful and malevolent (Douglas et al., 2019), from scientists and doctors (e.g., Lamberty & Imhoff, 2018) to one’s boss in the workplace (e.g., Douglas & Leite, 2017). While conspiracy beliefs may form as a route to explain large and significant events (e.g., Leman & Cinnirella, 2007), one’s life experiences may also increase an individual’s susceptibility to conspiracy theorising (e.g., prior discrimination, Jolley & Jaspal, 2020). In the current research, we explore the possibility that hostile workplace experiences (i.e., bullying) could be an antecedent to the development of conspiracy beliefs.

Psychology of Conspiracy Theories

Research exploring the psychology of conspiracy beliefs has proliferated in the last 10-years (Douglas et al., 2019), where psychologists have made significant progress uncovering how conspiracy theories can impact the smooth running of societies (see Jolley et al., 2022 for a review). For example, conspiracy beliefs have been shown to impact COVID-19 preventative behaviour (such as following government advice around self-isolation or wishing to receive a COVID-19 vaccine; Douglas, 2021) and reduce political vote intentions and engagement in climate-friendly behaviours (Jolley & Douglas, 2014), alongside impacting medical intentions (e.g., Lamberty & Imhoff, 2018) and workplace outcomes (e.g., turnover intentions, Douglas & Leite, 2017). Conspiracy beliefs have also been linked with being more willing to support violence (e.g., Jolley & Paterson, 2020) and engaging in unethical activities (Jolley et al., 2019).

Worryingly, conspiracy beliefs are popular (Oliver & Wood, 2014), often thought to be because they promise to meet psychological needs (Douglas, et al., 2017). Psychologists have identified a range of psychological correlates of conspiracy beliefs such as feelings of uncertainty (van Prooijen & Jostmann, 2013) and anxiety (Grzesiak-Feldman, 2013). Association also exists between paranoia and conspiracy beliefs (e.g., Grzesiak-Feldman & Ejsmont, 2008). Whilst it could be argued paranoia and conspiracy beliefs are the same construct, Imhoff and Lamberty (2018) provided evidence of their distinctions and divergent associations with other factors (i.e., conspiracy beliefs attribute evil to the powerful, whereas paranoia attributes evil to people in general). Further supporting this notion, Alsuhibani et al. (2022) also demonstrated that conspiracy beliefs, but not paranoia, predicted poorer analytical thinking. It is clear that some of these psychological correlates can be frustrated during times of societal crisis, such as rapid political change, a terrorist attack, or a virus outbreak (van Prooijen & Douglas, 2017). Indeed, societal crises breed feelings of uncertainty, anxiety and threat (such as during the COVID-19 pandemic, Lalot et al., 2021), where citizens try to make sense of a turbulent society (Franks et al., 2017). Such conditions make fertile ground for conspiracy beliefs to flourish.

Another contributor to the development of conspiracy beliefs is experiences of collective victimhood and discrimination. Early work by Abalakina-Paap et al. (1999) showcased how African-American participants who reported they had been subject to police harassment were more likely to subscribe to HIV conspiracy theories that propose HIV is human-made. More recently, Jolley and Jaspal (2020) demonstrated in a sample of UK White gay males, experiences of discrimination (because of their sexual orientation) were associated with heightened HIV conspiracy beliefs. In turn, HIV conspiracy beliefs were then associated with less favourable attitudes towards Pre-Exposure Prophylaxis (PrEP), a bio-medical approach preventing the risk of HIV. Jolley and Jaspal (2020) propose that the roots of HIV

conspiracy beliefs could be in adverse social experiences (i.e., victimisation), and its consequences may be the rejection of biomedical therapies.

In a similar vein, Pantazi et al. (2022) found across a series of studies with Greek participants, historical collective victimhood fostered conspiracy theorising, but only for those who identified strongly with being Greek. Armaly and Enders (2021) also provided evidence that victimhood is linked to increased conspiracy beliefs. However, the researchers demonstrated that believing one is a victim does not appear to depend on true oppression and instead cut across political and sociodemographic lines. For example, they found that a roughly equal fraction of White (53%) and non-White (57%) participants agreed that “*the system is rigged to benefit a select few*”, which was associated with heightened conspiracy beliefs. In other words, people do not need to be victimised due to group status to *feel* like a victim; they can subjectively *feel* like their group is a victim even in the absence of true oppression. Pantazi et al. (2022) proposed that conspiracy endorsement may take the form of protecting the ingroup from enemies, especially when the ingroup is (perceived to be) a victim. Taken together, it is plausible that hostile experiences (such as specific forms of victimisation and discrimination) in one’s everyday life could be a precursor to conspiracy theorising.

Bullying and Belief in Conspiracy Theories

In the literature to date on the antecedents of conspiracy beliefs, discrimination and victimisation that is not based on collective identities have not yet received attention. An important specific form of discrimination and victimisation to consider is workplace bullying. Bullying is interpersonal, where there is a power imbalance between the bully and the victim (e.g., co-worker is bullied by a superior or informal power imbalance between co-workers, Einarsen et al., 1994; Shetgiri, 2013). Importantly, bullying is a multi-causal phenomenon, since it can result from a range of factors (Salin, 2003). Compared to collective victimhood,

individuals could end up being bullied because of individual differences between workers (i.e., personality clashes that inspire interpersonal conflict), appearance (e.g., size or height), or even displayed aggression (e.g., Anti-Bullying Alliance, 2021; Salin, 2003). As the root cause of workplace bullying can be so diverse, researchers typically focus on the ‘acts’ to define bullying (Hewett et al., 2018). Specifically, the negative acts toward the bullied victim can be work-related (such as withholding work-related information) or personal (such as gossiping about them), but they must be experienced by the victim repeatedly over time (i.e., at least weekly for six months or more, Leymann, 1996). Bullying can include direct (e.g., name-calling) and indirect (e.g., gossiping) behaviours (see Shetgiri, 2013).

To measure the experiences of being bullied in the workplace, two approaches are typically used (Nielsen et al., 2011). First is the self-labelling method, where participants simply report if they have been bullied within the last six months. The second approach lists a range of negative (bullying) behaviours, which participants respond to, indicating if they have experienced such acts in the workplace. Using such measures of bullying, researchers have demonstrated that bullying experiences can impact a victim’s wellbeing and performance at work. For example, in a meta-analysis that included 90 studies, Bowling and Beehr (2006) uncovered that workplace bullying was predictive of burnout, stress, decreased job satisfaction and increased turnover intentions.

Furthermore, bullying can contribute to a negative work climate (e.g., affect relationship with peers, reduce morale and organisational commitment, see Barlett & Bartlett, 2011). Such a negative work climate has been linked with conspiracy beliefs. Specifically, Douglas and Leite (2017) found that a work place with negative features (e.g., little autonomy over their work, frequent conflict and gossip in the workplace, vs. a positive climate) increased belief in conspiracy theories. Whilst this study did not examine bullying, we argue that the acts included as part of their experimental manipulation could be stemmed

from bullying. Thus, as bullying behaviours can contribute to a negative work environment (Barlett & Bartlett, 2011), this work provides initial support for the assertion that because bullied victims may seek explanations for their difficult circumstances, being bullied could inspire conspiracy theorising.

In supporting such a view, research has also found that victims report increased feelings of anxiety and paranoid thinking (Hawker & Boulton, 2000; Singham, et al. 2017), alongside being hypervigilant to threats in the environment (Jack & Egan, 2018). Such variables also predict belief in conspiracy theories (Douglas et al., 2019). Victims of bullying may find conspiracy theories appealing because bullying experiences – which contribute to a negative work environment – frustrate the exact psychological factors that are a route to developing conspiracy beliefs. A route that is appealing because conspiracy beliefs promise to satisfy psychological needs and restore a sense of control and meaning (Douglas et al., 2019). Whilst such a route likely explains the link between collective victimisation and conspiracy theorising (e.g., sexual orientation, Jolley & Jaspal, 2020), it is plausible that victimisation caused by more interpersonal factors (i.e., bullying) can also inspire conspiracy beliefs through the same mechanisms.

In a similar vein, bullying can also include being socially excluded, such as where an individual is excluded from a work environment (Gamian-Wilk & Madeja-Bien, 2018). However, scholars have argued that exclusion and bullying are theoretically and empirically separate concepts (e.g., Ferris et al., 2008). Nonetheless, Poon, et al. (2020) have recently demonstrated that socially excluded participants (ostracised) were more likely to endorse conspiracy theories. While ostracism and bullying are distinct concepts, because of the overlap between the two, this work provides further support for the idea that bullying experiences could be an antecedent to conspiracy theorising. In sum, it is plausible that experiences of workplace bullying may be linked to heightened belief in conspiracy theories.

An effect explained by increased feelings of anxiety and paranoia, alongside being hypervigilant to threats in the environment; all grounded in victims seeking to understand their circumstances.

The Present Research

In two studies, we investigated the relationship between the experience of bullying and belief in conspiracy theories. In Study 1, we examined this relationship in a cross-sectional study, where we tested whether prior experiences of being bullied in the workplace predicted belief in conspiracy theories. We also examined whether paranoia, anxiety, and hypervigilance to threat mediated this relationship. We predicted that bullying experiences would be associated with increased paranoia, anxiety, and hypervigilance, which would then be associated with heightened belief in conspiracy theories. In Study 2, we experimentally manipulated exposure to a bullying work environment (vs. support) and measured belief in conspiracy theories. State paranoia was tested as a mediator. We predicted that exposure to a bullying work environment would increase feelings of (state) paranoia, which would be associated with increased belief in conspiracy theories. The materials of our two studies, the data and the corresponding statistical code, are made available on:

https://osf.io/4t6bp/?view_only=1a5b47d4a50f4a319c3c7f9bec0efec8

Study 1

Method

Participants and Design

Following recommendations to receive stable correlations ($n = 250$; Schönbrodt & Perugini, 2013), 274 participants (69 male, 204 female, and 1 transgender; $M_{age} = 34.90$, $SD = 10.15$) were recruited via the online platform, *Prolific* in early January 2020. All participants were residents in the UK. Based on a pre-registered exclusion criterion (see https://aspredicted.org/CCP_GBD), 1 participant was excluded because they do not wish their

data to be used in the analysis. Our remaining sample consisted of 273 participants (69 male, 203 female, and 1 transgender; $M_{age} = 34.93$, $SD = 10.16$). The predictor variables comprised of experiences of bullying at work, and the criterion variable was a measure of belief in conspiracy theories. Paranoia, anxiety, and hypervigilance were measured as mediators of this relationship.

Materials and Procedure

Participants indicated their informed consent before beginning the questionnaire. Participants were then asked to complete two measures of bullying at work. First, participants completed the Short Negative Acts Questionnaire (SNAQ, Notelaers et al., 2019), where there were nine statements (e.g., “*Someone withholding information which affects your performance*”, $\alpha = .88$). Participants were asked how often they have experience each behaviour at work on a five-point scale (1 = *never*, 2 = *now and then*, 3 = *monthly*, 4 = *weekly*, 5 = *daily*). Second, participants were provided with a definition of bullying (e.g., “*Bullying at work means harassing, offending, socially excluding someone or negatively affecting someone’s work tasks...*”), before being asked if they consider themselves to have been bullied over the past 6 months (“*Do you consider yourself to have been bullied at your workplace over the past 6 months*”, Trenberth, et al., 2013). Participants answered on a 5-point scale (1 = *no*, 2 = *yes, but only rarely*, 3 = *yes, now and then*, 4 = *yes, several times a week*, 5 = *yes, almost daily*), which was turned into a dichotomous variable (-1 = *no*, 1 = *yes*).

Next, participants completed a measure of paranoia (Paranoid Ideation Scale, Fenigstein & Vanable, 1992) made up of twenty items (e.g., “*Someone has it in for me*”, $\alpha = .93$) where participants signified their applicability to themselves on a five-point scale (1 = *not at all applicable to me*, 5 = *extremely applicable to me*). Anxiety was then measured using seven items (e.g., “*I feel tense of ‘wound up’*”, Snaith, 2003, $\alpha = .88$) on a 4-point scale

(e.g., 0 = *not at all*, 1 = *not often*, 2 = *usually*, 3 = *definitely*), followed by hypervigilance with 5 items (e.g., “As soon as I wake up and for the rest of the day, I am watching for signs of trouble”, Bernstein et al., 2015, $\alpha = .87$) on a 5-point scale (1 = *not at all like me* to 5 = *very much like me*). These three measures were counterbalanced. A measure of conspiracy beliefs was then completed using 15 items (e.g., “A small, secret group of people is responsible for making all major world decisions, such as going to war” $\alpha = .93$; Brotherton et al., 2013) on a five-point scale (1 = *definitely not true*, 5 = *definitely true*). Participants then provided demographic details, before being debriefed, paid and thanked for their time.

Results and Discussion

Confirmatory Analyses

Bivariate correlations between all the variables measured in our study are presented in Table 1. As predicted, we found a positive and significant relationship between belief in conspiracy theories and bullying at work (measured with the SNAQ), $r(271) = .28, p < .001$, 95% CI [.16, .38].

Then, we ran a multiple mediation model, with bullying at work (SNAQ) as the independent variable, hypervigilance, anxiety, and paranoia as the mediators, and conspiracy belief as the dependent variable (see Figure 1). We first tested the total effect of bullying in the workplace on belief in conspiracy theory. The more the participants reported having being bullied the more they believed in conspiracy theories, $\beta = .28, B = 0.36, SE = .08, t(271) = 4.77, p < .001, \eta^2_p = .077$. Then, a series of three regression models (testing the IV to mediators path) showed that bullying at work was positively related to hypervigilance, $\beta = .42, B = 0.57, SE = .08, t(271) = 7.53, p < .001, \eta^2_p = .173$, anxiety, $\beta = .40, B = 2.79, SE = .39, t(271) = 7.15, p < .001, \eta^2_p = .159$, and paranoia, $\beta = .57, B = 0.66, SE = .06, t(271) = 11.43, p < .001, \eta^2_p = .325$.

The last regression model (testing the mediators to DV path) showed that the more people express paranoia, the more they believe in conspiracy theories, controlling for all the other predictors in the model, $\beta = .32$, $B = 0.36$, $SE = .09$, $t(268) = 3.82$, $p < .001$, $\eta^2_p = .052$. The two other mediators were not significantly related to the DV ($ps > .652$)¹. The residual direct effect of bullying became not significant, $\beta = .07$, $B = 0.09$, $SE = .09$, $t(268) = 1.05$, $p = .295$, $\eta^2_p = .004$. As for paranoia, the IV to mediator and mediator to DV paths are both significant, we can conclude that this indirect effect is significant (Judd et al., 2014). A percentile bootstrap procedure (5,000 bootstrap samples; using the package ‘PROCESS’ [v. 4.1; Hayes, 2022] in R [v. 3.6.1]) also leads to the same conclusions with the confidence interval of the indirect effect of paranoia ($ab = 0.24$), that does not include zero, 95% CI [0.10; 0.39]. Therefore, paranoia was shown to be the only significant mediator (when controlling for hypervigilance and anxiety) explaining the effect between bullying experiences and belief in conspiracy theories.

¹ When each mediator is entered independently in a simple mediation (i.e., not controlling for each other), anxiety ($ab = 0.09$, 95% CI [0.02; 0.18]) and hypervigilance ($ab = 0.12$, 95% CI [0.05; 0.19]) are significant mediators, in addition to paranoia ($ab = 0.26$, 95% CI [0.15; 0.39]). It is when controlling for each other (in a test of multiple mediation as reported in the main text) that paranoia is shown to be the star player in explaining the effect of bullying and conspiracy beliefs. See the General Discussion for a discussion on this point.

Table 1
Bivariate Correlations (With 95% Confidence Intervals) Between all the Variables (Study 1)

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Bullying at work	1.70	0.64	-					
2. Self-labelled bullied item ^a	-0.67	0.74	.58*** [.50, .66]	-				
3. Hypervigilance	1.89	0.88	.42*** [.31, .51]	.25*** [.14, .36]	-			
4. Anxiety ^b	12.90	4.50	.40*** [.29, .49]	.28*** [.17, .39]	.67*** [.60, .73]	-		
5. Paranoia	2.14	0.75	.57*** [.48, .65]	.34*** [.23, .44]	.66*** [.59, .72]	.60*** [.52, .67]	-	
6. Belief in conspiracy theories	2.70	0.84	.28*** [.16, .38]	.23*** [.11, .34]	.29*** [.18, .40]	.26*** [.15, .37]	.40*** [.29, .49]	-

Notes. *N* = 273. Values in square brackets indicate the 95% confidence interval for each correlation.

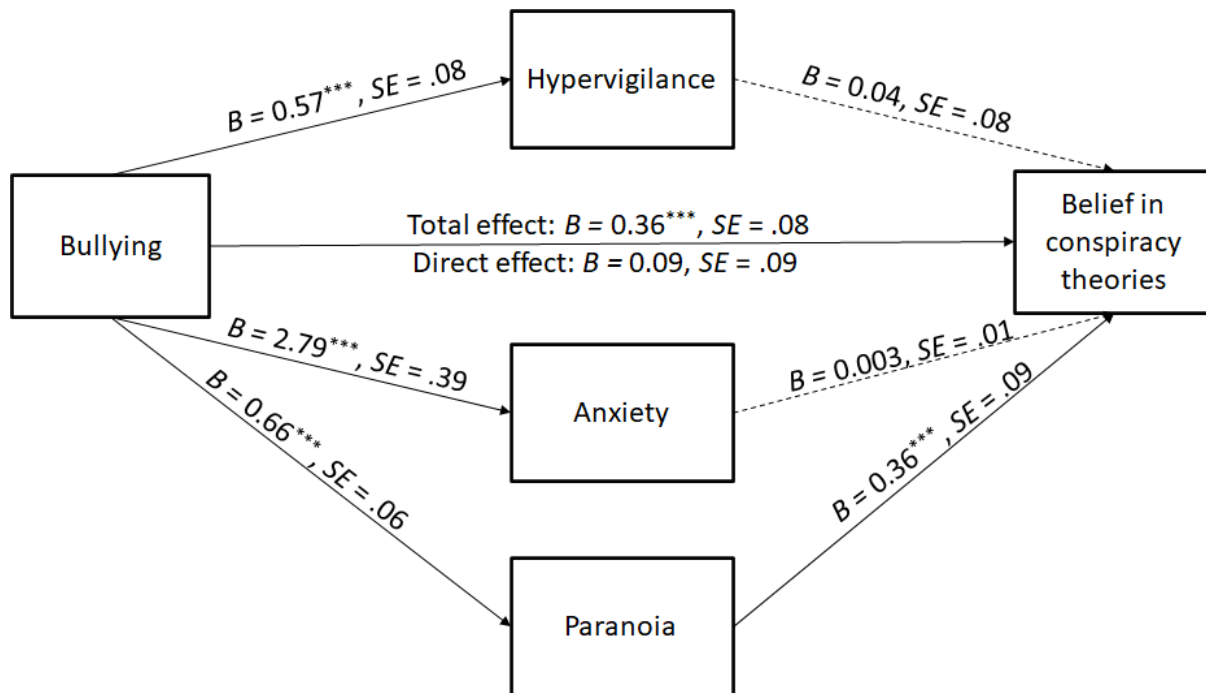
a Values represent point-biserial correlations, an absence of bullying experience at work in the previous 6 months (value of 1 on the original scale) was coded -1, experience of bullying experience at work in the previous 6 months (values ranging from 2 to 5 on the original scale) was coded 1.

b These values do not correspond to the mean but the sum.

*** *p* < .001.

Figure 1

A Multiple Mediation Model of the Association between Bullying and Belief in Conspiracy Theories via Hypervigilance, Anxiety, and Paranoia



Note. The B values represent unstandardised regression coefficients. Solid lines represent significant paths, and dashed lines represent non-significant paths. Bullying is measured with the Short Negative Acts Questionnaire (SNAQ).

*** $p < .001$.

Exploratory Analyses

As not all the paths of the hypothetical multiple mediation were conclusive, we have chosen not to pursue a serial mediation analyses (e.g., anxiety $\rightarrow$ paranoia) any further as detailed in our pre-registration. Interestingly, as indicated in Table 1, the participants who reported experience of bullying experience at work in the previous 6 months believe more in conspiracy theories than those who reported an absence of bullying experience at work over

this same period. In a similar vein, if we run the same multiple mediation model as the one reported in the Confirmation Analyses section by replacing the independent variable by this self-labelled bullied item (-1 = *absence of bullying experience at work*, 1 = *bullying experience at work*) we then find the same pattern of results as the one observed previously, with paranoia as the only significant mediator explaining the effect between bullying experiences and belief in conspiracy theories, $ab = 0.13$, 95% CI [0.06; 0.21].

The results from Study 1 demonstrated that experiences of bullying—measured by experiences of a range of negative (bullying) acts and self-labelled—were associated with heightened belief in conspiracy theories. Whilst bullying was associated with paranoia, anxiety, and hypervigilance to threat, we found that only paranoia was a significant mediator between bullying and conspiracy beliefs in a test of multiple mediation. Specifically, bullying experiences were associated with increased paranoia, which in turn, were associated with a higher endorsement of conspiracy beliefs. However, these findings are based on cross-sectional data, where causation is not possible to be concluded. Study 2 sought to address this limitation and explore causation.

Study 2

Study 1 has provided evidence that an antecedent to conspiracy theorising could be bullying experiences, an effect that increased levels of paranoid thinking may explain. Study 2 seeks to develop this work by exploring causation. Specifically, using an experimental design, participants were asked to imagine a new work environment that included behaviours defined as bullying (such as being harassed, Notelaers et al., 2019) or a supportive work environment that did not include the same negative acts. We predicted that exposure to a bullying environment (vs. support) would increase belief in conspiracy theories. Further, as we did not expect a short experimental prime to increase trait paranoia (which was our mediator in Study 1), we also included a measure of *state* paranoia. We expected that being

exposed to a bullying prime (vs. support) would increase (state) paranoia, which in turn, would be associated with heightened belief in conspiracy theories.

Method

Participants and Design

We recruited 218 participants with complete data (63 male, 154 female, and 1 transgender; $M_{age} = 39.77$, $SD = 11.46$) via the online platform, *Prolific* in early-March 2020 (importantly before any COVID-19 restrictions). All participants were resident in the UK. Following our pre-registered exclusion criterion (see https://aspredicted.org/5M4_X8M), a total of 12 participants were excluded (8 because they spent an unrealistic short time [less than 36 sec] on the Study, 2 because they did not want their data to be used, and 3 because their answer was considered in a non-consensual manner by two independent judges as “non-serious participants” regarding the content of the task of imagination; including 1 participant who failed *two* exclusion criteria). Our remaining sample consisted of 206 participants (58 male, 147 female, and 1 transgender; $M_{age} = 40.12$, $SD = 11.38$). Ninety-nine participants were in the bullying condition and 107 were in the support condition. This sample size was above the desired sample size ($N = 200$) that we had specified in our pre-registration. This latter was based on a statistical power calculation showing that this sample size allows us to have 80% power to detect a difference corresponding to a Cohen’s $d_s \geq 0.40$ (with $\alpha = .05$).

Materials and Procedure

Participants provided their informed consent, before being asked to imagine either being bullied (experimental condition) or supported (comparison condition) in a new workplace. In both conditions, participants were asked to imagine that they have in past 6-months joined a new workplace. They were then asked to imagine the described scenario, followed by being asked to write down as many aspects of the scenario that they imagined as possible in their own words. The term ‘bullying’ was not used in either scenario. In the

bullied condition, participants were asked to imagine that during the first 6 months in their new job, they have experienced a range of behaviours (taken from Notelaers et al., 2019, see also Shetgiri, 2014), that are direct (e.g., shouting) and indirect (e.g., gossiping). We did not include a specific prompt to imagine being socially excluded (e.g., ignored and left out of social activities). The full bullying scenario is as follows:

“I would like you to take a minute to imagine that you have in the past 6-months joined a new workplace. During that time, however, you have been harassed and offended by someone which is negatively affecting your work tasks. There has been the withholding of information, the spread of gossip and rumour, insulting remarks about you, repeated reminders of any errors and persistent unwarranted criticism of your work and effort. These behaviours and others (such as that person shouting at you and conducting unwelcome practical jokes on you) have occurred repeatedly and regularly.”

In the non-bullying condition (supported), participants were asked to imagine that during the first 6 months in their new job, they have experienced behaviours a range of behaviours such as being supportive by colleagues. The full supported scenario is as follows:

“I would like you to take a minute to imagine that you have in the past 6-months joined a new workplace. During that time, your new colleagues have been welcoming and supportive, which is having a positive impact on you settling into the new work environment.”

Next, participants completed a measure of state paranoia (Freeman, et al., 2007) using 10 statements (e.g., “someone was hostile towards me”, $\alpha = .99$) on a 5-point scale (1 = strongly disagree, 5 = strongly agree), followed by belief in conspiracy theories (as in Study 1, $\alpha = .92$). The participant then answered three manipulation check measures. First, participants were asked to complete the SNAQ (Notelaers et al., 2019) as in Study 1, adapted

to the experimental scenario. Specifically, participants completed the following sentence: “During the scenario that you imagined, someone was...” for each of the 9 items (e.g., “...*withholding information which affected your performance.*”) on a five-point scale (1 = *strongly disagree*, 5 = *strongly agree*). Participants were then asked to complete two further items that explicitly measured bullying (“*during the imagined scenario, I felt bullied*”) and ostracism (“*during the imagined scenario, I felt socially excluded (ostracised)*”), each on a five-point scale (1 = *strongly disagree*, 5 = *strongly agree*). Participants who were in the bullied condition were then asked to imagine a supportive new work environment to eliminate any discomfort. Finally, participants provided demographic details and were debriefed, paid, and thanked for their time.

Results and Discussion

Confirmatory Analyses

Bivariate correlations between all the variables measured in our study are presented in Table 2. As a preliminary analysis, we first conducted independent *t*-tests on our manipulation checks. As expected, the mean level of bullying (SNAQ) is significantly higher in the bullying condition ($M = 3.81$, $SD = 0.38$, $n = 96$) than in the support condition ($M = 1.05$, $SD = 0.15$, $n = 102$), $t(196) = 68.49$, $p < .001$, Cohen’s $d_s = 9.74$, 95% CI [8.73, 10.74]². We also found the same pattern with the 1-item bullying measure (bullying: $M = 4.82$, $SD = 0.38$, $n = 96$; support: $M = 1.07$, $SD = 0.25$, $n = 107$), $t(201) = 83.63$, $p < .001$, Cohen’s $d_s = 11.76$, 95% CI [10.58, 12.93]). Although social exclusion was not explicitly prompted in the manipulation text, because of the overlap between bullying and exclusion, participants did also report feeling ostracized (bullying: $M = 4.54$, $SD = 0.65$, $n = 97$; support: $M = 1.05$, $SD =$

² For this statistical analysis, we detected 8 observations with large studentized deleted residual (i.e., > 4 , see McClelland, 2014). Following our pre-registering document, we removed these participants from the sample for this analysis. Keeping these participants did not change the result. The following analyses also include some statistical outliers and their inclusion or not did not change the results either

0.21, $n = 106$], $t(201) = 52.54$, $p < .001$, Cohen's $d_s = 7.38$, 95% CI [6.61, 8.15]). Taken together, there is consistent evidence that the manipulation was successful in eliciting the perception of being bullied.

Next, we ran a mediation model, with bullying as the independent variable (support condition coded -1 vs. bullied condition coded 1), state paranoia as the mediator, and conspiracy belief as the dependent variable (see Figure 2). A first regression model tests our main hypothesis, that is, the (total) effect of bullying on belief in conspiracy belief. As predicted, belief in conspiracy theories was significantly higher in the bullying condition ($M = 2.79$, $SD = 0.83$, $n = 99$) than in the support condition ($M = 2.55$, $SD = 0.69$, $n = 107$), $\beta = .15$, $B = 0.12$, $SE = .05$, $t(204) = 2.19$, $p = .029$, $\eta^2_p = .023$. A second regression model (testing the IV to mediator path) revealed that participants from the bullied condition ($M = 4.31$, $SD = 0.48$, $n = 99$) reported higher level of state paranoia than participants in the support condition ($M = 1.07$, $SD = 0.22$, $n = 107$), $\beta = .98$, $B = 1.62$, $SE = .03$, $t(204) = 62.69$, $p < .001$, $\eta^2_p = .951$. Finally, a third regression model (testing the mediator to DV path) examining the relationship between state paranoia and belief in conspiracy theories, controlling for the experimental condition, was not significant, $\beta = .14$, $B = 0.07$, $SE = .14$, $t(203) = 0.46$, $p = .65$, $\eta^2_p = .001$. The residual direct effect of bullying was not significant, $\beta = .01$, $B = .009$, $SE = .24$, $t(203) = 0.04$, $p = .97$, $\eta^2_p < .001$. As the mediator to DV path was not significant, mechanically, the indirect effect could not be significant (Judd et al., 2014; Yzerbyt et al., 2018). Estimation of the indirect effect (point estimate: 0.108, 95% [-0.331; 0.560]) included zero and was obtained by using a Monte Carlo simulation (5,000 iterations, using JSmediation package [v. 0.1.1] in R [v. 3.6.1], Yzerbyt et al., 2018).

Table 2*Bivariate Correlations (With 95% Confidence Intervals) Between all the Variables (Study 2)*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Experimental condition ^a	-0.04	1.00	-					
2. State paranoia	2.63	1.67	.98*** [.97, .98]	-				
3. Belief in conspiracy theories	2.66	0.77	.15* [.02, .28]	.16* [.02, .29]	-			
4. Bullying (SNAQ)	2.45	1.44	.92*** [.90, .94]	.91*** [.88, .93]	.18* [.04, .31]	-		
5. Bullying (1-item)	2.84	1.89	.98*** [.97, .98]	.98*** [.97, .98]	.15* [.02, .28]	.93*** [.90, .94]	-	
6. Ostracised (1-item)	2.71	1.80	.95*** [.94, .96]	.96*** [.95, .97]	.13 [-.00, .27]	.91*** [.88, .93]	.97*** [.96, .98]	-

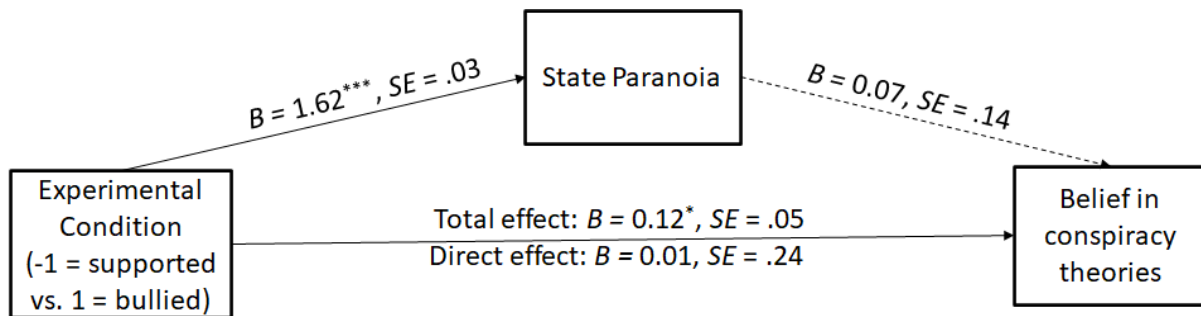
Notes. *N* = 206. Values in square brackets indicate the 95% confidence interval for each correlation.

^a Values represent point-biserial correlations, support condition was coded -1, bullied condition was coded 1.

* $p < .05$, *** $p < .001$.

Figure 2

A Mediation Model of the Association Between the Experimental Condition and Belief in Conspiracy Theories via State Paranoia



Note. The B values represent unstandardised regression coefficients. Solid lines represent significant paths and dashed line represent the non-significant path.

* $p < .05$, *** $p < .001$.

The results of Study 2 provided experimental evidence that exposure to an imagined bullying environment in a new workplace (vs. a support condition) directly increased belief in conspiracy theories. However, whilst we found that exposure to a bullying prime increased feelings of (state) paranoia, this factor did not act as a mediator between the experimental condition and belief in conspiracy theories. This was unexpected and highlighted that primed state paranoia does not explain this effect. Nonetheless, our findings extend Study 1 by providing causal evidence of the link between bullying experiences and the development of conspiracy beliefs.

General Discussion

Across two studies, the current research has uncovered a link between experiences of workplace bullying and belief in conspiracy theories. In Study 1, prior experiences of workplace bullying were associated with heightened conspiracy beliefs, an effect that could

be explained by paranoid thinking. Specifically, bullying was associated with paranoia, which in turn, was associated with heightened conspiracy beliefs. Anxiety and hypervigilance to threats did not act as mediators in a test of multiple mediation. Study 2 then demonstrated that participants who were asked to imagine being bullied in a new workplace (vs. supported) indicated an increased belief in conspiracy theories. Unexpectedly, (state) paranoia did not mediate this effect. Together, to our knowledge, the link between workplace bullying and belief in conspiracy theories has been revealed for the first time.

These findings extend previous work by showcasing the detrimental link between hostile work experiences (bullying) and the development of conspiracy beliefs. Previous work has examined the role of victimhood and discrimination, but was often restricted to group characteristics (e.g., Pantazi et al., 2022). Here, we offer a demonstration of how the experiences of bullying that are removed from collective identities can increase beliefs in conspiracy theories. Our findings include both a cross-sectional (Study 1) and an experimental (Study 2) design, allowing a robust investigation of our pre-registered predictions. Bullying has been shown to impact wellbeing and workplace behaviours, such as anxiety, burnout, and turnover intentions (e.g., Bowling & Beehr, 2006; Hawker & Boulton, 2000). Our work also showcases that bullying can also increase belief in conspiracy theories. We know that conspiracy beliefs can have serious consequences for individuals and wider society (see Jolley et al. 2022). In the work place, for example, conspiracy theories can reduce job satisfaction and increase turnover intentions (Douglas & Leite, 2017). It is plausible that bullying inspired conspiracy theorising may further cement an employee's intention to leave the company. However, it is also worth noting that work based problems do not limit themselves to the workplace, but can spread to other domains (e.g., workplace bullying jeopardizing life satisfaction, Nauman et al., 2019). The emergence of conspiracy

beliefs from bullying could have much wider consequences than first envisaged. A timely question for future research to tackle.

We also demonstrated the role that (trait) paranoid thinking could play in explaining the relationship between bullying and belief in conspiracy theories. In Study 1, bullying experiences were associated with higher levels of paranoia, which was associated with conspiracy beliefs. However, in Study 2, after participants imagined a bullying experience (vs. support), (state) paranoia was increased, but did not act as a mediator between the bullying manipulation and belief in conspiracy theories. This result may indicate that the effects may lie in more trait-based cognitions. Alternatively, whilst the manipulation was successful in increasing belief in conspiracy theories and state paranoia, more prolonged exposure to a bullying environment would need to be required to influence levels of trait paranoia. Future research could explore such a possibility.

We also found that anxiety and hypervigilance to threats in the environment did not explain the effects in Study 1. While each factor was correlated with both bullying experiences and belief in conspiracy theories (and were each a significant mediator when not controlling for each other, see Footnote 1), paranoia was the key mediator in a multiple mediation model. This might not be that surprising. Paranoia, anxiety, and hypervigilance to threat, whilst distinct concepts, are interconnected. For example, maltreatment (such as emotional abuse) is linked with paranoia, via feelings of anxiety (Fisher et al., 2012). Bullying, paranoia, and overestimation of threat (i.e., hypervigilance) have also been found to be associated (Jack & Egan, 2017). As paranoia is likely a product of anxiety exasperating hypervigilance, in a model that seeks to explain the *unique* links between bullying and conspiracy beliefs, paranoia rose as the star player. Therefore, our research provides the first test of exploring the mechanisms between bullying experiences and belief in conspiracy theories and sets up a new line of inquiry for future research.

Our work is not without limitations. Study 2 relied on a scenario where participants (who had never been bullied) *imagined* being bullied (vs. supported) in a new work environment. While imagination scenarios have been shown to be effective in several topic areas, including workplace social exclusion (e.g., Sjøstad et al., 2021), the real experience is likely a very different experience than what a naïve participant imagined. We also experimentally manipulated a supportive condition (rather than a neutral) as a comparison, thus, overshadowing the conclusion slightly that the effect is purely down to bullying (vs. a neutral control). However, in Study 1, we find that the effects were replicated when comparing participants who had been bullied in the previous 6 months (vs. those who had not). Specifically, those who had been bullied (vs. not) reported higher levels of paranoia, which in turn, was associated with belief in conspiracy theories. This can provide some reassurance that the effects appear to replicate for participants who *have* been bullied (subjective experience). However, with that specific point in mind, our bullying measures in Study 1 did rely upon self-reported bullying experiences. Participants may have over or underestimated their experiences. Further, our measures were based on the *acts* of bullying, thus we did not take into account any contextual factors that may have led to the bullying experience. There are diverse factors involved that can include personality clashes to displaced aggression (e.g., Salin, 2003). Future research could aim to utilise a more objective measure of bullying behaviour to explore whether our reported effects replicate, alongside exploring how different contextual factors (e.g., bullying due to appearance vs. interpersonal conflict) may strengthen or weaken the reported effects.

Future research should also explore bullying in other contexts, specifically bullying in school-aged children. Recently Jolley et al. (2021) have demonstrated that conspiracy theorising flourishes in adolescents, with age 14 being a peak age for conspiracy beliefs to develop. As in the workplace, bullying in school can negatively impact the victim (e.g.,

Stassen Berger, 2007), with the consequences remaining in adulthood (e.g., Bender & Lösel, 2011). As with adults in our work, it is plausible that bullying could also inspire the development of conspiracy theorising in young populations. Moreover, as we continue to uncover the connections between victimhood and conspiracy beliefs, a timely question for future research is to explore how victims can be supported to help buffer the development of conspiracy beliefs. Whilst conspiracy theories may act as a potential adaptive function, where victimhood helps protect the individual from harm (Pantazi et al., 2022), due to the severe consequences of conspiracy theories, conspiracy beliefs may harm the individual rather than protect. It might be that support that is already available to victims of bullying could help reduce the likelihood of conspiracy beliefs developing (e.g., see a systematic review by Vreeman & Carroll, 2007). Exploring such a possibility would be an important future research endeavour.

Conclusion

Our timely research has uncovered a link between the experiences of workplace bullying and the endorsement of conspiracy beliefs. We also provide initial evidence that (trait) paranoia may explain this effect. Bullying experiences can significantly impact the victim in numerous ways (e.g., Bowling & Beehr, 2006), with the development of conspiracy beliefs being another detrimental consequence. As conspiracy beliefs can impact the smooth functioning of a society (see Jolley et al. 2022), understanding how conspiracy beliefs form is timely. Our work encourages the development of tools to support victims to try and avert the link between being bullied and conspiracy theorising emerging.

References

- Abalakina-Paap, M., Stephan, W. G., Craig, T., & Gregory, W. L. (1999). Beliefs in conspiracies. *Political Psychology*, 20, 637–647. <https://doi.org/10.1111/0162-895X.00160>
- Alsuhbani, A., Shevlin, M., Freeman, D., Sheaves, B., & Bentall, R. P. (2022). Why conspiracy theorists are not always paranoid: Conspiracy theories and paranoia form separate factors with distinct psychological predictors. *PloS ONE*, 17(4), e0259053. <https://doi.org/10.1371/journal.pone.0259053>
- Anti-Bullying Alliance (2021). *Changing Faces: ChildWise survey 2021*. Retrieved from <https://anti-bullyingalliance.org.uk/tools-information/all-about-bullying/at-risk-groups/appearance-targeted-bullying>
- Armaly, M. T. & Enders, A. M. (2021). 'Why Me?' The role of perceived victimhood in American politics. *Political Behaviour*, 2, 1–27. <https://doi.org/10.1007/s11109-020-09662-x>
- Bartlett, J. E., & Bartlett, M. E. (2011). Workplace Bullying: An Integrative Literature Review. *Advances in Developing Human Resources*, 13(1), 69–84. <https://doi.org/10.1177/1523422311410651>
- Bender, D., & Lösel, F. (2011). Bullying at school as a predictor of delinquency, violence and other anti-social behaviour in adulthood. *Criminal Behaviour and Mental Health*, 21(2), 99–106. <https://doi.org/10.1002/cbm.799>
- Bernstein, R. E., Delker, B. C., Knight, J. A., & Freyd, J. J. (2015). Hypervigilance in college students: Associations with betrayal and dissociation and psychometric properties in a Brief Hypervigilance Scale. *Psychological Trauma: Theory, Research, Practice, and Policy*, 7(5), 448–455. <https://doi.org/10.1037/tra0000070>
- Bowling, N. A., & Beehr, T. A. (2006). Workplace harassment from the victim's perspective:

- A theoretical model and meta-analysis. *Journal of Applied Psychology*, 91, 998–1012.
<https://doi.org/10.1037/0021-9010.91.5.998>
- Brotherton, R., French, C. C., & Pickering, A. D. (2013). Measuring belief in conspiracy theories: The generic conspiracist beliefs scale. *Frontiers in Psychology*, 4, 279.
<https://doi.org/10.3389/fpsyg.2013.00279>
- Douglas, K. M., & Leite, A. C. (2017). Suspicion in the workplace: Organisational conspiracy theories and work-related outcomes. *British Journal of Psychology*, 108, 486–506. <https://doi.org/10.1111/bjop.12212>
- Douglas, K. M., Sutton, R. M., & Cichocka, A. (2017). The psychology of conspiracy theories. *Current Directions in Psychological Science*, 26, 538–542.
<https://doi.org/10.1177/0963721417718261>
- Douglas, K. M., Uscinski, J. E., Sutton, R. M., Cichocka, A., Nefes, T., Ang, C. S., & Deravi, F. (2019). Understanding conspiracy theories. *Political Psychology*, 40, 3–35.
<https://doi.org/10.1111/pops.12568>
- Douglas, K. (2021). COVID-19 conspiracy theories. *Group Processes and Intergroup Relations*, 24(2), 270–275. <https://doi.org/10.1177/1368430220982068>
- Einarsen, S., Raknes, B. I., & Matthiesen, S. B. (1994). Bullying and harassment at work and their relationships to work environment quality. An exploratory study. *The European Work and Organisational Psychologist*, 4, 381–401.
<https://doi.org/10.1080/13594329408410497>
- Fenigstein, A., & Vanable, P. A. (1992). Paranoia and self-consciousness. *Journal of Personality and Social Psychology*, 62(1), 129–138. <https://doi.org/10.1037/0022-3514.62.1.129>
- Ferris, D. L., Brown, D. J., Berry, J. W., & Lian, H. (2008). The development and validation of the Workplace Ostracism Scale. *Journal of Applied Psychology*, 93(6), 1348–

1366. <https://doi.org/10.1037/a0012743>

- Fisher, H. L., Appiah-Kusi, E., & Grant, C. (2012). Anxiety and negative self-schemas mediate the association between childhood maltreatment and paranoia. *Psychiatry Research*, 196(2-3), 323–324. <https://doi.org/10.1016/j.psychres.2011.12.004>
- Franks, B., Bangerter, A., Bauer, M. W., Hall, M., & Noort, M. C. (2017). Beyond “monologicality”? Exploring conspiracist worldviews. *Frontiers in Psychology*, 8(861). <https://doi.org/10.3389/fpsyg.2017.00861>
- Freeman, D., Pugh, K., Green, C., Valmaggia, L., Dunn, G., & Garety, P. (2007). A measure of state persecutory ideation for experimental studies. *Journal of Nervous and Mental Disease*, 195(9), 781-784. <https://doi.org/10.1097/NMD.0b013e318145a0a9>
- Gamian-Wilk, M., & Madeja-Bien, K. (2018). Ostracism in the workplace. In D’Cruz, P., Noronha, E., Keashly, L. & Tye-Williams, S. (Eds), *Special Topics and Particular Occupations, Professions and Sectors*, Springer Nature, Singapore, pp. 1-30.
- Grzesiak-Feldman, M. (2013). The effect of high-anxiety situations on conspiracy thinking. *Current Psychology: A Journal for Diverse Perspectives on Diverse Psychological Issues*, 32(1), 100–118. <https://doi.org/10.1007/s12144-013-9165-6>
- Grzesiak-Feldman, M., & Ejsmont, A. (2008). Paranoia and conspiracy thinking of Jews, Arabs, Germans, and Russians in a Polish sample. *Psychological Reports*, 102(3), 884–886. <https://doi.org/10.2466/pr0.102.3.884-886>
- Hawker, D. S. J. & Boulton, M. J. (2000). Twenty years’ research on peer victimisation and psychosocial maladjustment: A meta-analytic review of cross-sectional studies. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 41, 441–455. <https://doi.org/10.1111/1469-7610.00629>
- Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (2nd ed.). New York, NY: Guilford Press.

- Hewett, R., Liefoghe, A., Visockaite, G., & Roongrengsuke, S. (2018). Bullying at work: Cognitive appraisal of negative acts, coping, wellbeing, and performance. *Journal of Occupational Health Psychology, 23*(1), 71–84. <https://doi.org/10.1037/ocp0000064>
- Imhoff, R., & Lamberty, P. (2018). How paranoid are conspiracy believers? Toward a more fine-grained understanding of the connect and disconnect between paranoia and belief in conspiracy theories. *European Journal of Social Psychology, 48*(7), 909–926. <https://doi.org/10.1002/ejsp.2494>
- Jack, A. H., & Egan, V. (2018). Childhood bullying, paranoid thinking and the misappraisal of social threat: Trouble at school. *School Mental Health, 10*, 26–34. <https://doi.org/10.1007/s12310-017-9238-z>
- Jolley, D., & Douglas, K. M. (2014). The social consequences of conspiracism: Exposure to conspiracy theories decreases intentions to engage in politics and to reduce one's carbon footprint. *British Journal of Psychology, 105*, 35–56. <https://doi.org/10.1111/bjop.12018>
- Jolley, D., & Jaspal, R. (2020). Discrimination, HIV conspiracy theories and pre-exposure prophylaxis acceptability in gay men. *Sexual Health, 17*, 525–533. <https://doi.org/10.1071/SH20154>
- Jolley, D., & Paterson, J. (2020). Pylons ablaze: Examining the role of 5G COVID-19 conspiracy beliefs and support for violence. *British Journal of Social Psychology, 59*(3), 628–640. <https://doi.org/10.1111/bjso.12394>
- Jolley, D., Douglas, K. M., Leite, A., & Schrader, T. (2019). Belief in conspiracy theories and intentions to engage in everyday crime. *British Journal of Social Psychology, 58*(3), 534–549. <https://doi.org/10.1111/bjso.12311>
- Jolley, D., Douglas, K. M., Skipper, Y., Thomas, E., & Cookson, D. (2021). Measuring adolescents' beliefs in conspiracy theories: Development and validation of the

- Adolescent Conspiracy Beliefs Questionnaire (ACBQ). *British Journal of Developmental Psychology*, 39(3), 499–520 <https://doi.org/10.1111/bjdp.12368>
- Jolley, D., Marques, D., & Cookson, D. (2022). Shining a spotlight on the dangerous consequences of conspiracy theories. *Current Opinion in Psychology*. <https://doi.org/10.1016/j.copsyc.2022.101363>
- Judd, C. M., Yzerbyt, V. Y., & Muller, D. (2014). Mediation and moderation. In H. Reis & C. M. Judd (Eds.), *Handbook of research methods in social and personality psychology* (2nd ed., pp. 653–676). Cambridge University Press. <https://doi.org/10.1017/CBO9780511996481.030>
- Lalot, F., Abrams, D., & Travaglino, G. A. (2021). Aversion amplification in the emerging COVID-19 pandemic: The impact of political trust and subjective uncertainty on perceived threat. *Journal of Community & Applied Social Psychology*, 31(2), 213–222. <https://doi.org/10.1002/casp.2490>
- Lamberty, P., & Imhoff, R. (2018). Powerful pharma and its marginalised alternatives? effects of individual differences in conspiracy mentality on attitudes toward medical approaches. *Social Psychology*, 49, 255–270. doi: 10.1027/1864-9335/a000347
- Leman, P. J., & Cinnirella, M. (2007). A major event has a major cause: Evidence for the role of heuristics in reasoning about conspiracy theories. *Social Psychological Review*, 9, 18–28. <https://doi.org/10.3389/fpsyg.2013.00378>
- Leymann, H. (1996). The content and development of mobbing at work. *European Journal of Work and Organizational Psychology*, 10, 165–184. <https://doi.org/10.1080/13594329608414853>
- McClelland, G. H. (2014). Unruly, ill-mannered observations can ruin your analysis. In H. T. Reis & C. M. Judd (Eds.), *Handbook of research methods in social and personality*

psychology (2nd ed., pp. 608–626). Cambridge University Press.

<https://doi.org/10.1017/cbo9780511996481.028>

Nauman, S., Malik, S. Z., & Jalil, F. (2019). How workplace bullying jeopardizes employees' life satisfaction: The roles of job anxiety and insomnia. *Frontiers in psychology*, 10, 2292. <https://doi.org/10.3389/fpsyg.2019.02292> .

Nielsen, M. B., Notelaers G., & Einarsen, S. (2011). Measuring exposure to workplace bullying. In: Einarsen S, Hoel H, Zapf D, Cooper CL (eds) *Bullying and emotional abuse in the workplace developments in theory, research and practice*. CRC Press, Boca Raton

Notelaers, G., Van der Heijden, B., Hoel, H., & Einarsen, S. (2019). Measuring bullying at work with the Short-Negative Acts Questionnaire: Identification of targets and criterion validity. *Work & Stress*, 33(1), 58–75. <https://doi.org/10.1080/02678373.2018.1457736>

Oliver, J. E., & Wood, T. J. (2014). Conspiracy theories and the paranoid style (s) of mass opinion. *American Journal of Political Science*, 58(4), 952–966. <https://doi.org/10.1111/ajps.12084>

Pantazi, M., Gkinopoulos, T., Witkowska, M., Klein, O., & Bilewicz, M. (2022). “Historia est magistra vitae”? The impact of historical victimhood on current conspiracy beliefs. *Group Processes & Intergroup Relations*, 25(2), 581–601 <https://doi.org/10.1177/1368430220968898>

Poon, K-T., Chen, Z., & Wong, W-Y. (2020). Beliefs in conspiracy theories following ostracism. *Personality and Social Psychology Bulletin*, 46(8), 1234–1246. <https://doi.org/10.1177/0146167219898944>

- Salin, D. (2003). Ways of explaining workplace bullying: a review of enabling, motivating and precipitating structures and processes in the work environment. *Human Relations*, 56(10), 1213–1232. <https://doi.org/10.1177/00187267035610003>
- Schönbrodt, F. D., & Perugini, M. (2013). At what sample size do correlations stabilise? *Journal of Research in Personality*, 47(5), 609–621. <https://doi.org/10.1016/j.jrp.2013.05.009>
- Snaith, 2003
- Shetgiri R. (2013). Bullying and victimization among children. *Advances in pediatrics*, 60(1), 33–51. <https://doi.org/10.1016/j.yapd.2013.04.004>
- Singham, T., Viding, E., Schoeler, T., Arseneault, L., Ronald, A., Cecil, C. M., McCrory, E., Rijdsdijk, F., & Pingault, J. B. (2017). Concurrent and longitudinal contribution of exposure to bullying in childhood to mental health: The role of vulnerability and resilience. *JAMA psychiatry*, 74(11), 1112–1119. <https://doi.org/10.1001/jamapsychiatry.2017.2678>
- Sjåstad, H., Zhang, M., Espegren, A., & Baumeister, R. (2021). Social exclusion reduces happiness by creating expectations of future rejection. *Self and Identity*, 20(1), 116–125. <https://doi.org/10.1080/15298868.2020.1779119>
- Stassen Berger, K. (2007). Update on bullying at school: Science forgotten? *Developmental Review*, 27(1), 90–126. <https://doi.org/10.1016/j.dr.2006.08.002>
- van Prooijen J.-W., & Douglas, K. M. (2017). Conspiracy theories as part of history: The role of societal crisis situations. *Memory Studies*, 10(3), 323–333. <https://doi.org/10.1177/1750698017701615>
- van Prooijen, J.-W., & Jostmann, N. B. (2013). Belief in conspiracy theories: The influence of uncertainty and perceived morality. *European Journal of Social Psychology*, 43(1), 109–115. <https://doi.org/10.1002/ejsp.1922>

- Vreeman, R. C., & Carroll, A. E. (2007). A systematic review of school-based interventions to prevent bullying. *Archives of Pediatrics & Adolescent Medicine*, 161(1), 78–88.
<https://doi.org/10.1001/archpedi.161.1.78>.
- Yzerbyt, V., Muller, D., Batailler, C., & Judd, C. M. (2018). New recommendations for testing indirect effects in mediational models: The need to report and test component paths. *Journal of Personality and Social Psychology*, 115(6), 929–943.
<https://doi.org/10.1037/pspa0000132>