The Social Identity Motives Behind Conspiracy Beliefs and Intentions

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A thesis submitted for the degree of P.h.D in the Faculty of Social Sciences at the University of Kent, *September 2021*

Declaration

The research presented in this thesis was conducted at the School of Psychology, University of Kent, whilst the author was a full-time postgraduate student, supported by a Graduate Teaching Assistantship, under the supervision of Doctor Aleksandra Cichocka and co-supervision of Professor Karen Douglas. Chapter 1 of this thesis has been published, a version of the systematic review in Chapter 2 has been published, and Chapter 4 is currently under review at the British Journal of Psychology.

Published articles:

- Biddlestone, M., Cichocka, A., Žeželj, I., & Bilewicz, M. (2020). *Conspiracy theories and intergroup relations.* In M. Butter, & P. Knight (Eds.) *Routledge handbook of conspiracy theories* (pp. 219-230). Routledge. https://doi.org/10.4324/9780429452734
- Biddlestone, M., Green, R., Cichocka, A., Sutton, R., & Douglas, K. (2021). Conspiracy beliefs and the individual, relational, and collective selves. *Social and Personality Psychology Compass,* e12639. https://doi.org/10.1111/spc3.12639

Submitted:

- Biddlestone, M., Cichocka, A., Główczewski, M., & Cislak, A. (2021). *Their own worst enemy? Collective narcissists are willing to conspire against their ingroup* [Manuscript submitted for publication]. School of Psychology, University of Kent.

Abstract

The main aim of this thesis is to explore the role that social motives play in the formation of conspiracist beliefs and intentions. Chapter 1 provides an overview of past work on the group processes and intergroup relations associated with conspiracy beliefs. Subsequent chapters use a social psychological perspective to answer three related questions: 1) what are the social motives associated with conspiracy beliefs (Chapter 2), 2) which ideological and identity motives are associated with conspiracy beliefs among members of social groups of different status (Chapter 3), and 3) can social identity motives help us understand how certain individuals not only believe in conspiracy theories, but are also willing to engage in conspiratorial plots (Chapter 4)? I have applied meta-analytic techniques to answer the first question, showing that conspiracy beliefs appear to be born out of attempts to enhance and defend the self-image, compensate for feelings of social exclusion, and defend the group image. I used multigroup analysis of cross-sectional survey designs to investigate the second question, showing that ethnic collective narcissism is underpinned by opposing ideologies depending on the social status of the group in question. Finally, I used standard regression analyses of similar cross-sectional survey designs to inform our understanding of the third question, showing that collective narcissists are not only particularly willing to believe in conspiracy theories, but they are also willing to conspire against fellow ingroup members. Implications and recommendations for future research are discussed, including the need to implement more experimental or longitudinal designs.

Keywords: conspiracy beliefs, intentions, social motives, collective narcissism

Acknowledgements

First, I would like to thank Doctor Aleksandra Cichocka for being such an attentive and supportive supervisor. Aleksandra not only became a great friend throughout my PhD, but

was also always able to find enough time for me in her incredibly busy schedule. There was not a moment where I felt left on my own, and I knew I could always count on her for honest and informed advice. Second, I would like to thank Professor Karen Douglas for her important insights, responsiveness to collaborative work, and her invaluable recommendations that helped me immensely with public engagement. I would also like to thank the whole Political Psychology Lab for their challenging and thoughtful feedback on all projects and ideas I was lucky enough to present to them. Doctor Nikhil Sengupta was particularly thoughtful and willing to put his time into helping me out, so to him I'd like to give a special thanks.

I would also like to thank my amazing partner Mahsa Barzy for supporting me so much when I needed it most, and for just generally enriching my life to a level I didn't know was possible. Ricky Green, you are of course my partner in crime forever, and I look forward to our many collaborations and parties to come. Last but not least, I would like to thank my close family for helping me to gain pride in my output, and the boys from Brighton for playing with me hard after I'd also worked…reasonably hard.

Data availability

All data, analysis codes, pre-registration documents, and the Supplement accompanying this thesis are posted at https://osf.io/z3gwu/?view_only=e20e3aaec7e945d986acc4b28483e5fc

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[1] Chapter based on Biddlestone, M., Cichocka, A., Žeželj, I., & Bilewicz, M. (2020). Conspiracy theories and intergroup relations. In M. Butter, & P. Knight (Eds.), *Routledge handbook of conspiracy theories* (pp. 219–230). Routledge. https://doi.org/10.4324/9780429452734

1.1 Abstract

This first chapter is based on a published review chapter by myself and my colleagues (Biddlestone, Cichocka, et al., 2020) in the *Routledge Handbook of Conspiracy Theories*. In this chapter, I illuminate the group processes involved in the development and endorsement of conspiracy beliefs. First, I review research on group perceptions and stereotyping, alongside its implications for conspiracy beliefs. Second, I discuss the motivational paths associated with beliefs in conspiring groups, focusing especially on the influences of fear, control and the need for recognition. Finally, I review the consequences of intergroup conspiracy beliefs.

Keywords: conspiracy theories, stereotypes, intergroup relations, collective narcissism, victimhood

1.2 Conspiracy stereotypes and images of conspiring outgroups

Considering the prevalence of conspiracy beliefs, there is substantial consensus in the psychological literature that they are unlikely to be a function of pathology (Oliver & Wood, 2014; Sunstein & Vermeule, 2009). The implication that these beliefs could be held by almost anyone warrants careful consideration of this topic from a social psychological perspective. As aptly noted by van Prooijen and van Lange (2014, p. 238–9), "most conspiracy beliefs can be framed in terms of beliefs about how a powerful and evil outgroup meets in secret, designing a plot that is harmful to one's in-group". Understanding conspiracy beliefs, therefore, requires understanding of intergroup attitudes and behaviours (see Crocker et al., 1999; Kramer & Messick, 1998).

In the first section, I discuss characteristics that might make outgroups especially likely to be accused of conspiring against the ingroup. I first illustrate the dimensions along which social groups are perceived, and then move on to address the unique aspects of conspiracy stereotypes.

People's perceptions of social groups are based on cognitive schemata, known as stereotypes (e.g. Fiske et al., 2002; Phalet & Poppe, 1997). Kofta and Sedek (2005) have argued that conspiracy stereotypes (which usually refer to a whole group) are qualitatively different from other, trait-laden stereotypes (which usually refer to characteristics of individual group members). Although both can promote ingroup favouritism and involve ascribing collective outgroup goals, trait-laden stereotypes determine judgements about individuals belonging to a group, whereas conspiracy stereotypes may determine judgements about social groups as a whole.

One way we can illustrate differences between trait-laden and conspiracy stereotypes is the way they respond to a key mechanism of attitude change, namely intergroup contact. Having positive contact with stereotyped outgroup members (especially of equal status) is an

effective way to promote more favourable attitudes and decrease stereotyping of outgroup members (Pettigrew & Tropp, 2006a, 2006b). However, attempts to use this paradigm in counteracting conspiracy stereotypes have been largely ineffective. A nationwide representative study in Poland found that intergroup contact, as well as intergroup friendships, were significant predictors of attitudes toward Jews, but they were not significantly related to belief in the Jewish conspiracy (Winiewski et al., 2015). To put it more simply, contact with Jewish people did not seem to reduce the 'Jewish conspiracy' myth. Similar findings were reported by Bilewicz (2007), who conducted an intervention bringing together Polish youth (with no prior contact with Jews) with Canadian and American Jewish peers. This intervention had many positive effects except for one: those who believed in the Jewish conspiracy did not change their opinion after the meeting.

This difference in effectiveness of intergroup contact illustrates the essential difference between trait-laden and conspiracy stereotypes. Trait-laden stereotypes are schemata and generalisations based on knowledge of specific exemplars of a given category. Contact provides such information that could be later generalised to the whole outgroup, and even to other, unrelated outgroups (Pettigrew, 2009; see also Jolley, Meleady et al., 2019). Conspiracy stereotypes are based on essentialist thinking to a much greater extent than trait-laden stereotypes are. If someone believes that there is some biological basis for the intention of the outgroup to conspire, then any form of contact would not be effective, as individual experiences could not affect the general theory about the whole group. In order to better understand the components of social stereotypes, Fiske and colleagues (2002) proposed the stereotype content model (SCM), which assumes the attributes that comprise all social stereotypes can be grouped along two dimensions: warmth (i.e. sociability and morality) and competence (i.e. agency; but see Koch et al., 2016). This model aimed to provide an explanation for emotions felt towards outgroups based on their perceived level of warmth and

competence. According to the SCM, feelings of pity are associated with perceptions of the outgroup as warm but incompetent, conceptualised as a paternalistic stereotype (e.g. of the elderly). Conversely, feelings of envy are associated with perceptions of the outgroup as cold but competent, conceptualised as an envious stereotype (e.g. of Asians).

Envious perceptions of high-status competitive outgroups—induced by the perception of incompatible goals (see Fiske et al., 2002)—can justify ingroup resentment. These stereotypes have been linked to conspiracy beliefs: a group that is competent yet cold and unfriendly is most likely to be viewed as being able to plot against the ingroup (e.g. Winiewski et al., 2015; but see Fousiani & van Prooijen, 2019 for a more nuanced view on competence). Envious stereotyping has been implicated in such insidious views as hostile sexism (Glick et al., 1997) and anti-Semitic notions of economic Jewish conspiracies (Glick, 2002). Due to their perceived high-status and competence, enviously stereotyped outgroups are likely to be the target of threat detection. This threat detection encourages conspiracy beliefs about the enviously stereotyped outgroup. Consequently, Winiewski and colleagues (2015) argued that envious stereotyping can eventually lead to a belief system that views the outgroup as a scapegoat responsible for the ingroup's misfortunes. For example, Winiewski and colleagues (2015) demonstrated this process in Nazi caricatures depicting Jews as conspiring during the Second World War. Based on coding of hundreds of images that appeared in the notorious anti-Semitic magazine *Der Stuermer*, they found that the caricatures portraying Jews as conspiring also presented Jewish characters as highly competent, but simultaneously immoral and not sociable. When looking at this phenomenon from a chronological angle, one could see that the caricatures presenting Jews as conspiring were more frequent in the period of the Second World War (1939–1945), as compared to the previous period of Nazi regime in Germany (1933–1939). This suggests that envious caricatures portraying certain enemy groups as conspiring can be used in propaganda to

mobilise war efforts and to engage society in collective goals. Moreover, findings demonstrating that people show preferential attention to general envy-related stimuli (such as a successful protagonist; Zhong et al., 2013) may also reveal why this propaganda was so alarmingly effective.

The process of identifying enemies can also be facilitated by the tendency to personalise groups as collective agents (e.g. Morris, 2000) —another important factor shaping conspiracy stereotypes. This tendency is associated with perceiving groups as entitative categories (that is, being viewed as highly similar, and with common goals and fate; see Hogg et al., 2007; Lickel et al., 2000), which share a common essence (see Lickel et al., 2000; Rothbart & Taylor, 1992). For example, Kofta and Sedek (2005) found that higher perceptions of entitativity of Jews predicted conspiracy stereotyping of this group (see also Wieckowska, 2004). The grounding of these stereotypes in natural categories fosters perceptions oriented towards a prototypical symbol of the outgroup rather than a concrete, observable characteristic (see Rosch, 1973, 1975). This focus on a prototypical symbol (rather than the more realistic perception of diversity within a group) makes it easier for ingroup members to project their own conspiracy stereotypes onto the outgroup (see Ames, 2004; Krueger, 2000).

I have thus far considered the group perceptions involved in conspiracy belief. This section aimed to illuminate the stereotype contents of groups, revealing that the stereotyping process is likely an evaluative system used to determine whether a group is threatening. If an outgroup's goals and intentions do not match the ingroup's, their perceived warmth and competence will likely determine whether they are a potential threat (however, for a detailed review on the complicated relationship between these dimensions, see Koch et al., 2016). Specifically, groups perceived as competent and agentic, but cold, are most likely to be viewed as threatening and conspiring. Because conspiracy stereotypes are based on

essentialising perceptions of outgroups, they seem relatively resistant to change. Therefore, considering the antecedent motivations in conspiracy stereotyping and conspiracy beliefs more broadly may reveal the underlying mechanisms that lead ingroup members to endorse these beliefs.

1.3 What motivates conspiring images of outgroups?

So far, I have discussed the perceived characteristics of outgroups that can increase their likelihood of being viewed as conspirators. Now, I will discuss the individual and group-level motives that can lead ingroup members to endorse conspiracy theories that target these outgroups. According to Krekó (2015), intergroup conspiracy theories serve to 1) explain significant and unexpected events, by managing the anxiety associated with them, 2) justify power strivings, and 3) help defend the image of the ingroup. Indeed, research indicates that conspiracy beliefs about outgroups can increase when people experience anxiety and fear, loss of power and control, or strive for recognition of their social groups. In the following section, I discuss each of these paths to embracing intergroup conspiracy theories (for a discussion of individual motives associated with conspiracy beliefs more broadly, see Douglas et al., 2017; 2019, 2020).

The first is the *fear* path. People can be motivated to view outgroups as conspiring against them when they experience fear and anxiety. Fear and anxiety generally lead to an overreliance on stereotype-consistent information (see Wilder & Simon, 2001 for a review), making ingroup members evaluate ambiguous social information based on pre-existing beliefs about the outgroup (Kramer & Schaffer, 2014). Further, given the connection between anxiety and threat detection (e.g. Mathews & MacLeod, 2002; Yiend & Mathews, 2001), it is unsurprising that people with high levels of anxiety tend to interpret ambiguous information as threatening (Mathews & MacLeod, 2002). Thus, they might also be more susceptible to interpreting ambiguous intergroup behaviour as intentionally malevolent. This threat

perception has been implicated in the endorsement of conspiracy theories as a way of preparing for collective self-defence from the outgroup (Kofta & Sedek 2005). A body of research has confirmed the link between anxiety and conspiracy beliefs. For example, Grzesiak-Feldman demonstrated that both trait (2007) and situationally induced (2013) anxiety are associated with endorsement of conspiracy stereotypes of Jews and also with more general conspiracy thinking. Thus, conspiracy theories may be adopted through a fear path, wherein anxious ingroup members tend to perceive higher levels of intergroup threat, leading them to adopt conspiracy theories to derogate the outgroup and protect the ingroup (see Kofta & Sedek, 2005).

Conspiracy beliefs have also been linked to ideological predispositions that foster perceptions of threat. One such predisposition is right-wing authoritarianism (RWA): A dispositional measure of adherence to authority (authoritarian submission), aggression towards outgroups (authoritarian aggression) and adherence to the social norms defined by the authority and society (conventionalism; Altemeyer, 1996). Duckitt (2001) proposed a dual-process model that outlines the personality, motivational and worldview antecedents of RWA. This model argues that individuals who believe their social environment is inherently dangerous and threatening are motivated to embrace ideological preferences that favour security and stability (Sibley et al., 2012). Consequently, Sibley and Duckitt (2013) demonstrated that the so-called dangerous worldview is associated with higher RWA. This is likely why RWA has been shown to correlate with both generalised conspiracy thinking (e.g. Grzesiak-Feldman & Irzycka, 2009) and belief in specific conspiracy theories (Abalakina-Paap et al., 1999). Also, Bilewicz and colleagues (2013) found RWA to be weakly but significantly associated with the belief in the Jewish conspiracy in Poland (although this relationship was not observed in a different study of the same paper involving similar variables).

Some argue, however, that authoritarianism predicts different intergroup attitudes than a general conspiracy mentality (Imhoff & Bruder, 2014). While authoritarianism predicts prejudice towards less powerful societal groups, conspiracy mentality can be seen as a distinct political attitude, with a stable ideological belief system that involves prejudicial attitudes towards more powerful groups. As previously discussed, in the process of scapegoating, outgroups are viewed as threatening when they are perceived as highly competent yet pursuing goals that are incompatible with the ingroup. Therefore, scapegoating usually fosters intergroup comparison with powerful outgroups (e.g. with high socio-economic agency; Koch et al., 2016). Conversely, RWA can foster intergroup comparison with subordinate groups perceived as less powerful (see Imhoff & Bruder, 2014; Wood & Gray, 2019). For example, an outgroup would be perceived as threatening if they were violating the perceived norms of the ingroup. Imhoff and Bruder (2014) argued that anti-Semitism was associated both with high levels of conspiracy mentality and RWA. Conspiracy mentality led to anti-Semitism through perceptions of Jews as more powerful, whereas RWA led to anti-Semitism through perceptions of Jews as less powerful. Future research should examine in more detail the mutual associations between authoritarian tendencies and conspiracy beliefs.

The second path is the *loss of control* path. Rothschild and colleagues (2012) have argued that scapegoating an outgroup may also be a response to reduced feelings of personal control. People strive to feel in control over their life and environment—it is a fundamental human motivation (e.g. Deci & Ryan, 1987, 2000). When people feel they do not have control over their fate, they tend to compensate by attributing control to other agents, be it God, government or powerful outgroups (Kay et al., 2008). In line with this reasoning, low personal control might increase a belief in powerful enemies conspiring against the ingroup. Indeed, Imhoff (2015) demonstrated that long-term lack of control was associated with

general conspiracy beliefs (but see Bruder et al., 2013). Also, a high external locus of control (deferring responsibility for one's actions to external explanations) was associated with high levels of paranoia and conspiracy beliefs specifically (Hamsher et al., 1968; Mirowsky & Ross, 1983). Finally, in a study by Sullivan and colleagues (2010), an experimental manipulation highlighting low personal control over external threat strengthened belief in the conspiratorial power of a political enemy (see also Whitson & Galinsky, 2008; see Stojanov & Halberstadt, 2020 for a meta-analysis).

Another factor that might show similar effects is uncertainty. In fact, personal control and uncertainty often elicit similar sense-making processes (Park, 2010; Van Den Bos, 2009). When feelings of uncertainty and reduced control are induced by crises, "a conspiracy theory helps people to make sense of the world by specifying the causes of important events, which further helps them predict, and anticipate, the future" (van Prooijen & Douglas, 2017, p. 327). Indeed, in an experiment by van Prooijen and Jostmann (2013), inducing uncertainty increased conspiracy beliefs about governments or big companies, especially when these entities were perceived as immoral. Also, a chronic intolerance for uncertainty has been found to be associated with blaming other national groups for dramatic societal events (such as plane catastrophes), especially when these lacked a plausible official explanation (Marchlewska, Cichocka, & Kossowska, 2018).

The third path is the *lack of recognition* path. The two previous sections highlighted the role of threat and the frustration of basic needs in predicting conspiracy beliefs. These findings can at least partially explain why conspiracy beliefs are more prevalent among members of powerless and minority groups (Abalakina-Paap et al., 1999; Crocker et al., 1999; Goertzel, 1994; Imhoff & Bruder, 2014; Stempel et al., 2007; van Prooijen et al., 2018), especially when they feel their disadvantage is not recognised. In fact, conspiracy beliefs seem to be stronger when group members experience relative deprivation: perceiving

their group as being worse off and not given the same opportunities as other groups (e.g. Runciman, 1966).

For example, van Prooijen and colleagues (2018) demonstrated that, for Muslims in the Netherlands, group-based deprivation significantly predicted both ethnic/national identity-relevant (e.g. "ISIS was created by the USA and Israel") and identity-irrelevant conspiracy beliefs (e.g. "The economic crisis of 2007 was created deliberately by bankers"). This suggests that the relative deprivation experienced by minority groups is associated with belief in general conspiracy theories, regardless of whether these theories are thought to target the ingroup directly. van Prooijen and colleagues (2018) argued that this is due to the perception that the overarching societal system is rigged. Similarly, Bilewicz and Krzeminski (2010) found that economic deprivation in Poland was associated with anti-Semitic Jewish stereotypes. In both Poland and Ukraine, economic deprivation was associated with increased discriminatory intentions towards Jews, but the association with conspiracy stereotypes was only observed in Poland. This might be due to the fact that conspiracy-based anti-Semitism is prevalent in Poland (see Kofta & Sedek, 2005; Krzemiński, 2004), while groups other than Jews may have been focal objects of scapegoating in Ukraine (e.g. Caucasian ethnic groups). This difference led the authors to conclude that economic deprivation partially explains anti-Semitic scapegoating in those countries where previous ideologies point to the responsibility of Jews for economic circumstances.

When individuals feel powerless, the self-ascribed social identity of victim can lead to so-called competitive victimhood (Reid, 2010; Suciu, 2008)—the motivation to establish that one's ingroup has endured more suffering and injustice than the outgroup (Noor et al., 2012). It is likely that competitive victimhood is a functional compensatory reaction to feelings of powerlessness due to a lack of control and feelings of intergroup threat (see Shnabel & Noor 2012). Competitive victimhood can result in a lack of intergroup trust and empathy (Bar-Tal

& Antebi, 1992; Noor et al., 2008), as well as searching for outgroups that can be blamed for the ingroup's misfortunes. This can lead ingroup members to endorse conspiracy theories that unite the ingroup against a common scapegoated enemy (see Reid, 2010). For example, Mashuri and Zaduqisti (2014) demonstrated that strong Islamic identity was linked to competitive victimhood and subsequent belief in a Western conspiracy against Islam. This effect was especially prevalent when people felt a high degree of distrust towards the West. Also, Bilewicz and Krzeminski (2010) found a positive relationship between competitive victimhood and beliefs in a Jewish conspiracy in Poland. Overall, these studies suggest that long-term feelings of deprivation and victimhood can lead to the development of a form of collective conspiracy mentality—"a more general collective mental state in which other nations are viewed as hostile and negatively intended toward one's own nation" (Soral et al., 2018, p. 373).

Such a mentality appears to lead to the perception that outgroups conspire against the ingroup, and would make conspiracy-driven explanations of political events more acceptable. Ultimately, it could create a societal rift between conspiracy-believers and conspiracy-nonbelievers. A study performed in Poland following the Smoleńsk air catastrophe shows that the tendency to interpret this event as caused by an anti-Polish Russian conspiracy was prevalent among people who focused their attention on the historical victimisation of their nation (Bilewicz et al., 2019). Those who believe in unique ingroup victimhood seem to treat their national history, as they see it, as a universal heuristic that allows them to understand current intergroup relations.

Feelings of the ingroup being relatively deprived and victimised are also associated with a broader defensive identification with one's social group, captured by the concept of collective narcissism (Cichocka et al., 2016; Golec de Zavala et al., 2009; Marchlewska, Cichocka, Panayiotou et al., 2018). Like competitive victimhood, collective narcissism

involves the conviction that others do not sufficiently appreciate the uniqueness of one's group. However, collective narcissism also involves an inflated sense of ingroup greatness, contingent on external recognition, often leading to destructive intergroup attitudes (Cichocka et al., 2016; Golec de Zavala et al., 2009). The constant need for validation means that collective narcissists are especially sensitive to any signs of threat or disrespect coming from other groups. They also tend to be convinced that others seek to undermine the ingroup intentionally, which forms a fertile ground for conspiracy theorising (see also Kramer & Schaffer, 2014).

Several lines of study have demonstrated that collective narcissism predicts belief in outgroup conspiracy theories. For example, Golec de Zavala and Cichocka (2012) found that Polish national collective narcissism predicted a belief in the Jewish conspiracy. In another set of surveys conducted in Poland by Cichocka, Marchlewska, Golec de Zavala and colleagues (2016), national collective narcissism was associated with the conviction that other nations are conspiring to undermine Polish achievements in fighting communism, and that Russians conspired to kill the former president (who died in the Smoleńsk plane crash in 2010). American collective narcissism also predicted a general conviction that other (although not one's own) governments are conspiring against the American people. The association between collective narcissism and conspiracy beliefs was driven by heightened perceptions of threat.

In all of these studies, ingroup identification without the narcissistic component was negatively associated with conspiracy beliefs, suggesting that only the defensive, narcissistic need for ingroup recognition, rather than ingroup positivity in general, drives conspiracy beliefs. In a different intergroup context, Marchlewska and colleagues (2019) found that collective narcissism in relation to Catholics as an ingroup was linked to a belief in a so-called "gender conspiracy"—a conviction that gender theory and gender studies are part of a

conspiracy aimed at destroying traditional family values. Taken together, these studies suggest that conspiracy beliefs might stem from a conviction that any group misfortunes or failures are due to a conspiring enemy. Arguably, such a conviction might protect and restore feelings of ingroup superiority (see also Kofta & Sedek, 2005).

In this section, I have outlined factors that can lead to outgroup conspiracy beliefs. For example, feelings of threat and low personal control can lead to a tendency to make sense of one's experience by seeing others as intentionally malevolent. Furthermore, viewing one's social group as disadvantaged and lacking recognition can foster the need to blame other groups for the ingroup's misfortunes. This can lead to conspiracy beliefs as a defensive reaction to protect the ingroup image. I next explore the potential consequences of intergroup conspiracy beliefs.

1.4 What are the intergroup consequences of beliefs in intergroup conspiracy theories?

Although some researchers have argued that conspiracy theories can be utilised to confront social hierarchies and offer alternatives to the status quo (e.g. Imhoff & Bruder, 2014; Sapountzis & Condor 2013), most empirical evidence suggests that they are likely to result in detrimental consequences more often than not. For example, conspiracy beliefs have been linked to undesirable health choices, political alienation and antisocial behaviours (e.g. for a review see Jolley et al., 2020; see also Douglas & Leite 2017; Jolley & Douglas 2014a, 2014b; Jolley, Douglas et al., 2019). Here, I will consider the consequences of conspiracy beliefs for intergroup relations and perceptions of the overarching political system. Specifically, I will discuss implications for 1) prejudice and intergroup discrimination and 2) legitimisation of injustice.

The key outcomes that tend to be associated with intergroup conspiracy beliefs are *prejudice and intergroup discrimination*. Some researchers have argued that conspiracy

stereotypes lead to "high supportiveness for in-groupers combined with complete disregard for out-groupers" (Kofta & Sedek, 2005, p. 42). As I highlighted before, conspiracy beliefs allow individuals to blame the outgroup for events that negatively affect the ingroup. In this way, they provide a "moral justification for immoral actions" (Winiewski et al., 2015, p. 24), such as intergroup discrimination. Indeed, multiple studies have linked conspiracy beliefs to hostile intergroup attitudes. For example, Bilewicz and colleagues (2013) demonstrated that belief in Jewish conspiracies was the most prevalent predictor of anti-Semitic prejudice above all other forms of anti-Semitism (e.g. religiously grounded stereotypes). Beliefs in Jewish conspiracy theories were also linked to anti-Jewish social distance (being unwilling to accept the outgroup as their neighbours or co-workers; Bilewicz et al., 2013; Bilewicz & Sedek, 2015), legal discrimination (support for laws that prevent the outgroup from establishing companies or buying land; Bilewicz & Krzeminski, 2010), electoral discrimination (Bilewicz et al., 2013) and discriminatory decision making (e.g. in terms of fund allocation; Bilewicz et al., 2013). Furthermore, Jolley, Meleady and colleagues (2019) showed that experimental exposure to anti-Semitic conspiracy theories increased prejudice and discrimination towards Jews.

This evidence shows that conspiracy stereotypes are strongly linked to different forms of discrimination of outgroup members who are accused of conspiring. The possible aim of such discrimination is to decrease ostensible control possessed by outgroup members, regardless of the perceived strength and power of such people. Interestingly, conspiracy stereotypes of certain outgroups (e.g. Jews) are strong predictors of discriminatory intentions toward other, unrelated outgroups (e.g. Germans; Bilewicz & Sedek, 2015; Jolley, Meleady et al., 2019; Kofta & Sedek, 2005). This suggests that ascriptions of conspiracies to groups can cause more general discriminatory approaches to outgroup members, even if those outgroups are not perceived as directly involved in the conspiracy.

This shows similar results to the secondary transfer effects observed in the contact hypothesis research (Pettigrew, 2009; Tausch et al., 2010): having contact with members of a given outgroup improves attitudes toward unrelated outgroups. In the case of conspiracy beliefs, the reverse seems to be true: endorsing conspiracy theories about one outgroup can translate into more negative attitudes toward many unrelated groups. This supports the view that conspiracy stereotypes are elements of a general mindset, or conspiracy mentality (Imhoff & Bruder, 2014). Furthermore, people believing in conspiracy theories tend to be more Machiavellian (Douglas & Sutton, 2011), building their own conspiracies to defend against conspiring groups. Therefore, discrimination (depriving outgroups of their rights and resources) can be an observable strategy of such Machiavellian approaches to intergroup relations that are typical for conspiracy believers.

Kofta and Sedek (2005) suggested that the link between conspiracy beliefs and discrimination might depend on situational factors. For example, the motivation to detect and defend against any potential threats to the ingroup's power might be higher during political elections. As conspiracy theories might be especially useful in identifying threatening outgroups (see also van Prooijen & van Vugt, 2018), they should predict prejudice more strongly in times of political uncertainty. Indeed, Kofta and Sedek (2005) demonstrated that conspiracy stereotypes about Jews in Poland were significant predictors of social distance towards Jews just before the election, but not a couple of weeks after (see also Kofta et al., 2020). Similarly, in another analysis, the link between conspiracy stereotypes of Jews, and the social distance towards Jews and other outgroups (e.g. Germans), was strong in an election year, but became almost invisible in a year without elections (Bilewicz & Sedek, 2015). The election circumstances may have temporarily heightened fears of what would happen in the event of a successful "collective enemy".

Intergroup conspiracy theories also have implications for legitimisation of injustice. Goertzel (2010, p. 494) argued that "a conspiracy theory gives believers someone tangible to blame for their perceived predicament, instead of blaming it on impersonal or abstract social forces". Jolley and colleagues (2018) proposed that conspiracy theories may therefore function as a system justifying mechanism, deflecting the blame from the dysfunctional components of the system to a small group of malevolent people. Consequently, they found that conspiracy theories increased when the legitimacy of a social system was threatened. Conspiracy theories also bolstered satisfaction with the status quo, causing people to increasingly attribute societal issues to malevolent groups. This has particularly problematic implications for the situation of disadvantaged groups. For example, as relative deprivation (Bilewicz & Krzeminski, 2010) and competitive victimhood (Bilewicz et al., 2013) are used to justify conspiracy beliefs, it is possible that disenfranchised groups will turn to conspiracy theories to explain their societal position, rather than focus on the more pervasive components of the societal structure that contribute to their disadvantaged position. Therefore, conspiracy beliefs might theoretically hinder social change for the groups that need it most.

1.5 Conclusion

In this chapter, I sought to highlight the intergroup dimensions of conspiracy beliefs. I reviewed both chronic predispositions and situational factors that can strengthen people's endorsements of intergroup conspiracy beliefs. First, I explained that perceptions of outgroups as competent yet immoral are likely to breed conspiracy explanations for their actions. These perceptions are also likely to be motivated by individual perceptions of threat and lack of control, as well as by the general need for understanding the disadvantaged position of one's social groups. All of these factors can increase vigilance to potential threats stemming from other groups, as well as increasing the need to find explanations for one's

misfortunes. Finally, I highlighted research that suggests that conspiracy beliefs can have undesirable consequences for intergroup relations, but at the same time these beliefs are difficult to change. Thus, in order to curtail the negative effects of intergroup conspiracy beliefs, interventions might need to target their varied psychological and societal antecedents.

1.6 Thesis plan

Following the literature discussed in this chapter, the broad aim of this thesis is to understand and quantify the social motives behind conspiracy beliefs and intentions. Specifically, this thesis primarily focuses on the ways in which collective narcissism can be a particularly potent risk factor for these outcomes.

In the first empirical chapter of this thesis (Chapter 2), I present a meta-analysis of the social motives associated with conspiracy beliefs. In a review published in *Social and Personality Psychology Compass* by myself and my colleagues (Biddlestone, Green, Cichocka, Sutton et al., 2021), we integrated Brewer and Gardner's (1996) notion of the individual, relational, and collective levels of self-representation with Douglas and colleagues' (2017, 2019) psychological needs framework of conspiracy beliefs. Therefore, the meta-analysis presented here includes a version of this article as its systematic review, ultimately providing a framework on which we categorised the motives analysed. We suggested that conspiracy beliefs might be born out of attempts to defend and enhance the self-image, compensate for the negative experiences associated with the breaking of social ties, and defend the ingroup image. The data collection for this meta-analysis is the social sub-section of a larger meta-analysis that we are currently preparing for publication on the epistemic, existential, and social motives associated with conspiracy beliefs (Biddlestone, Green, Cichocka, Douglas et al., 2021). Importantly, the results of the meta-analysis show that defensive ingroup identity (mostly capturing collective narcissism in different contexts) is shown to have a particularly strong relationship with belief in specific conspiracy theories

(as opposed to general notions of conspiracies, conspiracy mentality, or conspiracy stereotypes).

Therefore, the focus of Chapter 3 was to uncover the ways in which social status can moderate the link between collective narcissism and different types of conspiracy beliefs. Specifically, I used two cross-sectional studies to show that while collective narcissism is linked to conspiracy beliefs that both defend and challenge authority (pro- and anti-establishment conspiracy beliefs) regardless of social status, these processes are underpinned by opposing political ideologies depending on whether the group in question is an ethnic minority or ethnic majority. Furthermore, I explored the role of system justification in conspiracy beliefs. System justification is usually conceptualised as an ideological rationalisation (e.g., Jost et al., 2003, 2008) that is often particularly pronounced among individuals holding conservative ideologies (e.g., Jost et al., 2003). However, its links with belief in conspiracy theories have been mixed (Crocker et al., 1999; Davis et al., 2018; Jolley et al., 2018; Kofta & Soral, 2020; Pellegrini et al., 2019), despite persuasive evidence that conspiracy beliefs are overall more appealing to conservatives than liberals (e.g., Azevedo & Jost, 2021; Rutjens et al., 2018; van der Linden et al., 2021). In Chapter 3, I aim to show that anti-establishment conspiracy beliefs in particular are related to system challengers with conservative (rather than liberal) ideological leanings.

Considering the reflection of sentiments among contemporary right-wing populist movements that this finding captures, the final empirical chapter (Chapter 4) focuses on the role that collective narcissism might play in motivating individuals to conspire against the ingroup, particularly among right-wing populists (i.e., Trump voters). In Chapter 4, I use four cross-sectional studies (one pilot and three main studies; two pre-registered) to show how collective narcissism in the national context (Pilot Study, Studies 1 and 3) and among workplace teams (Study 2) is not only linked to stronger conspiracy beliefs about the ingroup,

but also a willingness to conspire against fellow ingroup members. Importantly, this willingness was significantly stronger among Trump supporters than Clinton supporters in the 2016 US presidential election. Chapter 4 is based on an empirical article currently under review (Biddlestone, Cichocka et al., 2021). I discuss the implications of all three empirical chapters in Chapter 5.

Chapter 2: Systematic review and meta-analysis of the social motives associated with conspiracy beliefs[2]

[2] The systematic review in this chapter is based on Biddlestone, M., Green, R., Cichocka, A., Sutton, R., & Douglas, K. (2021). Conspiracy beliefs and the individual, relational, and collective selves. *Social and Personality Psychology Compass*, e12639. https://doi.org/10.1111/spc3.12639

2.1 Abstract

Following a framework detailing the appeal of conspiracy theories to individuals with certain thwarted psychological needs, scholars have largely focused their efforts on uncovering the nature of these processes. However, despite meta-analyses on the role that personality traits and a lack of control might play in the formation of conspiracy beliefs, an exhaustive meta-analysis on the social motives included in the literature has yet to be carried out. Therefore, we systematically review the literature, integrating theorising on processes relating to three selves—the *individual, relational,* and *collective* self and outline their associations with conspiracy beliefs. Next, with the use of this framework, I conduct a meta-analysis of the effects associated with these three selves (N_{total} = 32,901.30). Results provide evidence of meta-analytic associations between conspiracy beliefs and all motives pertaining to the individual self, social exclusion, and defensive ingroup identity. Strong evidence was provided for the null hypothesis of low ingroup identification, and more data is needed to determine the role of perceived ingroup victimhood. Caveats in the form of secondary analyses and moderation effects are reported, alongside theoretical implications and future directions.

Keywords: meta-analysis, social motives, social needs, conspiracy beliefs, conspiracy theories

The COVID-19 pandemic has brought conspiracy theories to the front of mainstream public discourse. Almost immediately after the outbreak, we observed the use of conspiracy theories to blame outgroups for the spread of the virus (Douglas, 2021a; Lee, 2020). For example, China was accused of deliberately manufacturing COVID-19 in a laboratory to be used as a bioweapon. Further down the line, the impact of conspiracy theories and misinformation on reducing intentions to follow virus-mitigating behaviours (e.g., Biddlestone, Green, & Douglas, 2020) or take the vaccine (e.g., Bertin, Nera et al., 2020) became more apparent (see also Roozenbeek et al., 2020). These findings illustrate the grave consequences that conspiracy beliefs can have in the face of global threats, reminding us we urgently need to understand why they appeal to so many people (see Douglas, 2021b; Van Bavel et al., 2020).

Conspiracy theories can be defined as attempts to explain the causes of significant social or political events by accusing malevolent outgroups of secretly plotting to achieve nefarious goals (Douglas et al., 2019; Zonis & Joseph, 1994). The psychological factors that attract people to conspiracy theories have received significant attention in recent years. This has led to a refined theoretical understanding of the appeal of conspiracy theories. Many scholars now agree that belief in conspiracy theories arises from efforts to satisfy important but thwarted psychological motives (e.g., Douglas et al., 2017, 2019; Jutzi et al., 2020; van Prooijen, 2020).

Douglas and colleagues (2017) drew on theorising about ideological belief systems (Jost et al., 2008; see also Hennes et al., 2012) to categorise the motives associated with conspiracy beliefs as existential, epistemic, and social. *Epistemic* motives encompass the need to feel in possession of a stable and reliable understanding of the environment (Kruglanski, 1989). For example, a sense of uncertainty is associated with belief in conspiracy theories (Lamberty et al., 2018). *Existential* motives encompass the need for a sense of security and safety (Greenberg et al., 1990; Onraet et al., 2013). For example, people

are likely to turn to conspiracy theories when they feel anxious (Grzesiak-Feldman, 2013) or powerless (Abalakina-Paap et al., 1999). *Social* motives refer to the need to bolster and protect a favourable image of the self and ingroup (Brewer & Gardner, 1996). For example, conspiracy beliefs have been linked to narcissistic needs for recognition of oneself and one's social groups (e.g., Cichocka, Marchlewska, & Golec de Zavala, 2016), as well as the need to feel unique (Imhoff & Lamberty, 2017; Lantian et al., 2017). All three motives appear to play an important role in predicting conspiracy beliefs, but it is the *social motives* in particular that we turn our focus to in the current systematic review.

The three selves

Brewer and Gardner (1996) differentiate three fundamental representations of the self-concept: the individual self, the relational self, and the collective self. Each of these self-representations is driven by different social motivations. *The individual self* is associated with the motivation to maintain and establish personal uniqueness from others. The central features of the individual self are constructed with close reference to the people around us (e.g., Yeung & Martin, 2003; see also Sedikides et al., 2013). *The relational self* is associated with the motivation to establish and maintain interpersonal bonds with close others. Finally, *the collective self* is associated with a motivation to maintain and establish ties to groups deemed as important, seeking group-enhancement via intergroup comparisons (Brewer & Gardner, 1996).

People tend to experience tensions between feeling unique and independent from others versus wanting to fit in, belong, and form relationships with others. These tensions might explain why levels of self-categorisation can change dynamically (Brewer & Gardner, 1996). For example, when intimacy needs at the relational level are frustrated (e.g., via rejection in a romantic relationship), reliance on one's collective identities (e.g., ethnic group) might increase. Although there are debates about which of the self motives are more

important (see Sedikides & Gaertner, 2001), researchers agree that satisfaction of motives associated with all three selves are at least to some extent needed for meaningful psychological functioning and well-being (Sedikides et al., 2013). Thus, people seek to manage frustrations associated with these three fundamental motives in different ways. As we will argue here, one of these ways is to endorse conspiracy theories.

The current chapter aims to embed extant research on conspiracy beliefs from a variety of perspectives and theorising about the three levels of self-representation (Brewer & Gardner, 1996; Sedikides & Brewer, 2001) into Douglas and colleagues' (2017) framework of motivated conspiracy beliefs. While there are certainly other notable models of self that warrant further investigation with regards to conspiracy beliefs (e.g., Baumeister & Leary, 1995; Blatt & Blass, 2013; Deaux & Perkins, 2001; Markus & Kitayama, 1991; Markus & Wurf, 1987; Stryker & Statham, 1985; Turner et al., 1987), the current systematic review does not intend to use the extant evidence to debate the veracity of the tripartite self, but to employ this model as a useful framework that can be used to guide our meta-analysis and elucidate the social processes that result in conspiracy beliefs. Specifically, we will examine whether and why individual, relational, and collective motives may attract people toward conspiracy theories. By doing this, we aim to 1) provide a more detailed taxonomy of the social processes that might motivate conspiracy beliefs, 2) discuss the distinctive consequences that conspiracy beliefs may have on each of the selves, and use this to 3) make more detailed predictions about the interplay between the social motives that drive conspiracy beliefs, and 4) meta-analytically synthesise the social motives associated with conspiracy beliefs.

Individual self motives and conspiracy beliefs

Most people are motivated to maintain or enhance views of themselves (Sedikides et al., 2013). To achieve this, they tend to compare themselves to relevant others (e.g., Pelham &

Swann, 1989). At the same time, perceived threats to the individual self trigger a motivation to protect and maintain a sense of self-worth (e.g., Sedikides & Gregg, 2008; Sedikides & Strube, 1997). It has been proposed that conspiracy theories appeal to people for this reason (Robins & Post, 1997). For example, Abalakina-Paap and colleagues (1999) suggested that conspiracy theories might appeal to people with low self-esteem because this allows them to blame others for their problems. Conspiracy beliefs promise the ability to control the narrative, ascribing responsibility for one's circumstances onto others, and positioning the self as morally superior (see Douglas et al., 2017). At the same time, conspiracy theories may make people feel like they have unique access to special knowledge, providing a particular allure for people hoping to bolster their self-image. Accordingly, conspiracy beliefs have been linked to various self-related motives, such as the need for positive self-worth and the need for uniqueness. We discuss each of these motives in turn.

The need to defend the self-image: Self-esteem and narcissism

Although early theorising has linked conspiracy beliefs to low self-esteem, empirical evidence for this association has been mixed (Crocker et al., 1999; Stieger et al., 2013; Swami et al., 2011; Swami, 2012). One reason could be that low self-esteem might not always motivate the need to restore or enhance the self (vanDellen et al., 2011). Cichocka, Marchlewska, and Golec de Zavala (2016) suggested that conspiracy beliefs may in fact be more strongly associated with narcissism—a sense of self-importance, superiority and entitlement to special treatment (Brummelman et al., 2016; Krizan & Herlache, 2017; see also Rosenthal et al., 2020). In particular, grandiose narcissism (as opposed to vulnerable narcissism, linked to negative self-views and paranoia; Cain et al., 2008; Kay, 2021) is characterised by a strong motivation to maintain a grandiose self (Horvath & Morf, 2009; Morf & Rhodewalt, 2001)—what Baumeister and Vohs (2001) referred to as “addiction to self-esteem”. Those scoring high in narcissism use two social strategies to regulate the self.

On the one hand, assertive self-enhancement leads individuals to—often unsuccessfully—attempt to gain ego boosts by garnering admiration from others. On the other, antagonistic self-protection leads them to defend against (real or imagined) ego threats by engaging in social rivalry and competition (Back et al., 2013). Another way those scoring high in narcissism may protect the self is by attributing any of their shortcomings or undesirable personal attributes to malevolent plots and conspiracies. The need for external validation also means that narcissists tend to have paranoid preoccupations with the idea that others are purposefully trying to undermine them (Fenigstein & Vanable, 1992).

Cichocka, Marchlewska, and Golec de Zavala (2016) used validated questionnaires to measure self-esteem and narcissism, testing them as joint predictors of belief in various conspiracy theories (e.g., about the moon landing, or foreign governments' activities). They discovered that individual narcissism was indeed a more robust positive predictor of conspiracy beliefs. Once the overlap with individual narcissism was accounted for, low self-esteem was a relatively weak predictor of conspiracy beliefs. In fact, its effect became non-significant when controlling for generalised views of humanity, suggesting that any effects of low self-esteem on conspiracy beliefs may be due to the fact that low self-esteem is linked to generally negative views of humanity.

The need for uniqueness and autonomy

Motives relating to the individual self reflect not only a need for positive self-evaluation, but also the need to demonstrate a person's unique contribution to the world, proving they are not expendable (see Leary, 2005). It has been argued that nearly all conspiracy theories offer the sense that one possesses supposed coveted knowledge (see Lantian et al., 2017). This ability to provide the believer with a sense of enlightened understanding is perhaps why several lines of research have documented that both a chronic and temporarily heightened need for uniqueness (e.g., through a writing task that increases the salience of one's unique qualities)

increases belief in conspiracy theories (e.g., Imhoff & Lamberty, 2017, 2018; Lantian et al., 2017). Interestingly, while vulnerable narcissism in particular is associated with paranoia, the link between grandiose narcissism and conspiracy beliefs can be explained by convictions about one's unique and special qualities (Kay, 2021; see also Reynolds & Lejuez, 2011), indicating that the need for uniqueness might additionally explain why those high in narcissism find conspiracy theories especially appealing.

While the need for uniqueness reflects an individual's motivation to maintain a positive self-image through expressions of difference from others, reactance represents a defensive rejection of the ideas perceived as threatening to one's sense of autonomy. For example, throughout the COVID-19 pandemic, groups have engaged in collective action against legal requirements to wear facemasks, citing "a violation of [their] freedom" (Stewart, 2020). When individuals experience threats to their sense of freedom, they express an active rejection of the values or beliefs that represent the source of this threat to maintain or restore their sense of autonomy (see Brehm & Brehm, 1981). Across 24 nations, Hornsey and colleagues (2018) found that individual reactance scores (measured with items such as "I consider advice from others an intrusion"; Hong & Page, 1989) were associated with stronger belief in various conspiracy theories. The authors suggested that people might reject scientific consensus to the extent that they view it as threatening to their individual autonomy, due to a perception that it imposes prescriptive ideals on how one should live their life (cf. van der Linden et al., 2019).[3]

In sum, motives relating to the individual self seem to underlie two routes to conspiracy beliefs. On the one hand, suspicion of others and the need to deflect blame for

[3] Links comparable to reactance have been studied, showing that dominance and prestige (Suessenbach & Moore, 2019) correlate with conspiracy beliefs, likely through defensive psychological mechanisms that pre-emptively adjust to negate conflicting information (Festinger, 1957).

personal shortcomings means that narcissists are more prone to believing in conspiracy theories. On the other hand, conspiracy theories might be used as an attempt to maintain a positive self-image by providing people with the prospect of feeling unique and non-conformist. These processes reflect the primary goals to protect the individual self through deflection of psychological vulnerabilities (Leary et al., 2009) and achieve a sense of positive distinctiveness (Leary, 2005).

Implications for the individual self

Despite their apparent usefulness to protect the self, conspiracy beliefs might in fact have undesirable consequences for the individual. For example, defending self-worth by perceiving the world in conspiracist terms can leave one feeling dissatisfied and disillusioned with life's circumstances (see Jolley, Douglas et al., 2019; see also Jolley & Douglas, 2014a, 2014b). Furthermore, despite the positive function of the need for uniqueness to demonstrate personal value, motivated aspirations of uniqueness can cloud people's judgement. Imhoff and Lamberty (2017) argue that presenting conflicting evidence to a conspiracy believer may ironically encourage them to ‘double-down’ on their beliefs, because doing so reaffirms the uniqueness they initially sought in the conspiracy theories. This suggests that although conspiracy theories may carry the promise of a route to bolster the self-image, the additional need to defend this image may override any realistic benefits that could have otherwise been gained from presenting unique ideas with intellectual humility. When coupled with the defensive rejection of consensus views in reactance, these attempts to protect the individual self can have negative consequences not only for the self (e.g., Chapter 4; Jolley & Douglas, 2014a, 2014b), but also for society more broadly (e.g., hesitance to vaccinate or follow pandemic guidelines; see Bertin, Nera et al., 2020; Romer & Jamieson, 2020).

Relational self motives of conspiracy beliefs

Even though conspiracy beliefs are motivated by the need to demonstrate and maintain individual uniqueness, there is also some evidence that they might be linked to relational motives to establish interpersonal bonds with close others. If the relational self is under threat, people seek to regain a sense of social support (see Thoits, 1984). In this regard, research has begun to explore whether conspiracy theory communities can sometimes offer a promise of such help (Graeupner & Coman, 2017; Moulding et al., 2016; Poon et al., 2020; van Prooijen, 2015).

The need for relationships: Social exclusion

The rise of real-world events organised through social media (e.g., the 'stop the steal' protests against Joe Biden's victory over Donald Trump in the 2020 US election; Spring, 2020a) have provided a mechanism for conspiracy believers to meet both online and face-to-face. While conspiracy believers are unlikely to be the only community that individuals seeking close bonds will turn to, when coupled with other motives implicated in the formation of conspiracy beliefs, expanding online conspiracist communities (e.g., Klein et al., 2018, 2019) might be particularly attractive for those seeking social connection. In fact, conspiracy theories may even provide a basis for individuals to create close bonds with others through their shared interests (Klein et al., 2019), epistemic concerns (Klein et al., 2018), and ideologies (Holt et al., 2020).

Accordingly, Poon and colleagues (2020) demonstrated that conspiracy beliefs can increase when people feel excluded from others: across three studies, experimental manipulations of ostracism (e.g., receiving fewer social media likes compared to a control group) increased conspiracy beliefs. Cross-sectional research has indicated similar effects, revealing associations between conspiracy beliefs and feelings of social exclusion (Graeupner & Coman, 2017), as well as a sense of isolation (Moulding et al., 2016). Interestingly, van Prooijen (2015) found that conspiracy beliefs were actually higher when participants were

experimentally induced to feel included (vs. excluded) by others. However, these effects were only observed for participants with unstable self-esteem or those who were made to feel uncertain. It is then at least plausible that in this case, feelings of inclusion triggered individual self motives, such as the need to feel unique, which might have further translated into higher conspiracy beliefs. Although more research is needed to understand the effects of relational motives on conspiracy beliefs, one possibility is that these effects depend on whether the endorsement of a specific conspiracy theory provides individuals with a sense of community (e.g., belonging to a movement such as QAnon).[4]

Implications for the relational self

Although conspiracy theories might promise a way of building relationships with others, public endorsement of conspiracy theories ironically heightens concerns for social exclusion. For example, Lantian and colleagues (2018) found that participants who were instructed to write online texts supporting conspiracy theories about the Charlie Hebdo shooting were more likely to anticipate fear of social exclusion than those instructed to write pieces criticising the theories. Moreover, despite a lack of direct research on the interpersonal consequences of conspiracy beliefs, simply searching "relationship advice conspiracy" on Google provides a swathe of pages detailing the relationship difficulties people are having with their friends, families, and partners who believe in conspiracy theories (e.g., Reddit, 2015; Spring, 2020b). Therefore, future research would benefit from elucidating the circumstances under which associating with other like-minded conspiracy believers may help

[4] Relational self motives that have received less attention in the literature include social value affirmation (being recognised by valued others; Davis et al., 2018), leadership (the motivation for social power; Suessenbach & Moore, 2019), and anomie (a sense of alienation following the breaking of social ties, not to be confused with the existential threat of anomia; see Imhoff et al., 2018).

to create new dyadic bonds, and whether this may come at the cost of pushing away existing bonds with “non-believers”.

Collective self motives of conspiracy beliefs

Just as people seek to protect their selves and their relationships, they seek to protect and enhance their social groups. Therefore, conspiracy beliefs can not only be a defensive strategy to manage threats to one's self-worth, but they can also be used in a similar way to attempt to manage threats to the social groups people belong to. van Prooijen and van Vugt (2018) argue that conspiracy beliefs can be seen as an evolved psychological mechanism aimed at detecting malevolent outgroups colluding against the ingroup. Thus, members of groups that feel chronically threatened might show higher levels of conspiracy beliefs. Indeed, there is evidence showing higher levels of belief in conspiracy theories among ethnic and religious minorities, compared to majorities (e.g., Crocker et al., 1999; van Prooijen et al., 2018). Comparable to individual self motives, evidence shows that conspiracy beliefs are also strongest among people who feel victimised or are generally defensive about their group identities. They are likely to use conspiracy theories as a way of maintaining their group image by providing an explanation for their ingroup's (real or exaggerated) disadvantage and defending the group from (real or imaginary) enemies (e.g., see also Chapter 1; Cichocka, Marchlewska, Golec de Zavala et al., 2016; Kofta & Sedek, 2005).

The need to defend a positive ingroup image: Collective narcissism

Just as individual narcissism encompasses a defensive self-evaluation, a defensive ingroup identity can be captured by the concept of collective narcissism. Collective narcissism is a belief in the greatness of one's social group (be it nation, ethnicity, or sports team) that is not sufficiently appreciated by others (Golec de Zavala et al., 2009). For those scoring high in collective narcissism, conspiracy theories might be a way of explaining why the ingroup is not getting the recognition it is allegedly entitled to, enabling people to blame outgroups for

their ingroup's misfortunes. For example, collective narcissism measured among Poles predicted a belief that other nations are conspiring to undermine Poland's successes in the fight against communism (Cichocka, Marchlewska, Golec de Zavala et al., 2016). Similarly, collective narcissism in the US predicted a belief that other governments are conspiring against the ingroup (e.g., Cichocka, Marchlewska, Golec de Zavala et al., 2016; for examples from other intergroup contexts see Golec de Zavala & Cichocka, 2012; Marchlewska et al., 2019; van Prooijen & Song, 2020).[5] This association between collective narcissism and conspiracy beliefs seems to be driven by increased sensitivity to intergroup threats (Cichocka, Marchlewska, Golec de Zavala et al., 2016). In fact, research suggests that collective narcissism might also predict a more general propensity to believe in conspiracy theories. For example, it has been linked to a tendency to view political events in terms of group-based conspiracies (Golec de Zavala & Federico, 2018), as well as belief in other conspiracy theories, such as ones about vaccines (Cislak et al., in press), climate change (Bertin, Nera, et al., 2021), or the COVID-19 pandemic (Sternisko, Cichocka, Cislak et al., 2020), which might not necessarily implicate a specific enemy outgroup.

Importantly, a strong commitment to one's group does not necessarily foster a propensity to believe in conspiracy theories. Research suggests that ingroup identification, understood as a positive group evaluation or ties to ingroup members, shows mixed associations with conspiracy beliefs (for negative associations, see Mashuri & Zaduqisti, 2014; Prot, 2015; Swami et al., 2017; Sternisko, Cichocka, Cislak, & Van Bavel, 2020; Uenal et al., 2020; for a positive association, see Douglas & Leite, 2017; and for non-significant

[5] Similar measures of defensive national ingroup identity have been researched with regards to conspiracy beliefs, such as blind patriotism (e.g., Pavlopoulos & Theologitis, 2019), national glorification (e.g., Imhoff et al., 2018), and identity subversion—a concern for changing ingroup norms and values (Mashuri et al., 2016).

associations, see Douglas & Leite, 2017).[6] However, when the overlap between ingroup identification and collective narcissism is accounted for, collective narcissism is revealed as a unique predictor of the belief in conspiracy theories. In fact, ingroup identification without the narcissistic component, which can be interpreted as a secure form of ingroup identity, seems to be associated with a *lower* tendency to believe in conspiracy theories (e.g., Cichocka, Marchlewska, Golec de Zavala et al., 2016). Therefore, it seems that the collective self motivation to defend against threats to the group image through conspiracy beliefs is driven by the narcissistic need for ingroup recognition, rather than genuine commitment to the group.

Links between conspiracy beliefs and other variables reflecting general concern for the collective self have also been identified. For example, consistent with the measurement of the collective self with regards to society, Cichocka, Marchlewska, and Golec de Zavala (2016) also showed that a satisfaction with human identity—humanity esteem (Luke & Maio, 2009) —was negatively associated with belief in popular conspiracy theories. Davis and colleagues (2018) also measured experiences of social devaluation as a result of ingroup disadvantage, showing that it positively correlated with belief in both race-relevant and more general conspiracy theories. The links between these variables and conspiracy beliefs are consistent with the theoretical notion that threats to the collective self—particularly through a

[6] Comparable variables to ingroup identification in the national context have also been investigated with regards to conspiracy beliefs, such as national attachment (Imhoff et al., 2018) and constructive patriotism (Pavlopoulos & Theologitis, 2019).

concern for the loss of ingroup worth—result in conspiracy beliefs in an attempt to defend and regain positive group worth.[7]

The need to blame others: Perceived ingroup victimhood

Conspiracy theories usually point to specific outgroups that constitute a threat to the ingroup (Kofta & Sedek, 2005; Sternisko, Cichocka, & Van Bavel, 2020; van Prooijen, 2020). Outgroups that are perceived as agentic, yet cold and unfriendly (Cuddy et al., 2009; Fousiani & van Prooijen, 2019; Winiewski et al., 2015) might be especially likely to be stereotyped as a "dangerous, potent, and deceptive enemy" (Kofta & Sedek, 2005, p. 42). Conspiracy stereotypes paint specific groups as being highly coordinated in their secret efforts to exert dominance over other groups (Kofta & Sedek, 2005). When these stereotypes are ascribed to groups that are perceived as more powerful than one's own, this can lead to scapegoating, wherein individuals hold the outgroup as responsible for negative ingroup circumstances (Glick, 2002). A typical example that illustrates this dynamic is the conspiracy stereotyping of Jews.

People might be especially motivated to look for outgroups to blame when they see the ingroup as a victim (Reid, 2010; Shnabel & Noor, 2012; Suciu, 2008). To maintain a positive group image and compensate for this perceived negative social standing, victimhood motivates the use of conspiracy stereotypes in an attempt to unite the ingroup against the scapegoated outgroup (Reid, 2010; see also Bilewicz et al., 2019; Bilewicz et al., 2013; Kofta & Sedek, 2005; Mashuri & Zaduqisti, 2014), which seems particularly important when ingroup identification is strong (Pantazi et al., 2020). Similarly, conspiracy stereotyping

[7] Other variables have captured more of a specific concern with intergroup relations, such as Bertin's (2018) findings that a focus on social competition between groups, as well as a perceived identity overlap between the national ingroup and outgroups, were both positively associated with conspiracy beliefs.

seems stronger among those who are chronically defensive about the ingroup, particularly those scoring higher in collective narcissism (Golec de Zavala & Cichocka, 2012).

In sum, chronic or situationally induced threats to one's social identity can motivate conspiracy beliefs. Conspiracy theories can serve as a sort of threat detection mechanism that identifies allegedly dangerous groups seeking to harm or undermine the ingroup (see Kofta & Sedek, 2005; van Prooijen & van Vugt, 2018). Furthermore, this hypersensitivity to outgroup threat fosters attempts to maintain the positive group image through intergroup comparisons that place the ingroup in a morally superior victim role (Bar-Tal et al., 2009), justifying conspiracy stereotypes even further. Therefore, collective self motives that seek to protect and enhance one's social group increase the propensity to believe in conspiracy theories. This can have potentially problematic social consequences.

Implications for the collective self

Conspiracy beliefs about outgroups can threaten social cohesion. They lead to prejudice and intergroup hostility (Bilewicz et al., 2013; Jolley et al., 2020; Marchlewska et al., 2020), as well as disruptive forms of political engagement (Imhoff et al., 2021). However, conspiracy beliefs might also turn out to be dangerous for the ingroup itself. For example, collective narcissism is linked to suspicion of outgroups, even if these outgroups are offering aid to the ingroup (Mashuri et al., 2020). The increased threat sensitivity of those high in collective narcissism may also foster uncertainty around whether fellow ingroup members can even be trusted (see also Cichocka & Cislak, 2020; Golec de Zavala & Federico, 2018; Marchlewska et al., 2020). This might be one reason why people scoring high in collective narcissism are willing to engage in conspiratorial plots against their ingroup, such as covering up sensitive information from the public and carrying out terrorist acts on their own soil for the government (see Chapter 4). In fact, the association between collective narcissism and a readiness to conspire against the ingroup is partially explained by the fact that collective

narcissists believe other ingroup members are conspiring too (see also Douglas & Sutton, 2011). Therefore, it appears that the use of conspiracy theories to defend against threats to the collective self may also backfire and hurt the ingroup and its members.

Engaging with conspiracy theories also has implications for one's identification with the "conspiracy theorist" ingroup. Evidence suggests that labelling an idea a "conspiracy theory" does not affect its believability (Wood, 2016), and individuals share these ideas with others, often in online communities (see Klein et al., 2019). Within these communities, the label of "conspiracy theorist" itself can represent a distinct social group identity (see Nera, Jetten et al., 2021), encompassing, for example, the dismissal of non-"conspiracy theorist" outgroup members as "sheeple" (Nattrass, 2012). Furthermore, results show that perceived discrimination of the conspiracist identity can be associated with stronger identification with the "conspiracy theorist" ingroup (Nera, Jetten et al., 2021). Thus, while conspiracy beliefs themselves may act as a defensive response against threats to the group image, stronger identification with the "conspiracy theorist" ingroup, which carries unique implications for intergroup tensions, can be a simultaneous response to a threatened collective self.

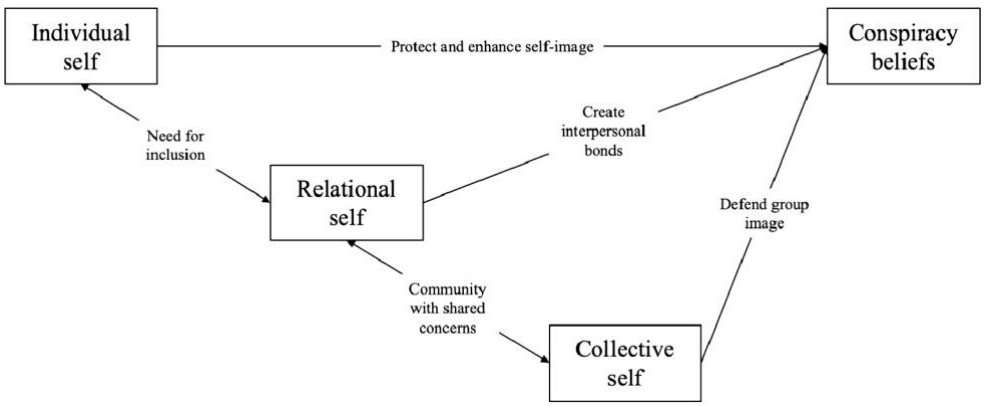
How social motives predict conspiracy beliefs

Thus far, we have outlined why the motives associated with the three selves (Brewer & Gardner, 1996; Sedikides et al., 2013) can lead to stronger conspiracy beliefs, weighing the potential consequences for each. Firstly, we argue that threats to the self-image activate defensive motivations to deflect from personal misgivings by accusing others of conspiratorial intentions. At the same time, conspiracy beliefs can be driven by the need to feel special and independent. However, there is less evidence that these attempts might be successful—those who believe in conspiracy theories report lower well-being and life satisfaction (e.g., Chen et al., 2020; Freeman & Bentall, 2017). Secondly, we argue that threats to the relational self may motivate conspiracy beliefs in an attempt to regain social

support through the exchange of shared interests. However, this behaviour could further threaten the relational self by simultaneously pushing away previously existing interpersonal bonds with "non-believers". Finally, we argue that threats to the collective self motivate conspiracy beliefs in attempts to defend and maintain a positive group image (see Figure 2.1). These processes have distinctive consequences through the exacerbation of intergroup conflicts and a breaking down of trust within the ingroup. Thus, we will now use this approach as a framework for our meta-analytic synthesis of the social motives associated with conspiracy beliefs.

Figure 2.1

Interplay Between the Processes Linking Each of the Three Selves with Conspiracy Beliefs



2.2 Method

2.2.1 Selection of variables

Our systematic review was fully pre-registered:

https://osf.io/5aw7m/?view_only=b08f3d1a76e945058ca97ef699788404[8]

[8] This registration is under embargo until March 1, 2022, but the link contains the document uploaded to the embargoed registration.

We were interested in the relationships between social motives and conspiracy beliefs. Therefore, we excluded from our sample studies that only dealt with ideological rationalisations, epistemic or existential motives, psychological measures of personality types, pathology, cultural orientation, values, and the consequences of conspiracy beliefs. Furthermore, we excluded any studies that only measured susceptibility to misinformation, fake news, or measures of conspiracy beliefs that did not strictly fall under our definition of belief conspiracy theories (e.g., belief in monsters, aliens, and conspiracies; see Stone et al., 2018).

We started our search by extracting all empirical papers from the CREST database and scanning them for relevance, obtaining 295 articles. Next, we screened the meta-data of these articles, excluding any that did not fit our criteria. Then, we read the full-texts and coded their inclusion/exclusion criteria, moderators, sample sizes and effect sizes. Once we checked each other's coding and resolved our disagreements, we carried out the same process to obtain records from other sources. To do this, we searched the online *PsychINFO, Scopus, ProQuest,* and *ProQuest Dissertations and Theses* databases, returning 224 additional articles.

The COVID-19 pandemic also began during our systematic review, so we decided to extend our pre-registered deadline to the end of July 2020, enabling us to include articles that were published during the influx of research at the beginning of the pandemic. After carrying out the same process again, we retrieved three additional articles relevant to our meta-analysis. Finally, we made a call for papers, contacting the corresponding authors of the papers with unreported data, and included messages in selected journal announcements. Once we completed this process, we were left with a total of 45 articles, containing 98 samples to be included in the meta-analysis (see Table 2.1; Appendix A).

Table 2.1

Summary of the Number of Samples and Participants Included in the Meta-Analysis that Are/Are Not Exclusively Undergraduates, and their Country of Origin

Characteristic	No. of samples	No. of cases/participants
Country of sample		
Argentina	1	202
Australia	3	545
Austria	2	562
Brazil	1	196
Canada	1	192
Chile	1	200
China	1	192
France	9	1,194
Germany	7	1,439
Greece	1	212
Hong Kong	2	283
India	1	195
Indonesia	3	676
Ireland	1	189
Japan	1	180
Malaysia	1	368
Mexico	1	211
Mixed	12	3,748
New Zealand	1	187
Philippines	1	197
Poland	7	3,541
Portugal	1	191
Russia	1	244
Singapore	1	188
South Africa	1	204
South Korea	1	191
Spain	1	196
Sweden	1	192
UK	4	1,512
US	29	15,267.30
Type of sample		
Exclusively undergraduates	19	3,636
Not exclusively undergraduates	79	29,265.30
Total	98	32,901.30

2.2.2 Categorisation of studies

We categorised the independent variables into their broad motive categories of individual, relational, and collective self, and then sub-categorised them into their more specific motive categories. There is a wide array of measures frequently used to capture different facets of conspiracy beliefs, often differing widely in their conceptual approach. Therefore, we coded the type of conspiracy beliefs as one of our pre-registered moderating variables.

2.2.2.1 Classification of independent measures

Please note that only the measures that were included as specific motives are reported here, for a full list of the independent and dependent variable measures, see table in Appendix A.

Individual self motives

Low self-esteem was measured with Rosenberg's (1965) self-esteem scale (e.g., "I take a positive attitude toward myself"), Robins and colleagues' (2001) single item: "I have high self-esteem", a single item in the US National Comorbidity Survey-Replication data (see Kessler et al., 2004), and self-esteem instability (e.g., "I notice that how I feel about myself changes from day to day"; Dykman, 1998).

Individual narcissism was measured using versions of the Narcissistic Personality Inventory (e.g., "I am a really special person"; Ang & Yusof, 2006; Emmons, 1987; Raskin & Hall, 1979; Raskin & Terry, 1988; Schoenleber et al., 2015), and the narcissistic sub-scale of the Dark Triad (e.g., "I tend to seek prestige or status"; Jonason & Webster, 2010).

The need for uniqueness was measured in cross-sectional designs using versions of the Self-Attributed Need for Uniqueness scale (e.g., "I prefer being [no/slightly/moderately/very/extremely] different from other people"; Lynn & Harris, 1997; Lynn & Schnyder, 2002; Schumpe et al., 2016; Snyder & Fromkin, 1977), versions of Lantian and colleagues' (2017) scale asking the degree to which conspiracy theories are perceived to be disclosed to or hidden from the public view, Imhoff and Lamberty's (2017)

similar scale with reference to supposedly well-known versus unknown events, and Lantian's (2016) various single-items (e.g., "Compared to the average French person, I think more so that the official version of events given by authorities very often hides the truth"). In experimental designs, the need for uniqueness was manipulated using a writing task on the importance of individuality versus conformity (Lantian et al., 2017), and a reading task that emphasises the benefits experienced by people that seek to distinguish themselves from versus establish similarity to others (Lantian et al., 2017).

Reactance was measured using the Hong Psychological Reactance Scale (e.g., "I consider advice from others an intrusion"; Hong & Page, 1989).

Relational self motives

Social exclusion was measured in cross-sectional designs using the Ostracism Experience Scale (e.g., "In general, others do not look at me when I'm in their presence"; Carter-Sowell, 2010; Gilman et al., 2013), or the isolation sub-scale of the Dean Alienation Scale (e.g., "I feel all alone in the world"; Dean, 1961). In the experiments, an ostracism memory priming task (Poon et al., 2015), a task where participants receive a high versus low number of social media likes (Poon, 2019; Wolf et al., 2015), and a thought experiment version of Twenge and colleagues' (2001) "future together/alone" manipulation were used.

Collective self motives

Low ingroup identification was measured through workplace commitment (e.g., "I would be happy to spend the rest of my working life in my workplace"; Allen & Meyer, 1990), workplace identification (e.g., "I feel strong ties with my workplace"; Edwards & Peccei, 2007), Luhtanen and Crocker's (1992) Collective Self-Esteem Scale with reference to the British and US national ingroups (e.g., "I am proud to be British"), both Cameron's (2004) ingroup identification scale (e.g., "I have a lot in common with other Poles") and the Inclusion of In-Group in the Self Scale (i.e., indicating identification through visual overlap

with the self and national ingroup; Tropp & Wright, 2001), ingroup satisfaction (e.g., "I think that Americans have a lot to be proud of"; Leach et al., 2008), national attachment (e.g., "I am strongly committed to my nation"; Roccas et al., 2006), and constructive patriotism (e.g., "I express my love for Greece by supporting efforts at positive change"; Schatz et al., 1999).

Defensive ingroup identity. Collective narcissism was measured using versions of Golec de Zavala and colleagues' (2009; see also Ardag, 2019; Golec de Zavala, Cichocka, & Bilewicz, 2013) Collective Narcissism Scale, with reference to various group identities (e.g., "If Polish people had a major say in the world, the world would be a much better place"). Furthermore, other forms of defensive ingroup identity were captured using national glorification (e.g., "Germany is better than other nations in all respects"; Roccas et al., 2006) and blind patriotism scales (e.g., "I would support my country right or wrong"; Schatz et al., 1999), and identity subversion with reference to the Islamic ingroup (e.g., "The Western culture and ways of life has subverted the true nature of Islam"; Mashuri et al., 2016).

Perceived ingroup victimhood was measured with reference to Polish nationality (e.g., "Do you agree that no other nation suffered as much as Poles did?"; Bilewicz et al., 2013; Krzeminski, 2002) and Islamic identification (e.g., "I believe that Moslems are the most victimized groups of the Western people's unjust and discriminatory treatments than other religious groups"; Sullivan et al., 2012).

2.2.2.2 Classification of dependent measures

The most common approach to measuring conspiracy beliefs is through the application of general notions of conspiracies, captured most frequently by the Generic Conspiracist Beliefs Scale (e.g., "New and advanced technology which would harm current industry is being suppressed"; Brotherton et al., 2013). A similar measure capturing belief in general notions of conspiracies is the Single Item Conspiracy Belief Scale (i.e., "I think that the official version of the events given by the authorities very often hides the truth"; Lantian et al., 2016).

Therefore, when either of these measures were used, the type of belief was coded as "General". Another general but distinct measure is that of conspiracy mentality (e.g., "Those at the top do whatever they want"; Bruder et al., 2013; Imhoff & Bruder, 2014). Instead of presenting general notions of conspiracies, this measure presents components of conspiracist thinking, aiming to capture a more ideological conspiracist mindset. Whenever a version of this measure was implemented, data was coded as "Mentality".

Another common approach to measuring conspiracy beliefs is through the presentation of specific conspiracy theories. Scales used to capture this type of belief are more varied, spanning from the commonly used Belief in Conspiracy Theories Inventory (e.g., "Government agencies in the UK are involved in the distribution of illegal drugs to ethnic minorities"; Swami et al., 2011, 2017) or Conspiracist Belief Scale (Douglas et al., 2015)—both measuring belief in well-known conspiracy theories—to the more idiosyncratic measurement of belief in conspiracy theories regarding specific events, such as the Smoleńsk plane crash (e.g., "Polish and Russian authorities jointly conceal the truth about the catastrophe"; Bilewicz et al., 2019) or the COVID-19 pandemic (e.g., "The implementation of 5G technology is a means of deliberately spreading Coronavirus"; Biddlestone, Green, & Douglas, 2020). Whenever one of these measures was used, they were coded as "Specific". Finally, some studies measure conspiracy stereotypes of specific groups (e.g., "Do you agree or disagree with the opinion that Jews aspire to dominate the world?"), these were coded as "Stereotypes". Therefore, we decided on four dependent variable categories (see Appendix A).

2.2.3 Moderators

Conspiracy measure. Considering the myriad of conceptual approaches to measuring conspiracy beliefs, we analysed whether the effects depended on the use of General, Specific, Mentality, or Stereotype measures.

Study design. As we analysed data from both correlational and experimental designs, we checked whether effects changed depending on these designs.

Mean age. Demographically, age is associated with many variables that may influence conspiracy beliefs, such as education level (e.g., van Prooijen, 2016). Therefore, we explored the moderating effects of mean age of the samples.

WEIRD sample. The vast majority of conspiracy beliefs research has been conducted on White, Educated, Industrialised, Rich, and Democratic (WEIRD) samples. Therefore, we included this sample characteristic as a moderating variable.

Student sample. The social psychology literature as a whole relies heavily on the use of student samples. Therefore, we tested this as a sample moderator.

Publication status. While we already planned to analyse publication bias, we also included publication status as a moderator to investigate whether there was preliminary evidence for the *file drawer problem* in certain effects.

2.2.4 Coding procedure

Two researchers acted as coders, discussing and refining the categorisation of variables with guidance from the framework outlined in our systematic review (i.e., distinguishing between the individual, relational, and collective levels of self-definition). The categorisation of different conspiracy belief measures was informed by the theoretical distinctions discussed by authors (e.g., Brotherton et al., 2013; Bruder et al., 2013; Swami et al., 2011), as well as previous meta-analyses of the conspiracy beliefs literature (Bierwiaczonek et al., 2021; Goreis & Voracek, 2019; Stojanov & Halberstadt, 2020).

2.2.5 Calculation of effect sizes

We used Fisher's *z* as the final standardised meta-analytic effect size. Thus, we calculated the respective variances and converted the initially obtained Pearson's *r* from correlational studies and Cohen's *d* from experimental studies to Fisher's *z* using the *Campbell*

Collaboration Effect Size Calculator (Wilson, 2001). In some cases, conspiracy beliefs were treated as a median split measure, requiring the conversion of Odds Ratio (OR) effect sizes. In these cases, the OR was converted into Cohen's *d* with the following formula:

$$d = LogOddsRatio \times \frac{\sqrt{3}}{\pi}$$

In some experimental studies, Cohen's *d* was not reported. In this case, we input the relevant sample sizes, means and standard deviations into the online calculator.[9] For use in our Bayesian analyses, we calculated the standard error of Fisher's *z* with the following formula:

$$\frac{1}{\sqrt{n-3}}$$

For the same reason, the standard error of *z* was used to calculate the lower and upper bounds of the respective confidence intervals using the following formula:

$$z \pm (se_z \times 1.96)$$

2.3 Analytic strategy

2.3.1 Main effects

We conducted our main analyses with multiple Robust Variance Estimation (RVE) models using the *robumeta* package (Fisher et al., 2017) in R (R Core Team, 2021). It is common in the conspiracy beliefs literature to include multiple measures of conspiracy beliefs in one sample (i.e., non-independent effect sizes), and RVE accounts for the possibility of some effect sizes being dependent on the same sample (*k*; see Fisher & Tipton, 2015). We first computed meta-analytic effect sizes for each of the three levels of self-definition, and then for each specific motive within each of the selves.

[9] If information required for this analysis—such as the sample size of each experimental condition—could not be obtained from the paper or corresponding authors, equal groups were assumed.

Fisher's standardised *z* coefficient was calculated as the main effect size to be used in our analyses because its standard error is determined solely by the sample size. This avoids the issues associated with conceptually comparing the correlational Pearsons's *r* and experimental Cohen's *d*, and does not risk larger effects appearing more precise due to their standard errors being a function of the magnitude of the effect. When the meta-analytic effect sizes were obtained, however, we converted them into their equivalent Pearson's *r* and Cohen's *d* effect sizes for ease of interpretability.

Additionally, Bayesian analysis was performed to determine the probability of each directional hypothesis (H_1) given the data. Bayesian analysis provides an important advantage over the frequentist approach through its ability to distinguish between "evidence of absence" and "absence of evidence" in the face of null results (Dienes, 2014). To achieve this, Bayesian analysis requires parameter estimation of the prior (μ) distribution (the level of confidence one has in certain values carrying a higher likelihood of being true than others). A μ distribution that predicts the data well receives a boost in the posterior distribution (the relative plausibility of the specified effect size based on the input μ distribution; Wagenmakers et al., 2016).

Because we predicted significant meta-analytic associations (assuming $p < .05$)[10] of each of our motives with conspiracy beliefs, we used the Bayesian Regression Models using 'Stan' (*brms*) R package (Bürkner, 2017) to apply the recommended weakly informative

[10] If degrees of freedom (*df*) < 4 in the RVE model, type I error is much more likely. Therefore, in these instances the significance level was adjusted to a more conservative $p < .01$, and results were treated with caution (see Tipton, 2015).

normal distribution priors for our main effects (z = 0, Scale = 1; Williams et al., 2018; see Harrer et al., 2021).[11]

Bayesian analysis can also be used to detect potential inflation of the obtained meta-analytic effect size—that is, the probability that the pooled (overall) effect size is weaker than any given effect size (in our case, the one obtained in our respective RVE model). Therefore, we used the *brms* package to calculate the inflation probability of each meta-analytic effect size obtained (results are only reported if inflation probability ≥ 50%).[12]

In order to interpret the main results of Bayesian analysis, a Bayes Factor (BF) is used to provide an estimate for the relative probability of H_1 over the null hypothesis (H_0). We used the Jeffrey's Amazing Statistics Program (*JASP*) R skin (JASP Team, 2020) to obtain these respective BFs, applying the appropriate number of iterations as determined by our analyses in the *brms* package. Specifically, BF < 0.1 suggests strong evidence for H_0, BFs between 0.1 and 0.33 suggest moderate evidence for H_0, BFs between 0.33 and 3 suggest uncertain evidence (in this case, more data is needed to provide a clearer picture of the probability of H_1 over H_0), BFs between 3 and 10 suggest moderate evidence for H_1, and BFs > 10 suggest strong evidence for H_1 (see van Doorn et al., 2019).

2.3.2 Sensitivity analysis

Unlike most forms of multivariate analysis, RVE uses estimates of the within-study correlations (i.e., effect size dependence; ρ), which are assumed to be similar and consistent. Therefore, Hedges and colleagues (2010) recommend conducting sensitivity analyses to confirm that the approximate conservative ρ estimate (ρ = .80) is appropriate. We used the

[11] In the event that this initial μ distribution did not effectively fit the data (i.e., $\hat{R} \geq 1.01$), the number of iterations (originally 4,000) was systematically altered until $\hat{R} < 1.01$ (see Supplement for posterior distributions).

[12] See Supplement for effect size distributions.

robumeta package to conduct these sensitivity analyses on each of our models, enabling us to determine whether the assumed $\rho = .80$ is suitably consistent (only notable results are reported here; see Supplement for full results). If this was not the case, we planned to re-run the respective model with a more conservative ρ estimate (e.g., $\rho = 1$).

2.3.3 Effect size heterogeneity, between-study variance, and moderations

We further estimated individual effect size heterogeneity (low heterogeneity represents consistent effects) with the I^2 statistic that is automatically provided by the main RVE analysis. Higgins and colleagues (2003; see also Higgins & Thompson, 2002) suggest that I^2 = 30% to 60% may represent moderate heterogeneity, I^2 = 50% to 90% may represent substantial heterogeneity, and I^2 = 75% to 100% represents considerable heterogeneity. The tau-squared statistic (τ^2) is also used to quantify the heterogeneity of the obtained meta-analytic effect, otherwise known as the between-study variance. Although τ^2 is automatically provided in the main RVE analysis, we used the τ obtained from our Bayesian analyses in the *brms* package, because this also provided the possibility of plotting our τ distributions and estimating the probability of their inflation (see Supplement for between-study variance distributions). This was analysed using the recommended Half Cauchy τ prior (*SD* = 0.5; see Harrer et al., 2021).

For effect sizes that appear to show substantial or considerable heterogeneity, Wiernik colleagues (2017) recommend investigating potential moderation effects. Therefore, we also recorded a number of variables to test for their potential moderation effects. Mean age of the sample was a continuous variable, and was thus entered as a predictor of the effect size in the respective RVE models. Four variables that each contained two levels were also dummy coded and separately entered as predictors of the effect size in respective RVE models: 1) study design (experimental = 0, correlational = 1), 2) whether the sample was WEIRD (Henrich et al., 2010; non-WEIRD = 0, WEIRD = 1), 3) whether the sample was comprised

exclusively of students (non-student = 0, student = 1), and 4) the publication status of the study (unpublished = 0, published = 1). Finally, the variable of the type of conspiracy measure applied in the study often contained more than two levels (Specific, General, Mentality, and Stereotypes), and was thus entered into a respective random-effects model as a predictor of the effect size using the *metafor* package (Viechtbauer, 2021).[13]

2.3.4 Publication bias

To initially gain an understanding of the potential presence of publication bias, we used *P-uniform* analysis when $k < 10$, and *P-uniform** analysis when $k \geq 10$, following the recommendations of van Aert and van Assen (2018). *P-uniform* analysis assumes that the *p*-values of an obtained effect are uniformly distributed around the true effect size, using this to test and correct for publication bias by estimating the probability of obtaining a statistically significant effect larger than the true effect. *P-uniform** analysis uses the same assumption to calculate the same outcome, but this time the probability of obtaining a non-significant effect size is additionally taken into consideration. We used the *puniform* R package (van Aert, 2021) to carry out these analyses.

The nature of this potential publication bias was also interpreted with the use of contour-enhanced funnel plots. Peters and colleagues (2008) developed an improvement on the traditional funnel plot, wherein the plots are enhanced to show clear indicators of significance levels, permitting easier distinction of whether asymmetry is due to publication bias (effect sizes missing in statistically non-significant regions) or other confounding factors, such as widely varying study quality (effect sizes missing in statistically significant

[13] In order to account for scarce data within the multiple levels of this variable, Satterthwaite (Satterthwaite, 1946) and Saddlepoint (Daniels, 1954) approximations were applied using the *clubSandwich* package (see Pustejovsky, 2021) to provide robust estimations of the data distributions that were not only based on *k*.

regions). We used the *metaviz* package (Kossmeier et al., 2020) to construct these plots with trim-and-filled corrections—estimating the number of missing effect sizes on either side of the funnel plot (Duval & Tweedie, 2000a, 2000b)—which were only interpreted here when findings were notable (see Appendix C for all contour-enhanced funnel plots).

As complementary analyses, we carried out more traditional statistical tests of publication bias using the *metafor* package. Firstly, we computed Kendall's Rank correlation coefficient (Begg & Mazumdar, 1994), which tests for funnel plot asymmetry by analysing whether the obtained meta-analytic effect correlates with τ^2. Secondly, we computed a regression coefficient between the meta-analytic effect and τ^2 (Egger et al., 1997). If either of these effects are significant, asymmetry is indicated, and thus potential publication bias. Once again, only notable results for these analyses will be reported here.

2.3.5 P-Curve analysis

To analyse the evidential value of our results, we used the *P-Curve* app (Simonsohn et al., 2015) to provide average estimated power levels of the data in each motive, and to determine whether the significant effect sizes contained more highly ($p \leq .01$) than marginally ($p \leq .04$) significant *p*-values (indicated when a right-skewed *P-Curve* is obtained; Simonsohn et al., 2014). This approach also allows for the investigations into the presence of the *file drawer problem* and *p*-hacking. Only notable plots are included here (see Appendix D for all *P-Curves*).

Additional details of our planned data synthesis and analytic strategy can be found in our pre-registration document here:

https://osf.io/5aw7m/?view_only=b08f3d1a76e945058ca97ef699788404

2.4 Results

2.4.1 Main effects

We examined the associations between motives pertaining to the individual, relational, and collective selves. A small-to-medium positive significant meta-analytic association was found for the individual self, and small significant positive meta-analytic associations were found for both the relational and collective selves (see Table 2.2). Although the association remained significant for the individual self when correcting for publication bias, the relationships for the other two selves became non-significant when this correction was applied (but this is likely influenced by the varying specific motives included in these analyses). Despite this, the BF for the individual self provided very strong evidence for its H_1, and moderate-to-strong evidence was provided for the respective H_1 of the relational and collective selves. Some potential effect size inflation was detected for the individual self (ECDF = 55%).[14]

2.4.1.1 Individual self

Small-to-medium positive significant meta-analytic associations were found for reactance, individual narcissism, and the need for uniqueness, with a very small positive significant meta-analytic association for low self-esteem. All four of these relationships remained significant when correcting for publication bias, and the respective BFs provided strong evidence for the H_1 of low self-esteem, and very strong evidence for the H_1 of the other three

[14] Some specific motives were excluded from the subsequent analyses because there were not enough samples. These were: dominance, knowledge overestimation, and prestige for the individual self; social value affirmation (reverse-coded), leadership, and anomie for the relational self; and humanity esteem (reverse-coded), perceived in-group/out-group overlap (reverse-coded), social competition, and social devaluation for the collective self.

specific motives. Some potential effect size inflation was detected for individual narcissism (ECDF = 51%), the need for uniqueness (ECDF = 53%), and reactance (ECDF = 54%).

2.4.1.2 Relational self

No significant meta-analytic association was detected for social exclusion. However, this relationship became significant and positive with a medium effect size when correcting for publication bias, and the BF provided moderate evidence for its H_1.

2.4.1.3 Collective self

A small-to-medium positive significant meta-analytic association was found for defensive ingroup identity, but there were no significant effect sizes for low ingroup identification or perceived ingroup victimhood. The relationship remained significant for defensive ingroup identity and became significant for perceived ingroup victimhood when correcting for publication bias, also remaining non-significant for low ingroup identification. The BFs provided moderate-to-strong evidence for the H_0 of low ingroup identification, and very strong evidence for the H_1 of defensive ingroup identity. In contrast, the BF for perceived ingroup victimhood indicated uncertainty around the evidence for its H_1. Finally, there were small indications of potential effect size inflation for perceived ingroup victimhood (ECDF = 52%) and defensive ingroup identity (ECDF = 50%).

Table 2.2

Meta-Analytic Effect Sizes, Bayes Factors, Between-Study Variance, and Publication Bias Statistics for the Three Selves and Specific Motives

Self	Motive	*k* (*N*$_{obv}$)	*z*	[95% CI]	*Pb* corrected *z*	*r*	*d*	BF	τ^2	L_{pb}
Individual[a]		66 (122)	**.21*****	[.18, .24]	**.17*****	.20	.36	> 100	.01	0.54
	Low self-esteem[a]	16 (24)	**.08***	[.02, .14]	**.08***	.07	.14	66.74	.01	0.42
	Individual narcissism[a]	10 (17)	**.23****	[.11, .34]	**.22***	.22	.39	> 100	.03	0.03
	Need for uniqueness[a]	18 (47)	**.22*****	[.13, 31]	**.17*****	.21	.38	> 100	.04	0.49
	Reactance[b]	28 (29)	**.26*****	[.22, .30]	**.29*****	.25	.45	> 100	.01	1.96
Relational[a]		11 (17)	**.13***	[.01, .27]	.11	.13	.24	15.45	.04	1.39
	Social exclusion[b]	8 (13)	.15	[-.05, .35]	**.31*****	.14	.26	10.83	.07	2.89
Collective[a]		31 (62)	**.09***	[.01, .18]	.08	.09	.18	15.05	.05	0.39
	Low ingroup identification[a]	21 (27)	-.06	[-.14, .03]	-.05	-.07	-.14	0.04	.03	0.26
	Defensive ingroup identity[a]	19 (25)	**.21*****	[.12, .30]	**.24****	.20	.43	> 100	.04	0.07
	Perceived ingroup victimhood[†b]	2 (4)	.36	[-2.58, 3.29]	**.17*****	.33	.70	0.78	.23	0.02

*p < .05; **p < .01; ***p < .001; [†]df < 4; [a]*P-uniform** analysis performed*; [b]P-uniform* analysis performed. *k* = Number of samples; N_{obv} = Number of effect sizes; *Pb* = Publication bias; L_{pb} = Publication bias statistic; BF = Bayes Factor.

2.4.2 Sensitivity analysis, effect size heterogeneity, between-study variance, and moderations

Considerable effect size heterogeneity was detected for the collective, I^2 = 95.28%, and relational selves, I^2 = 81.69%, and substantial effect size heterogeneity was detected for the individual self, I^2 = 79.76%. Effect sizes for the relational self were significantly stronger among older samples z = .26, 95% CI [.04, .48], t(6.55) = 2.84, p = .027. Furthermore, effect sizes for the collective self were marginally stronger when conspiracy stereotypes were measured, β = .18, t(3.48) = 4.53, $p_{Satterthwaite}$ = .015, $p_{Saddlepoint}$ = .006, but this result should be treated with caution due to df < 4. No significant moderation effects were revealed for the individual self. Considerable between-study variance was detected for the collective and relational selves (see Table 2.2; Supplement).

With respect to the specific individual self motives, considerable effect size heterogeneity was detected for individual narcissism, I^2 = 85.97%. Effect sizes for individual narcissism were significantly stronger in WEIRD (vs. non-WEIRD) samples, z = .20, 95% CI [.05, .35], t(5.96) = 3.32, p = .016. However, there was only one sample that included non-WEIRD participants, z = .03, while we still observed a significant effect size for WEIRD samples alone, z = .23, 95% CI [.09, .38], t(5.96) = 3.88, p = .008. Considerable heterogeneity was also detected for the need for uniqueness, I^2 = 85.38%, alongside substantial effect size heterogeneity for low self-esteem, I^2 = 74.45%. Published (vs. unpublished) effect sizes were significantly stronger for low self-esteem, z = .14, 95% CI [.05, .23], t(4.18) = 4.40, p = .011, such that the association was only significant for published studies, z = .11, 95% CI [.05, .18], t(9.24) = 3.85, p = .004. However, no significant moderation effects were detected for the need for uniqueness. Despite only a small likelihood of substantial heterogeneity detected for reactance, I^2 = 48.83%, effect sizes were significantly weaker in exclusively student (vs. non-student) samples, z = -.14, 95% CI [-.18,

-.10], $t(26) = 7.18$, $p < .001$. However, there was only one sample that exclusively included students, $z = .13$, while we still observed a significant association for samples including non-students alone, $z = .26$, 95% CI [.23, .30], $t(24.90) = 14$, $p < .001$. Some notable between-study variance was detected for individual narcissism and the need for uniqueness (see Table 2.2; Supplement).

Considerable effect size heterogeneity, $I^2 = 82.28\%$, and between-study variance (see Table 2.2; Supplement) were detected for social exclusion, but we found no significant moderation effects. Similarly, considerable effect size heterogeneity was detected for perceived ingroup victimhood, $I^2 = 97.37\%$, low ingroup identification, $I^2 = 88.50\%$, and defensive ingroup identity, $I^2 = 94.03\%$. Moderation analysis revealed that effect sizes for defensive ingroup identity were significantly stronger when belief in specific conspiracy theories were measured, $\beta = .21$, $t(7.52) = 5.37$, $p_{Satterthwaite} < .001$, $p_{Saddlepoint} < .001$. Notable between-study variance was also detected for low ingroup identification, and moderation analysis revealed that effect sizes were significantly stronger among WEIRD (vs. non-WEIRD) samples, $z = .19$, 95% CI [.08, .30], $t(13.20) = 3.79$, $p = .002$. However, there was only one sample that included a non-WEIRD sample, $z = -.21$, while we still observed a non-significant association for WEIRD samples alone. Notable between-study variance was also discovered for defensive ingroup identity, and extremely high between-study variance was detected for perceived ingroup victimhood (see Table 2.2; Supplement). Moderation analysis revealed that effect sizes for perceived ingroup victimhood were significantly weaker among WEIRD (vs. non-WEIRD) samples, $z = -.46$, 95% CI [-.46, -.46], $t(1) = 61928060$, $p < .001$. However, despite passing the adjusted significance level for the small number of samples, this finding should be interpreted with caution. Furthermore, there was only one effect size that included a non-WEIRD sample, $z = .59$, while we observed a significant association for

WEIRD samples alone, z = .13, 95% CI [.13, .13], $t(1)$ = 13918556041763448, p < .001, which should also be interpreted with caution due to df < 4.

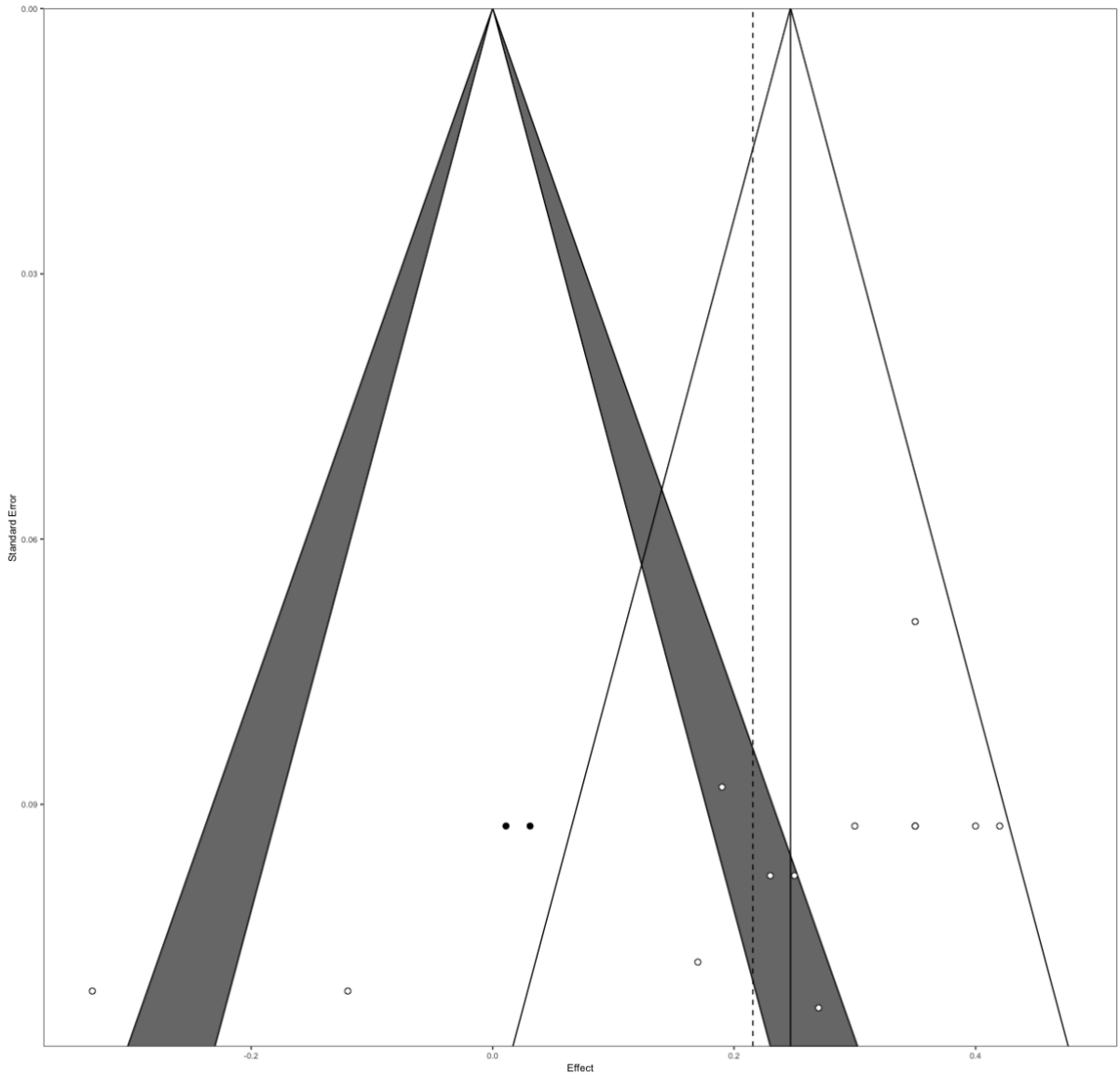
2.4.3 Publication bias

There was no significant publication bias detected for any of the selves or specific motives according to the *P-uniform* analyses.[15] However, inspection of the contour-enhanced funnel plots indicated potential asymmetry in the individual self, relational self, and social exclusion data. Specifically, the trim-and-filled corrections revealed a number of possible unpublished effect sizes in the non-significant regions for these data, suggesting some small possibility of publication bias (see Figure 2.2; Appendix C). This was further confirmed by a significant Kendall's rank test for the social exclusion data, τ = -0.51, p = .023.

[15] Please note that although there were technically 28 separate samples investigating the link between reactance and conspiracy beliefs, *P-uniform* analysis rather than *P-uniform** analysis was used for this data due to 25 of these samples being extracted from the same paper.

Figure 2.2

Contour-Enhanced Funnel Plot with Trim-and-Filled Corrections for the Social Exclusion Data



Note. Transparent dots denote collected effect sizes, black dots denote suggested effect sizes from the trim-and-filled correction.

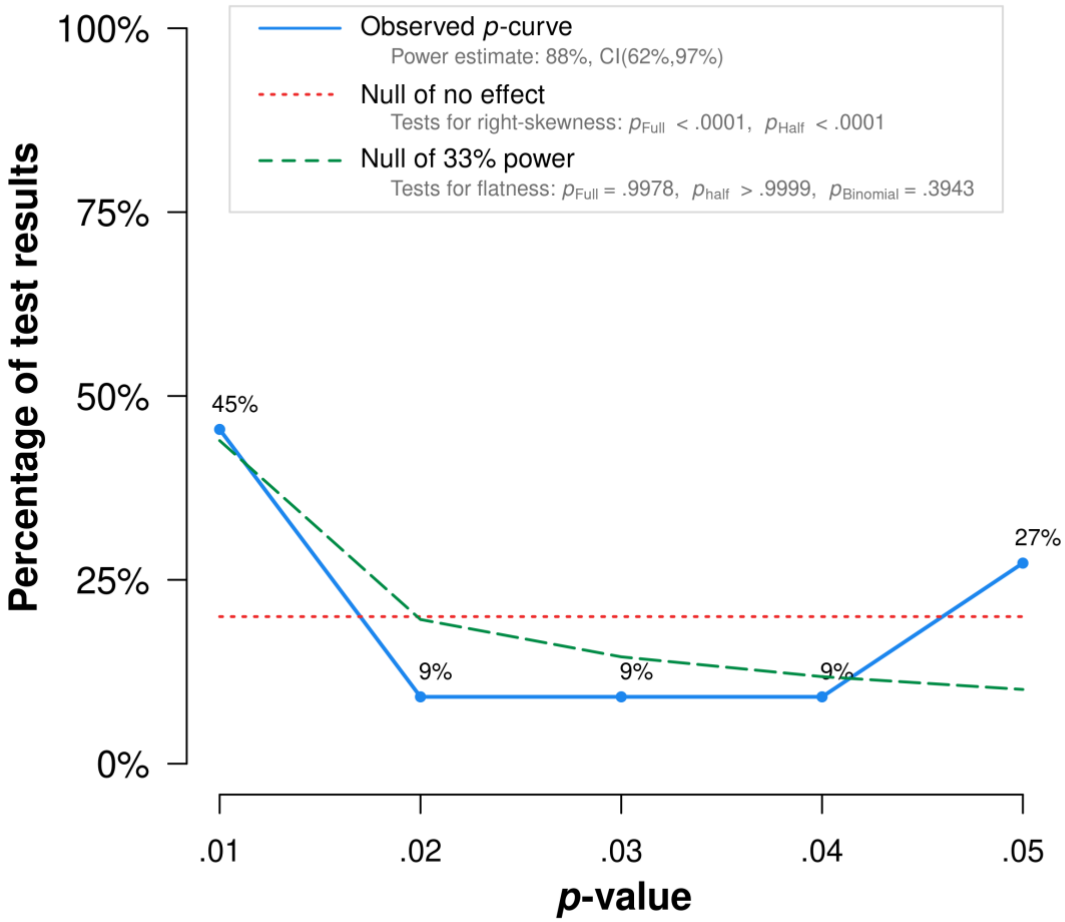
2.4.4 P-Curve analysis

Inspection of the *P-Curves* revealed that the average estimated power levels for the individual self were 97%, 95% CI [96%, 99%], ranging from 88%, 95% CI [62%, 97%], for the low self-esteem data, to 99%, 95% CI [99%, 99%], for the individual narcissism data. Overall

evidential value was indicated for all four of the specific individual self motives, but there was a notable rise in *p*-values around the .05 region of the low self-esteem *P-Curve,* raising uncertainty about the nature of its evidential value (see Figure 2.3; Appendix D).

Figure 2.3

P-Curve Plot for the Low Self-Esteem Data

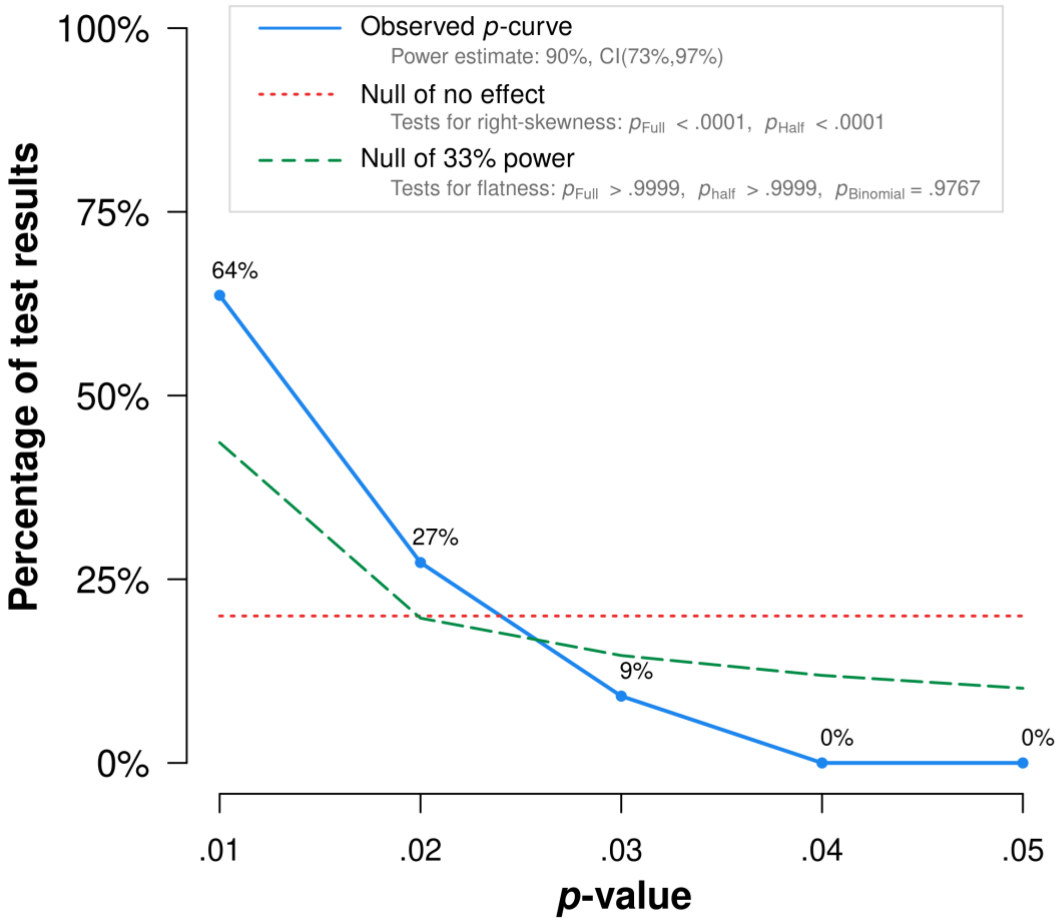


Note: The observed *p*-curve includes 11 statistically significant ($p < .05$) results, of which 7 are $p < .025$. There were 13 additional results entered but excluded from *p*-curve because they were $p > .05$.

Average estimated power levels of the relational self data were 90%, 95% CI [75%, 97%], with similar results for the social exclusion data, 90%, 95% CI [73%, 97%]. Furthermore, although overall evidential value was indicated for these, there were notable clusters of *p*-values around the .02 region of both of their *P-Curves*, again calling their evidential value into question (see Figure 2.4; Appendix D).

Figure 2.4

P-Curve Plot for the Social Exclusion Data

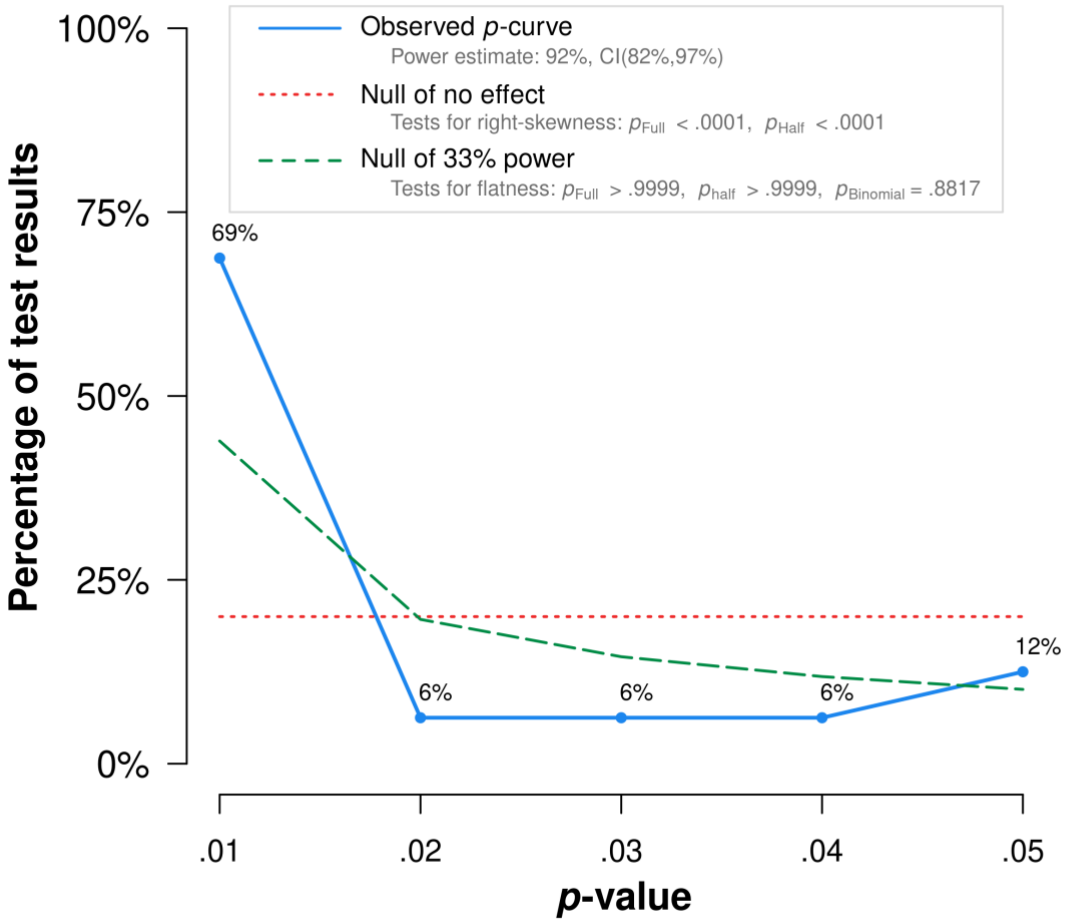


Note: The observed *p*-curve includes 11 statistically significant ($p < .05$) results, of which 10 are $p < .025$. There were 2 additional results entered but excluded from *p*-curve because they were $p > .05$.

Finally, average estimated power levels for the collective self data were 99%, 95% CI [99%, 99%], ranging from 92%, 95% CI [82%, 97%] for the low ingroup identification data, to 99%, 95% CI [99%, 99%], for the other two motives. Overall evidential value for all of the collective self motives was indicated, but there was a notable cluster of *p*-values around the .05 region of the low ingroup identification *P-Curve,* further confirming its lack of association with conspiracy beliefs (see Figure 2.5; Appendix D).

Figure 2.5

P-Curve Plot for the Low Ingroup Identification Data



Note: The observed *p*-curve includes 16 statistically significant ($p < .05$) results, of which 13 are $p < .025$. There were 11 additional results entered but excluded from *p*-curve because they were $p > .05$.

2.5 General discussion

In the current Chapter we aimed to meta-analytically synthesise the associations between social motives and conspiracy beliefs, employing the framework of the individual, relational, and collective levels of self-representation (Brewer & Gardner, 1996). With regards to the individual self, small-to-medium significant effect sizes were obtained for all motives except low self-esteem, which had a very small but significant association with conspiracy beliefs. Nevertheless, Bayesian analyses and corrections for publications bias corroborated these relationships, despite small indications of publication bias in the individual self data overall. These findings support the notion that conspiracy theories are endorsed in part to defend

(individual narcissism and reactance) and enhance (the need for uniqueness and to a lesser extent low self-esteem) the self-image.

With regards to the relational self, the overall effect size was small but significant, and the Bayesian analysis confirmed moderate evidence for its directional hypothesis. However, when correcting for publication bias, this effect became non-significant. In contrast, the effect size for social exclusion was non-significant, but correcting for publication bias revealed a significant association. Nevertheless, the Bayesian analysis also confirmed moderate evidence for its directional hypothesis. Therefore, while more data is required to further clarify these associations, it appears that conspiracy beliefs can indeed be a response to experiencing the breaking of social ties. Marchlewska and colleagues (2021) argue that this may occur as an *avoidant* stress coping strategy—the use of maladaptive cognitive and emotional avoidance, resulting in the abandonment of goal-related behaviours (Mackay et al., 2011)—to compensate for the inability to engage in the more adaptive *approach* stress coping strategy of gaining instrumental and emotional social support (see Carver et al., 1989).

Reduced evidential value among the relational self data was also indicated by the *P-Curves,* and minor funnel plot asymmetry suggested the presence of publication bias for this data. However, this was somewhat unsurprising considering the small number of samples included in these analyses. Furthermore, the uncertainties among the relational self data may also be explained by the considerable effect size heterogeneity and between-study variance, both of which led to the discovery that the link between the relational self and conspiracy beliefs is significantly stronger among older samples. This is also in line with Marchlewska and colleagues' (2021) stress coping account. Specifically, interpersonal relationships are known to buffer against stress across the lifespan (e.g., Hostinar & Gunnar, 2015; Lee et al., 2012). Therefore, it may be the case that as we get older, experiencing an inability to gain

social support becomes more stressful, resulting in a stronger reliance on alternative avoidant stress coping strategies—such as the endorsement of conspiracy theories—in desperate attempts to compensate for these increasingly negative experiences.

With regards to the collective self, a small-to-moderate significant association with conspiracy beliefs was revealed for defensive ingroup identity, but not low ingroup identification. This suggests that it is the motivation to defend the ingroup image, rather than the absence of group membership, that can make conspiracy theories particularly appealing to the collective self. This was corroborated by the effect sizes correcting for publication bias, and the Bayesian analyses. However, the Bayesian analyses also revealed uncertain evidence for the perceived ingroup victimhood data, thus making us tentative to draw conclusions about this specific motive until more data has been collected.

Interestingly, the association between defensive ingroup identity and conspiracy beliefs was significantly stronger when belief in specific conspiracy theories were measured. This finding is in line with Sternisko, Cichocka, and Van Bavel's (2020) reasoning that when social identity motives are frustrated, the ability to identify a relevant antagonistic outgroup may override the influence of the need for uniqueness on endorsing conspiracy theories to uncover secret knowledge. That is, while all conspiracy theories may offer the possibility of possessing secret knowledge, it is the specific content of certain conspiracy theories that particularly appeals to those seeking to defend their group image. However, measures of conspiracy stereotypes were also included in this meta-analysis, but they did not reveal particularly strong associations with defensive ingroup identity.[16] Therefore, more work is required to uncover the exact nature of this caveat.

[16] Effect sizes for the collective self were marginally stronger when conspiracy stereotypes were measured, but this result should be treated with caution due to $df < 4$.

2.5.1 The interplay of social motives that predict conspiracy beliefs

Sedikides and colleagues (2013) provided evidence suggesting that the processes associated with the individual self take psychological priority over the other two selves. For example, threats towards the individual self trigger stronger reactions, result in more psychological avoidance, and affect participants' mood more strongly than those aimed at the other two selves (Gaertner et al., 1999, 2002, 2012). This individual self-primacy means that even relational and collective self processes are often used to defend against threats to the individual self (e.g., Eidelman & Biernat, 2003; Gebauer et al., 2012; Pinter & Wildschut, 2012; Rusbult et al., 1988; Sherman & Kim, 2005; Seta & Seta, 1996; Skitka, 2003). Accordingly, research shows that interpersonal bonds (Aron et al., 1992) and groups (Abrams & Hogg, 1988) gain psychological value the more they are incorporated into the individual self. This notion may be reflected in our discovery of particularly consistent and relatively strong results with regards to the individual self.

Furthermore, goal alignment between the selves illustrates how the underlying role of the individual self may alter or strengthen the role that the other selves play in motivating conspiracy beliefs. For example, Poon and colleagues (2020) found that an additional manipulation of self-affirmation—strengthening the individual self through heightened feelings of competence and morality (e.g., Sherman & Cohen, 2006)—mitigated the experience of a frustrated relational self that would have otherwise been evoked by ostracism, ultimately attenuating its effect on conspiracy beliefs. These findings illustrate how satisfying individual needs might mitigate the effects of relational and collective needs on conspiracy beliefs. However, meta-analytic synthesis of the interplay between the three selves is beyond the scope of the current chapter, and is therefore an important challenge for future research to tackle. Importantly, if satisfaction of relational or collective self motives is also effective in

buffering needs associated with the individual self, this could challenge arguments about the primacy of the self in motivating conspiracy beliefs.

2.5.2 Limitations and future research

Despite the confident interpretations we have been able to draw, there are a number of important limitations to address. Most importantly, the inclusion of both correlational and experimental data in our meta-analysis strengthened the statistical power of our results, but the considerable minority of experimental designs calls into question the empirical strength of our findings. Specifically, experimental designs only made up 3.28% of the effect sizes in the individual self data, 35.29% in the relational self data, and 0% in the collective self data. Therefore, more research is required in order to determine whether these results remain when only including experimental designs. However, experimental manipulations of defensive ingroup identity have proven complicated (e.g., Bertin, Marinthe et al., 2021), so longitudinal data may be more appropriate to remedy concerns in this particular domain.

Methodologically, our aim in the current meta-analysis was to employ a myriad of contemporary research methods in order to limit the possibility of statistical bias and overinterpretation of our findings. However, no approach is without its issues. For example, while RVE enabled us to retain as much data as possible while controlling for the dependency of effect sizes, some work has presented rare circumstances under which variance underestimation can occur with the implementation of any form of multi-level meta-analysis (see Park & Beretvas, 2019). Therefore, although this concern is unlikely to be a significant influence, interpreting the tightness of our confidence intervals should be done with some caution. Similarly, the use of *P-Curves* to determine evidential value involves the ability to detect the presence of *p*-hacking. However, Bishop and Thompson (2016) discovered that when ghost *p*-hacking has occurred—the exclusion of additional dependent variables from the paper that were originally included in the study—*P-Curves* may still

mistakenly indicate evidential value, particularly if the correlation between the reported and unreported dependent variables is high. Therefore, our analyses of evidential value should also be interpreted with caution, particularly with regards to studies that included measures of, for example, conspiracy beliefs alongside behavioural intentions as simultaneous outcome variables (e.g., Biddlestone, Green, & Douglas, 2020).

The vast majority of the studies included in our analyses were conducted on WEIRD samples. Specifically, non-WEIRD effect sizes only made up 0.13% of the individual self data, 0% of the relational self data, and 4.84% of the collective self data. Therefore, while there were initial indications of potential differences in the magnitude of effect sizes between these samples, future research should focus particular efforts on replicating these studies among non-WEIRD samples to permit more robust moderation analysis in this context. Finally, we focused on the conceptualisation of conspiracy beliefs acting as an outcome to frustrated psychological needs (Douglas et al., 2017, 2019). However, similar models additionally suggest that conspiracy beliefs may in turn frustrate the very needs they purport to satisfy (see Douglas et al., 2017, 2019; van Prooijen, 2020). Therefore, future meta-analyses should also investigate the robustness of this claim by analysing the effect of conspiracy beliefs as an independent variable (e.g., exposure to conspiracy theories; see Jolley & Douglas, 2014a, 2014b) on the psychological motives reported here as dependent variables.

2.5.3 Conclusion

In sum, while our findings are statistically robust, there is still considerable room for conceptual and methodological improvement, particularly with regards to the implementation of experimental designs. Regardless, the pooled effect sizes suggested that conspiracy beliefs are born out of attempts to defend and enhance the self-image, compensate for the negative experiences felt after social exclusion, and defend the ingroup image. Importantly, the meta-

analysis confirmed that it is the motivation to defend the ingroup image, rather than low identification, that appears to make conspiracy theories particularly appealing. Furthermore, this association is most potent when belief in specific conspiracy theories is measured. While this chapter did not cover the other epistemic or existential motives associated with conspiracy beliefs, it is worth noting that these motives should be understood in context with each other (see Douglas et al., 2017, 2019; van Prooijen, 2020). One motive capturing some form of existential concern with the way in which societal systems are run, and that is known to carry important implications for group processes, is system justification. In the next Chapter, I explore both the role of ideology, defensive ingroup identity and system justification in conspiracy beliefs.

Chapter 3: Privileged suspicions? The role of ideology and ethnic collective narcissism in conspiracy beliefs that defend versus challenge the status quo

3.1 Abstract

Research has confirmed that collective narcissism—defensive ingroup identity characterised by a greater need for recognition—is robustly linked to conspiracy beliefs. However, recent findings show that this link is primarily driven by the content of specific conspiracy theories, and that collective narcissism is underpinned by different value systems depending on the social status of the group in question. Furthermore, conspiracy beliefs targeting relatively *powerful* groups appear to be most appealing to both conservative and liberal extremists, whereas those targeting relatively *powerless* groups appear to be most appealing to conservatives in general. Therefore, this chapter aims to combine these distinct findings by investigating the role that ideology and social status might play in the link between collective narcissism and these different kinds of conspiracy beliefs. In two cross-sectional studies (N_{total} = 1,754; US citizens), we discovered that while ethnic collective narcissism was linked to both pro- and anti-establishment conspiracy beliefs regardless of social status, it was underpinned by conservative ideology among ethnic majority participants, and liberal ideology among ethnic minority participants. In Study 2, we corroborated these findings, additionally showing that anti-establishment conspiracy beliefs appeared to be most appealing to conservatives motivated to challenge the status quo. Implications of these findings for the ideological asymmetry account, the group context behind collective narcissism, and the treatment of conspiracy beliefs as a unitary construct are discussed.

Keywords: social status, conspiracy beliefs, collective narcissism, system justification, political ideology

If you're not careful, the newspapers will have you hating the people who are being oppressed, and loving the people who are doing the oppressing. (Malcolm X).

Conspiracist narratives tend to implicate an eclectic mix of outgroups, such as accusations that the Centers for Disease Control and Prevention purposefully orchestrated the COVID-19 pandemic for profit (e.g., Dunlop, 2020), or that there is a global effort to "Arabise" Europe with a coordinated influx of immigration from Arabic-speaking Muslim majority countries (see Brown, 2019). Importantly, substantial evidence suggests that socially disadvantaged groups might be most susceptible to conspiracy beliefs (e.g., Crocker et al., 1999; Simmons & Parsons, 2005; van Prooijen et al., 2018), possibly to help them make sense of their negative social standing (e.g., Cichocka, Marchlewska, Golec de Zavala et al., 2016; Park, 2010; see also Chapters 1 & 2; Cichocka, 2016 for reviews). Given the societal threats associated with conspiracy theories (e.g., political violence; see Douglas et al., 2019; reduced compliance with pandemic guidelines; Biddlestone, Green, & Douglas, 2020; refusal to take the COVID-19 vaccine; Bertin, Nera et al., 2020), it is important to understand the factors associated with the endorsement of conspiracy theories among these very groups.

Accounts of the psychology of conspiracy beliefs rely on the notion that beliefs in many different conspiracy theories are underpinned by a similar homogeneous mindset (Goertzel, 1994; Imhoff & Bruder, 2014), encompassing overlapping political attitudes and sentiments. While the majority of evidence does indeed support the notion that conspiracy beliefs are driven by overlapping psychological processes (see Douglas et al., 2017, 2019; van Prooijen, 2020), treating conspiracy beliefs as a unitary construct can also ignore the complex interplay between conspiracy beliefs and social status (e.g., Crocker et al., 1999; Simmons & Parsons, 2005; van Prooijen et al., 2018), ideology (e.g., Azevedo & Jost, 2021; Nera, Wagner-Egger et al., 2021; van der Linden et al., 2021; Wood & Gray, 2019), and their varied implications for society (e.g., intentions to refuse the COVID-19 vaccine; Bertin, Nera

et al., 2020; or supporting anti-immigration policies in times of global crisis; Bertin, Marinthe et al., 2021). Therefore, the current article aims to further illuminate the role that social status can play in the ideological rationalisations and social identity processes that are associated with belief in some conspiracy theories over others.

The psychology of conspiracy beliefs

A great deal of work relies on the definition of conspiracy beliefs as convictions that powerful social groups secretly orchestrate societal events for their own selfish gain (e.g., Douglas et al., 2019; Imhoff & Bruder, 2014; Imhoff & Lamberty, 2021; Popper, 2002). However, Nera, Wagner-Egger and colleagues (2021) recently argued that conspiracy theories do not necessarily have to implicate powerful groups. For example, many conspiracy theories target groups with relatively low access to power, such as immigrants (Bertin, Marinthe et al., 2021; Jolley, Meleady et al., 2019), religious minorities (Bilewicz et al., 2013; Dyrendal et al., 2018; Grzesiak-Feldman & Irzycka, 2009; Kofta & Sedek, 2005; Mendelssohn, 2015; Muller, 2011; Swami et al., 2017; Uenal, 2016), gender activists (Marchlewska et al., 2019), and ethnic minorities (Miller et al., 2016; Pasek et al., 2015; Richey, 2017). Thus, Nera, Wagner-Egger and colleagues (2021) instead favoured definitions that exclude specifications of power, simply focusing on suspicions about malevolent groups that collude in secret to achieve nefarious goals (Moscovici, 1987; van der Linden, 2013; Zonis & Joseph, 1994).

Conspiracy theories can also be used by those in power to exacerbate societal conditions that foster political extremism, and ultimately violence (e.g., Fekete, 2012; see Douglas et al., 2019). In this way, the relative social power held by groups under conspiratorial suspicion is important because—aside from the difference in likelihood that the conspiracist claims about these groups hold veracity (see Magee & Galinsky, 2008; Nera, Wagner-Egger et al., 2021; Stojanov & Halberstadt, 2019)—it can determine the outcomes of

the theories targeting them. For example, conspiracy theories targeting religious and ethnic minorities appear to be used to strengthen and justify the disproportionate negative stereotypes and discrimination they experience (Bilewicz et al., 2013; Kofta & Sedek, 2005; Uenal, 2016). In contrast, powerful groups may be better equipped to defend themselves against conspiratorial accusations by utilising their privileged access to resources (e.g., hiring adequate legal teams in a court of law if required; see also Magee & Galinsky, 2008). Given the unequal implications that different conspiracy theories may have, it is key to understand the different psychological processes involved in conspiracy beliefs targeting powerful or powerless groups. One way to accomplish this goal is to understand exactly why certain conspiracy beliefs take hold in the first place.

Ideological asymmetry and conspiracy beliefs

Douglas and colleagues' (2017, 2019) psychological framework posits that conspiracy beliefs are driven by attempts to satisfy thwarted psychological needs to understand one's environment (*epistemic* needs), establish a sense of security (*existential* needs), and defend the image of one's self and the groups that one belongs to (*social* needs; see also Chapter 2; van Prooijen, 2020). This perspective was initially based on a conceptualisation of conservative ideology as motivated social cognition (Jost et al., 2003, 2008), positing that political conservatism is a motivated response to frustrated psychological needs for order, structure, and closure (*epistemic* needs), anxiety management (*existential* needs), and the socio-political rationalisation of social systems (*ideological* rationalisations). This conceptual crossover has also led to a focus on the role that political ideology—beliefs, attitudes and values about the way society should be (Jost, 2006)—may play in the formation of conspiracy beliefs (e.g., Azevedo & Jost, 2021; Imhoff, 2015; Miller et al., 2015; Nera, Wagner-Egger et al., 2021; Oliver & Wood, 2014; Pasek et al., 2015; van der Linden et al.,

2021; van Prooijen et al., 2015; Wood & Gray, 2019), many of which are already political in nature (Imhoff & Bruder, 2014; Sunstein & Vermeule, 2009; Sutton & Douglas, 2020).

In line with these motivational perspectives, a growing body of evidence supports the notion that conservatives display a particular readiness to engage in science scepticism and endorse conspiracy theories compared to liberals, referred to as *ideological asymmetry*. For example, van der Linden and colleagues (2021) showed that political conservatism (vs. liberalism) was associated with the belief that climate change is a hoax, as well as a broader conspiracist mindset (see also Azevedo & Jost, 2021; Rutjens et al., 2018). Other findings suggest that conservatives are more generally susceptible to spreading and believing fake news, misinformation, conspiracy theories, bullshit, and rumours than liberals (Basol et al., 2020; Benkler et al., 2017; Guess et al., 2019, 2020; Jost et al., 2018). Finally, despite findings that conspiracy beliefs are particularly endorsed by extremists on either side of the political spectrum (e.g., Nera, Wagner-Egger et al., 2021; van Prooijen et al., 2015), Imhoff and colleagues (in press) showed across 26 countries that this is still noticeably pronounced on the political right.

Pro- and anti-establishment conspiracy beliefs

Extending these findings, recent work has uncovered an important caveat to the ideological asymmetry account: while conspiracy beliefs about relatively *powerless* groups (i.e., pro-establishment conspiracy beliefs) are indeed associated with conservative ideology in general, conspiracy beliefs targeting relatively *powerful* groups (i.e., anti-establishment conspiracy beliefs) tend to appeal to those with extremist ideological leanings on either side of the political spectrum (Nera, Wagner-Egger et al., 2021). Perceptions of leadership breakdown were also found to play a role in this process, but further work is required to uncover the psychological mechanisms that explain the ideological differences that determine

the appeal of certain conspiracy theories. Therefore, it is this goal that we aim to turn our focus to in the current article.

Ideological rationalisations and conspiracy beliefs

Two of the most influential ideological rationalisations disproportionality displayed among conservatives (e.g., Jost et al., 2003) are system justification—the motivation to support the societal status quo, even when it may contribute to the preservation of inequality (Jost, 1995; Jost & Banaji, 1994)—and right-wing authoritarianism (RWA)—conformist submission to authority (Altemeyer, 2006). Importantly, both of these variables capture a perceived legitimacy of societal structures and authority, not unlike the responses probed by many conspiracy beliefs that frame society as chaotic and dangerous (see Duckitt, 2006; Duckitt & Sibley, 2007; Moulding et al., 2016; Wood & Gray, 2019). Furthermore, some evidence indicates that they are both associated with conspiracy beliefs (e.g., Jolley et al., 2018; Wood & Gray, 2019).

However, links between system justification and conspiracy beliefs have been inconsistent (e.g., Crocker et al., 1999; Davis et al., 2018; Jolley et al., 2018; Kofta & Soral, 2020; Pellegrini et al., 2019), with meta-analytic associations found to be non-significant (Biddlestone, Green, Cichocka, Douglas et al., 2021). In fact, Wood and Gray (2019) also revealed that—not unlike conservative ideology in general (see Nera, Wagner-Egger et al., 2021)—RWA was more strongly associated with belief in conspiracy theories that defend authority (i.e., pro-establishment conspiracy beliefs) than those that challenge authority (i.e., anti-establishment conspiracy beliefs). Therefore, considering the legitimisation of authority captured by both of these forms of ideological rationalisation, it may also be the case that the inconsistent findings between system justification and conspiracy beliefs can again be explained by the treatment of belief in conspiracy theories as a unitary construct. That is, not unlike RWA, we aim to investigate whether system justification is positively associated with

pro-establishment conspiracy beliefs, but also negatively associated with anti-establishment conspiracy beliefs, in line with the support of authority captured by this measure.

Defensive social identity and conspiracy beliefs

Another variable associated with both of these ideological rationalisations that support authority and belief in conspiracy theories is collective narcissism (e.g., Cichocka, Marchlewska, Golec de Zavala et al., 2016; Golec de Zavala et al., 2017; Golec de Zavala & Federico, 2018). While conventional ingroup identification can capture a satisfying form of group membership (Cameron, 2004; Leach et al., 2008; Tajfel & Turner, 1979), when the overlap in variance with collective narcissism is taken into account, conventional identification measures a secure ingroup identity, but collecitve narcissism captures a more insecure, defensive ingroup identity, contingent on feelings that one's group does not receive the recognition it deserves (Cichocka, 2016; Golec de Zavala et al., 2009). This can be measured with reference to the national ingroup (see Cichocka & Cislak, 2020), as well as any other group, including sports teams (Larkin & Fink, 2019), religions (Marchlewska et al., 2019; Yustisia et al., 2019), and more (e.g., Cichocka et al., 2021; Jasko et al., 2020). Most importantly, collective narcissism—but not conventional ingroup identification—is consistently linked to belief in conspiracy theories (e.g., Cichocka, Marchlewska, Golec de Zavala et al., 2016; Golec de Zavala & Cichocka, 2012), partially to defend the ingroup from the perceived threat of outgroups (see also Cichocka, 2016).

While early findings from Cichocka, Marchlewska, Golec de Zavala and colleagues (2016) appeared to suggest that collective narcissism is only linked to belief in conspiracy theories about outgroups (but not the ingroup), more recent findings have shown that it may in fact be linked to a more general conspiracist mindset. For example, national collective narcissism in the US was linked to long-term growth in a general propensity to perceive political events in terms of group-based conspiracies during the 2016 US presidential election

campaigns (Golec de Zavala & Federico, 2018). Furthemore, Biddlestone and colleagues (Chapter 4) found that the link between collective narcissism and belief in ingroup conspiracy theories was partially explained by a stronger willingness to conspire against fellow ingroup members. However, the vast majority of work linking collective narcissism to conspiracy beliefs to-date has only been measured among groups with dominant identity status, such as citizens of the countries being referred to (Chapter 4; Cichocka, Marchlewska, & Golec de Zavala, 2016; Cichocka, Marchlewska, Golec de Zavala et al., 2016; Golec de Zavala & Cichocka, 2012; Golec de Zavala & Federico, 2018; Kofta et al., 2020; Sternisko, Cichocka, Cislak et al., 2020) or religious majorities (Marchlewska et al., 2019).

One notable exception to this was provided by Marinthe and colleagues (2021), who showed that collective narcissism was underpinned by different values depending on the social status of groups. Moreover, the more egalitarian form of collective narcissism among low (but not high) status groups (e.g., black Americans)—underpinned by universalism values—was also associated with stronger support for socially conscious liberal political movements (e.g., Black Lives Matter). These opposing political attitudes suggest that collective narcissism among low status groups may be underpinned by a more egalitarian liberal political ideology (see Wetherell et al., 2013), whereas the central component of conservative ideology capturing rigid resistance to this sort of social change will likely underpin collective narcissism among high status groups (Jost et al., 2003).

Despite this distinction in political sentiments, past research suggests that collective narcissism is likely to be associated with both pro- and anti-establishment conspiracy beliefs, regardless of identity context. For example, Golec de Zavala and Cichocka (2012) demonstrated that Polish national collective narcissism was associated with belief in anti-Semitic conspiracy stereotypes, reflecting similar content to the targeting of minority groups in pro-establishment conspiracy theories (but see Mendelssohn, 2015; Muller, 2011). At the

same time, Cichocka, Marchlewska, Golec de Zavala and colleagues (2016) demonstrated that both Polish and US national collective narcissism predicted belief in conspiracy theories about Western countries, reflecting the focus on powerful groups in society captured by anti-establishment conspiracy beliefs (see also Golec de Zavala & Federico, 2018). Therefore, in the current studies we expect to uncover that although collective narcissism will be underpinned by opposing political ideologies based on social status, these differences will not change the fact that in turn, collective narcissism will be associated with both pro- and anti-establishment conspiracy beliefs, regardless of this status.

A body of literature that has recived considerable focus on the different implications of social status is that which focuses on system justification. Importantly, low status groups are more likley to defend the status quo through the endorsement of positive stereotypes about higher status groups, often referred to as *outgroup favouratism* (see Jost, 1995; Jost & Banaji, 1994; Jost et al., 2002; see also Cichocka et al., 2015). For example, Mullen and colleagues (1992) demonstrated that various low status groups were more likely to internalise stereotypes of higher status outgroup superiority in domains such as intelligence and industriousness (see Jost, 2001). In contrast, collective narcissism is generally linked to *ingroup* favouritism and outgroup *derogation* (see Golec de Zavala & Lantos, 2020; Marchlewska et al., 2020). Therefore, in the current article we will also explore whether system justification has different implications for collective narcissism depending on social status.

3.2 Overview of current studies

In the present studies, we examine the ideological and social identity predictors of pro- and anti-establishment conspiracy beliefs between groups that differ in social status. We reasoned that although both collective narcissism and conservative (vs. liberal) ideology were likely to be linked to belief in either type of conspiracy theories regardless of social status, collective

narcissism would be underpinned by opposing ideologies depending on whether participants were members of high or low status groups. Specifically, while we expected conservative ideology to be positively associated with ethnic collective narcissism among high status group members, ethnic collective narcissism would be underpinned by liberal ideology among low status group members. Therefore, while *conservative* ideology and ethnic collective narcissism would have positive direct relationships with conspiracy beliefs for both groups, only *conservative* ideology would indirectly relate to conspiracy beliefs through ethnic collective narcissism among high status groups, whereas *liberal* ideology would be indirectly associated with conspiracy beliefs through ethnic collective narcissism for low status groups. Furthermore, we investigated the role that system justification might also play in these processes. Both studies used a cross-sectional design, measuring conservative ideology, ethnic collective narcissism, ethnic ingroup identification, and both pro- and anti-establishment conspiracy beliefs.

In Study 1, we investigated whether conservative (and extremist) ideology was indirectly (and directly) associated with pro- and anti-establishment conspiracy beliefs through ethnic collective narcissism among white Americans, and whether liberal ideology was indirectly (but conservative ideology was directly) associated with these conspiracy beliefs through ethnic collective narcissism among ethnic minority groups in the US. We additionally controlled for general attitudes toward the target groups included in the conspiracy measures, alongside demographic information, to determine whether the main effects remained when the overlap in variance with these variables was accounted for. In Study 2, we investigated the same relationships with the inclusion of a more homogeneous ethnic minority group category: black Americans. In this study we also tested whether the support for authority encompassed by system justification would translate into positive associations with pro-establishment conspiracy beliefs, and negative associations with anti-

establishment conspiracy beliefs, regardless of social status. Moreover, we explored how system justification—if at all—might be related to the different forms of ethnic ingroup identification between the groups, and their resulting indirect relationships with conspiracy beliefs. Data are posted at https://osf.io/z3gwu/?view_only=e20e3aaec7e945d986acc4b28483e5fc

3.3 Study 1

3.3.1 Method

3.3.1.1 Participants

We initially collected 1,859 responses through the use of snowball sampling, posting on various subreddits and Facebook groups. Prior to analysis, participants that reported they were not US citizens (N = 5), were under the age of 18 (N = 14), did not give responses to any of the measures analysed (N = 503), and failed at least one of the two attention checks (N = 873) were removed from the dataset. As a result, the final sample consisted of 968 participants (M_{age} = 33.37, SD_{age} = 11.87; 513 men, 395 women, 60 other/prefer not to say).[17] Sensitivity power analysis (two-tailed) using G*Power revealed that we achieved a power of .90 (in order to account for additional mediation effects) to detect a small reverse interaction (r = .16) based on the ethnic group with the smallest sample size (ethnic minority group, N = 402; see Giner-Sorolla, 2018).[18]

3.3.1.2 Procedure

Once participants were informed and their consent was obtained, they were asked to identify their ethnic group, and then filled out measures of ethnic collective narcissism and ingroup

[17] Two additional responses were removed for reporting nonsensical ethnicities after selecting "other".

[18] Additional measures of personal values were included and an a priori power analysis was conducted to test hypotheses for a different study (see pre-registration document: https://aspredicted.org/T9M_CKR).

identification, pro- and anti-establishment conspiracy beliefs, and general attitudes toward the alleged perpetrators in the conspiracy measures, all in randomised order. Finally, they were asked to report their political ideology and other demographic information (age, gender, education, religiosity, nationality, and chosen candidate in the 2020 US presidential election), before being fully debriefed. Full ethical approval was received from the University of Kent Psychology Ethics Committee.

3.3.1.3 Measures

Ethnicity was indicated from a list of major ethnic groups in the US.

Ethnic majority participants (N = 562) selected their ethnicity as "White American".

Ethnic minority participants (N = 402) indicated their ethnicity as "Middle Eastern American" (1.99%), "Black/African American" (9.45%), "Native American/Alaska Native" (1.74%), "Asian American" (23.88%), "Native Hawaiian/Other Pacific Islander" (0.25%), "Hispanic/Latino American" (14.93%), "Two/More (please specify)" (41.79%), or "Other (please specify)" (6.72%).

Ethnic collective narcissism (α = .89, M = 2.31, SD = 1.03) was measured with the short five-item Collective Narcissism Scale (e.g., "If my ethnic group had a major say in the world, the world would be a much better place"; Golec de Zavala, Cichocka, & Bilewicz, 2013), using a response scale from *strongly disagree* (1) to *strongly agree* (5).

Ethnic ingroup identification (α = .81, M = 4.81, SD = 1.23) was measured with Leach and colleagues' (2008) four-item ingroup satisfaction sub-scale (e.g., "I think that people in my ethnic group have a lot to be proud of"), on a response scale from *strongly disagree* (1) to *strongly agree* (7).

Pro- and anti-establishment conspiracy beliefs were measured using Wood and Gray's (2019) scale, which contains seven pro-establishment conspiracy theories (e.g., "Many of the foreigners coming into this country are here as part of a deliberate plan to

radically change our society"; α = .84, *M* = 2.23, *SD* = 1.19) and seven anti-establishment conspiracy theories (e.g., "Those in power are secretly campaigning to destroy individual freedom in this country"; α = .86, *M* = 3.73, *SD* = 1.33). Participants indicated their agreement on a response scale from *strongly disagree* (1) to *strongly agree* (7).

General attitudes toward the conspiracy groups were measured using a response scale from *extremely negative* (1) to *extremely positive* (7), and included seven groups referred to in Wood and Gray's (2019) scale: "Social deviants", "World elites", "Corporations", "Governments", "Ethnic minorities", "Immigrants", and "Religious minorities".

Political ideology (*M* = 2.10, *SD* = 0.95) was measured with a single item asking participants to indicate where they would place themselves on a scale from *extremely liberal* (1) to *extremely conservative* (5). A quadratic term of this variable was also created to explore the role of extremist ideology.

Demographics. Chosen candidate in the 2020 US presidential election was recorded using a single item with the options "Joe Biden" (*N* = 693), "Donald Trump" (*N* = 74), "Other", and "Did not vote" (*N* = 201). Age was measured on a sliding scale (0-100 years), and religiosity (*M* = 2.22, *SD* = 1.66) was measured using a response scale from *not at all religious* (1) to *very religious* (7). Gender was indicated from the options "Male", "Female", "Other (specify if you wish)", and "Prefer not to say". Highest level of completed education (*M* = 4.04, *SD* = 0.85) was indicated from the following options (low-to-high): "No formal education", "Elementary (grades 1-8)", "High school (grades 9-12)", "Bachelor's degree", "Master's degree (or equivalent)", and "PhD/higher". Nationality was collected from a dropdown list of all nationalities, with an additional item to report dual-nationality if applicable.

3.3.2 Results

Independent samples t-tests revealed that both types of ethnic ingroup identification and conspiracy beliefs were significantly stronger among ethnic minorities (vs. majorities; see Supplement).

3.3.2.1 Correlations

Pearson's *r* coefficients for correlations between the main variables are presented in Table 3.1. Conservative ideology was associated with ethnic collective narcissism among the ethnic majority group, but liberal ideology was associated with ethnic collective narcissism among ethnic minorities. Furthermore, ethnic collective narcissism was positively associated with both types of conspiracy beliefs in the ethnic majority group, but these associations were non-significant in the ethnic minority group. Conventional ethnic ingroup identification was positively related to both types of conspiracy beliefs among ethnic majorities, but negatively associated with these beliefs among ethnic minorities. Finally, conservative ideology was associated with both types of conspiracy beliefs among both ethnic groups. The correlation with ethnic collective narcissism was significantly stronger for pro-establishment conspiracy beliefs than anti-establishment conspiracy beliefs among ethnic majorities, $z = 11.15$, $p < .001$, but there was no difference in the strength of these correlations among ethnic minorities (see Lee & Preacher, 2013).

Table 3.1

Pearson's r Coefficients Between the Main Variables for Both Ethnic Groups (Study 1)

	1	2	3	4	5
1. Pro-establishment CTs	-	.62***	-.01	-.05	.49***
2. Anti-establishment CTs	.59***	-	.07	-.11*	.19***
3. Ethnic collective narcissism	.64***	.29***	-	.19***	-.21***
4. Ethnic ingroup identification	.34***	.07	.48***	-	-.02

5. Conservative ideology	.63***	.21***	.55***	.36***	-

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

Note. Below diagonal line = majority group; above diagonal line = minority group. CTs = conspiracy beliefs.

3.3.2.2 Multigroup analysis

We constructed a multigroup mediation path model with conservative ideology (mean-centered), extremist ideology, ethnic collective narcissism and ethnic ingroup identification as the predictors, and both pro- and anti-establishment conspiracy beliefs as the dependent variables. Each path was tested for interactions by ethnic group. Constraining all paths in this model so that the interaction of ethnic group was not accounted for revealed that the model fit was significantly worse than the equivalent unconstrained model with interactions between ethnic groups accounted for, $\Delta\chi^2(16) = 573.17$, $p < .001$. This confirmed that at least some of the paths varied between the two ethnic groups. Therefore, we systematically constrained each path to determine which ones did or did not vary between the two ethnic groups.

Constrained paths

Through this process, we found that model fit did not change significantly when constraining the path from extremist ideology to pro-establishment conspiracy beliefs, indicating that there was no interaction between ethnic groups for this path. We found that extremist conservative—but not liberal—ideology was linked to pro-establishment conspiracy beliefs equally across the two ethnic groups (see Figure 3.1; Appendix F). Similarly, constraining the path from extremist ideology to ethnic ingroup identification did not significantly worsen model fit, but there was no relationship between these variables among either of the groups. Constraining the path from ethnic ingroup identification to pro-establishment conspiracy beliefs also did not significantly worsen model fit, with no relationship between these variables for either group. Model fit did not significantly change

when constraining the paths from either type of ethnic ingroup identification to anti-establishment conspiracy beliefs. We found that ethnic collective narcissism was positively, and ethnic ingroup identification was negatively related to this outcome equally across both groups. Finally, constraining the covariance between the two types of ethnic ingroup identification did not significantly change model fit (see Supplement).

Unconstrained paths

In contrast, constraining the path from conservative ideology to ethnic collective narcissism significantly worsened model fit, $\Delta\chi^2(1) = 78.07$, $p < .001$, indicating an interaction between the two ethnic groups. We found that conservative ideology was associated with ethnic collective narcissism positively among the ethnic majority group, but liberal ideology was associated with this outcome among the ethnic minority group (see Figure 3.1; Appendix E). Similarly, constraining the path from conservative ideology to ethnic ingroup identification significantly worsened model fit, $\Delta\chi^2(1) = 21.66$, $p < .001$, revealing a positive relationship among the ethnic majority group, but no relationship among ethnic minorities. Model fit also became significantly worse when constraining the path from conservative ideology to pro-establishment conspiracy beliefs, $\Delta\chi^2(3) = 12.04$, $p = .007$, indicating a positive relationship for both groups, but this link was stronger among ethnic minorities. Similarly, when the path from conservative ideology to anti-establishment conspiracy beliefs was constrained, model fit became marginally worse, $\Delta\chi^2(6) = 12.09$, $p = .059$,[19] revealing a positive relationship among the ethnic minority group, but no relationship among the ethnic majority group.

[19] While this difference was only marginally significant, model fit was slightly worse when this path was constrained, $\chi^2(6) = 12.09$, $p = .060$; CFI = 0.99; TLI = 0.98; RMSEA = .05, 95% CI [.01, .09]; SRMR = .02, than when it was unconstrained, $\chi^2(5) = 3.69$, $p = .595$; CFI = 1; TLI = 1.01; RMSEA = .01, 95% CI [.01,

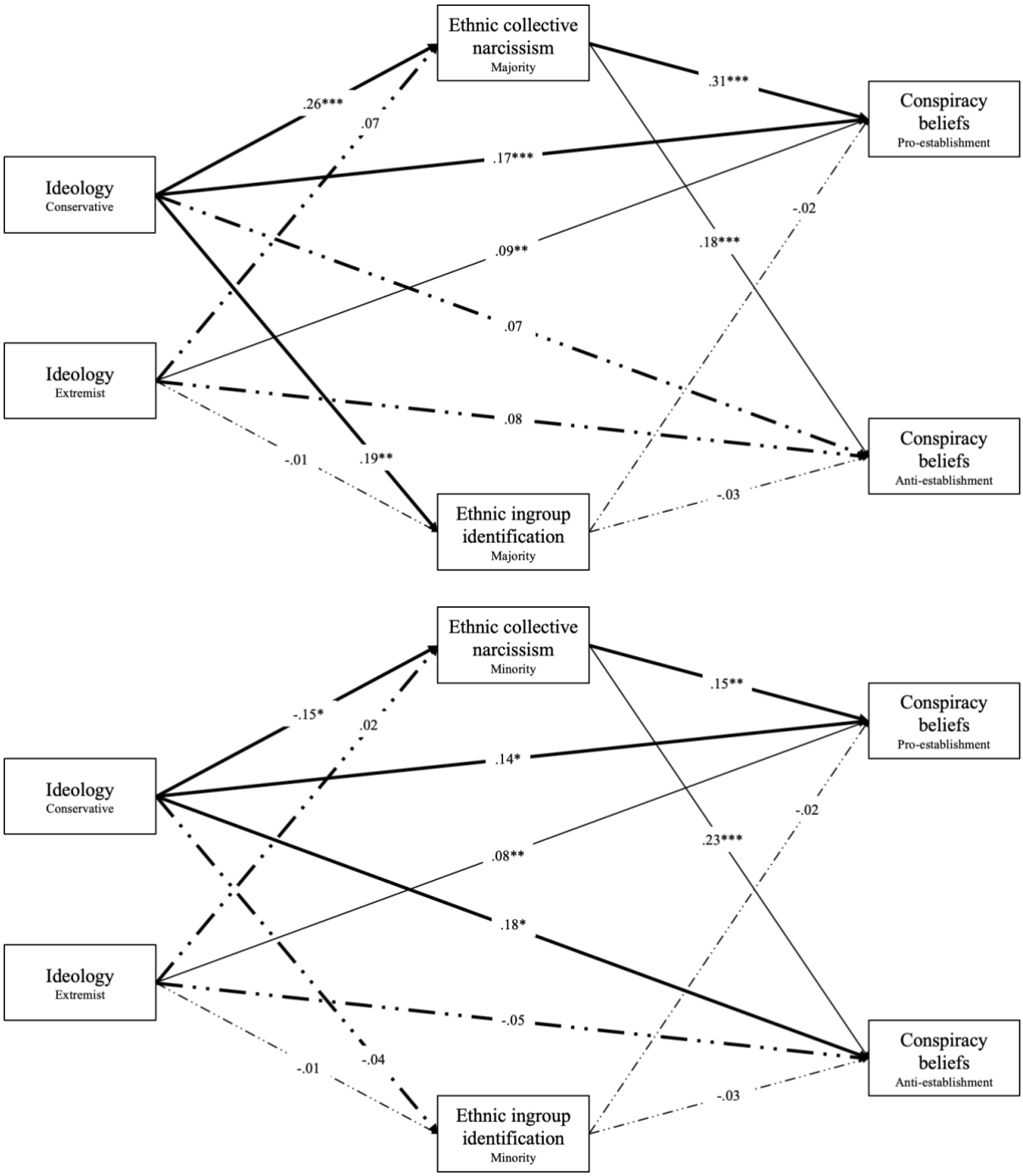
Constraining the path from extremist ideology to ethnic collective narcissism significantly worsened model fit, $\Delta\chi^2(1) = 8.31$, $p = .003$, indicating a positive relationship, but only among the ethnic majority group (see Appendix F). However, this link became non-significant when controlling for the additional effects of demographics (see Supplement). Similarly, constraining the path from extremist ideology to anti-establishment conspiracy beliefs significantly worsened model fit, $\Delta\chi^2(6) = 16.51$, $p = .011$, once again only revealing a positive relationship among the ethnic majority group (see Appendix F). This link, however, also became non-significant when controlling for the additional effects of demographics (see Supplement). Model fit also became significantly worse when constraining the path from ethnic collective narcissism to pro-establishment conspiracy beliefs, $\Delta\chi^2(2) = 20.94$, $p < .001$, showing that this relationship was positive among both groups, but stronger among the ethnic majority group. Finally, constraining the covariance between both types of conspiracy beliefs significantly worsened model fit, $\Delta\chi^2(6) = 12.97$, $p = .044$, and thus this path was also left unconstrained. The model with this combination of constrained and unconstrained paths retained excellent fit, $\chi^2(6) = 4.14$, $p = .658$; CFI = 1; TLI = 1.01; RMSEA = .01, 95% CI [.01, .05]; SRMR = .02 (see Figure 3.1).[20]

.06]; SRMR = .01. Therefore, in order ensure better identification of the model and avoid missing potential differences between groups, this path was left unconstrained in the final model.

[20] Controlling for the additional effects of demographics and attitudes toward the conspiracy groups did not significantly worsen the model fit. Therefore, these variables were controlled for in Figure 3.1 and Table 3.2 (see Supplement for details).

Figure 3.1

Standardised Regression Paths for the Main Model (Study 1)



Note. *** $p < .001$; ** $p < .01$; * $p < .05$. Significant regression paths are solid lines, non-significant paths are double-dotted dash lines, unconstrained paths are bold.

Ethnic majority group

Total effects revealed that the association between conservative ideology and pro-establishment conspiracy beliefs remained significant when accounting for the indirect relationships through both types of ethnic ingroup identification (see Table 3.2). Moreover, the path from conservative ideology to anti-establishment conspiracy beliefs became significant when controlling for the indirect relationship through ethnic collective narcissism, but not ethnic ingroup identification. Finally, indirect relationships showed that the variance in conservative ideology carried through ethnic collective narcissism to both types of conspiracy beliefs.

Ethnic minority group

Despite the lack of association between conservative ideology and ethnic ingroup identification, total effects revealed that the paths from conservative ideology to both types of conspiracy beliefs became significant when controlling for the indirect relationship through ethnic ingroup identification, but not ethnic collective narcissism (see Table 3.2). However, there were no indirect relationships.

Table 3.2

Indirect Relationships and Total Effects for the Main Model (Study 1)

	Ethnic majority group		Ethnic minority group	
Parameter	Indirect relationship [95% CI]	Total effect	Indirect relationship [95% CI]	Total effect
Cons → Pro				
CN	**.08 [.04, .12]**	.25***	-.02 [-.05, .01]	.12
ID	-.01 [-.01, .01]	.17***	.01 [-.01, .01]	.14*
Cons → Ant				

CN	**.05 [.02, .07]**	.11*	-.03 [-.06, .01]	.15
ID	-.01 [-.02, .01]	.06	.01 [-.01, .01]	.18*

Note. Cons = Conservative ideology; Pro = Pro-establishment conspiracy beliefs; Ant = Anti-establishment conspiracy beliefs; CN = Ethnic collective narcissism; ID = Ethnic ingroup identification; 95% CI = 95% Confidence interval. All effects are standardised, notable indirect relationships are in bold.

3.3.3 Discussion

Study 1 provided support for the ideological asymmetry account of conspiracy beliefs, such that conservative ideology was positively associated with both types of conspiracy beliefs for ethnic minorities, and pro-establishment conspiracy beliefs for ethnic majority participants. Furthermore, conservative—but not liberal—extremism was associated with pro-establishment conspiracy beliefs among both groups. However, contrary to the findings from Nera, Wagner-Egger and colleagues (2021), multilateral extremist ideology was not associated with anti-establishment conspiracy beliefs. Moreover, among the ethnic majority group, conservative ideology was not associated with anti-establishment conspiracy beliefs *unless* the indirect relationship through ethnic collective narcissism was controlled for. In contrast, conservative ideology among ethnic minorities was initially related to anti-establishment conspiracy beliefs *until* the indirect path through ethnic collective narcissism was controlled for. These findings suggest that ethnic identification is closely tied to the ways in which political ideology can contribute to the formation of conspiracy beliefs.

Ethnic collective narcissism was also positively associated with both pro- and anti-establishment conspiracy beliefs among both ethnic groups, supporting the notion that collective narcissism is related to a general conspiracist mindset, rather than belief in conspiracy theories which only target other groups (see Cichocka, Marchlewska, Golec de Zavala et al., 2016; Golec de Zavala & Federico, 2018). As hypothesised, conservative

ideology was associated with ethnic collective narcissism among ethnic majority participants, whereas liberal ideology was associated with ethnic collective narcissism among ethnic minorities. This echoes evidence provided by Marinthe and colleagues (2021) suggesting that collective narcissism is underpinned by different value systems depending on social status. Therefore, despite the apparent general conspiracist mindset of collective narcissists regardless of social status, this particular type of identification may have opposing ideological implications depending on whether it refers to a high or low status ingroup.

3.4 Study 2

In Study 2, we aimed to replicate the results of Study 1, further uncovering the ideological rationalisations that may account for these initial findings. System justification (see Jost, 1995; Jost & Banaji, 1994) captures the motivation to defend the societal status quo, even when this can support the unfair social conditions that the individual may experience (i.e., social deprivation and disadvantage). Considering that this motivation is particularly prevalent among conservatives (e.g., Jost et al., 2003)—and that the sentiments of pro-establishment conspiracy beliefs support authority, whereas anti-establishment conspiracy beliefs challenge authority (see Wood & Gray, 2019)—we theorised that system justification would be a useful addition to our model to further illuminate these different processes. Additionally, not all groups experience the same forms of social deprivation (see Caricati & Owuamalam, 2020), so including a heterogeneous ethnic minority group category such as that in Study 1 did not allow us to make inferences about whether the relationships observed are specific to certain ethnic groups. Therefore, in Study 2 we collected a more homogeneous ethnic minority group—namely, black Americans.

3.4.1 Method

3.4.1.1 Participants

We initially collected 788 pre-screened responses from both white and black Americans using the *Prolific Academic* database. Once participants that failed the attention check were removed (N = 2), the final sample consisted of 786 participants (M_{age} = 36.39, SD_{age} = 12.37; 396 white Americans, 390 black Americans; 347 men, 432 women, 7 other/prefer not to say). Sensitivity power analysis (two-tailed) using G*Power revealed that we achieved a power of .90 to detect a small reverse interaction (r = .16) based on the ethnic group with the smallest sample size (black Americans, N = 390; see Giner-Sorolla, 2018).

3.4.1.2 Procedure

Once participants were informed and their consent was obtained, they were asked to fill out measures of their ethnic collective narcissism and ethnic ingroup identification, general system justification, and both pro- and anti-establishment conspiracy beliefs in randomised order. Finally, they were asked to report their political ideology and demographic information (age, gender, education, religiosity, and chosen candidate in the 2020 US presidential election), before being fully debriefed. Full ethical approval was received from the University of Kent Psychology Ethics Committee.

3.4.1.3 Measures

All responses were collected using a response scale from *strongly/completely disagree* (1) to *strongly/completely agree* (7), unless otherwise specified.

Ethnic collective narcissism (α = .92, M = 3.78, SD = 1.75) was measured as in Study 1.

Ethnic ingroup identification (α = .96, M = 4.81, SD = 1.23) was measured using 10 items from three of the most relevant components (see Leach et al., 2010) of Leach and colleagues' (2008) ingroup identification scale, capturing ingroup satisfaction (e.g., "I am

glad to be a person from my ethnic group"), ingroup solidarity (e.g., "I feel solidarity with my ethnic group"), and ingroup centrality (e.g., "I often think about the fact that I am a member of my ethnic group").

General system justification (α = .87, *M* = 3.44, *SD* = 1.23) was measured using Kay and Jost's (2003) eight-item general system justification scale (e.g., "In general, you find society to be fair").

Pro- (α = .90, *M* = 3.13, *SD* = 1.47) ***and anti-establishment conspiracy beliefs*** (α = .90, *M* = 3.93, *SD* = 1.41) were measured as in Study 1.

Political ideology (*M* = 3.24, *SD* = 1.78) was measured with a single item asking participants to indicate where they would place themselves on a scale from *extremely liberal* (1) to *extremely conservative* (7). A quadratic term of this variable was also created to investigate the role of extremist ideology.

Demographics. Chosen candidate in the 2020 US presidential election was measured using the same options as Study 1: "Joe Biden" (*N* = 507), "Donald Trump" (*N* = 142), "Other" or "Did not vote" (*N* = 137). Age, religiosity (*M* = 3.45, *SD* = 2.17), gender, and education (*M* = 3.93, *SD* = 0.85) were all measured as in Study 1.

3.4.2 Results

Independent samples t-tests revealed that system justification, both types of ethnic ingroup identification, and both types of conspiracy beliefs were significantly stronger among black (vs. white) Americans (see Supplement).

3.4.2.1 Correlations

Pearson's *r* coefficients for correlations between the main variables are presented in Table 3.3. Conservative ideology was associated with system justification and both types of conspiracy beliefs among both ethnic groups. However, while liberal ideology was associated with both types of ethnic ingroup identification among black Americans, conservative

ideology was associated with both types of ethnic ingroup identification among white Americans. Furthermore, system justification was positively related to both types of ethnic ingroup identification among white Americans, but was only significantly positively associated with conventional ethnic ingroup identification among black Americans. System justification was also positively associated with pro-establishment conspiracy beliefs among both ethnic groups, but was only negatively associated with anti-establishment conspiracy beliefs among black Americans. Finally, both types of ethnic ingroup identification were positively associated with both types of conspiracy beliefs among white Americans, but only ethnic collective narcissism was significantly positively associated with both types of conspiracy beliefs among black Americans. The correlation with ethnic collective narcissism was significantly stronger for pro-establishment conspiracy beliefs than anti-establishment conspiracy beliefs among white Americans, $z = 6.97$, $p < .001$. In contrast, the correlation with ethnic collective narcissism was significantly stronger for anti-establishment conspiracy beliefs than pro-establishment conspiracy beliefs among black Americans, $z = 1.69$, $p = .045$.

Table 3.3

Pearson's r Coefficients Between the Main Variables for Both Ethnic Groups (Study 2)

	1	2	3	4	5	6
1. Pro-establishment CTs	-	.75***	.27***	.12*	.06	.41***
2. Anti-establishment CTs	.75***	-	-.10*	.18**	.08	.22***
3. System justification	.35***	-.01	-	.04	.12*	.32***
4. Ethnic collective narcissism	.58***	.37***	.46***	-	.58***	-.11*
5. Ethnic ingroup identification	.42***	.20***	.48***	.70***	-	-.13*
6. Conservative ideology	.62***	.40***	.52***	.41***	.39***	-

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

Note. Pro-establishment CTs = Pro-establishment conspiracy beliefs; Anti-establishment CTs = Anti-establishment conspiracy beliefs. Below diagonal line = white Americans; above diagonal line = black Americans.

3.4.2.2 Multigroup analysis

We constructed a multigroup mediation path model that tested for interactions on all paths between the two ethnic groups, with conservative ideology, system justification, ethnic collective narcissism, and ethnic ingroup identification as the predictors, and both pro- and anti-establishment conspiracy beliefs as the dependent variables. Constraining all paths in this model so that the interaction of ethnic group was not accounted for revealed that the model fit was significantly worse than the equivalent unconstrained model, $\Delta\chi^2(18) = 630.28$, $p < .001$. This confirmed that at least some of the paths varied between the two ethnic groups. Therefore, we systematically constrained each path to determine which relationships did or did not vary between the two ethnic groups.

Constrained paths

Constraining the paths from ethnic ingroup identification to either type of conspiracy beliefs did not significantly worsen the model fit, with no relationship between these variables among either of the ethnic groups (see Figure 3.2). Similarly, constraining the path from conservative ideology to either type of conspiracy beliefs did not significantly worsen model fit, with positive relationships between these variables equally across both ethnic groups. Finally, constraining the covariance between both types of ethnic ingroup identification did not worsen the model fit, and thus this path was also constrained.

Unconstrained paths

In contrast, model fit was significantly worsened when constraining the paths from conservative ideology to either ethnic collective narcissism, $\Delta\chi^2(1) = 25.76$, $p < .001$, or ethnic ingroup identification, $\Delta\chi^2(1) = 27.28$, $p < .001$. We found that these paths were

positive among white Americans, and negative among black Americans (see Figure 3.2; Appendix E). Furthermore, constraining the path from system justification to ethnic collective narcissism significantly worsened model fit, $\Delta\chi^2(1) = 15.46$, $p < .001$, revealing that this relationship was positive among white Americans, but non-significant among black Americans. Constraining the path from system justification to ethnic ingroup identification also significantly worsened the model fit, $\Delta\chi^2(1) = 12.16$, $p < .001$, revealing that this relationship was positive among both ethnic groups, but stronger among white Americans.

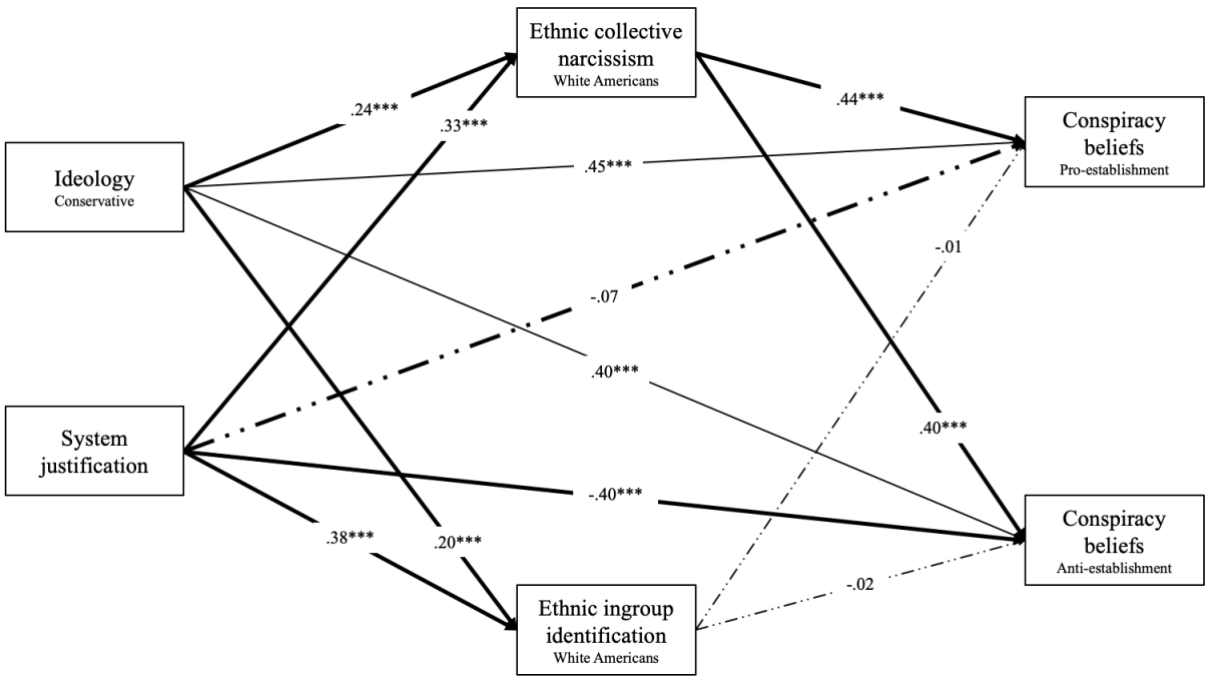
Constraining the path from system justification to anti-establishment conspiracy beliefs significantly worsened the model fit, $\Delta\chi^2(5) = 14.92$, $p = .011$, with a negative relationship among both ethnic groups, but this was stronger among white Americans. The model fit also became significantly worse when constraining the path from system justification to pro-establishment conspiracy beliefs, $\Delta\chi^2(3) = 13.18$, $p = .004$, and this relationship was positive, but only among black Americans. Model fit became significantly worse when constraining the paths from ethnic collective narcissism to both pro-, $\Delta\chi^2(1) = 12.89$, $p < .001$, and anti-establishment conspiracy beliefs, $\Delta\chi^2(3) = 9.35$, $p = .025$, revealing that these relationships were positive among both ethnic groups, but stronger among white Americans. Finally, model fit worsened when constraining the covariances between system justification and conservative ideology, $\Delta\chi^2(6) = 12.73$, $p = .048$, and both types of conspiracy beliefs, $\Delta\chi^2(5) = 21.15$, $p < .001$ (see Supplement). Thus, these paths were also left unconstrained.

An alternative model with political extremism included as a predictor was also tested by systematically constraining the paths, but the model fit was extremely poor, $\chi^2(12) = 250.17$, $p < .001$; CFI = 89; TLI = 0.62; RMSEA = .23, 95% CI [.20, .25]; SRMR = .11, and significantly worse than the unconstrained model that did not include political extremism, $\Delta\chi^2(12) = 250.17$, $p < .001$. Similarly, the model controlling for the variance in our

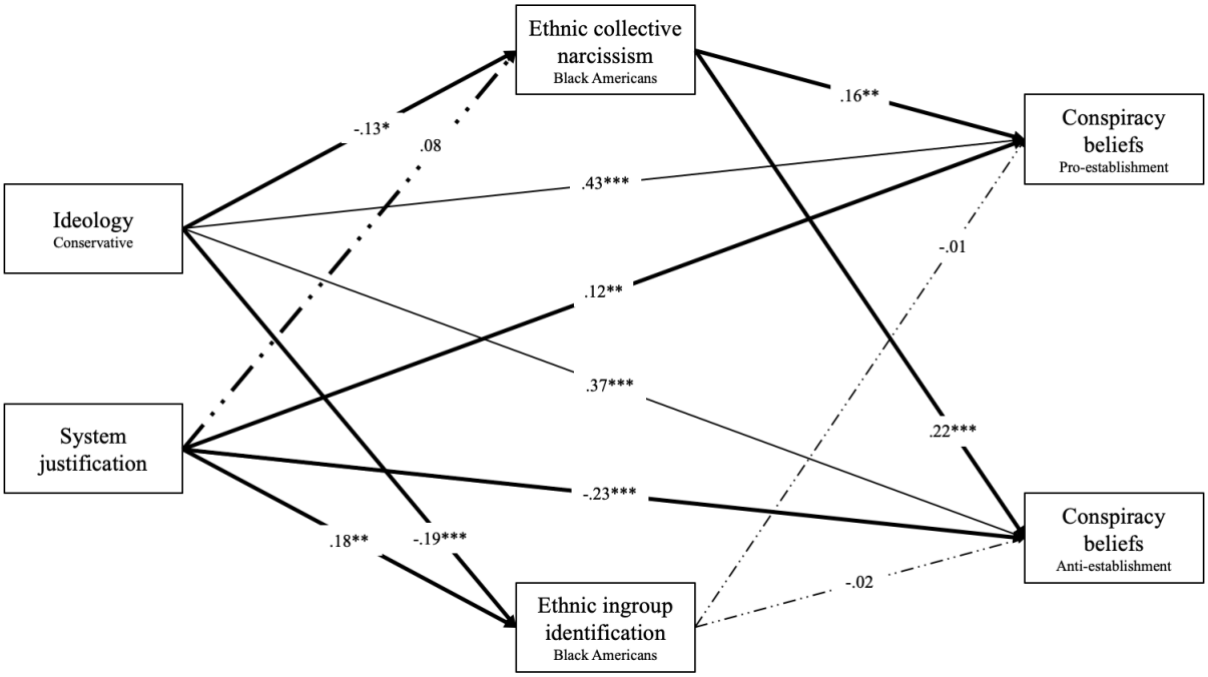
demographic variables had significantly worse fit than both the unconstrained model, $\Delta\chi^2(25) = 643.50$, $p < .001$, and the model that did not control for these additional effects, $\Delta\chi^2(20) = 636.02$, $p < .001$. Therefore, our selected model did not control for demographics or include extremist ideology, retaining excellent fit, $\chi^2(5) = 7.47$, $p = .188$; CFI = 0.99; TLI = 0.99; RMSEA = .04, 95% CI [.01, .09]; SRMR = .02, that was not significantly different from the unconstrained model (see Figure 3.2).[21]

Figure 3.2

Standardised Regression Paths for the Final Model (Study 2)



[21] To view the alternative models and additional effects of political extremism and demographics, see the Supplement.



White Americans

Total effects revealed that the associations between conservative ideology and both types of conspiracy beliefs remained significant when controlling for the indirect paths through both ethnic collective narcissism and ethnic ingroup identification (see Table 3.4). Furthermore, the association between system justification and anti-establishment conspiracy beliefs remained negative and significant when the indirect relationships through both types of ethnic ingroup identification were accounted for, and the relationship between system justification and pro-establishment conspiracy beliefs remained non-significant when controlling for the indirect paths through either type of ethnic ingroup identification. Indirect relationships revealed that the variance in system justification carried positively through ethnic collective narcissism to both pro- and anti-establishment conspiracy beliefs (see Table 3.4). Similarly, the variance in conservative ideology carried through ethnic collective narcissism to both pro- and anti-establishment conspiracy beliefs.

Black Americans

Total effects revealed that the associations between conservative ideology and both types of conspiracy beliefs remained significant when controlling for the indirect

relationships through both ethnic collective narcissism and ethnic ingroup identification (see Table 3.4). Similarly, the relationship between system justification and anti-establishment conspiracy beliefs remained negative and significant when controlling for the indirect paths through both types of ethnic ingroup identification, and the link with pro-establishment conspiracy beliefs remained positive and significant when controlling for the indirect relationships through both types of ethnic ingroup identification. Indirect relationships revealed that the variance in liberal ideology carried through ethnic collective narcissism to pro-establishment conspiracy beliefs (see Table 3.4).

Table 3.4

Indirect Relationships and Total Effects for the Final Model (Study 2)

	White Americans		Black Americans	
Parameter	Indirect relationship [95% CI]	Total effect	Indirect relationship [95% CI]	Total effect
Cons → Pro				
CN	**.11 [.06, .15]**	.56***	**-.02 [-.04, -.01]**	.43***
ID	-.01 [-.02, .01]	.45***	.01 [-.01, .02]	.46***
Cons → Ant				
CN	**.10 [.05, .14]**	.50***	-.03 [.06, -.01]	.37***
ID	-.01 [-.02, .01]	.40***	.01 [-.01, .02]	.41***
SJ → Pro				
CN	**.15 [.09, .20]**	.07	.01 [-.01, .03]	.13**
ID	-.01 [-.04, .03]	-.08	-.01 [-.02, .01]	.12*
SJ → Ant				
CN	**.13 [.08, .19]**	-.26***	.02 [-.01, .04]	-.21***

ID	-.01 [-.04, .03]	-.40***	-.01 [-.02, .01]	-.23***

Note. Cons = Conservative ideology; Pro = Pro-establishment conspiracy beliefs; Ant = Anti-establishment conspiracy beliefs; CN = Ethnic collective narcissism; ID = Ethnic ingroup identification; SJ = System Justification. All effects are standardised, notable indirect relationships are in bold.

3.4.3 Discussion

In line with Study 1, ideological asymmetry with regards to both pro- and anti-establishment conspiracy beliefs was indicated among both ethnic groups in Study 2, such that conservative ideology was positively associated with both types of conspiracy beliefs regardless of social status. Similarly, ethnic collective narcissism was also associated with a general conspiracist mindset, revealing positive associations with both types of conspiracy beliefs. However, ethnic collective narcissism was more strongly associated with pro-establishment conspiracy beliefs among white Americans, and more strongly associated with anti-establishment conspiracy beliefs among black Americans. Therefore, although collective narcissism may be associated with a general conspiracist mindset, the appeal of certain conspiracy theories over others may be altered by social status (see Sternisko, Cichocka, & Van Bavel 2020).

Conservative ideology was related to both types of ethnic ingroup identification among white Americans, but liberal ideology was related to both types of ethnic ingroup identification among black Americans. This latter finding was even indirectly related to pro-establishment conspiracy beliefs through ethnic collective narcissism. On the other hand, the variance in conservative ideology among white Americans carried through ethnic collective narcissism to both types of conspiracy beliefs. Once again, this supports the notion that collective narcissism is underpinned by opposing ideological concerns depending on social status (see Marinthe et al., 2021), further suggesting that it can motivate the endorsement of

conspiracy theories on both sides of the political spectrum (see also Nera, Wagner-Egger et al., 2021).

The addition of system justification revealed a negative relationship with anti-establishment conspiracy beliefs among both ethnic groups, and a positive relationship with pro-establishment conspiracy beliefs, but only among black Americans. In contrast, higher system justification was only *indirectly* linked to stronger beliefs in both types of conspiracy theories through ethnic collective narcissism among white Americans. This suggests that conspiracy beliefs can be differentially explained by motivations to challenge or defend the status quo depending on their content, but motivations to defend the status quo only underpin conspiracy beliefs among high status groups when collective narcissism is accounted for. Finally, while system justification was positively associated with both types of ethnic ingroup identification among white Americans, it was only positively related to ethnic ingroup identification among black Americans. This may reflect the sentiments surrounding reduced system justifying beliefs among low status groups, forming an important part of their ingroup identity to improve societal conditions, rather than simply defend the ingroup image (i.e., universalism; see also Marinthe et al., 2021).

3.5 General discussion

Across two cross-sectional studies, we examined the relationships between conservative ideology, ethnic collective narcissism, ethnic ingroup identification, and both pro- and anti-establishment conspiracy beliefs, for ethnic majority and minority groups in the US. In both studies, our findings supported the ideological asymmetry account, demonstrating that conservative ideology was related to both pro- and anti-establishment conspiracy beliefs. Furthermore, collective narcissism was positively related to both types of conspiracy beliefs, regardless of social status. In line with Chapter 4, our findings may show that collective narcissism can be linked to conspiracy beliefs that both defend and target groups with a

similar social status. For example, in Study 1 we showed that collective narcissism among ethnic minority groups was not only associated with anti-establishment conspiracy beliefs that criticise the ways in which powerful people can distract from the disproportionate discrimination these groups likely experience (e.g., "The silly, pointless stories commonly seen in the mass media are often planted by those in power to distract the population from the real problems in society"), but also pro-establishment conspiracy beliefs that vilify groups with a similar social status to their own (e.g., "Certain ethnic and religious minority groups wield a disproportionate amount of power in this country, and use that power to covertly push a self-serving political agenda"). Therefore, our findings are in line with previous evidence suggesting that while collective narcissism is associated with motivations to protect the image of one's ingroup (e.g., Bertin, Nera et al., 2021; see also Cichocka, 2016), these processes can eventually be to the detriment of both ingroup and outgroup members (e.g., Cislak et al., 2018; Chapter 4).

However, we also discovered an important caveat to these processes: while both conservative ideology and collective narcissism were positively associated with conspiracy beliefs regardless of social status, ethnic collective narcissism was underpinned by liberal—rather than conservative—ideology among ethnic minorities. In fact, the variance in liberal ideology carried through ethnic collective narcissism to pro-establishment conspiracy beliefs among black Americans in Study 2.[22] This supports evidence provided by Marinthe and colleagues (2021), showing that while collective narcissism among high status groups is underpinned by power values, the same type of identity among low status groups is underpinned by more egalitarian values for universalism (known correlates of liberal

[22] This was also discovered among ethnic minorities in Study 1 until demographics were added to the model (see Supplement).

ideology; e.g., Wetherell et al., 2013). However, regardless of these potentially well-meaning motivations, all conspiracy beliefs can have dire consequences for society (e.g., Bertin, Nera et al., 2020; Biddlestone, Green, & Douglas, 2020; Jolley & Douglas, 2014a, 2014b). Therefore, while we argue that these beliefs may come from more egalitarian—and perhaps realistic—concerns among low status groups, it is still important to tackle belief in conspiracy theories across the board.

In Study 2, we additionally found that system justification was positively associated with pro-establishment conspiracy beliefs, and negatively associated with anti-establishment conspiracy beliefs. Despite the need for future replications of these relationships, our findings possibly provide an explanation for the conflicting results between system justification and conspiracy beliefs in the literature (e.g., Crocker et al., 1999; Davis et al., 2018; Jolley et al., 2018; Kofta & Soral, 2020; Pellegrini et al., 2019; see Biddlestone, Green, Cichocka, Sutton et al., 2021). Specifically, treating conspiracy beliefs as a unitary construct ignores the conflicting motivational appeal of certain theories. Jolley and colleagues (2018) argue that conspiracy beliefs may be associated with higher system justification through the diversion of attention away from the pervasive structural issues in society, focusing instead on the actions of a targeted group. Our findings suggest that while this may be true in the context of pro-establishment conspiracy beliefs that shift unrealistic blame onto relatively powerless groups, anti-establishment conspiracy beliefs may appeal more to those looking to genuinely challenge the broken system with which they feel discontent.

Although system justification is generally found to be higher among conservatives (e.g., Jost et al., 2003), we found that anti-establishment conspiracy beliefs were simultaneously underpinned by conservative ideology and *low* system justification. Thus, our findings echo conspiracist sentiments often expressed by right-wing populists. For example, Trump supporters are known to endorse right-wing ideologies while simultaneously

expressing their appetite for "draining the swamp" (referring to well-known political establishment figures; e.g., Martineau, 2017). Indeed, in Study 1, voting for Trump (vs. Biden) in the 2020 US presidential election was associated with anti-establishment conspiracy beliefs among both groups (see Supplement). Therefore, the current findings highlight the duality between opposing ideological and social identity processes that can be used to understand beliefs in pro- or anti-establishment theories.

3.5.1 Limitations

Despite the theoretical developments provided by the current article, there are a number of important limitations to address. Most importantly, both studies used a cross-sectional design. While experimental findings have suggested that conspiracy beliefs are a result of manipulated system threat (Jolley et al., 2018, Study 1), similar efforts have also demonstrated that system justification is heightened after exposure to conspiracy theories (Jolley et al., 2018, Study 2). Therefore, future research should focus on uncovering the causal pathways between the effects presented in the current article. Furthermore, despite the slight change in minority group categories from Studies 1 to 2, both surveys presented here were only conducted on participants from the US. Some evidence suggests that the link between collective narcissism and belief in intergroup conspiracy theories varies between cultures (van Prooijen & Song, 2020). Therefore, future research should also aim to corroborate the current findings on participants from different countries, potentially adding measures of cultural orientation to explain these differences (see also Adam-Troian et al., 2020; Biddlestone, Green, & Douglas, 2020; van Prooijen & Song, 2020).

3.5.2 Future research

The results analysed in the current article provide important insights for researchers to take into consideration when conducting future studies on this topic. Most importantly, we recommend the inclusion of variables that distinguish between conspiracy theories that

defend versus challenge the system to avoid conceptual crossover. Furthermore, the measurement of social status when examining the underlying processes that link ideological concerns to different forms of ingroup identification will be an important step for future efforts to provide more nuance. Following Marinthe and colleagues (2021), measuring collective narcissism in other domains of social status (e.g., gender) would strengthen the conclusions that can be made about these mechanisms (see also Marchlewska et al., 2019). Finally, while we now know more about the different values (Marinthe et al., 2021) and ideological concerns associated with collective narcissism among high versus low status groups, it would be beneficial to uncover whether frustrated needs also predict this form of identity among these different groups (see Bertin, Marinte et al., 2021; Cichocka et al., 2018).

3.5.3 Conclusion

In sum, while conspiracy beliefs that either support or defend authority appear to be born out of similar attempts to defend the ethnic ingroup image regardless of social status, the ideological concerns that underlie these processes may vary based on the societal deprivation that certain groups experience. In this way, conspiracy beliefs are a concern no matter the sentiment, but all defensive social identities in this context do not share equal origins, and they should not be treated as such.

Interestingly, I also discovered that despite the evidence suggesting that system justification is particularly high among conservatives (e.g., Jost et al., 2003), anti-establishment conspiracy beliefs were underpinned by conservative motivations to *challenge,* rather than defend, the status quo. This echoes sentiments commonly expressed by modern right-wing populist movements, such as Trump supporters (e.g., Martineau, 2017). Therefore, in Chapter 4, I aimed to conclude the empirical investigations in this thesis by uncovering the concerning implications of collective narcissism for behavioural intentions, particularly in the context of right-wing populism. Specifically, I show how collective narcissism is not only

linked to belief in conspiracy theories about the ingroup, but also a willingness to conspire against fellow ingroup members.

Chapter 4: Their own worst enemy? Collective narcissists are willing to conspire against their ingroup[23]

[23] This chapter is an empirical paper currently under review: Biddlestone, M., Cichocka, A., Główczewski, M., & Cislak, A. (2021). *Their own worst enemy? Collective narcissists are willing to conspire against their ingroup* [Manuscript submitted for publication]. School of Psychology, University of Kent.

4.1 Abstract

Collective narcissism—a belief in ingroup greatness that is not appreciated by others—is associated with using one's group for personal benefits. Across one pilot and three studies, we demonstrated that collective narcissism predicts readiness to conspire against ingroup members ($r_{meta\text{-}analysis}$ = .26). In Study 1, conducted in Poland (N = 361), collective narcissism measured in the context of national identity predicted readiness to engage in secret surveillance against one's own country's citizens. In Study 2 (N = 174; pre-registered), collective narcissism in UK workplace teams predicted intentions to engage in conspiracies against co-workers. In Study 3 (N = 471; pre-registered), US national collective narcissism predicted intentions to conspire against fellow citizens. Furthermore, conspiracy intentions accounted for the relationship between collective narcissism and beliefs in conspiracy theories about the ingroup. Ingroup identification was either negatively related (Studies 1 and 2) or unrelated (Study 3) to conspiracy intentions ($r_{meta\text{-}analysis}$ = .07). We discuss implications for research on conspiracy theories and populism.

Keywords: collective narcissism, ingroup identification, conspiracy theories, conspiracy beliefs, populism

"Our enemies are innovative and resourceful, and so are we. They never stop thinking about new ways to harm our country and our people, and neither do we" (George W. Bush; cited in Time, 2009).

The recent rise of national populism in Western democracies has often been linked to the spread of conspiracy theories (e.g., Bergmann, 2018; van Prooijen, 2018; see also Castanho Silva et al., 2017). For example, conspiracy beliefs are higher among Trump (vs. Clinton) or Brexit (vs. Remain) voters (Rogers de Waal, 2018). Right-wing populist leaders and governments have been suspected of spreading conspiracy theories, but they have also faced accusations of engaging in conspiracies. For example, the Polish government was questioned about purchasing a surveillance technology called *Pegasus*, which would allow them to spy on citizens without their knowledge (VOANews, 2019). Similarly, President Trump was under investigation for potential collusion with Russia to interfere in the 2016 election. Alarmingly, most of his supporters thought he should remain in office even if these accusations were proven true (Weiss, 2017).

While there is extensive research on the psychological concomitants of *conspiracy beliefs* (Douglas et al., 2017, 2019), less is known about the processes that might explain personal willingness to become involved in conspiracies (cf., Douglas & Sutton, 2011). We aim to address this gap in the current research, focusing especially on the role of group identity.

Who might be ready to conspire?

Literature on willingness to conspire is scarce. One exception is research by Douglas and Sutton (2011), who showed that individuals were more likely to believe conspiracy theories if they were personally willing to engage in conspiracies. For example, those who believed in 9/11 conspiracy theories were more likely to say they would have ordered the attack on the Twin Towers themselves. The authors concluded that this may be an example of projection

(Ames, 2004; McClosky, 1958)—a process whereby individuals attribute their own thoughts, feelings and motivations onto others in order to make sense of their social environment.

In their work, Douglas and Sutton (2011) also examined personality predispositions related to conspiring. They found that intentions to conspire were associated with Machiavellianism—a personality trait measuring willingness to exploit others for selfish gains (Festinger & Schachter, 1970; Paulhus & Williams, 2002). However, conspiring is rarely only an interpersonal endeavour. Most conspiracy theories presume that a powerful group is colluding to further their own agenda (Lewandowsky et al., 2013) and harm one's ingroup (Chapter 1; Cichocka, Marchlewska, Golec de Zavala et al., 2016; Sternisko, Cichocka, & Van Bavel, 2020; van Prooijen & van Lange, 2014). Therefore, we seek to examine whether the way people feel about their groups might be associated with conspiratorial intentions. We argue that those who tend to use their group to further their own agenda might be willing to engage in conspiracies against other group members.

Collective narcissism and its psychological concomitants

People can identify with their social groups in different ways. They might feel happy about their group membership, and connected to other group members. We can call this a "conventional" ingroup identification (Cameron, 2004; Leach et al., 2008; Tajfel & Turner, 1979). However, people can also be defensive about their social identities (Cichocka, 2016)—they might believe that their ingroup is exceptional but is not getting the recognition it is entitled to. Such beliefs are captured by the concept of collective narcissism (Golec de Zavala et al., 2009). Collective narcissism is related to measures of excessive ingroup commitment, such as nationalism (Golec de Zavala et al., 2016; Kosterman & Feshbach, 1989; Lyons et al., 2010) or ingroup glorification (Roccas et al., 2006). However, collective narcissism can be seen as a broader, underlying defensive need for ingroup recognition which can be measured beyond the national context. For example, it can refer to religion

(Marchlewska et al., 2019; Yustisia et al., 2019), sports teams (Larkin & Fink, 2019), or extremist organisations (Jasko et al., 2020).

Collective narcissism is thought to be generally motivated by a frustration of basic needs (Cichocka, 2016; Fromm, 1973), such as the need for personal control (Bertin, Marinthe et al., 2021; Cichocka et al., 2018; Marchlewska et al., 2020) or self-worth (Golec de Zavala et al., 2019). In line with its compensatory nature, collective narcissism is linked to defensive tendencies to perceive outgroups as threatening (Golec de Zavala et al., 2016) and to respond to threats with outgroup derogation or aggression (e.g., Golec de Zavala, Cichocka, & Iskra-Golec, 2013; Lyons et al., 2010). This defensiveness and threat sensitivity explain why collective narcissism predicts susceptibility to conspiracy theorising about outgroups (e.g., Cichocka, Marchlewska, Golec de Zavala et al., 2016; Golec de Zavala & Cichocka, 2012).

Indeed, multiple studies show links between collective narcissism (but not ingroup identification) and conspiracy beliefs. In Poland, national collective narcissism (i.e., collective narcissism in reference to one's nation) predicted beliefs in conspiracies about foreign involvement in high-profile events, such as the Smolensk crash (Cichocka, Marchlewska, Golec de Zavala et al., 2016; Soral et al., 2018). In the US and UK, national collective narcissism predicted both the endorsement and dissemination of conspiracy theories regarding the origin and infectivity of COVID-19, including theories that the spread of the virus was the result of a nefarious act by an outgroup (Sternisko, Cichocka, Cislak, et al., 2020). In a religious context, Marchlewska and colleagues (2019) found that catholic narcissism predicted belief in a so-called gender conspiracy, which assumes that "gender studies and gender-equality activists…secretly promote an ideology designed to harm traditional values and social arrangements" (p. 1).

All of these studies suggest collective narcissism is linked to conspiracy beliefs about outgroups. However, it has rarely been associated with belief in ingroup conspiracies. In a US sample, Cichocka, Marchlewska, Golec de Zavala and colleagues (2016) found that while national collective narcissism predicted convictions that foreign governments are conspiring, it was not associated with similar convictions about own governments. However, Golec de Zavala and Federico (2018) showed that national collective narcissism can be associated with a more general conspiratorial mindset—predicting a rise in generalised conspiratorial thinking over the course of the 2016 US election. Their findings suggest that collective narcissism might not only be predictive of belief in outgroup conspiracies, but also of a more general tendency to believe in a Manichean distinction between "us" and a malevolent "them", even within one nation (see also Uscinski et al., 2016). Thus, it seems plausible that collective narcissism may be associated with belief in conspiracies within the group.

Consistent with this reasoning, national collective narcissism is a robust predictor of support for national populist parties and politicians, who allegedly defend the "real people" from the malevolent national elites (Müller, 2016). For example, national collective narcissism is associated with support for populist leaders and parties in the US, UK, Poland, and Hungary (e.g., Cislak et al., 2020; Federico & Golec de Zavala, 2018; Marchlewska, Cichocka, Panayiotou et al., 2018; Forgas & Lantos, 2019). Based on recent theorising, we argue that collective narcissism might not only be associated with seeing conspiracies within the group, but also with a willingness to conspire against fellow group members.

Collective narcissism and a willingness to conspire against the ingroup

Recent theorising on collective narcissism suggests that it might be associated with selfish motivations (Cichocka & Cislak, 2020; Marchlewska et al., 2020). Because collective narcissism compensates for frustrated personal needs (Bertin, Marinthe et al., 2021; Cichocka et al., 2018), it is linked to a greater preoccupation with how the group image reflects on the

individual than with benefiting other ingroup members (Cichocka, 2016). This lack of genuine commitment to ingroup members might carry potentially problematic consequences for the ingroup. For example, national collective narcissism predicted a greater willingness to leave one's own country for financial gains (Marchlewska et al., 2020) or treat ingroup members instrumentally (i.e., using them for personal benefits; Cichocka et al., 2021). In the political domain, national collective narcissism has been linked to supporting policies that could harm the ingroup in the long run (e.g., anti-conservation policies; Cislak et al., 2018; Cislak et al., 2021).

These findings suggest that those scoring high in collective narcissism might be willing to conspire against their ingroup members. Indeed, conspiracy theories assume that people are colluding to further their own selfish agenda (Lewandowsky et al., 2013). Furthermore, those scoring high in collective narcissism may also project their selfish motivations onto other ingroup members. This, in turn, might increase the perceived threat that even ingroup members pose, thus making them a potential target of conspiracy theories. Following theorising by Douglas and Sutton (2011), we argue that a personal willingness to conspire against ingroup members may be accompanied by belief in ingroup conspiracies.

Collective narcissism assumes a positive ingroup evaluation and, hence, correlates with conventional ingroup identification (Golec de Zavala et al., 2009). However, the two tend to be associated with different outcomes, especially once their shared variance is accounted for. For example, while collective narcissism predicts greater outgroup prejudice, ingroup identification (without the narcissistic component) predicts greater outgroup tolerance (Golec de Zavala, Cichocka, & Bilewicz, 2013). Ingroup identification has also been associated with more positive outcomes for the ingroup, including greater loyalty (Marchlewska et al., 2020), and lower likelihood of exploiting ingroup members (Cichocka,

2016). Thus, we would expect ingroup identification to predict lower readiness to conspire against ingroup members.

4.2 Overview of the current studies

In the present studies, we investigate predictors of a readiness to conspire against ingroup members. We argue that because collective narcissism is associated with using the ingroup for personal benefits, it might also be positively associated with intentions to conspire against them. We also test whether intentions to conspire against the ingroup might indirectly link collective narcissism to belief in ingroup conspiracies. All studies used a cross-sectional design, measuring collective narcissism, ingroup identification and conspiracy intentions against the ingroup in various contexts.

In Study 1, we investigated whether Polish national collective narcissism was associated with personal intentions to conspire against other Polish citizens by secretly spying on them. In Studies 2 and 3 we examined intentions to engage in a wider range of conspiracies. In Study 2, conducted in the UK, we examined the associations between organisational collective narcissism and conspiracy intentions in a workplace context. In Study 3, conducted in the US, we again focused on the national context and measured national collective narcissism, identification, and intentions to engage in even more varied conspiracies against fellow US citizens. We also included a measure of ingroup conspiracy beliefs to determine whether conspiracy intentions mediate the relationship between national collective narcissism and belief in ingroup conspiracy theories. Because conspiracy intentions are likely to be positively skewed, in all studies we conducted our analyses with the use of

bias-corrected bootstrapping (with 1,000 re-samples).[24] Data are posted at https://osf.io/z3gwu/?view_only=e20e3aaec7e945d986acc4b28483e5fc

4.3 Study 1

In Study 1, we examined whether national collective narcissism and identification would predict individuals' intentions to engage in conspiracies against citizens of their own nation. We focused on conspiracies involving surveillance. Ideas of secret citizen monitoring feature frequently in modern conspiracy theories (e.g., Bruder et al., 2013). For example, one conspiracy theory argues that COVID-19 vaccines contain surveillance microchips (Romano, 2020). Although surveillance may not be considered a conspiracy in itself, *secret* surveillance without the consent of the individuals being monitored often carries an implicit conspiratorial intention. In fact, reflecting in *The Guardian* on his role as a whistleblower against the US National Security Agency, Edward Snowden (2021) referred to mass surveillance as a "true conspiracy" (para. 4). A pilot study, conducted in Poland, established that national collective narcissism (but not national identification) predicted support for the Polish government's covert use of a surveillance software against Polish citizens (see Supplement). Thus, in Study 1, we examined whether national collective narcissism would predict a willingness to engage in secret surveillance.

4.3.1 Method

4.3.1.1 Participants and Design

In Study 1, we collected data as part of a larger survey,[25] completed by 361 Polish participants, 228 men, 133 women, aged 18-77 (M_{age} = 43.11, SD_{age} = 14.36). Sensitivity

[24] Across the paper, significance levels and confidence intervals are from bootstrapped coefficients with 1,000 resamples (*B*), standardised beta coefficients are not bootstrapped.

[25] Study 1 additionally included measures of support for environmental and health-related policies for purposes of different projects (see Supplement).

analysis with G*Power ($\alpha = .05$, $\beta = .80$, two-tailed) suggested that we had enough power to detect a small effect size of $r = .15$. Participants filled out measures of national collective narcissism and identification (counterbalanced), and then of conspiracy intentions, political ideology and demographics (age, gender, and education). Unless noted otherwise, we used response scales from *definitely not* (1) to *definitely yes* (7).

4.3.1.2 Measures

National Collective Narcissism was measured with the short 5-item (Golec de Zavala, Cichocka, & Bilewicz, 2013) Collective Narcissism Scale (e.g., "If Poles had a major say in the world, the world would be a much better place"; Golec de Zavala et al., 2009).

National Identification was measured with five items (e.g., "I feel strong ties to other Polish people") based on Cameron's (2004) scale.

Conspiracy Intentions. Three items were created to measure conspiracy intentions (see Douglas & Sutton, 2011). Participants were asked whether, if they held a position in the government, they would "support rapid responses of intelligence agencies" in the form of "wiretapping citizens", "spreading false information if the situation required it", and "performing Internet surveillance without the consent of the observed citizens".

Political Ideology was measured with a single item asking participants to indicate their political orientation on a scale from *definitely left-wing* (1) to *definitely right-wing* (7).

4.3.2 Results and Discussion

Descriptive statistics and correlations are presented in Table 4.1.

Table 4.1

Means, Standard Deviations, Reliabilities and Bootstrapped Zero-Order Correlations (Study 1)

	M	*SD*	α	1	2	3	4

1.	Conspiracy intentions	2.46	1.65	.90	- .06	.29***	.25***
2.	National identification	5.23	1.30	.85	-	.55***	.20***
3.	National collective narcissism	4.45	1.55	.92		-	.32***
4.	Political ideology	4.00	1.41	-			-

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

We tested our hypotheses with a regression model (Table 4.2). National collective narcissism positively predicted conspiracy intentions, confirming our hypothesis. When its overlap with national collective narcissism was accounted for, national identification became a significant *negative* predictor of conspiracy intentions.

Because national collective narcissism tends to be associated with political conservatism (Cichocka et al., 2017; Golec de Zavala et al., 2009), and because we wanted to verify whether conspiracy intentions might be associated with left-right (or extremist; see van Prooijen et al., 2015) political orientation, we also included linear and quadratic effects of political ideology. Right-wing participants were more likely to report conspiracy intentions. There were no significant curvilinear effects for political ideology, suggesting that it was right-wingers, rather than extremists, that were willing to engage in conspiracies. The effects for national collective narcissism and national identification remained significant when we adjusted for political ideology or demographics. Overall, we demonstrated that Polish national collective narcissism predicted intentions to conspire against fellow Poles.

Table 4.2

Regression Model with Conspiracy Intentions as the Dependent Variable (Study 1)

Variables	*B* [95% CI]	β	*p*
National collective narcissism	0.34 [0.20, 0.47]	.32	<.001
National identification	-0.20 [-0.35, -0.06]	-.16	.007

Political ideology	0.21 [0.07, 0.34]	.18	.002
Political ideology^2	0.02 [-0.04, 0.08]	.03	.549
F	$F(4, 356) = 13.15$, $p < .001$		
R^2_{adj}	.12		

4.4 Study 2

Despite the clear conspiratorial nature of covert surveillance, it is possible that participants may interpret the intention items we used in Study 1 as solely referring to a benevolent protection of their ingroup. However, benevolent intentions do not necessarily contradict conspiratorial notions. In fact, conspiratorial intentions might be perceived as a benevolent antidote to an unjust world from the conspirator's perspective (see also Moulding et al., 2016). Nevertheless, in Study 2, we sought to test whether our predictions replicate beyond the specific context of national surveillance. Study 2 then focused on conspiracies in the workplace. Past research showed that belief in workplace conspiracy theories can have potentially problematic consequences, including lack of commitment, job dissatisfaction or turnover intentions (Douglas & Leite, 2017; van Prooijen & de Vries, 2015). We examined predictors of people's readiness to engage in a range of workplace conspiracies, such as secret surveillance or corrupt employee favouritism.

Study 2 was conducted with UK participants working in teams. We tested the hypothesis that workplace conspiracy intentions would be positively predicted by high team collective narcissism (but not team identification). The hypotheses, design, and analyses were pre-registered: https://aspredicted.org/blind.php?x=iw4hb7.

4.4.1 Method

4.4.1.1 Participants and Design

A-priori power analysis using the average social psychology effect size (r = .21; Richard, Bond Jr., & Stokes-Zoota, 2003) determined that a sample size of 173 would achieve a power of .80. The survey was completed by 174 participants, 50 men and 124 women, aged 20-68 (M_{age} = 37.93, SD_{age} = 10.91). Participants filled out measures of collective narcissism and identification in relation to their workplace team, workplace conspiracy intentions and demographics (age, gender and education).

4.4.1.2 Measures

Team Collective Narcissism was measured with the five items used in Study 1, in relation to the team that participants worked in (e.g., "Not many people seem to understand the importance of my team"), on a response scale from *strongly disagree* (1) to *strongly agree* (7).

Team Identification was measured with Cameron's (2004) 12-item identification scale used in reference to one's team (e.g., "Being a member of my team is an important reflection of who I am"), on a response scale from *strongly disagree* (1) to *strongly agree* (7).

Conspiracy Intentions. Five items were created to measure workplace conspiracy intentions. Participants read the following introduction "Imagine you've learned that some of your friends secretly coordinated to engage in activities that would help you gain advantage over other members of your team. To what extent would you be willing to join the following activities in your workplace…". They were then presented with five scenarios and asked whether they would "promote underperforming but loyal teammates", "spread false information about them", "secretly control other team members' computers", "monitor their web activity", and "record their phone conversations". Responses were recorded on a scale from *definitely not* (1) to *definitely yes* (5).

4.4.2 Results and Discussion

We first computed correlations between the variables (Table 4.3). Conspiracy intentions were negatively correlated with team identification, but unrelated to team collective narcissism. However, when their shared variance was accounted for in a regression model (Table 4.4), we found that team collective narcissism positively, and identification negatively, predicted conspiracy intentions. When we additionally controlled for demographics, the positive effect of team collective narcissism became only marginally significant, $B = 0.10$, [0.01, 0.19], $\beta = .15$, $p = .055$. Thus, findings in the workplace context were less consistent than in the national identity context.

Table 4.3

Means, Standard Deviations, and Bias-Corrected Bootstrap Zero-Order Correlations (Study 2)

Variable	*M*	*SD*	□	1	2	3
1. Workplace conspiracy intentions	1.56	0.65	.80	-	.10	-.17*
2. Team collective narcissism	4.18	0.96	.70		-	.23**
3. Team identification	4.58	0.98	.89			-

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

Table 4.4

Regression Model with Workplace Conspiracy Intentions as the Dependent Variable (Study 2)

Variables	*B* [95% CI]	β	*p*
Team collective narcissism	0.10 [0.01, 0.20]	.15	.044
Team identification	-0.14 [-0.24, -0.05]	-.21	.011
F	$F(2, 171) = 4.58$, $p = .012$		

R^2_{adj}	.04

4.5 Study 3

In Study 3, we again examined political conspiracies, this time in the US. Despite the more varied conspiracy context in Study 2, the majority of items so far have focused on intentions to conspire through secret surveillance. Therefore, in Study 3, we planned to measure a wider range of conspiratorial scenarios. We also examined whether, in line with Douglas & Sutton (2011), personal willingness to conspire would be associated with belief in ingroup conspiracies. Past work has found mixed evidence for the link between national collective narcissism and belief in own government conspiracies (Cichocka, Marchlewska, Golec de Zavala et al., 2016; Golec de Zavala & Federico, 2018). We argue that national collective narcissism may be associated with ingroup conspiracy beliefs positively insofar as it is linked to conspiracy intentions. Thus, we tested the hypotheses that US national collective narcissism would positively predict intentions to conspire against the national ingroup, and that these intentions would positively predict conspiracy beliefs about the national ingroup. The proposed design, hypotheses and analyses were pre-registered: https://aspredicted.org/blind.php?x=v5ck8d. Given past research linking national collective narcissism to support for Trump's presidency (Golec de Zavala & Federico, 2018; Marchlewska, Cichocka, Panayiotou et al., 2018), we also conducted exploratory analyses investigating the role of support for Trump (vs. Clinton) in these processes.

4.5.1 Method

4.5.1.1 Participants and Design

According to Fritz and MacKinnon (2007), a mediation analysis expecting small effect sizes ($\alpha = .14$; $\beta = .14$) requires a sample size of 462 to achieve a power of .80. The survey was completed by 471 participants recruited from *Prolific Academic*, 234 men, 229 women (eight

other), aged 18-77 (M_{age} = 36.94, SD_{age} = 12.08). To achieve balance in terms of political ideology, participants were pre-screened so that about half voted for Trump (N = 235), while others voted for Clinton (N = 236) in the 2016 US presidential election.

Participants completed the national collective narcissism and identification scales (counterbalanced), and were next randomly presented with belief items and conspiracy intention items (counterbalanced). These items were grouped so that participants did not see both versions of the same item (see Supplement). Finally, participants reported political ideology and demographics (age and gender).[26]

4.5.1.2 Measures

National Collective Narcissism was measured as in Study 1, referencing the US as the ingroup, on a response scale from *strongly disagree* (1) to *strongly agree* (5).

National Identification was measured with Leach et al.'s (2008) four-item ingroup satisfaction sub-scale (e.g., "I think that Americans have a lot to be proud of"), on a scale from *strongly disagree* (1) to *strongly agree* (5).

Conspiracy Beliefs about the Ingroup. Eight items from the Generic Conspiracist Belief Scale (GCB; Brotherton et al., 2013) were selected because they refer to the government or institutions (e.g., "the government is involved in the murder of innocent citizens and/or well-known public figures, and keeps this a secret"). Each participant responded to four items on a scale from *definitely not true* (1) to *definitely true* (5), while the remaining four were used to measure conspiracy intentions.

Conspiracy Intentions. We altered the eight selected GCB items to measure intentions to conspire with the US government. For example, the GCB item "The government

[26] We also measured education, but the item included an error. Nevertheless, controlling for education did not affect the pattern of results.

permits or perpetrates acts of terrorism on its own soil, disguising its involvement" was altered to "If it was necessary, I would work with the government to carry out acts of terrorism on my own soil, disguising our involvement", and "The spread of certain viruses and/or diseases is the result of the deliberate, concealed efforts of some organization" was altered to "If asked, I would aid organizations in concealing efforts that could lead to the spread of certain viruses and/or diseases." Each participant responded to four items on a scale from *I would never do this* (1) to *I would definitely do this* (5), while the remaining four were used to measure beliefs.

Political Ideology was measured with a single item: "Overall, where would you place yourself, on the following scale of liberalism-conservatism?", on a scale from *extremely liberal* (1) to *extremely conservative* (5).

4.5.2 Results

As hypothesised, national collective narcissism significantly positively correlated with conspiracy intentions, and conspiracy intentions significantly positively correlated with ingroup conspiracy beliefs (Table 4.5). National collective narcissism did not significantly correlate with ingroup conspiracy beliefs. We then conducted hierarchical regression analyses. First, we examined national collective narcissism, national identification, and political ideology (linear and quadratic) as predictors of conspiracy intentions (Table 4.6). Conspiracy intentions were positively predicted by national collective narcissism, but not by national identification or political ideology. We tested a similar model with ingroup conspiracy beliefs as the dependent variable (Table 4.6), showing that national collective narcissism positively, and national identification negatively, predicted ingroup conspiracy beliefs. Political ideology did not predict national conspiracy beliefs. This pattern of results remained the same when we controlled for demographics.

Table 4.5

Means, Standard Deviations, Reliability statistics and Zero-order Correlations (Study 3)

	M	*SD*	α	1	2	3	4	5
1. Conspiracy beliefs	2.99	1.07	.83/.85	-	.13**	-.04	-.18***	-.10*
2. Conspiracy intentions	1.54	0.69	.71		-	.27***	.17***	.13**
3. National narcissism	2.51	0.98	.90			-	.73***	.64***
4. National identification	3.85	1.09	.94				-	.60***
5. Political ideology	2.83	1.26	-					-

Note. Reliability of conspiracy beliefs is reported for the two versions of the scale. Reliability of the conspiracy intentions measure was the same in both versions.

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

Table 4.6

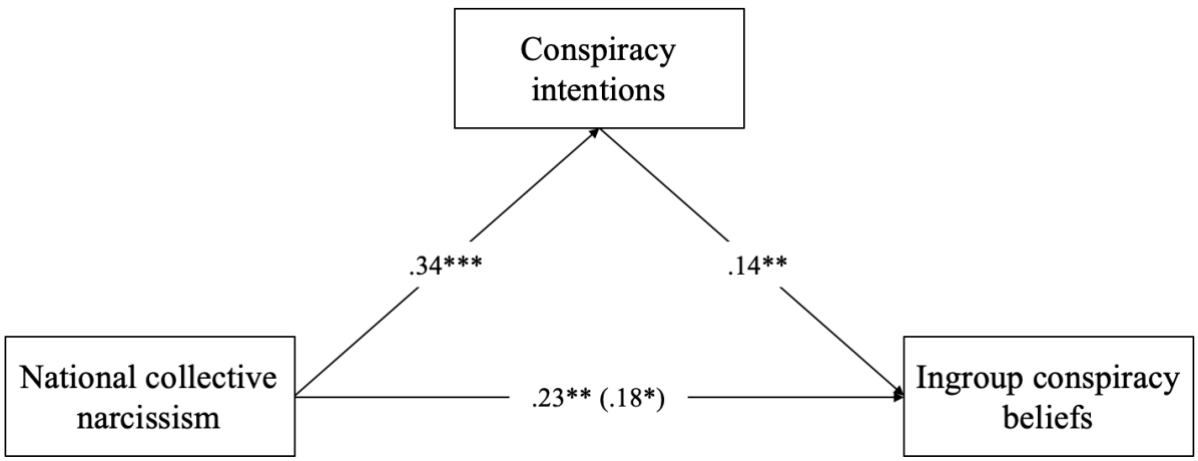
Regression Model with Conspiracy Intentions and Beliefs as Dependent Variables (Study 3)

	Conspiracy intentions			Conspiracy beliefs		
Variables	*B* [95% CI]	β	*p*	*B* [95% CI]	β	*p*
National narcissism	0.24 [0.12, 0.37]	.34	<.001	0.25 [0.08, 0.42]	.23	.004
National identification	-0.03 [-0.11, 0.05]	-.05	.428	-0.32 [-0.48, -0.17]	-.31	<.001
Political ideology	-0.03 [-0.13, 0.06]	-.06	.538	-0.05 [-0.17, 0.07]	-.06	.334
Political ideology^2	-0.02 [-0.07, 0.02]	-.05	.355	-0.01 [-0.08, 0.07]	-.001	.984
F	$F(4, 466) = 9.87$, $p < .001$			$F(4, 466) = 6.53$, $p < .001$		
R^2_{adj}	.07			.05		

We then tested the hypothesis that conspiracy intentions would account for the relationship between national collective narcissism and ingroup conspiracy beliefs. Using PROCESS, we tested an indirect effects model, with national collective narcissism as the predictor (controlling for national identification), ingroup conspiracy beliefs as the dependent variable, and conspiracy intentions as the mediator. National collective narcissism significantly predicted conspiracy intentions, which, in turn, predicted ingroup conspiracy beliefs. Conspiracy intentions significantly mediated the relationship between national collective narcissism and conspiracy intentions, standardised indirect effect = .05 [.01, .10][27] (Figure 4.1).

Figure 4.1

Indirect Relationship of National Collective Narcissism with Conspiracy Beliefs via Intentions (Study 3)



$^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

[27] This was contrary to our pre-registered suppression hypothesis, in which we expected national collective narcissism to be negatively associated with conspiracy beliefs directly, and positively associated with conspiracy beliefs indirectly via conspiracy intentions. Instead, we found that national collective narcissism was positively associated with conspiracy beliefs even when intentions were not accounted for.

Note. Entries are standardised coefficients; the direct effect is reported in brackets; the total effect is reported without brackets. All paths controlled for political ideology (both centred and squared) and national identification.

In line with our pre-registration, we conducted exploratory analyses to examine whether being a Trump (vs. Clinton) voter was associated with our variables. Intentions to conspire against the national ingroup were significantly higher among Trump (vs. Clinton) voters, $t(418.58) = 3.74$, $p < .001$. Furthermore, Trump (vs. Clinton) voters were significantly higher in national identification, $t(447.94) = 13.50$, $p < .001$, and national collective narcissism $t(439.27) = 17.12$, $p < .001$. However, there was no significant difference in ingroup conspiracy beliefs between voters, $t(469) = 0.30$, $p = .77$. Controlling for Trump (vs. Clinton) vote did not change the pattern of results of our main regression models (see Supplement).

4.5.3 Discussion

Study 3 offered further support for our hypotheses in the US context. Even though our measure included items that would blatantly refer to engaging in secretly harming fellow citizens, national collective narcissism (but not identification) significantly predicted intentions to support such governmental conspiracies. Interestingly, voting for Trump (vs. Clinton) was also associated with higher conspiracy intentions (although not ingroup conspiracy beliefs).

In line with our hypothesis, conspiracy intentions mediated the relationship between national collective narcissism and ingroup conspiracy beliefs. However, contrary to our expectations, national collective narcissism still positively predicted national conspiracy beliefs even when we accounted for conspiracy intentions. This contradicts past research by Cichocka, Marchlewska, Golec de Zavala and colleagues (2016), who found that US national collective narcissism was not associated with conspiracy beliefs about the ingroup, but

consistent with more recent research by Golec de Zavala and Federico (2018), who found that national collective narcissism was associated with generalised belief in conspiracies, especially after the 2016 Trump election (see also Bertin, Nera et al., 2021). Arguably, the highly polarised context of the Trump presidency might have intensified the association between national collective narcissism and ingroup conspiracy beliefs (see Kofta & Sedek, 2005).

4.6 Internal meta-analyses

In order to gain an overall understanding of our effects, we aimed to obtain the meta-analytic relationships for the zero-order correlations between: 1) collective narcissism and conspiracy intentions, 2) ingroup identification and conspiracy intentions, and 3) right-wing ideology and conspiracy intentions across the pilot study and three main studies. To carry this out, we tested three separate RVE models using the *robumeta* package (Fisher et al., 2017) in *R* (R Core Team, 2021). Due to the small number of studies included in these respective meta-analyses, the significance level was adjusted to a more conservative $p < .01$ to correct for the low degrees of freedom ($df < 4$; see Tipton & Pustejovsky, 2015).

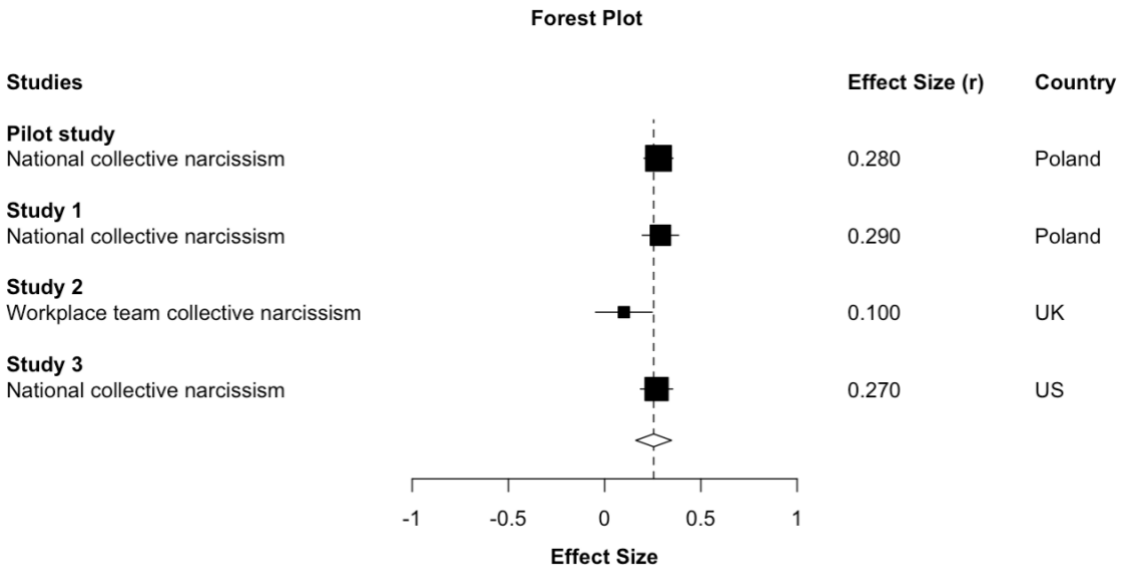
Once we obtained the respective meta-analytic effect sizes, we used the *brms* package (Bürkner, 2017) to obtain the between-study variance. Then, the JASP *R* skin (JASP Team, 2020) was used to obtain our Bayes Factors, applying the recommended Half Cauchy τ prior ($SD = 0.5$; see Harrer et al., 2019). Finally, we computed the evidential value and averaged estimated power levels and evidential value of our significant effects by using the *P-Curve* app to produce *P-Curves* (Simonsohn et al., 2014, 2015). Below, we report the key results, while full results, forest plots, Bayesian posterior distributions, effect size distributions, between-study variance distributions, and *P-Curves* for all variables are presented in the Supplement.

4.6.1 Results

Collective narcissism had a small significant positive meta-analytic association with conspiracy intentions, r = .26, 95% CI [.16, .35], t(2.73) = 9.23, p = .004 (see Figure 4.2), and the Bayes Factor provided moderate evidence for its directional hypothesis, BF = 3.55. Inspection of potential moderating effects revealed that the effects for collective narcissism were significantly weaker when workplace collective narcissism (vs. national collective narcissism) was measured, $r_{moderation}$ = -.18, 95% CI [-20, -.16], t(1.93) = 36.10, p < .001. Ingroup identification did not have a significant meta-analytic association with conspiracy intentions, r = .07, 95% CI [-.17, .31], t(2.98) = 0.95, p = .412, and the Bayes Factor provided moderate-to-strong evidence for its null hypothesis, BF = 0.11. Finally, right-wing ideology did not have a significant meta-analytic association with conspiracy intentions, r = .21, 95% CI [.03, .40], t(1.99) = 5.12, p = .037, as it did not pass the adjusted p < . 01 significance level. However, the Bayes Factor provided uncertain evidence, BF = 1.08.

Figure 4.2

Forest Plot of the Collective Narcissism Effect Sizes



4.6.2 Discussion

The results of our internal meta-analyses provided further evidence for our main hypothesis, that collective narcissism, but not ingroup identification, is associated with intentions to conspire against fellow ingroup members. The respective Bayes Factors confirmed that the collective narcissism directional hypothesis was more likely than the null, and the ingroup identification null hypothesis was more likely than the directional. A non-significant effect was obtained for right-wing ideology, but this was likely due to a lack of data, as indicated by the uncertain evidence provided by its Bayes Factor.

4.7 General Discussion

Across four studies (including one pilot study), we examined predictors of a personal willingness to conspire against the ingroup. We found that collective narcissism was associated with higher likelihood of engaging in conspiracies against ingroup members, both in the national and workplace (albeit less strongly) contexts. This relationship was robust across three countries: Poland (Pilot Study, Study 1), the UK (Study 2), and the US (Study 3).

Collective narcissism compensates for frustrated needs (Bertin, Marinthe et al., 2021; Cichocka et al., 2018; Golec de Zavala et al., 2019). Thus, for those scoring high in collective narcissism, it is the group that serves the individual, rather than the individual who serves the group (Cichocka, 2016). This implies that those high in collective narcissism might be willing to sacrifice ingroup members and collude against them, if this helps them further their agendas (see Douglas & Sutton, 2011). These findings add to the growing literature showing that collective narcissism does not only predict hostile outgroup attitudes, but that it might also be linked to problematic relations within the ingroup (Cichocka, 2016; Cichocka & Cislak, 2020; Marchlewska et al., 2020).

Their personal willingness to conspire can also explain why collective narcissists watch out for conspiracies within their ranks: they may perceive other ingroup members as a

threat due to a projection of their own mental states. As shown by Douglas & Sutton (2011), those who are willing to conspire believe that others would do so as well. Indeed, in Study 3, conspiracy intentions partially explained the positive association between collective narcissism and belief in ingroup conspiracies, replicating Douglas & Sutton (2011) in an ingroup context. However, it is important to note that our studies were correlational, and therefore it is alternatively possible that conspiracy beliefs affect conspiracy intentions. For example, intentions to engage in conspiracies within one's group might be a response to a conviction that malevolent forces operate within one's society.

Importantly, group identities are not static—they are continually negotiated (see Reicher, 2004; Reicher & Hopkins, 1996). This raises the possibility that participants justified their conspiratorial intentions by sub-typing fellow group members, labelling them as not truly representative of their ingroup. This echoes theoretical arguments in the literature that populists feel entitled to determine who the "real" people are in society (Müller, 2016). Thus, although our items directly asked about conspiring against ingroup members (e.g., "Polish citizens" in Study 1, or "innocent citizens" in Study 3), it could be that those high in collective narcissism were particularly willing to view them as less of a "true" member of the ingroup (see also Uscinski et al., 2016; Golec de Zavala & Keenan, 2020; Marchlewska, Cichocka, Panayiotou et al., 2018). Nevertheless, justifying conspiratorial intentions as a response to problematic ingroup members does not negate their conspiratorial nature.

As suggested by the meta-analysis, ingroup identification was unrelated to conspiracy intentions. However, in Studies 1 and 2 we found a negative effect of ingroup identification, once its overlap with collective narcissism was accounted for (see Cichocka, 2016). These findings suggest that more secure, non-narcissistic identification with the ingroup might limit one's willingness to engage in actions that harm ingroup members. This is consistent with past work showing positive effects of identifying with groups (e.g., Randsley de Moura et al.,

2009; Jetten et al., 2012; van Zomeren et al., 2008). We did not observe similar significant effects of ingroup identification in Study 3. These discrepant findings may have been because, to some degree, our measure of intentions might have captured a protective willingness to dissent from the ingroup, rather than simply a readiness to engage in dubious, secretive plots. Indeed, members that report a positive ingroup identification may sometimes feel urged to resist conformity when the group is not living up to its own standards and values (Packer, 2008). Alternatively, our use of varied identification measures (Cameron, 2004; Leach, 2008) to increase the reliability of our findings may have instead resulted in inconsistent effects, warranting further investigation.

In Studies 1 and 3, we also explored the role of political ideology and past voting in conspiracy intentions. In Study 1, we found that right-wing (but not extreme) beliefs were associated with greater intentions to conspire. Although we did not replicate this effect in Study 3 (and according to the meta-analysis, right-wing ideology was overall unrelated to conspiracy intentions), we did find Trump voters to be higher in national collective narcissism and intentions to conspire than Clinton voters. These results shed light on why populists might be more at risk to engage in conspiracies. They tend to be convinced that they hold a morally superior vision of what is good or bad for the nation (Müller, 2016; see also Bocian et al., 2021). This conviction may justify their willingness to engage in conspiracies that could undermine the freedoms and well-being of fellow group members. The role of national populist rhetoric might also explain why the meta-analytic relationship between collective narcissism and ingroup conspiracy intentions was significantly weaker in the workplace context than the national-political one. Populist movements both in Poland and the US appear to embody conspiratorial notions (Marchlewska, Cichocka, Panayiotou et al., 2018) and, in fact, leaders may sometimes use conspiracy theories strategically (Douglas et

al., 2020). Future research could examine the role of populist rhetoric in inspiring covert actions that seek to undermine ingroup cohesion and democratic principles.

4.7.1 Conclusion

Although Bush's statement about harming his own country was likely a lapsus, history is rich with examples of those who proclaim their commitment to their groups, but end up plotting against them. Here, we examined the concomitants of personal willingness to engage in conspiracies against fellow group members. Despite their alleged ingroup love, those scoring high in collective narcissism might be ready to conspire against the ingroup. Even though collective narcissists seem to always be on the lookout for others threatening their group, eventually they might end up being their own group's worst enemies.

Chapter 5: General discussion[28]

[28] Some points in this chapter are lifted from Biddlestone, M., Green, R., Cichocka, A., Sutton, R., & Douglas, K. (2021). Conspiracy beliefs and the individual, relational, and collective selves. *Social and Personality Psychology Compass*, e12639. https://doi.org/10.1111/spc3.12639

At the start of this thesis, I embarked on a number of objectives: to uncover the social motives associated with conspiracy beliefs, to understand how social identity processes associated with conspiracy beliefs may unfold in groups of different social status, and whether identity processes might be useful in explaining not only conspiracy beliefs, but also intentions to conspire against fellow ingroup members. In Chapter 2, I conducted a meta-analysis, providing strong evidence for the notion that conspiracy beliefs are born out of narcissistic attempts to defend and enhance the self-image, compensate for the negative experience of social exclusion, and defend the image of one's ingroup. In Chapter 3, I showed that while collective narcissism is linked to both pro- and anti-establishment conspiracy beliefs regardless of group status, these beliefs were underpinned by opposing ideologies depending on whether the group was an ethnic minority or majority, and that the appeal of these beliefs was not equal between these groups. Finally, in Chapter 4, I showed that collective narcissism is not only linked to belief in conspiracy theories about the ingroup, but also a willingness to engage in conspiracies against fellow ingroup members. These intentions were also more prevalent among right-wing populist voters (i.e., Trump supporters).

5.1 Theoretical implications

These findings extend the literature in a number of ways. Firstly, the meta-analysis provides robust and specific estimates of the pooled effect sizes between the varied social motives and conspiracy beliefs examined most frequently in the literature. Furthermore, it provided strong evidence for the notion that the link between social identity processes and conspiracy beliefs are characterised by motivations to defend the ingroup image, and not to compensate for low identification with the group (see Chapter 1; Chapter 2; Cichocka, Marchlewska, Golec de Zavala et al., 2016). Importantly, this process explains the additional finding that certain specific conspiracy theories are more appealing than the general features of most conspiracy

theories to collective narcissists. That is, while most conspiracy theories offer the promise of possessing secret knowledge, it is the ability to identify an antagonistic outgroup when endorsing the content of specific conspiracy theories over others that can be particularly appealing to collective narcissists (see Sternisko, Cichocka, & Van Bavel, 2020).

Secondly, Chapter 3 provided evidence for a number of important caveats to established findings in the literature. For example, previous findings on the link between system justification and conspiracy beliefs have been notably inconsistent (Crocker et al., 1999; Davis et al., 2018; Jolley et al., 2018; Kofta & Soral, 2020; Pellegrini et al., 2019), but the results from Study 2 revealed that this may have been due to the treatment of conspiracy beliefs as a unitary construct. That is, when the difference between conspiracy theories that challenge versus defend the status quo are distinguished, system justification has clear opposing relationships with both. Moreover, the ideological asymmetry account was supported (see Azevedo & Jost, 2021; Rutjens et al., 2017; van der Linden et al., 2020), showing that conservative ideology was related to both types of conspiracy beliefs. Interestingly, the findings in both studies revealed that the link between ethnic collective narcissism and conspiracy beliefs among ethnic minorities was instead underpinned by liberal ideology. This supports Marinthe and colleagues' (2021) findings that collective narcissism is associated with universalism (rather than power) values among low-status groups. Therefore, Chapter 3 extended this finding into the political ideology context, revealing that these differing value systems may capture more egalitarian liberal ideological sentiments if one's group is genuinely experiencing a lack of recognition (see Wetherell et al., 2013).

Finally, Chapter 4 showed that the consistent link between collective narcissism and conspiracy beliefs is perhaps, in part, an artefact of projection (Ames, 2004; Krueger, 2000; McCloskey, 1958). That is, while previous research has demonstrated that individuals believing conspiracy theories are more likely to show a willingness to conspire themselves

(Douglas & Sutton, 2011), we extended this to the group domain, revealing that collective narcissists are also willing to conspire against their fellow ingroup members. This can be explained by the notion that superficially strong commitment to the group among collective narcissists is used to serve the self rather than the group (Cichocka, 2016), and is comparable to findings demonstrating their instrumental treatment of ingroup members in other domains (Cichocka et al., 2021; Cislak et al., 2018; see also Cichocka & Cislak, 2020; Marchlewska et al., 2020).

5.2 Caveats and future research

Overall, aside from the focus on all three levels of self-represenation in the meta-analysis, the majority of research in this thesis has focused on the collective self processes involved in conspiracy beliefs, with less attention paid to the individual and relational selves (see Brewer & Gardner, 1996). This is largely due to the previous literature covering broader and more varied facets of the links between intergroup processes and conspiracy beliefs than for the other two selves, providing more comprehensive theoretical insights and nuanced evidence on which to base future hypotheses (e.g., Chapter 1; Chapter 2; Cichocka, 2016; Sternisko, Cichocka, & Van Bavel, 2020). However, this is not to say there are not valuable alternatives focusing on the other two selves. For example, Douglas and colleagues (2017, 2019; see also van Prooijen, 2020) pay particular attention to reviewing the evidence regarding the use of conspiracy beliefs to defend the self-image. However, due to the broad scope of this work, less specific claims and insights are able to be provided than the work focusing solely on social processes. Other work from van Prooijen and colleagues (2022) also focuses primarily on the relational self through the lens of interpersonal relationships. However, this perspective only covers how belief in conspiracy theories may foster cirucmstances that *excacerbate* relational concerns, rather than their motivational impact on conspiracy beliefs. Therefore, future work should turn its attention to elaborating more idiosyncratically on the

processes that link the individual and relational selves to conspiracy beliefs, in order to further contextualise the other important findings from the meta-analysis.

Once these theoretical extensions are provided, other work could focus on investigating the interplay between the three selves that was beyond the scope of the meta-analysis. For example, goals associated with different selves often align (Sedikides et al., 2013), meaning that the different allures of conspiracy theories to each self might often operate at the same time (see Sternisko, Cichocka, & Van Bavel, 2020). That is, conspiracy theories may appeal to both the individual and relational selves because they offer niche ideas of interest, providing a basis on which to form interpersonal bonds. At the same time, however, certain conspiracy theories may offer a unique content that other theories may not provide, which allows individuals to explain their particular negative interpersonal circumstances (see Graeupner & Coman, 2017). Indeed, although collective narcissism may primarily predict belief in conspiracy theories that implicate enemy outgroups (see Cichocka, Marchlewska, Golec de Zavala et al., 2016), I also showed in Chapter 4 that collective narcissists believe in conspiracy theories about the ingroup, especially when they are willing to conspire themselves. This, alongside that fact that collective narcissism appears to be a response to other frustrated needs (e.g., Bertin, Marinthe et al., 2021; Cichocka et al., 2018), means that it might trigger a more general distrust of others, even within one's group, increasing the appeal of many other conspiracy theories.

Importantly, the vast majority of research on conspiracy beliefs to-date has been conducted on WEIRD samples. This issue was highlighted multiple times in the meta-analysis, wherein small indications of varying effect size strengths between WEIRD versus non-WEIRD cultures were revealed, but there was not enough data collected from non-WEIRD cultures to make confident conclusions on these findings. However, research including non-WEIRD samples seems to be on the rise (e.g., Mashuri et al., 2016; Swami,

2012; van Prooijen & Song, 2020). For example, Sternisko, Cichocka, Cislak and colleagues (2020) replicated the association between collective narcissism and conspiracy beliefs in 55 countries. Similarly, Hornsey and colleagues (2018) confirmed the link between reactance and conspiracy beliefs across 24 separate nations. Other research has also begun to uncover the differential role cultural orientations may play in the formation of conspiracy beliefs (Adam-Troian et al., 2020; Biddlestone, Green, & Douglas, 2020; van Prooijen & Song, 2020). One implication may be that different cultural orientations could alter the way in which different self motives operate. For example, although Sedikides and colleagues (2013) argued for the primacy of the self being pancultural, other research highlights the different mechanisms associated with self-affirmation (Heine & Lehman, 1997) and reactance (Jonas et al., 2009) between cultures with independent versus interdependent views of the self. Therefore, future research should follow these efforts to further refine our understanding of the contextual parameters to previously established processes.

While I demonstrated in Chapter 4 that collective narcissism is associated with conspiracy intentions (see also Douglas & Sutton, 2011), future work may further clarify the unique connections between these motives and conspiracist notions through further distinctions between beliefs and other intentions. For example, collective narcissism has recently been shown to predict intentions to disseminate conspiracy theories (Sternisko, Cichocka, Cislak et al., 2020). Similarly, other recent findings have demonstrated that the sharing of conspiracy theories online appears to be partially motivated by relational needs to build social connections, perhaps even overriding personal concerns to remain accurate (Ren et al., 2021). Finally, preliminary findings suggest that individual narcissism may also be associated with intentions to disseminate conspiracy theories, even more so than endorsing the beliefs themselves (Wood, 2021). Thus, while other motives may embolden genuine belief in conspiracy theories, using and spreading conspiracy theories may simply be another

activity that demonstrates narcissists' Machiavellian side (Paulhus & Williams, 2002; see also Douglas & Sutton, 2011). In other words, this strategic use of conspiracy theories to gain a competitive advantage over others further exposes the antagonistic self-protection displayed by narcissists (Back et al., 2013), suggesting a promising avenue for future research.

5.3 Limitations

Despite the varying facets of conspiracist notions covered in this thesis, there are, of course, general limitations worth addressing. Most importantly, the majority of work here cannot be used to infer causation. Despite the inclusion of experimental designs alongside correlational designs in the meta-analysis, these made up a tiny fraction of the effect sizes (see Chapter 2). Furthermore, all results presented in the other empirical chapters were from cross-sectional data. Therefore, it is wholly possible that exposure to conspiracy theories that defend or challenge the status quo exacerbate the need to defend the ingroup image (see Chapter 3), or that the belief in the idea that other ingroup members are conspiring motivates a response to conspire against them in a pre-emptive defensive strategy (see Chapter 4). However, experimental manipulations of collective narcissism have proven methodologically and conceptually complex (e.g., Bertin, Marinthe et al., 2021). Therefore, we recommend that future research opts for longitudinal designs instead to corroborate the robustness of the findings laid out here.

With regards to the conceptual conclusions made in this thesis, empirical strength was provided through the repeated replication of similar effects. However, while some additional variables were included to further explain the processes under investigation, there was a considerable lack of direct measurement of the mechanisms that may explain these links. For example, although we reasoned that collective narcissism was likely linked to conspiracy intentions due to a perception of threats from within the group in Chapter 4, we did not directly measure these threat perceptions. Therefore, future efforts could also focus on

explaining the links between the variables discovered in this thesis to further strengthen or challenge the conceptual implications discussed as a result.

5.4 Conclusion

To sum up, this thesis extends previous work to further demonstrate the dangerous and alarming implications of defensive ingroup identity and its associated mechanisms. While the meta-analysis provided robust evidence for its particular link with belief in specific conspiracy theories, this notion was advanced through the distinction between the groups holding this form of identity and their belief in conspiracy theories that challenge versus defend the status quo. Finally, the startling implications of these processes were uncovered, showing that collective narcissists are not only strong endorsers of conspiracy theories, but are also willing to conspire against their own group members. This draws particular consideration to the ways in which we should focus our efforts on keeping a close eye on those that hold these identities, such as members of contemporary right-wing populist movements. I hope that the research findings and theoretical discussions included in this thesis can be used to advance the literature in ways that may tackle some of the most concerning challenges we currently face in society, and ultimately help those that may otherwise fall prey to the processes outlined throughout.

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Appendix A: Table of independent and dependent variable measures for all studies in the meta-analysis (Chapter 2)

Table 2.3

All Independent and Dependent Variable Measures Included in the Meta-analysis

Self	Article	Study	Independent variable	Dependent variable
Individual	Hornsey et al. (2018)	Study 1	Reactance – Hong Psychological Reactance Scale (Hong & Page, 1989).	Specific – Four most well-known items from Lewandowsky et al. (2013).
	van Prooijen (2015)	Study 1	Self-esteem instability – LSES (Dykman, 1998). Self-esteem – Rosenberg self-esteem scale (Rosenberg, 1965).	Specific – Referring to NATO and climate change (van Prooijen, 2015).
	Swami (2012)	Study 1	Self-esteem – Rosenberg self-esteem scale (Rosenberg, 1965).	Specific – Belief in the Jewish conspiracy theory (Swami, 2012). Specific – BCTI (Swami et al., 2010, 2011).
	Crocker et al. (1999)	Study 1	Self-esteem – Rosenberg self-esteem scale (Rosenberg, 1965).	Specific – Referring to the government conspiring against African Americans (Crocker et al., 1999).
	Imhoff & Lamberty (2018)	Study 3	Need for uniqueness –SANU (Lynn & Snyder, 2002).	General – GCBS (Brotherton et al., 2013). General – SICBS (Lantian et al., 2016). Mentality – CMQ (Imhoff & Bruder, 2014).
	Hart & Graether (2018)	Study 3 (Ad-Hoc)	Need for uniqueness – Conspiracy theories judged as known vs. unknown (Imhoff & Lamberty, 2017).	General – GCBS (Brotherton et al., 2013).

Galliford & Furnham (2017)	Study 1	Self-esteem – Rosenberg self-esteem scale (Rosenberg, 1965).	General – Medical and political sub-scales from GCBS (Brotherton et al., 2013).
Suessenbach & Moore (2019)	Study 1	Dominance and Prestige – DoPL (Suessenbach et al., 2019).	Specific – Pro-Trump (Suessenbach & Moore, 2019).
Imhoff & Lamberty (2017)	Study 1	Need for uniqueness –SANU (Lynn & Snyder, 2002).	Mentality – CMQ (Imhoff & Bruder, 2014). Specific – 99 popular conspiracy theories (Imhoff & Lamberty, 2017).
Imhoff & Lamberty (2017)	Study 2	Need for uniqueness –SANU (Lynn & Snyder, 2002).	Mentality – CMQ (Imhoff & Bruder, 2014). Specific – Widely believed and niche conspiracy theories (Imhoff & Lamberty, 2017).
Imhoff & Lamberty (2017)	Study 3	Need for uniqueness –SANU (Lynn & Snyder, 2002). Need for uniqueness – Article detailing a novel conspiracy believed by a majority vs. minority of poll responders (Imhoff & Lamberty, 2017).	Mentality – CMQ (Imhoff & Bruder, 2014). Specific – widely believed and niche conspiracy theories (Imhoff & Lamberty, 2017). Specific – Smoke detector conspiracy theory (Imhoff & Lamberty, 2017).
March & Springer (2019)	Study 1	Individual narcissism – B-PNI (Schoenleber et al., 2015).	General – GCBS (Brotherton et al., 2013).
Lantian (2016)	Study 4	Self-esteem – SISE (Robins et al., 2001).	General – SICBS (Lantian et al., 2016).
Lantian (2016)	Study 5	Self-esteem – SISE (Robins et al., 2001). Need for uniqueness – Perception that people believe the government hides the truth (Lantian, 2016).	General – SICBS (Lantian et al., 2016).

Lantian (2016)	Study 6	Need for uniqueness – Perception that people believe the official narrative (Lantian, 2016).	General – SICBS (Lantian et al., 2016).
Swami et al. (2012)	Study 1	Self-esteem – Rosenberg self-esteem scale (Rosenberg, 1965).	Specific – Referring to the 7/7 bombings in London (Swami et al., 2011). Specific – BCTI (Swami et al., 2010, 2011).
Swami et al. (2012)	Study 2	Self-esteem – Rosenberg self-esteem scale (Rosenberg, 1965).	Specific – Fictitious Red Bull conspiracy theory (Swami et al., 2011). Specific – BCTI (Swami et al., 2010, 2011).
Freeman & Bentall (2017)	Study 1	Self-esteem – Single item (Kessler et al., 2004).	General – Single item (Kessler et al., 2004).
Lantian et al. (2017)	Study 1	Need for uniqueness – Perceived level of disclosure vs. hiding of conspiracies from public view (Lantian et al., 2017).	Specific – BCTI (Swami et al., 2010, 2011).
Lantian et al. (2017)	Study 2	Need for uniqueness –SANU (Lynn & Snyder, 2002).	General – GCBS (Brotherton et al., 2013). General – SICBS (Lantian et al., 2016).
Lantian et al. (2017)	Study 3	Need for uniqueness – Writing task manipulation emphasising personal individuality vs. conformity (Lantian et al., 2017).	General – SICBS (Lantian et al., 2016).
Lantian et al. (2017)	Study 4	Need for uniqueness – Reading task manipulation emphasising individuality vs. conformity (Lantian et al., 2017).	General – SICBS (Lantian et al., 2016).
Bowes et al. (2020)	Study 1	Individual narcissism – NPI-13 (Gentile et al., 2013).	Specific – BCTI (Swami et al., 2010, 2011).

		Self-esteem – Rosenberg self-esteem scale (Rosenberg, 1965).	
Bowes et al. (2020)	Study 2	Individual narcissism – NPI-13 (Gentile et al., 2013). Self-esteem – Rosenberg self-esteem scale (Rosenberg, 1965).	Specific – BCTI (Swami et al., 2010, 2011).
Bowes et al. (2020)	Study 3	Individual narcissism – NPI-13 (Gentile et al., 2013).	Specific – BCTI (Swami et al., 2010, 2011).
Grigoryev & Batkhina (2020)	Study 1	Self-esteem – Rosenberg self-esteem scale (Rosenberg, 1965). Individual narcissism – Dark triad (Jonason & Webster, 2010).	Mentality – CMQ (Bruder et al., 2013).
Pummerer & Sassenberg (2020)	Study 1	Reactance – Hong Psychological Reactance Scale (Hong & Page, 1989). Need for uniqueness –SANU (Lynn & Snyder, 2002).	Mentality – CMQ (Imhoff & Bruder, 2014). Specific – Five items from Lewandowsky et al. (2013).
Pummerer & Sassenberg (2020)	Study 2	Reactance – Hong Psychological Reactance Scale (Hong & Page, 1989). Need for uniqueness – Scale (Snyder & Fromkin, 1977; Lynn & Harris, 1997).	Mentality – CMQ (Imhoff & Bruder, 2014). Specific – Six items from Lewandowsky et al. (2013).
Pummerer & Sassenberg (2020)	Study 3	Need for uniqueness – Scale (Lynn & Snyder, 2002; Schumpe et al., 2016).	Mentality – CMQ (Imhoff & Bruder, 2014). Specific – Five items from Lewandowsky et al. (2013).
Stieger et al. (2013)	Study 1	Self-esteem – Rosenberg self-esteem scale (Rosenberg, 1965).	Specific – Referring to the kidnapping of Natascha Kampush (Stieger et al., 2013).

			Specific – BCTI (Swami et al., 2010, 2011).
Biddlestone, Green, & Douglas (2020)	Study 1	Need for uniqueness –SANU (Lynn & Snyder, 2002).	Specific – Referring to the COVID-19 pandemic (Biddlestone, Green, & Douglas, 2020). General – GCBS (Brotherton et al., 2013).
Teovanović et al. (2020)	Study 1	Knowledge overestimation – Referring to the COVID-19 pandemic (Teovanović et al., 2020).	Specific – Referring to the COVID-19 pandemic (Teovanović et al., 2020).
Cichocka, Marchlewska, & Golec de Zavala (2016)	Study 1	Individual narcissism – Simplified NPI (Ang & Yusof, 2006). Self-esteem – Rosenberg self-esteem scale (Rosenberg, 1965).	General – GCBS (Brotherton et al., 2013).
Cichocka, Marchlewska, & Golec de Zavala (2016)	Study 2	Individual narcissism – Simplified NPI (Ang & Yusof, 2006). Self-esteem – SISE (Robins et al., 2001).	General – GCBS (Brotherton et al., 2013).
Cichocka, Marchlewska, & Golec de Zavala (2016)	Study 3	Individual narcissism – Simplified NPI (Ang & Yusof, 2006). Self-esteem – SISE (Robins et al., 2001).	Specific – CBS (Douglas et al., 2015).
Díaz & Cova (2021)	Pilot Study 1	Need for uniqueness – Reading task manipulation emphasising individuality vs. conformity (Lantian et al., 2017).	General – SICBS (Lantian et al., 2016).
Díaz & Cova (2021)	Study 1a	Reactance – Hong Psychological Reactance Scale (Hong & Page, 1989). Individual narcissism – NPI-16 (Ames et al., 2006).	General – SICBS (Lantian et al., 2016).

	Díaz & Cova (2021)	Study 1b	Reactance – Hong Psychological Reactance Scale (Hong & Page, 1989). Individual narcissism – NPI-16 (Ames et al., 2006).	General – SICBS (Lantian et al., 2016).
Relational	Davis et al. (2018)	Study 2	Social value affirmation – Manipulation in social context (Davis & Reyna, 2015).	Specific – Referring to the government conspiring against African Americans (Crocker et al., 1999). Specific – Popular conspiracy theories (Davis et al., 2018).
	Imhoff et al. (2018)	Study 1	Anomie – MOS Alienation Scale (Travis, 1993).	Mentality – CMQ (Imhoff & Bruder, 2014).
	Moulding et al. (2016)	Study 1	Isolation – DAS (Dean, 1961).	Specific – BCTI (Swami et al., 2010, 2011).
	Moulding et al. (2016)	Study 2	Isolation – DAS (Dean, 1961).	Specific – BCTI (Swami et al., 2010, 2011). General – GCBS (Brotherton et al., 2013). Mentality – CMQ (Bruder et al., 2013).
	Poon et al. (2016)	Study 1	Ostracism – Ostracism Experience Scale (Carter-Sowell, 2010; Gilman et al., 2013).	Specific – Popular conspiracy theories (Lewandowsky et al., 2013).
	Poon et al. (2016)	Study 2	Ostracism – Ostracism recall manipulation (Poon et al., 2015).	Specific – Popular conspiracy theories (Lewandowsky et al., 2013).
	Poon et al. (2016)	Study 3	Ostracism – High vs. low number of social media likes manipulation (Poon, 2019; Wolf et al., 2015).	Specific – Popular conspiracy theories (Lewandowsky et al., 2013).
	Poon et al. (2016)	Study 4	Ostracism – Ostracism recall manipulation (Poon et al., 2015).	General – GCBS (Brotherton et al., 2013).

	Suessenbach & Moore (2019)	Study 1	Leadership – DoPL (Suessenbach et al., 2019).	Specific – Pro-Trump (Suessenbach & Moore, 2019).
	van Prooijen (2015)	Study 1	Exclusion – Thought manipulation of "future together/alone" (Twenge et al., 2001).	Specific – Popular conspiracy theories (van Prooijen, 2015).
	van Prooijen (2015)	Study 2	Exclusion – Thought manipulation of "future together/alone" (Twenge et al., 2001).	Specific – Referring to oil companies (van Prooijen, 2015).
Collective	Bertin (2018)	Study 1	Social competition – Scale (Bernache-Assolant et al., 2014).	Mentality – CMQ (Bruder et al., 2013). General – SICBS (Lantian et al., 2016).
	Bertin (2018)	Study 2	Secure identification – French OSIO (Schubert & Otten, 2002).	Specific – Referring to the JFK assassination (Bertin, 2018).
	Biddlestone & Cichocka (2019)	Study 1	Defensive ingroup identity – National collective narcissism (Golec de Zavala, Cichocka, & Bilewicz, 2013). Secure identification – National ingroup satisfaction (Leach et al., 2008).	General – GCBS (Brotherton et al., 2013).
	Biddlestone, Cichocka et al. (2021)	Study 3	Defensive ingroup identity – US national collective narcissism (Golec de Zavala, Cichocka, & Bilewicz, 2013). Secure identification – US national ingroup satisfaction (Leach et al., 2008).	General – Institution items from GCBS (Brotherton et al., 2013).
	Bilewicz et al. (2013)	Study 1	Victimhood – Competitive Polish (Bilewicz et al., 2013; Krzeminski, 2002).	Specific – Referring to the Smolensk plane crash (Bilewicz et al., 2013). Stereotype – Anti-Semitic conspiracy stereotypes (Kofta & Sedek, 2005).
	Cichocka, Marchlewska, Golec de Zavala et al. (2016)	Study 2	Defensive ingroup identity – Polish national collective narcissism (Golec de Zavala et al., 2009).	Specific – Anti-Russian conspiracy theories (Cichocka, Marchlewska, Golec de Zavala et al., 2016).

		Secure identification – Polish national (Cameron et al., 2004).	
Cichocka, Marchlewska, Golec de Zavala et al. (2016)	Study 3	Defensive ingroup identity – Polish national collective narcissism (Golec de Zavala, Cichocka, & Bilewicz, 2013). Secure identification – Polish group-level self-investment (Leach et al., 2008).	General – GCBS (Brotherton et al., 2013).
Cichocka, Marchlewska, & Golec de Zavala (2016)	Study 2	Defensive ingroup identity – US national collective narcissism (Golec de Zavala, Cichocka, & Bilewicz, 2013).	General – GCBS (Brotherton et al., 2013).
Cichocka, Marchlewska, & Golec de Zavala (2016)	Study 3	Humanity esteem – Humanity-Esteem Scale (Luke & Maio, 2009).	Specific – CBS (Douglas et al., 2015).
Crocker et al. (1999)	Study 1	Secure identification – Racial CSE (Crocker et al., 1994).	Specific – Referring to the government conspiring against African Americans (Crocker et al., 1999).
Davis et al. (2018)	Study 2	Social devaluation – Ingroup (Davis & Reyna, 2015).	Specific – Referring to the government conspiring against African Americans (Crocker et al., 1999). Specific – Popular conspiracy theories (Davis et al., 2018).
Douglas & Leite (2017)	Study 1	Secure identification – Workplace commitment (Allen & Meyer, 1990). Secure identification – Workplace identification (Edwards & Peccei, 2007).	Specific – Workplace conspiracy theories (Douglas & Leite, 2017). Specific – Popular conspiracy theories (Douglas et al., 2015).
Golec de Zavala & Cichocka (2012)	Study 2	Defensive ingroup identity – Polish national collective narcissism (Golec de Zavala et al., 2009).	Stereotype – Anti-Semitic conspiracy stereotypes (Kofta & Sedek, 2005).

		Secure identification – Polish IIS (Tropp & Wright, 2001).	
Golec de Zavala & Federico (2018)	Study 1	Defensive ingroup identity – US national collective narcissism (Golec de Zavala, Cichocka, & Bilewicz, 2013). Secure identification – US national single item (Golec de Zavala, Cichocka, & Bilewicz, 2013).	Mentality – Conspiracy thinking (Uscinski et al., 2016).
Imhoff et al. (2018)	Study 2	Defensive ingroup identity – German national glorification (Roccas et al., 2006). Secure identification – German national attachment (Roccas et al., 2006).	Mentality – CMQ (Imhoff & Bruder, 2014).
Imhoff et al. (2018)	Study 3	Defensive ingroup identity – US national glorification (Roccas et al., 2006). Secure identification – US national attachment (Roccas et al., 2006).	Mentality – CMQ (Imhoff & Bruder, 2014).
Imhoff et al. (2018)	Study 4	Defensive ingroup identity – US national glorification (Roccas et al., 2006). Secure identification – US national attachment (Roccas et al., 2006).	Mentality – CMQ (Imhoff & Bruder, 2014).
Kofta et al. (2020)	Study 1	Defensive ingroup identity – Polish national collective narcissism (Golec de Zavala et al., 2009).	Stereotype – Anti-Semitic conspiracy stereotypes (Bilewicz et al., 2013).
Kofta et al. (2020)	Study 4	Defensive ingroup identity – British national collective narcissism (Golec de Zavala et al., 2009).	Stereotype – Anti-Semitic, anti-Russian, and anti-German conspiracy stereotypes (Bilewicz et al., 2013). General – GCBS (Brotherton et al., 2013).

Lamberty et al. (2018)	Study 1	Defensive ingroup identity – US national glorification (Roccas et al., 2006). Secure identification – US national attachment (Roccas et al., 2006).	Mentality – CMQ (Imhoff & Bruder, 2014).
Marchlewska et al. (2019)	Study 1	Defensive ingroup identity – Catholic collective narcissism (Golec de Zavala et al., 2009).	Specific – Gender conspiracy theories (Marchlewska et al., 2014).
Marchlewska et al. (2019)	Study 2	Defensive ingroup identity – Catholic collective narcissism (Golec de Zavala, Cichocka, & Bilewicz, 2013).	Specific – Gender conspiracy theories (Marchlewska et al., 2014).
Mashuri & Zaduqisti (2014)	Study 1	Secure identification – Islamic (Mashuri & Zaduqisti, 2014). Victimhood – Competitive Islamic (Sullivan et al., 2012). Defensive ingroup identification – Indonesian national (Mashuri et al., 2016).	Specific – Anti-Western conspiracy theories (Mashuri & Zaduqisti, 2014).
Pavlopoulos & Theologitis (2019)	Study 1	Defensive ingroup identity – Greek national blind patriotism (Schatz et al., 1999). Secure identification – Greek national constructive patriotism (Schatz et al., 1999).	Mentality – CMQ (Bruder et al., 2013).
Prot (2015)	Study 1A	Secure identification – Conservative ideology (Doosje et al., 1995; Nauroth et al., 2014).	Specific – Climate change (Prot, 2015).
Prot (2015)	Study 1B	Secure identification – Liberal ideology (Doosje et al., 1995; Nauroth et al., 2014).	Specific – Vaccines (Prot, 2015).
Sternisko, Cichocka, Cislak, et al. (2020)	Study 1	Defensive ingroup identity – US national collective narcissism (Ardag, 2019).	Specific – Referring to the COVID-19 pandemic (Sternisko, Cichocka, Cislak et al., 2020).

		Secure identification – US national (Postmes et al., 2013).	Specific – Popular conspiracy theories (Sternisko, Cichocka, Cislak et al., 2020).
Sternisko, Cichocka, Cislak, et al. (2020)	Study 2	Defensive ingroup identity – British national collective narcissism (Golec de Zavala, Cichocka, & Bilewicz, 2013). Secure identification – British national (Cameron, 2004).	Specific – Referring to the COVID-19 pandemic (Sternisko, Cichocka, Cislak et al., 2020).
Swami et al. (2017)	Study 1	Secure identification – British national CSE (Luhtanen & Crocker, 1992).	General – GCBS (Brotherton et al., 2013).
Uenal et al. (2020)	Study 2	Secure identification – US national CSE (Luhtanen & Crocker, 1992).	Specific – Islamophobic conspiracy theories (Uenal et al., 2020).

Note. BCTI = Belief in Conspiracy Theories Inventory; GCBS = Generic Conspiracist Beliefs Scale; SICBS = Single-Item Conspiracy Belief Scale; CMQ = Conspiracy Mentality Questionnaire; CBS = Conspiracist Beliefs Scale; LSES = Labile Self-Esteem Scale; SISE = Single-Item Self-Esteem; NCS-R = National Comorbidity Survey-Replication; SANU = Self-Attributed Need for Uniqueness; DoPL = Dominance, Prestige, and Leadership scale; B-NPI = Brief Pathalogical Narcissism Inventory; NPI = Narcissistic Personality Inventory; NPI-13 = 13-item Narcissistic Personality Inventory; NPI-16 = 16-item Narcissistic Personality Inventory; MOS = Margins of Society; DAS = Dean Alienation Scale; OSIO = Overlap of Self, Ingroup, and Outgroup scale; CSE = Collective Sefl-Esteem; IIS = Inclusion of Ingroup in the Self.

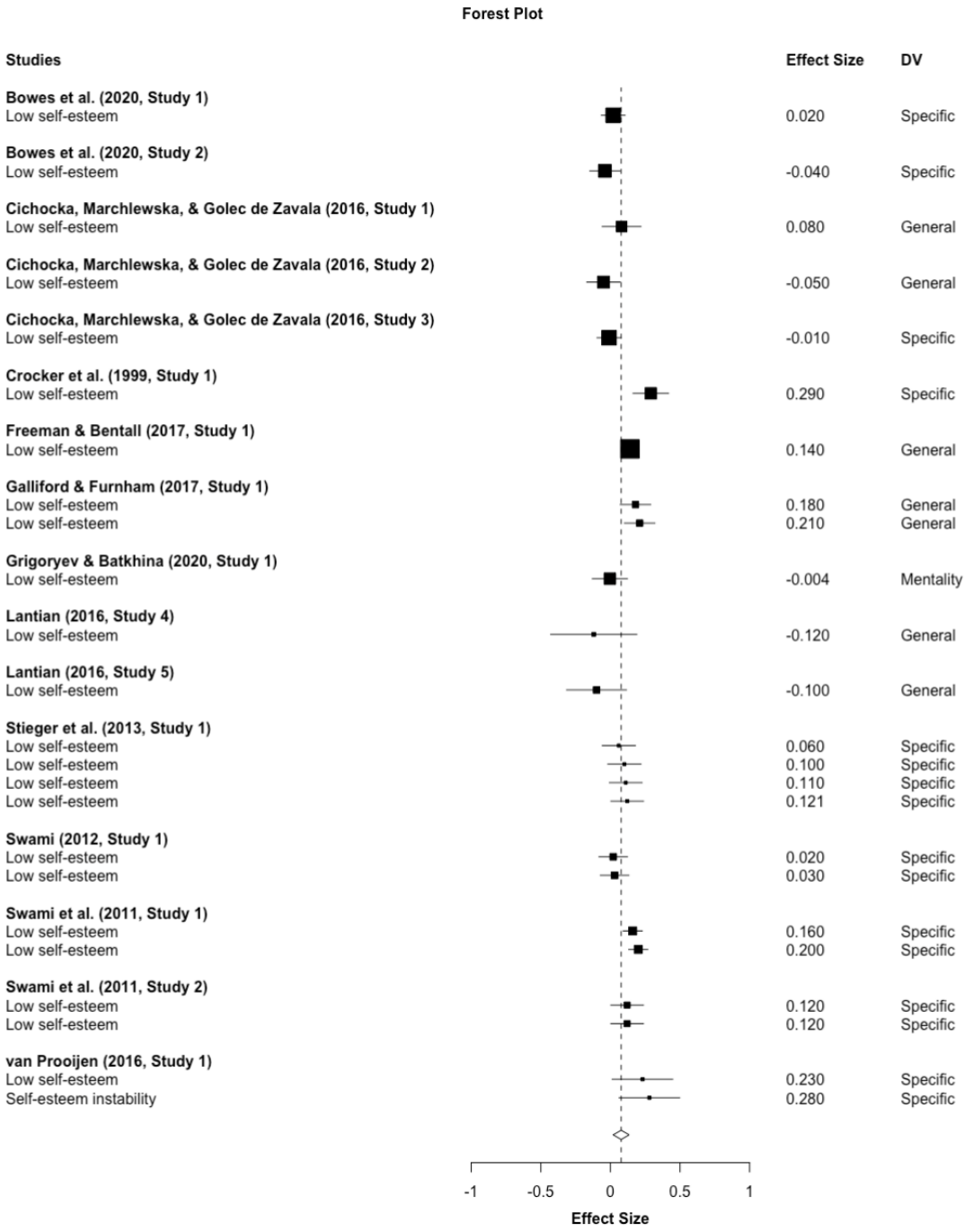
Appendix B: Forest plots for all motives in the meta-analysis (Chapter 2)

Individual self

Low self-esteem

Figure 2.6

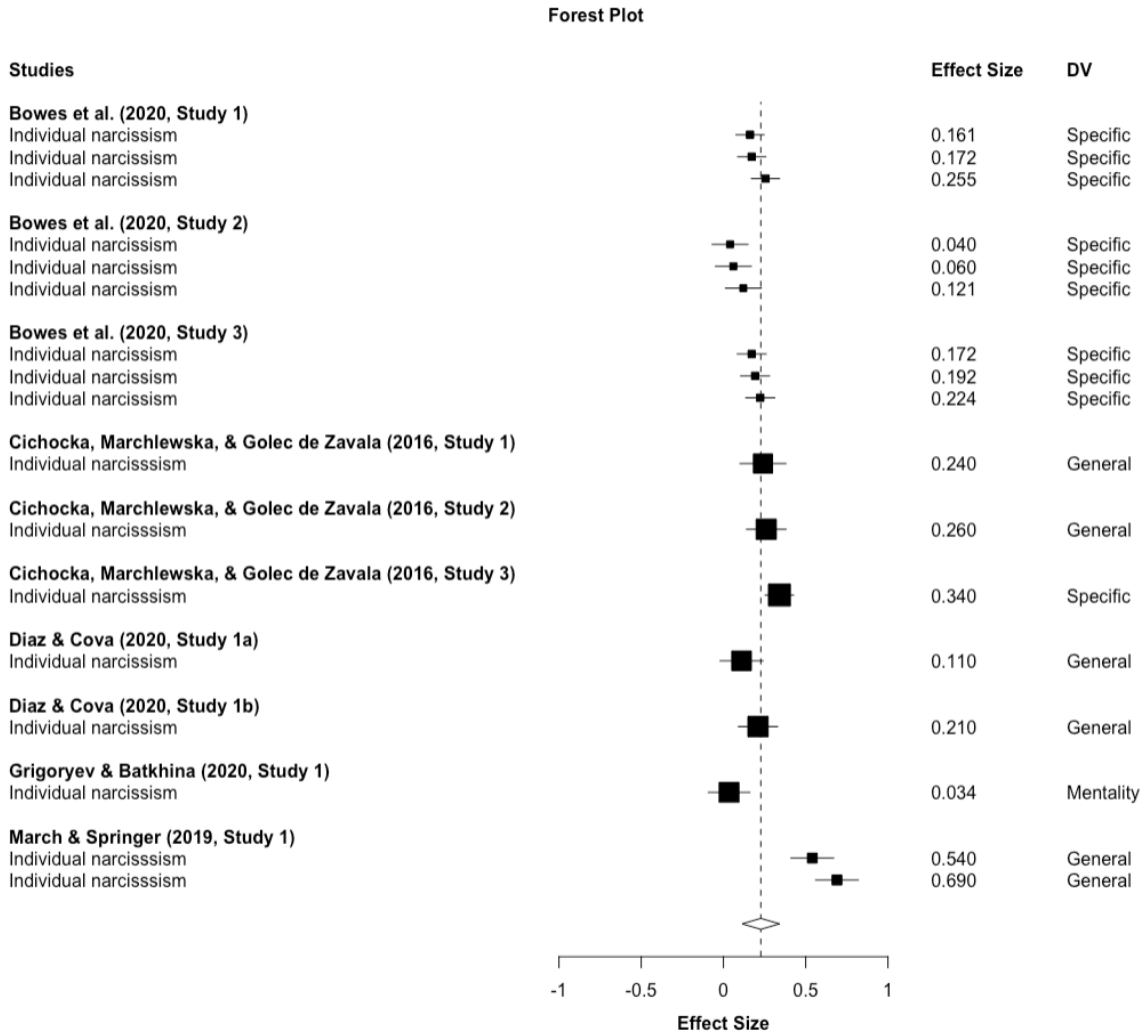
Forest Plot for the Low Self-Esteem Data



Individual narcissism

Figure 2.7

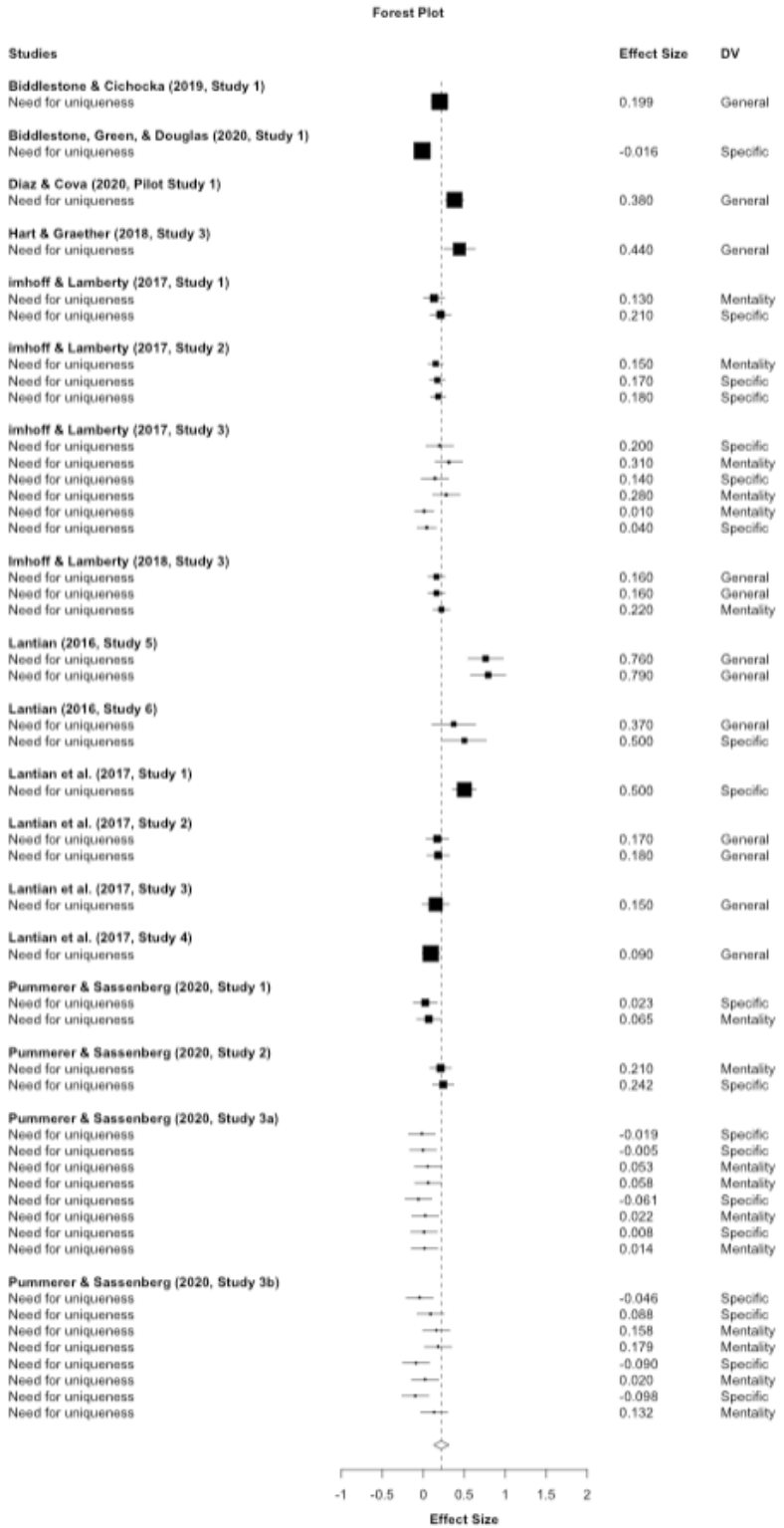
Forest Plot for the Individual Narcissism Data



The need for uniqueness

Figure 2.8

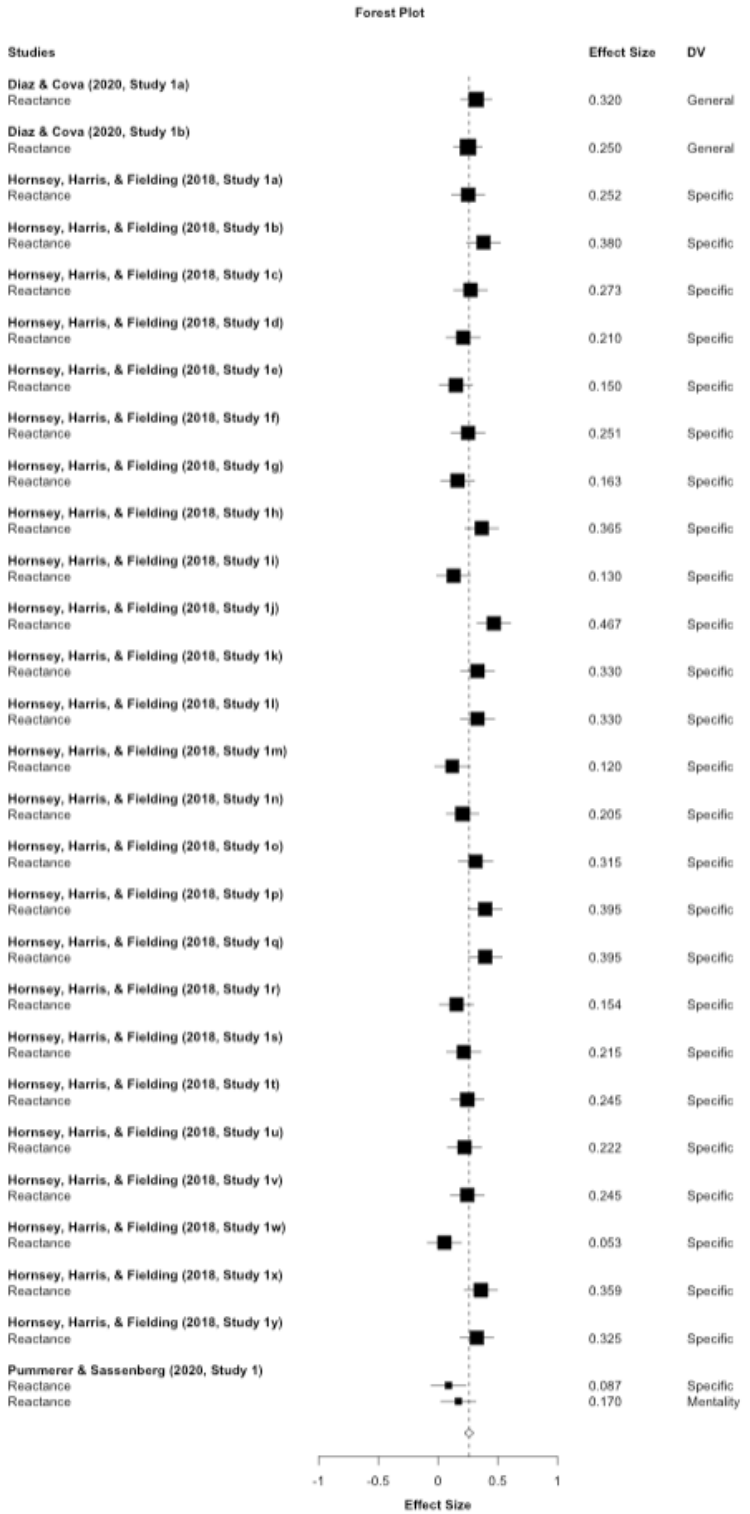
Forest Plot for the Need for Uniqueness Data



Reactance

Figure 2.9

Forest Plot for the Reactance Data

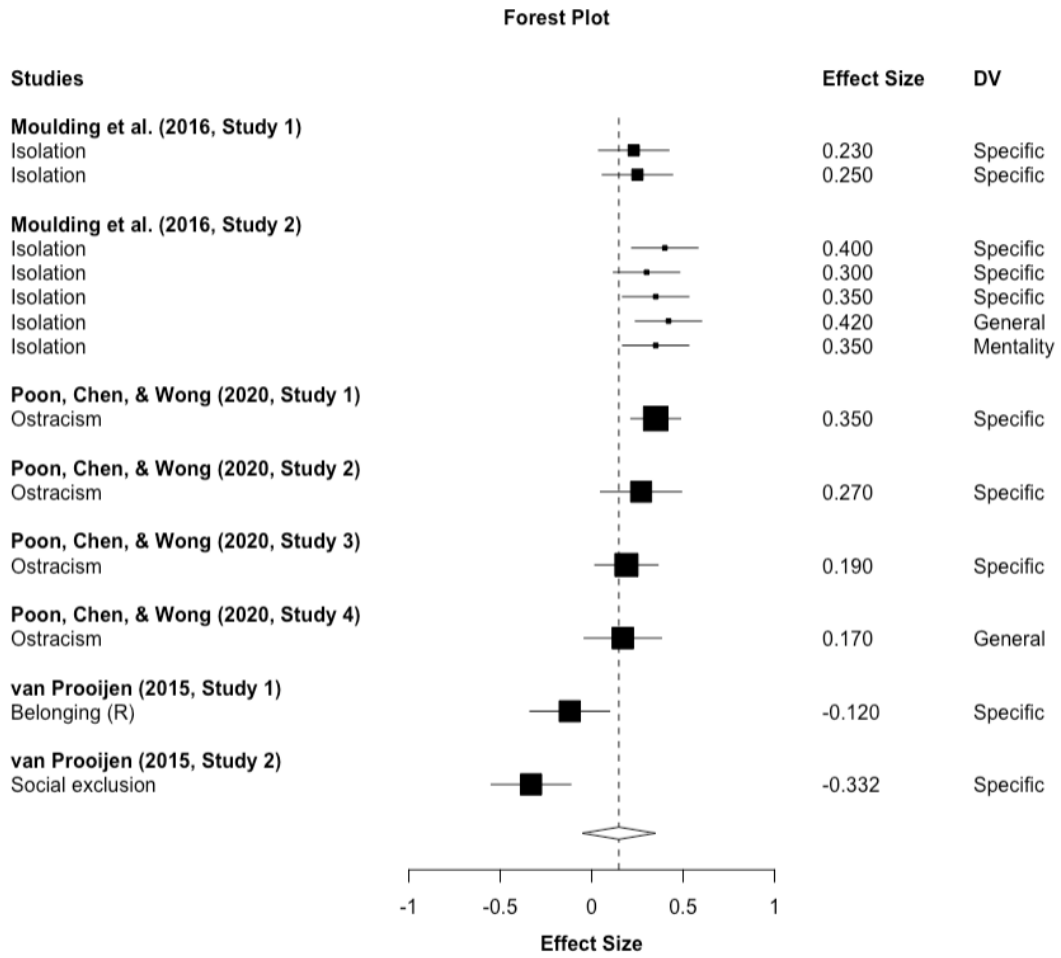


Relational self

Social exclusion

Figure 2.10

Forest Plot for the Social Exclusion Data

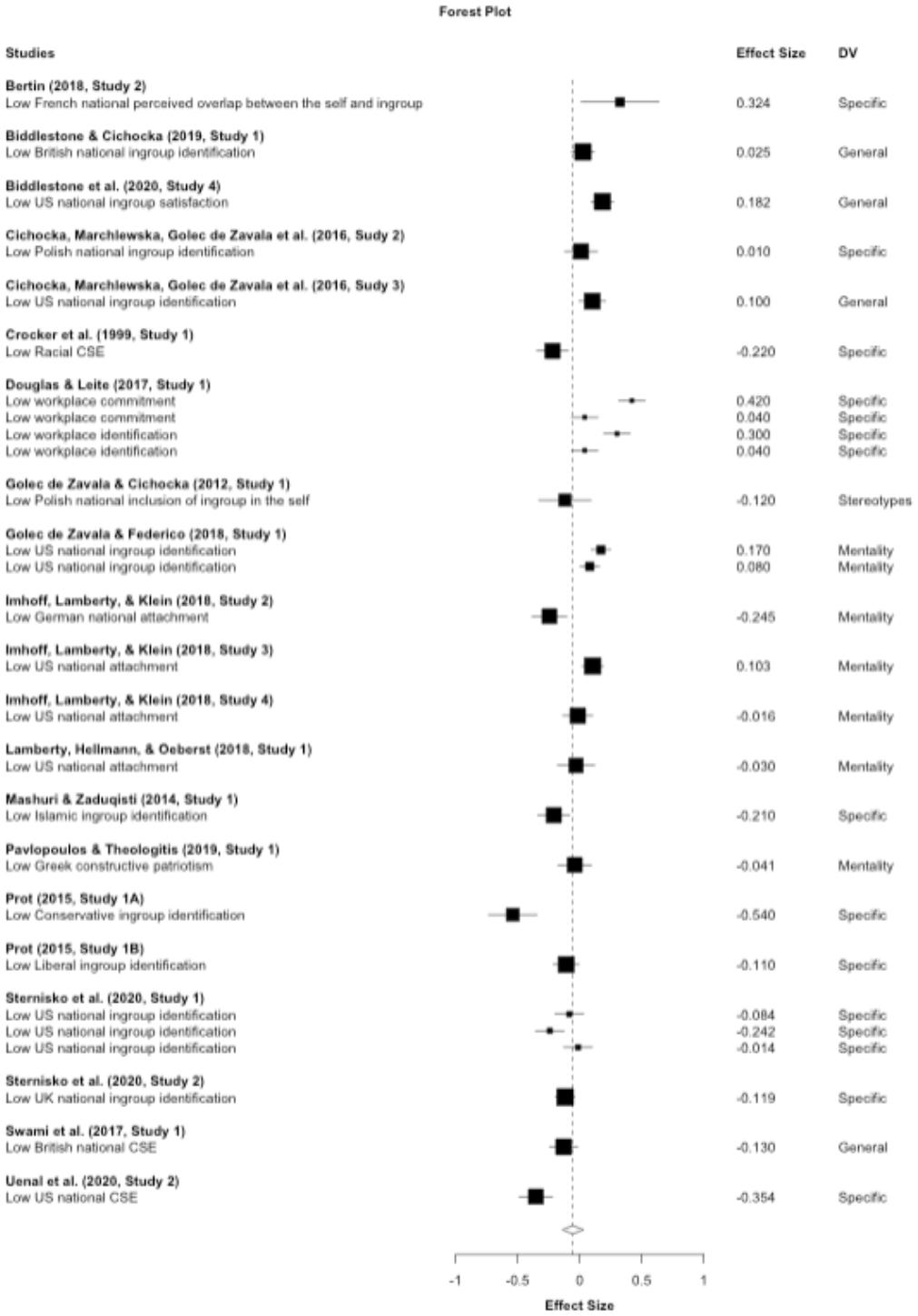


Collective self

Low ingroup identification

Figure 2.11

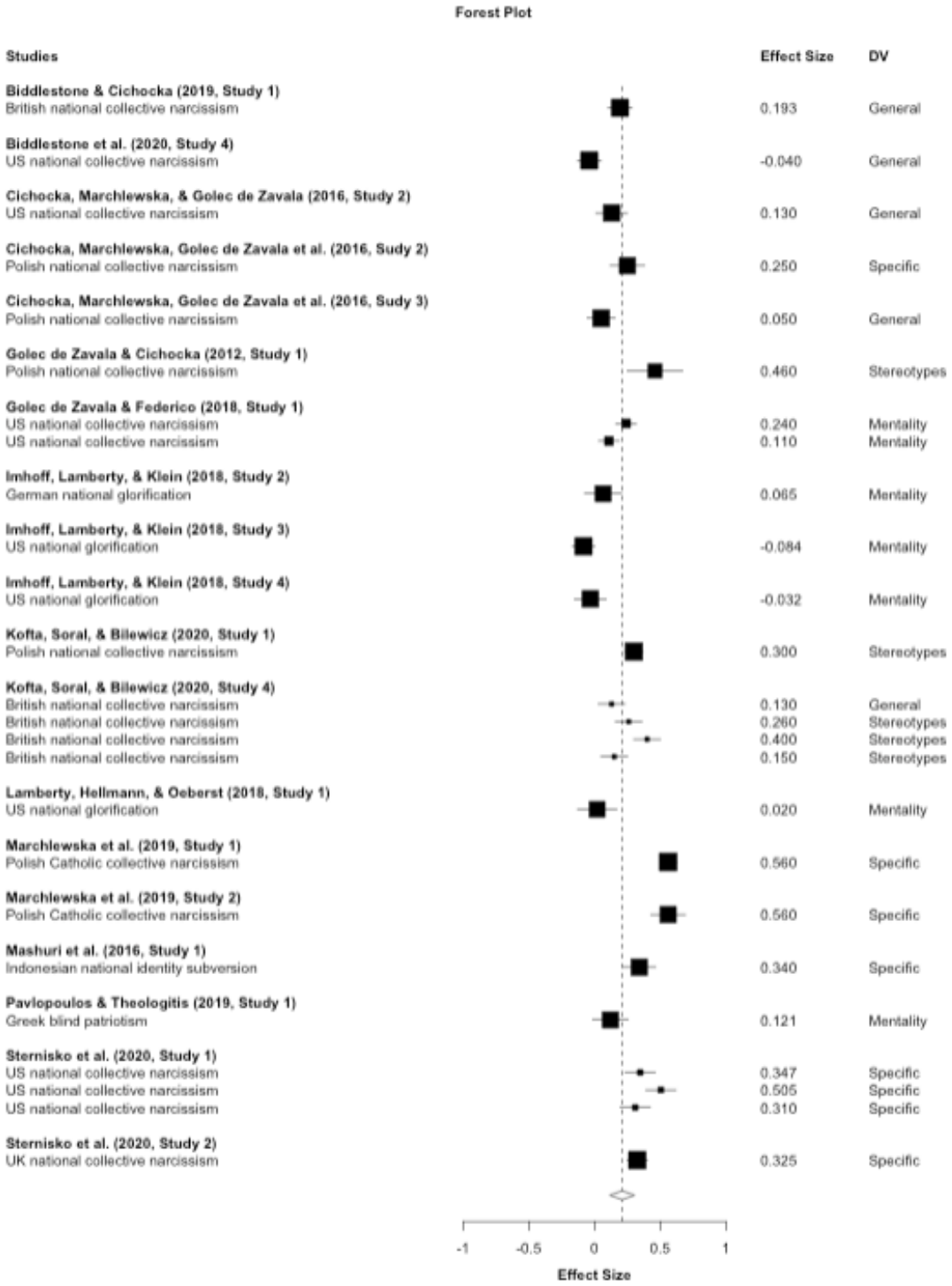
Forest Plot for the Low Ingroup Identification Data



Defensive ingroup identity

Figure 2.12

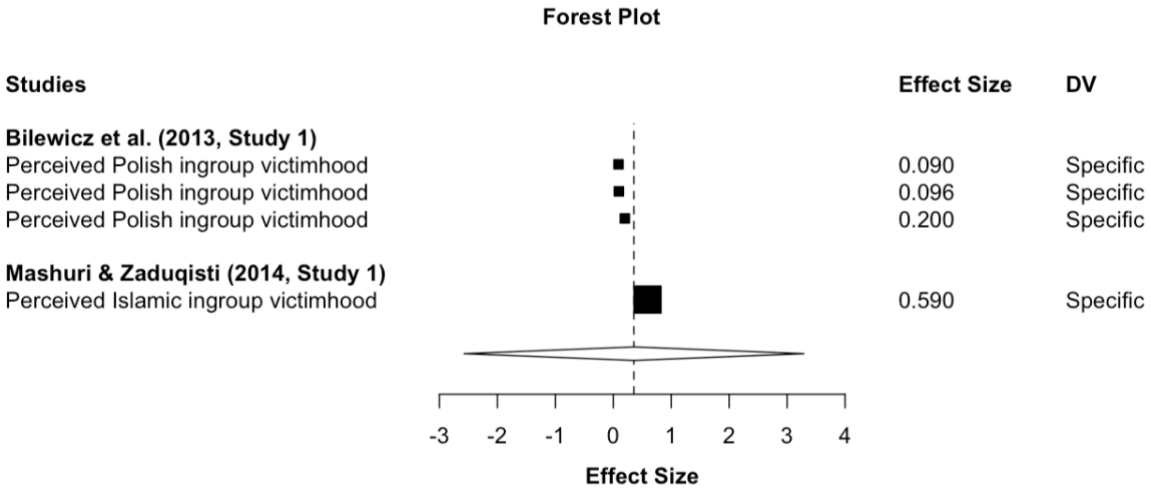
Forest Plot for the Defensive Ingroup Identity Data



Perceived ingroup victimhood

Figure 2.13

Forest Plot for the Perceived Ingroup Victimhood Data

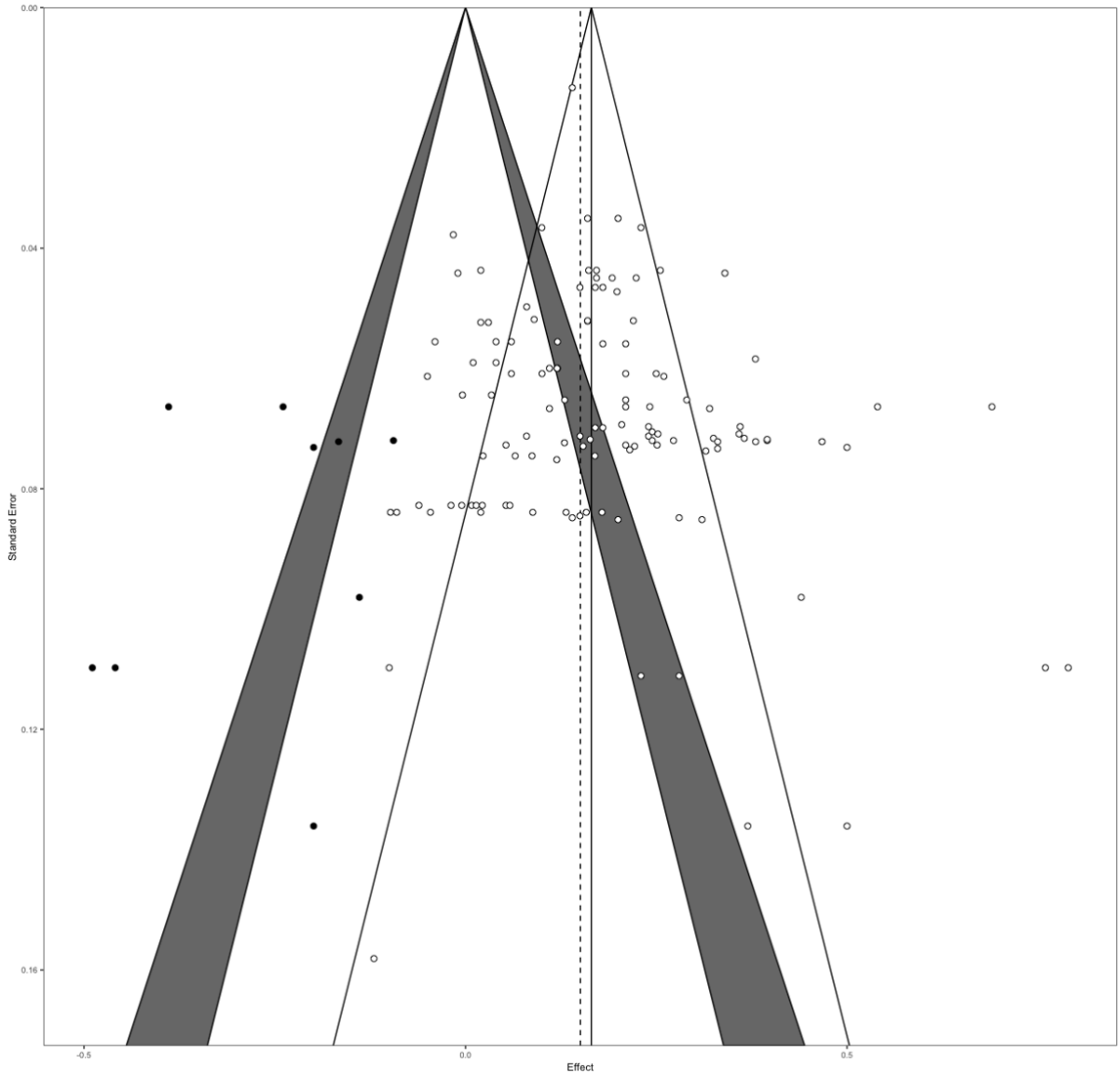


Appendix C: Contour-enhanced funnel plots for all motives in the meta-analysis (Chapter 2)

Individual self

Figure 2.14

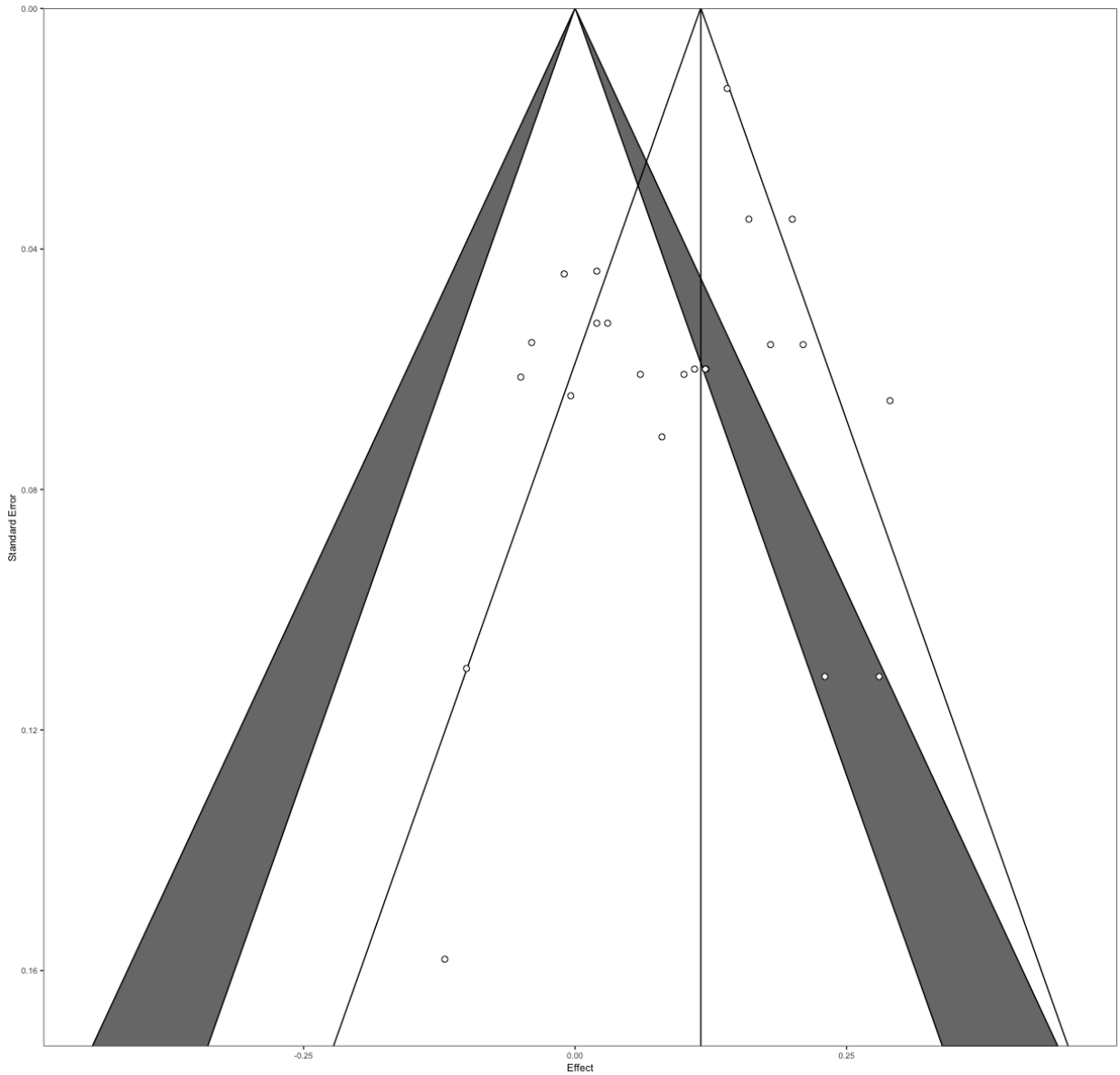
Contour-Enhanced Funnel Plot for the Individual Self Data



Low self-esteem

Figure 2.15

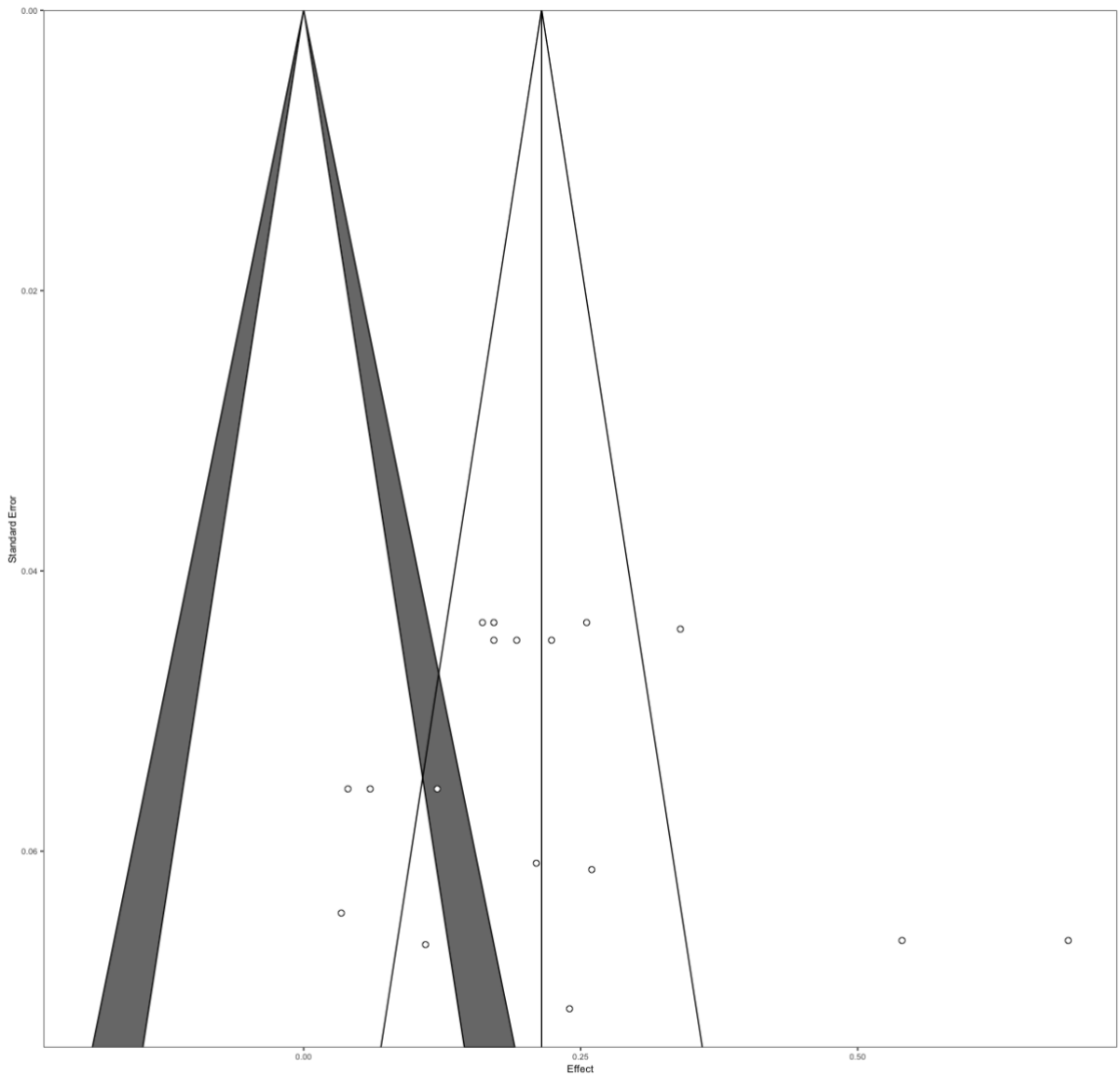
Contour-Enhanced Funnel Plot for the Low Self-Esteem Data



Individual narcissism

Figure 2.16

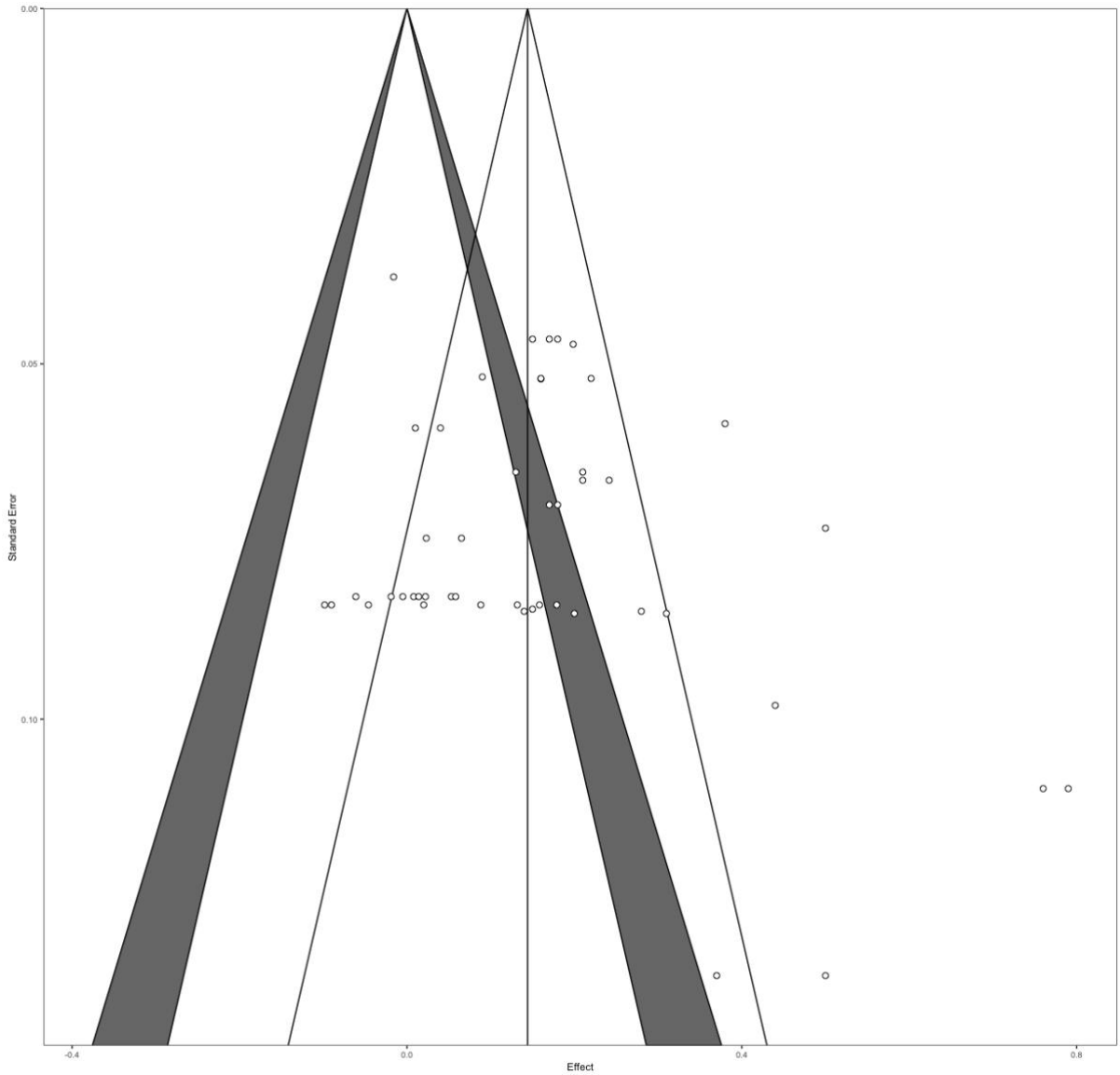
Contour-Enhanced Funnel Plot for the Individual Narcissism Data



The need for uniqueness

Figure 2.17

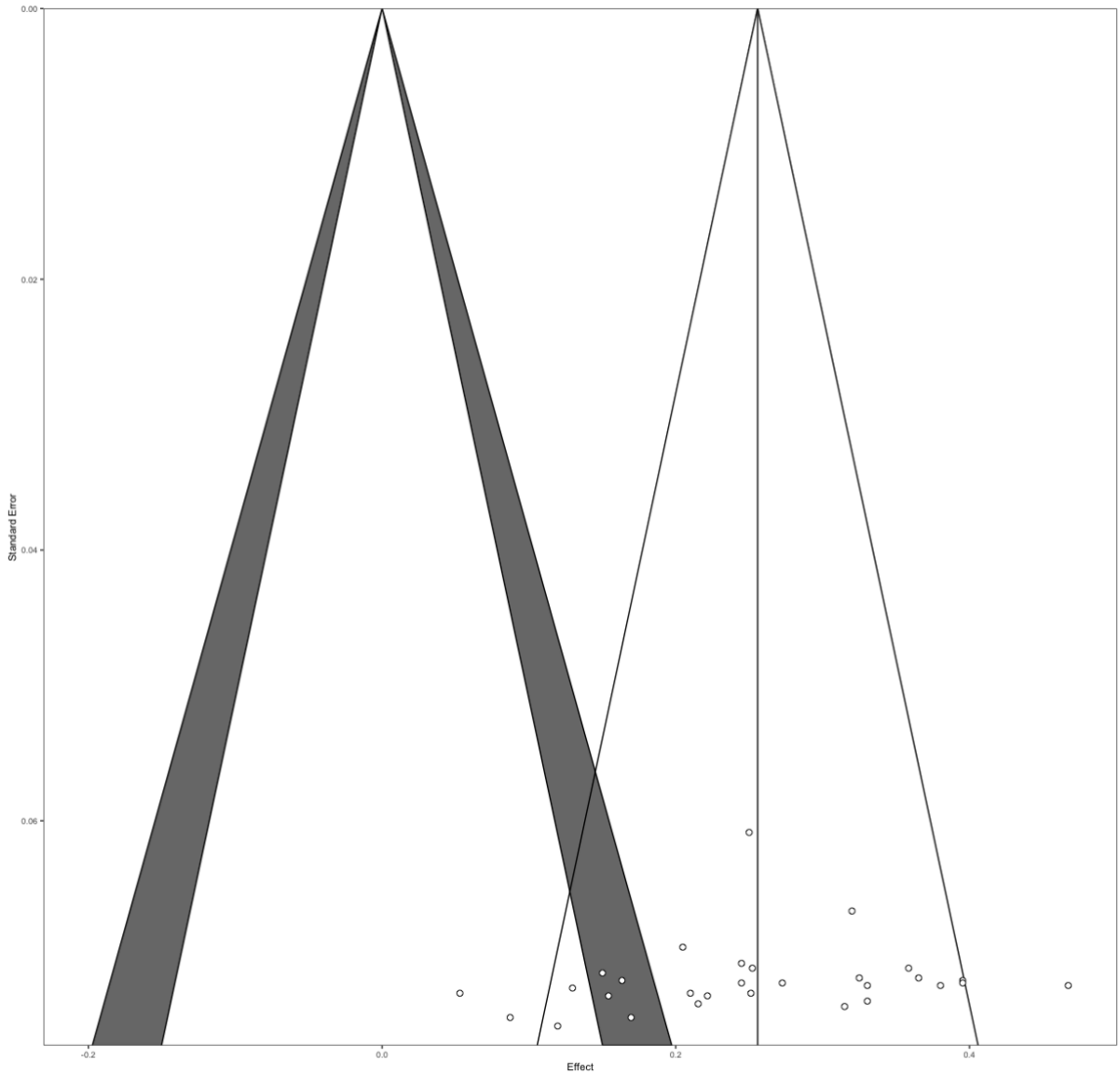
Contour-Enhanced Funnel Plot for the Need for Uniqueness Data



Reactance

Figure 2.18

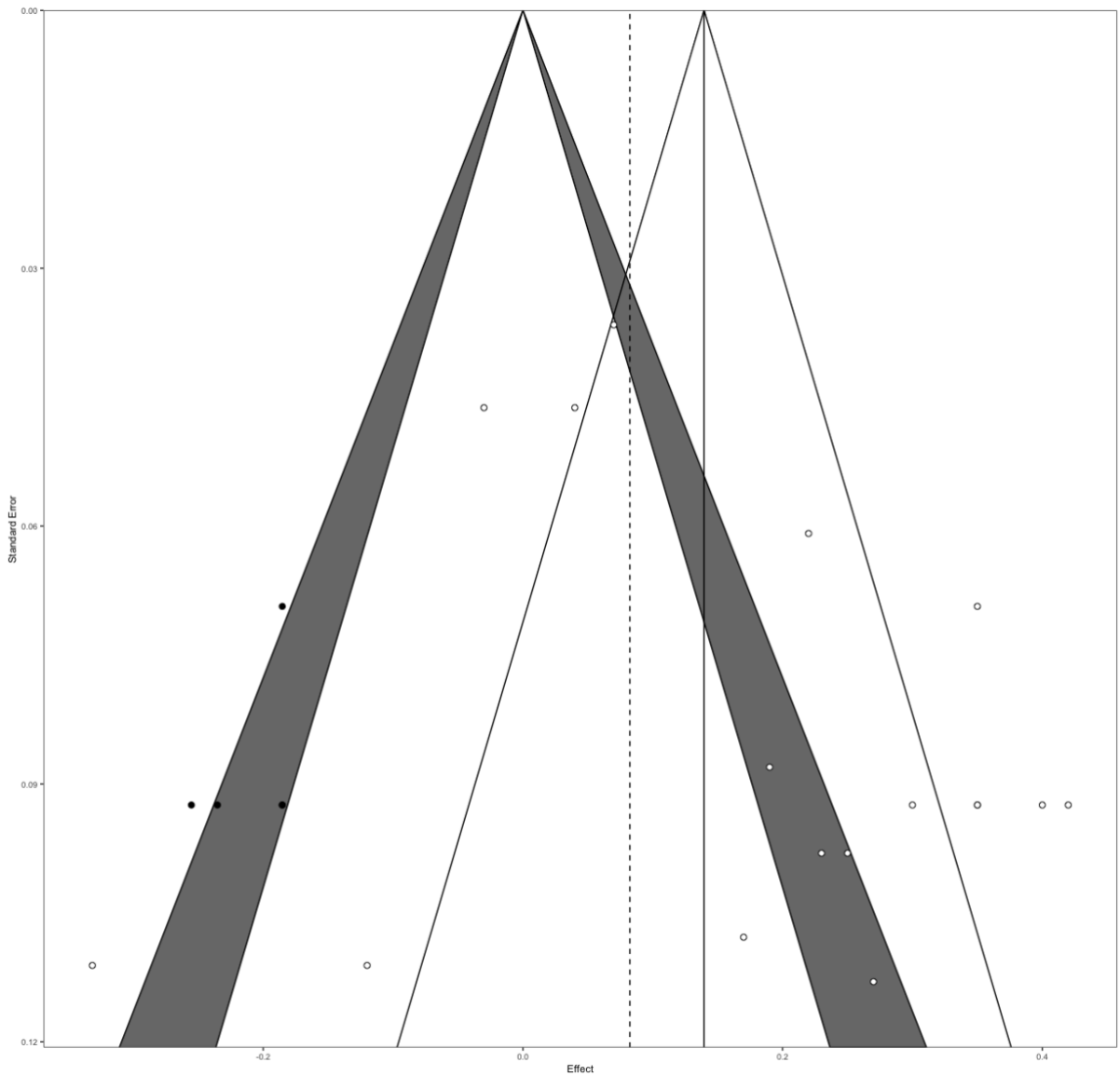
Contour-Enhanced Funnel Plot for the Reactance Data



Relational self

Figure 2.19

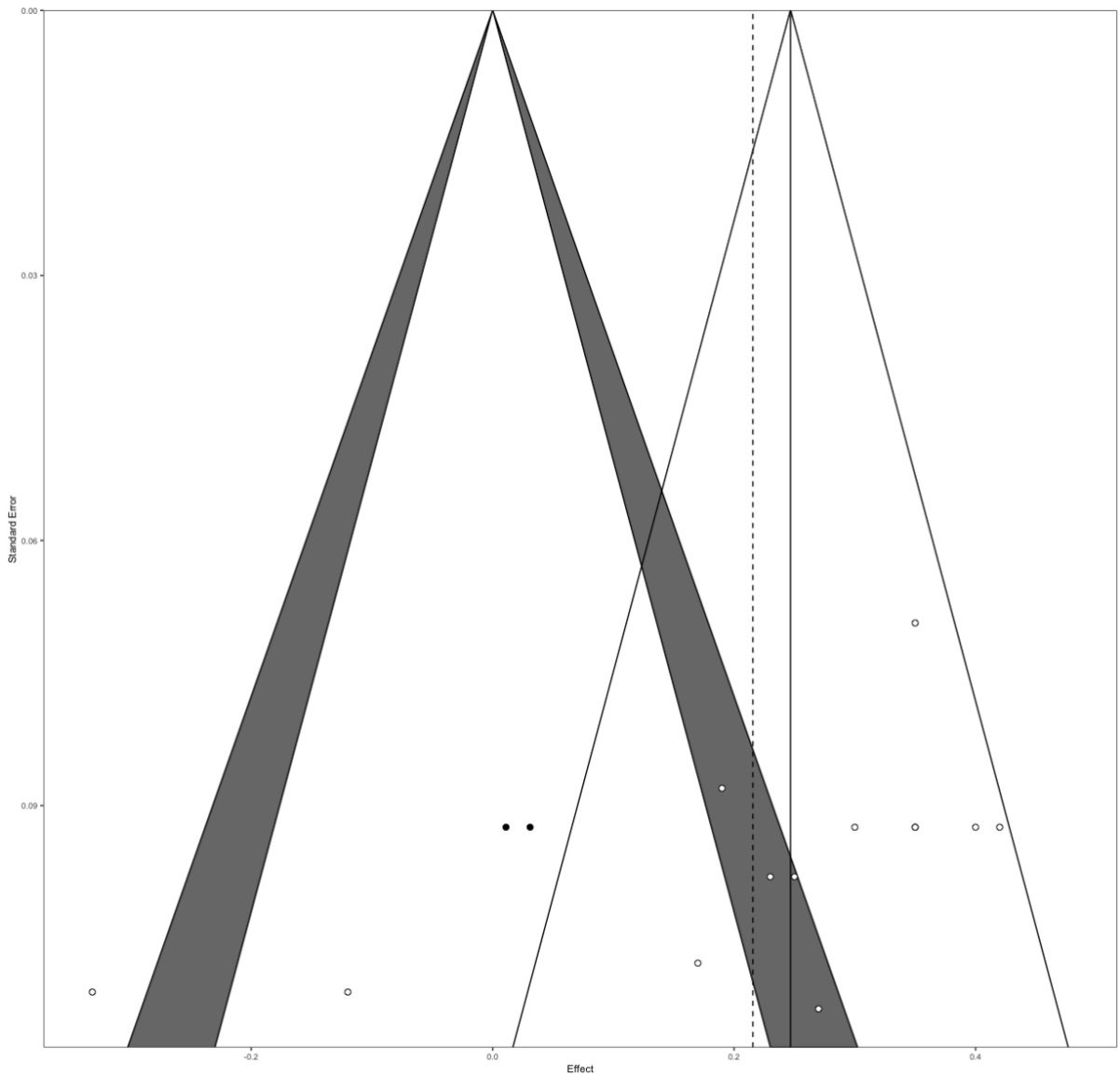
Contour-Enhanced Funnel Plot for the Relational Self Data



Social exclusion

Figure 2.20

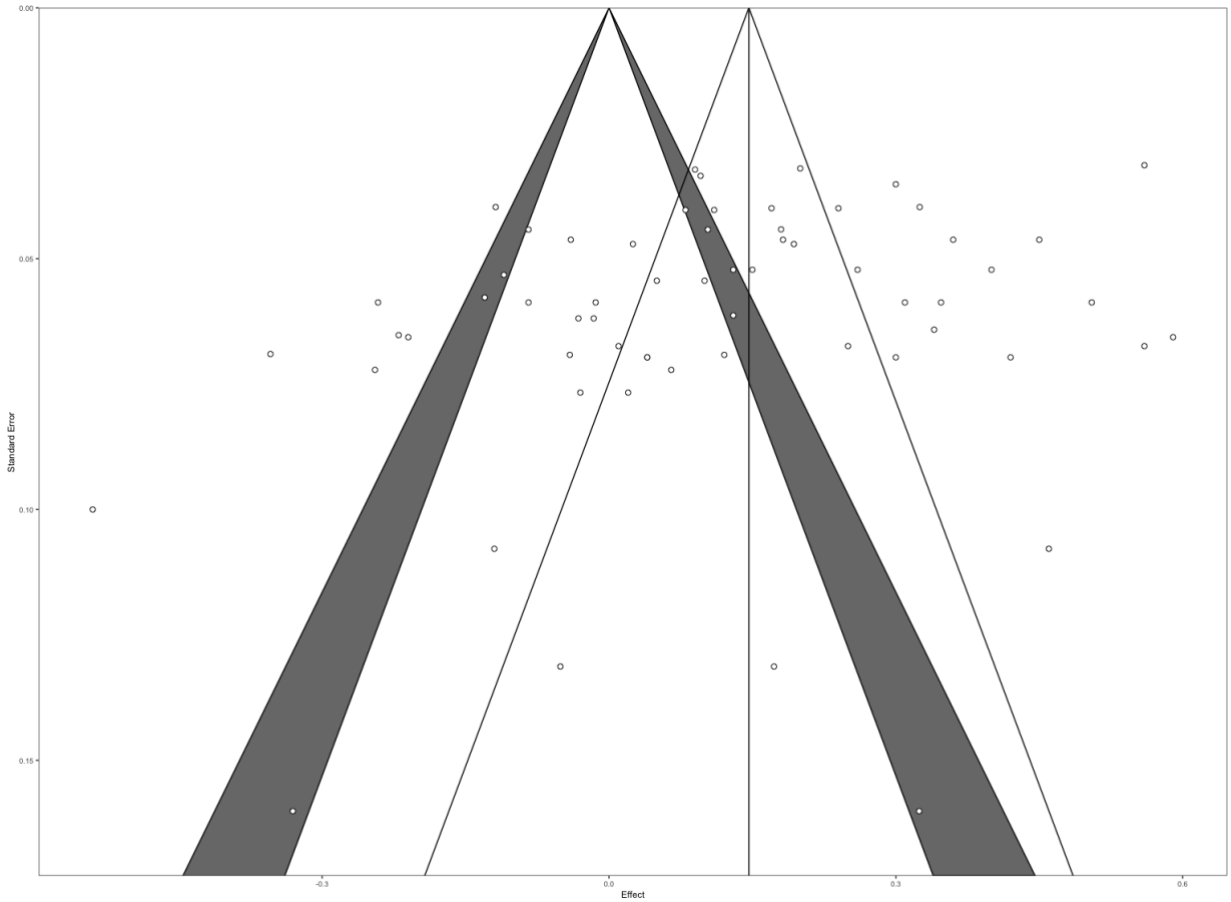
Contour-Enhanced Funnel Plot for the Social Exclusion Data



Collective self

Figure 2.21

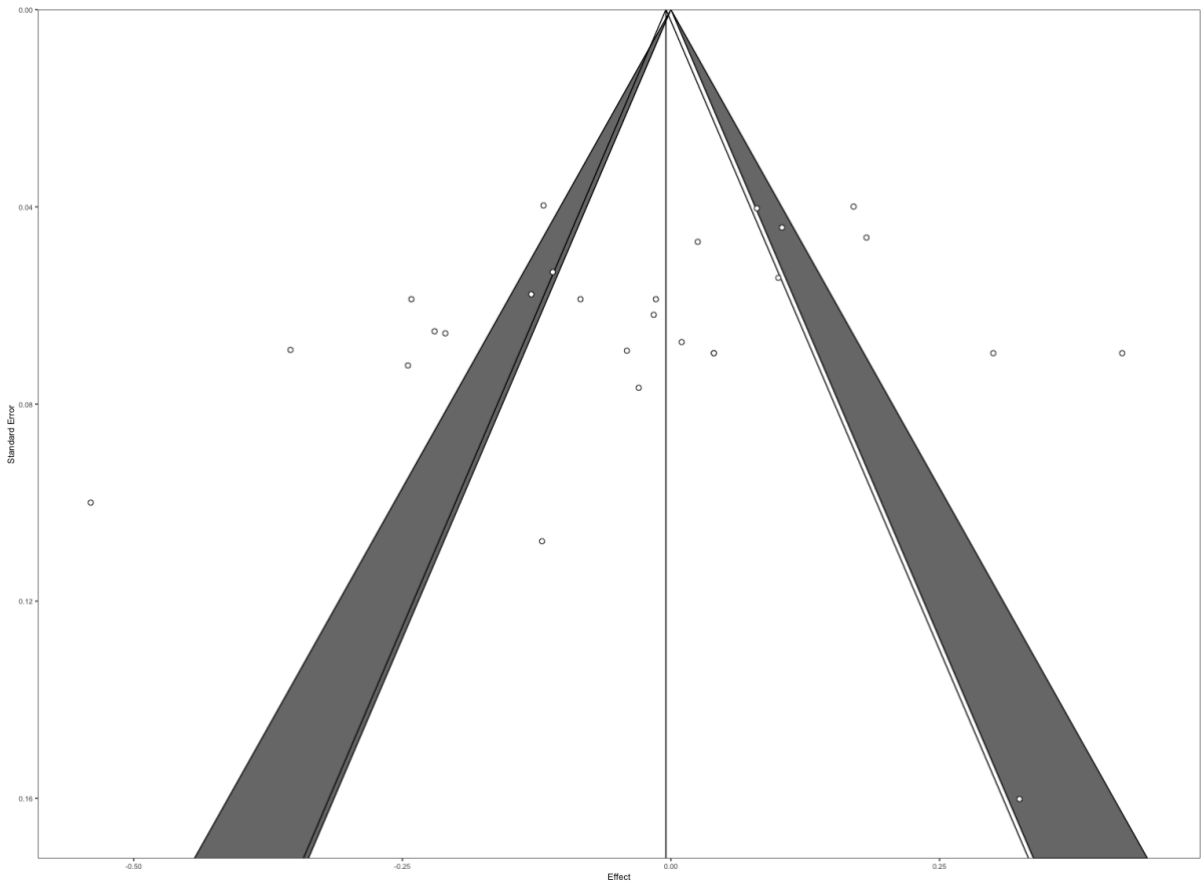
Contour-Enhanced Funnel Plot for the Collective Self Data



Low ingroup identification

Figure 2.22

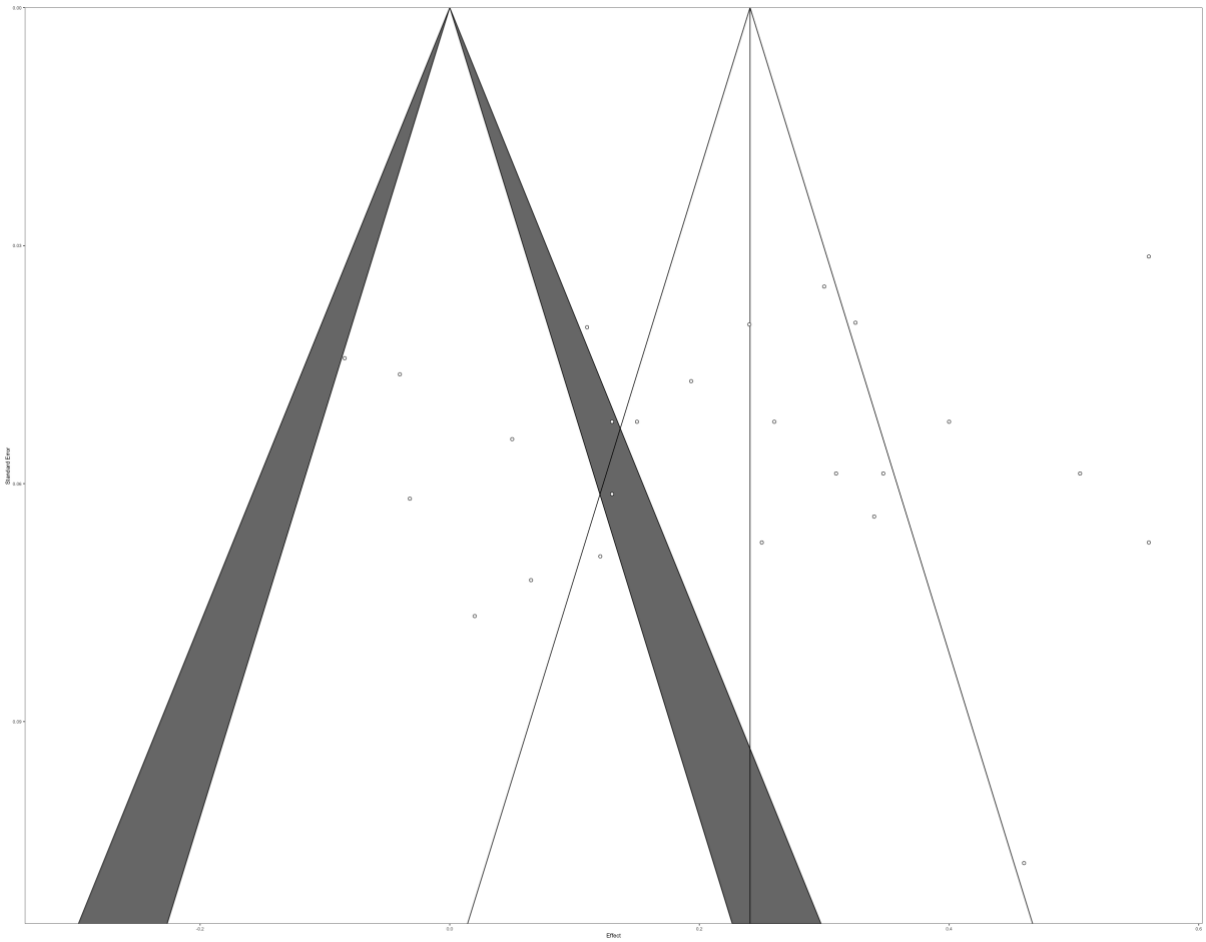
Contour-Enhanced Funnel Plot for the Low Ingroup Identification Data



Defensive ingroup identity

Figure 2.23

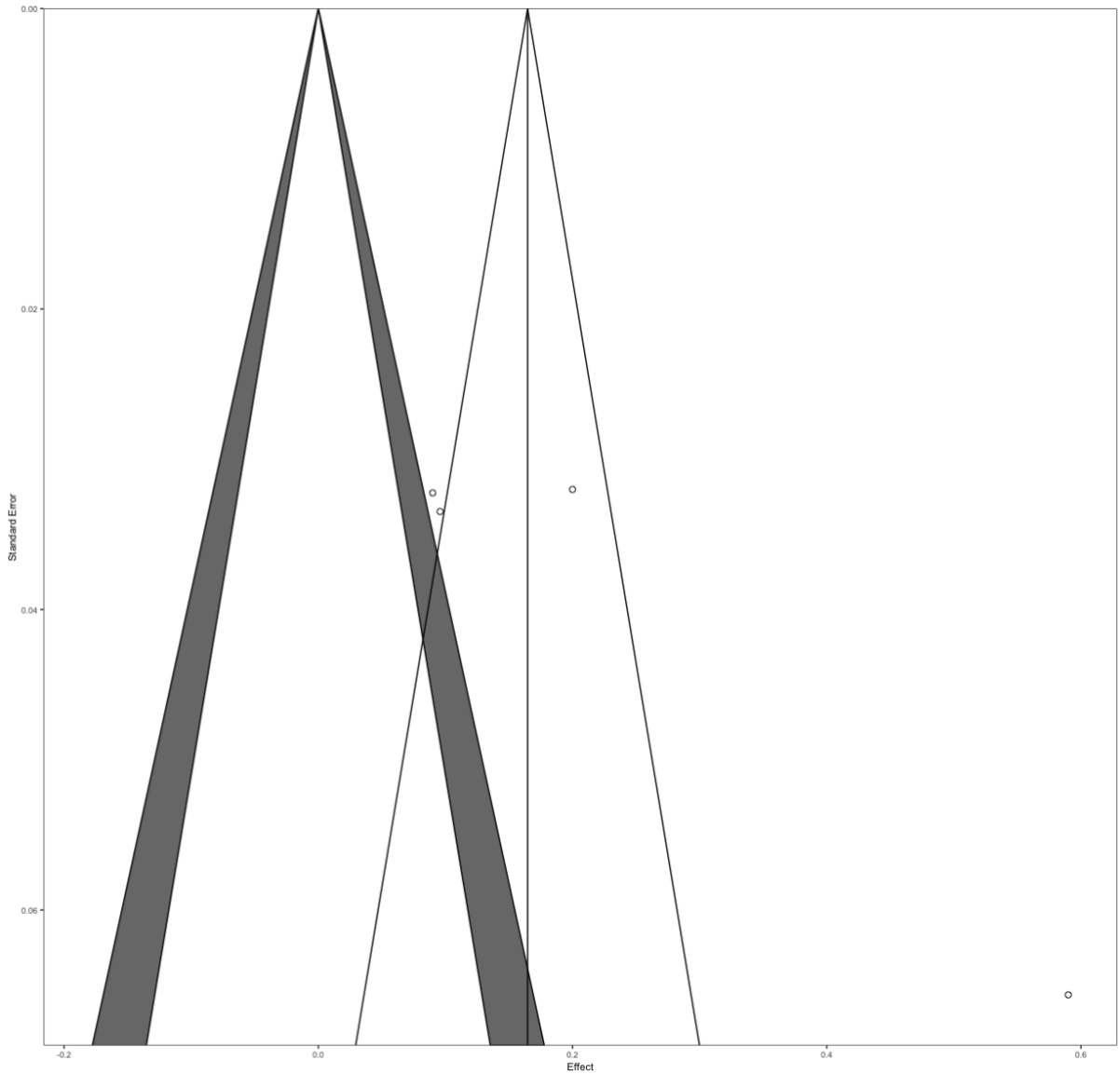
Contour-Enhanced Funnel Plot for the Defensive Ingroup Identity Data



Perceived ingroup victimhood

Figure 2.24

Contour-Enhanced Funnel Plot for the Perceived Ingroup Victimhood Data

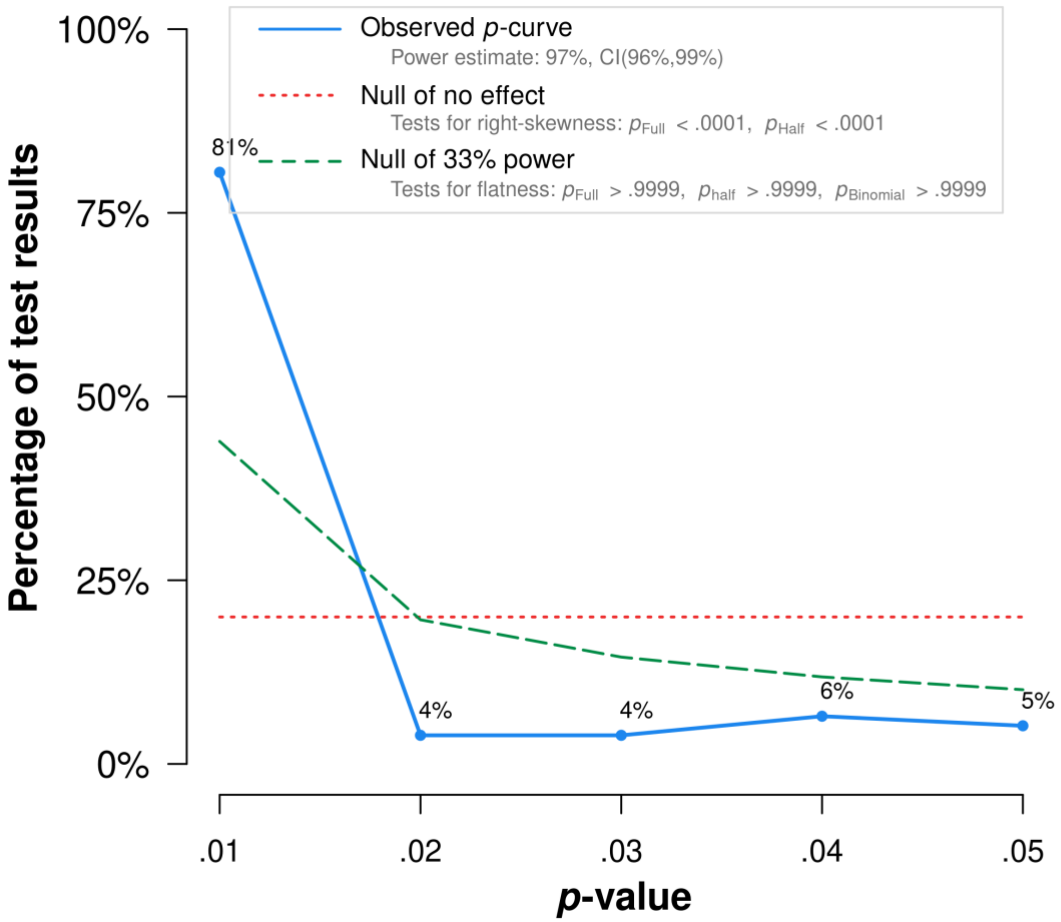


Appendix D: P-Curve plots for all motives in the meta-analysis (Chapter 2)

Individual self

Figure 2.25

P-Curve for the Individual Self Data

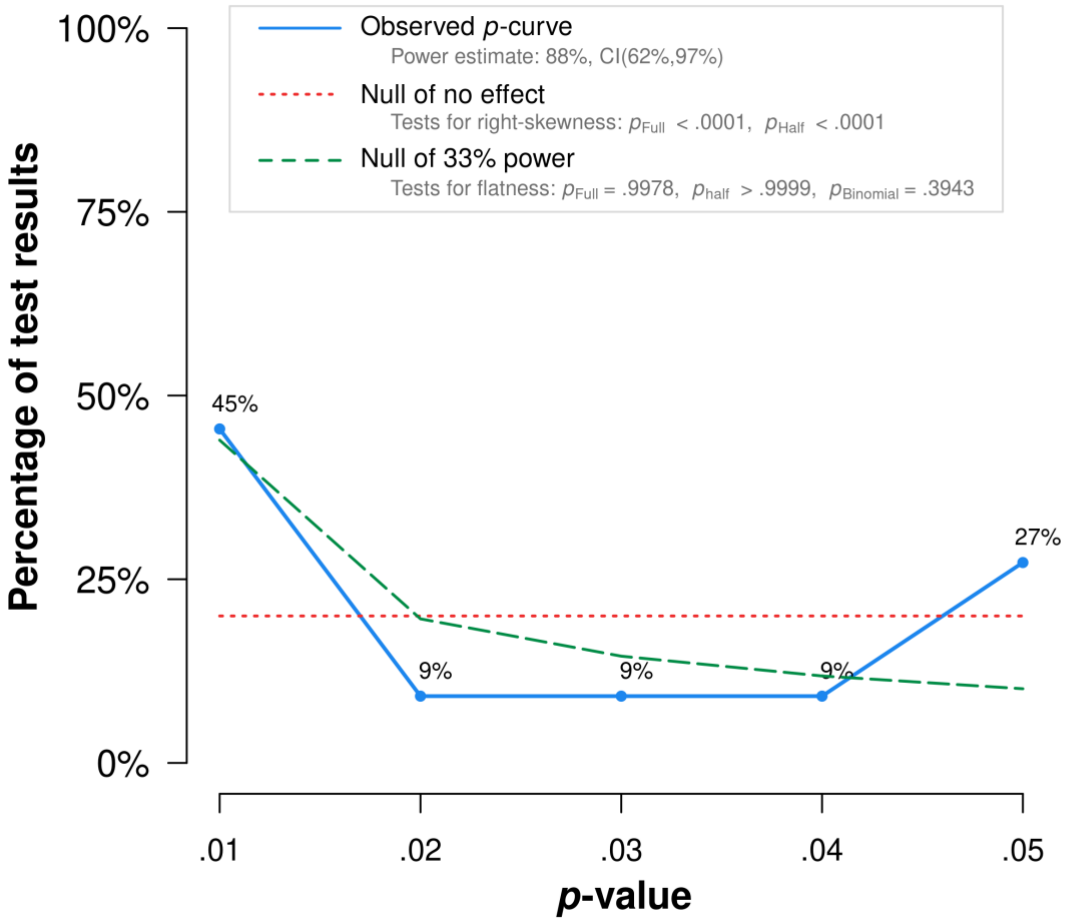


Note: The observed *p*-curve includes 77 statistically significant ($p < .05$) results, of which 68 are $p < .025$. There were 45 additional results entered but excluded from *p*-curve because they were $p > .05$.

Low self-esteem

Figure 2.26

P-Curve for the Low Self-Esteem Data

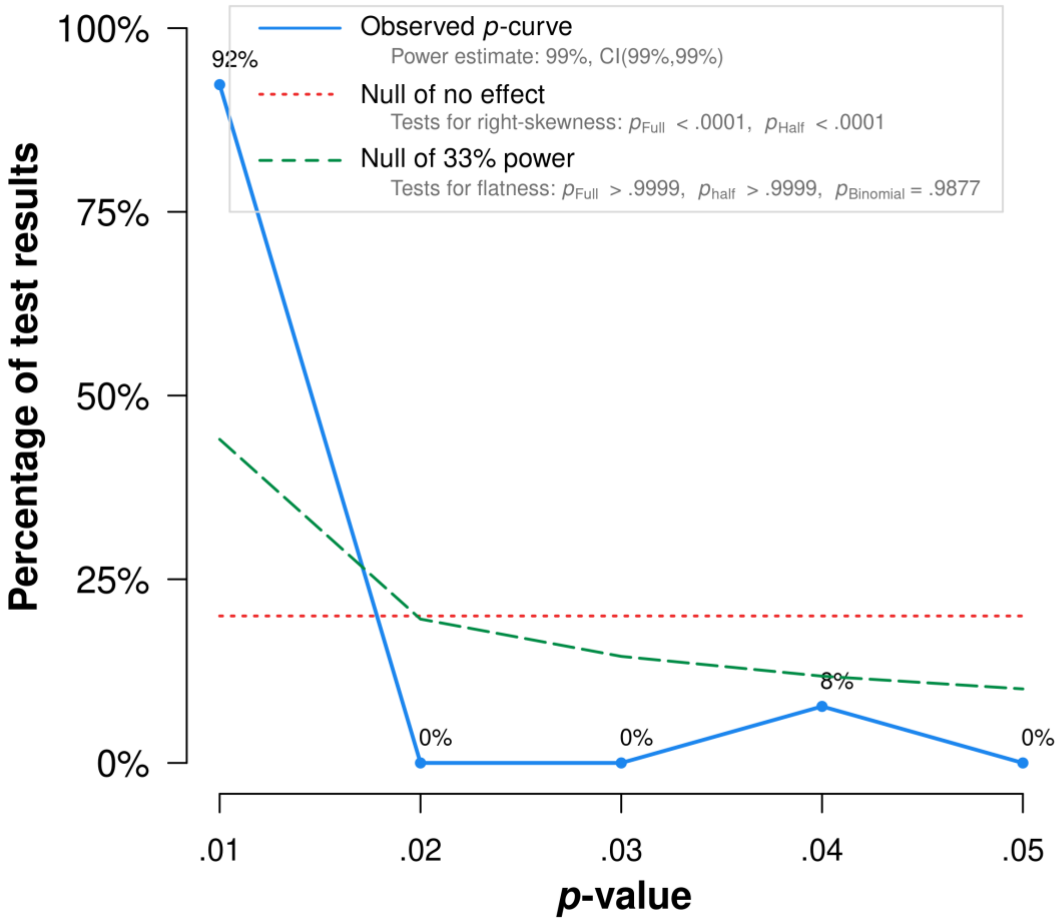


Note: The observed *p*-curve includes 11 statistically significant ($p < .05$) results, of which 7 are $p < .025$. There were 13 additional results entered but excluded from *p*-curve because they were $p > .05$.

Individual narcissism

Figure 2.27

P-Curve for the Individual Narcissism Data

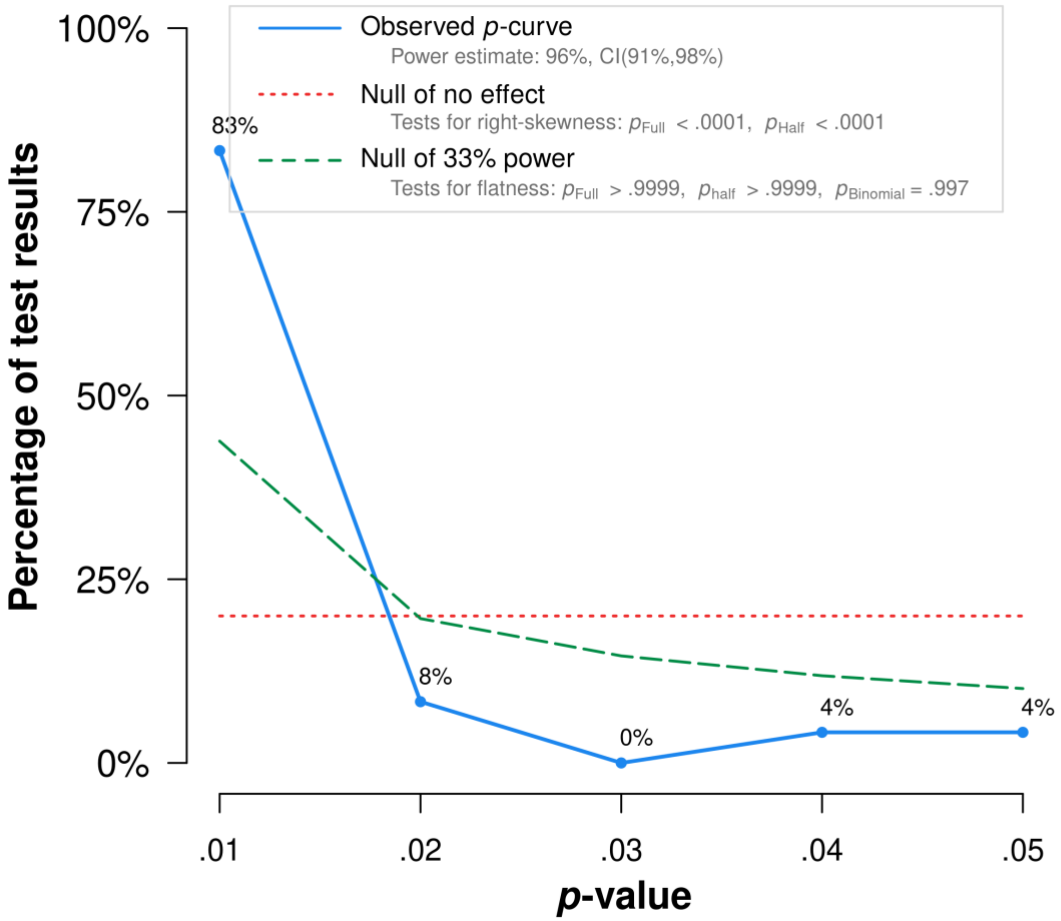


Note: The observed *p*-curve includes 13 statistically significant ($p < .05$) results, of which 12 are $p < .025$. There were 4 additional results entered but excluded from *p*-curve because they were $p > .05$.

The need for uniqueness

Figure 2.28

P-Curve for the Need for Uniqueness Data

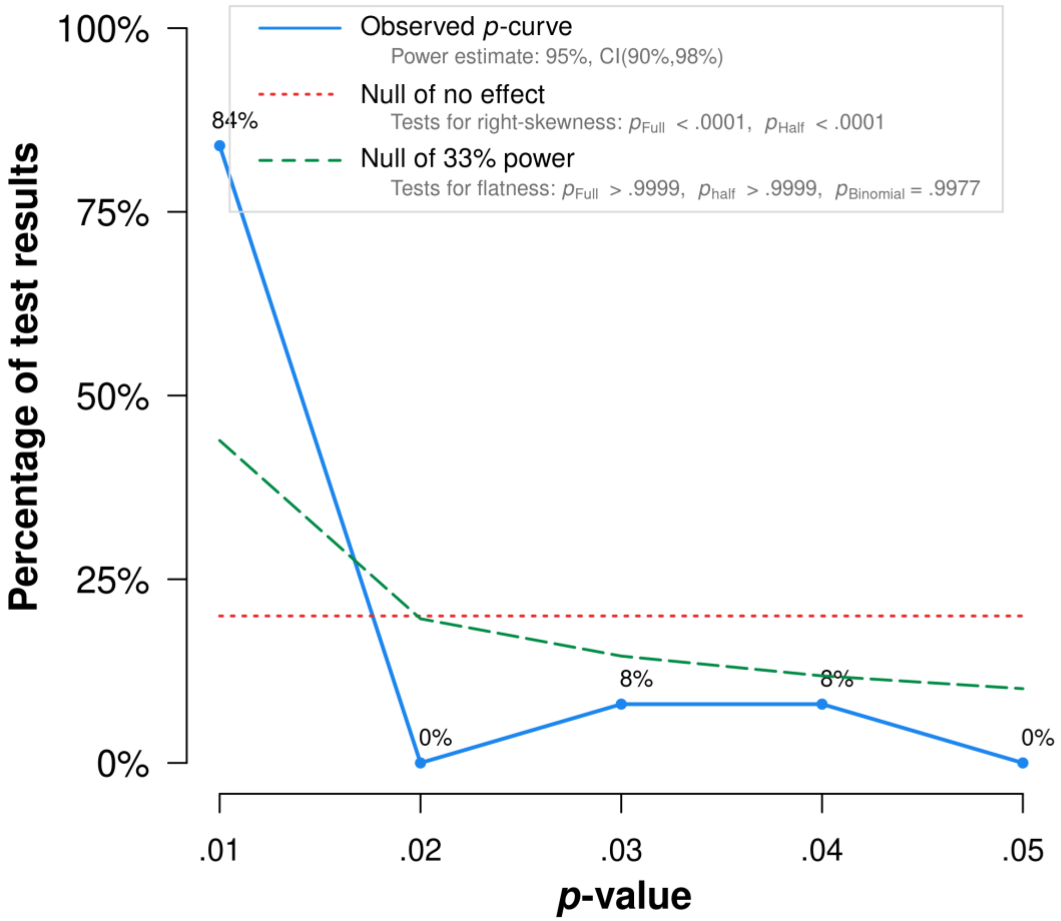


Note: The observed *p*-curve includes 24 statistically significant ($p < .05$) results, of which 22 are $p < .025$. There were 23 additional results entered but excluded from *p*-curve because they were $p > .05$.

Reactance

Figure 2.29

P-Curve for the Reactance Data

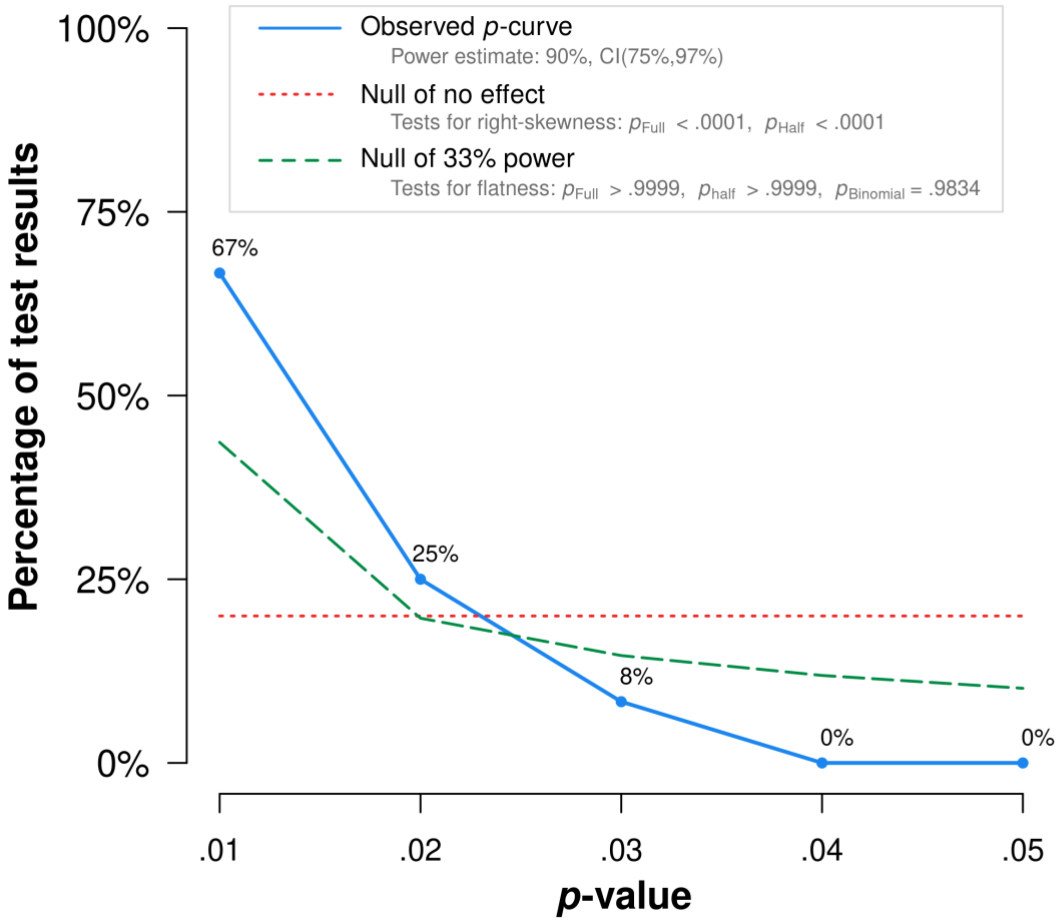


Note: The observed *p*-curve includes 25 statistically significant ($p < .05$) results, of which 23 are $p < .025$. There were 4 additional results entered but excluded from *p*-curve because they were $p > .05$.

Relational self

Figure 2.30

P-Curve for the Relational Self Data

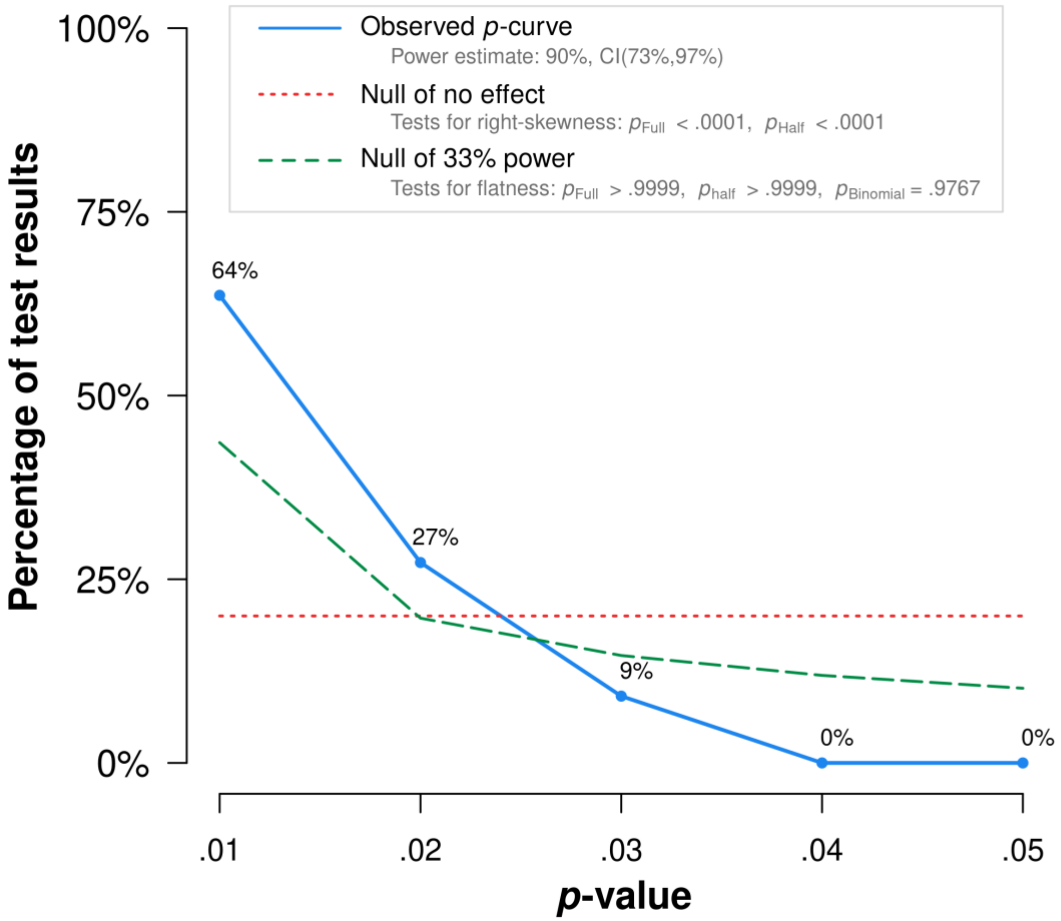


Note: The observed *p*-curve includes 12 statistically significant ($p < .05$) results, of which 11 are $p < .025$. There were 5 additional results entered but excluded from *p*-curve because they were $p > .05$.

Social exclusion

Figure 2.31

P-Curve for the Social Exclusion Data

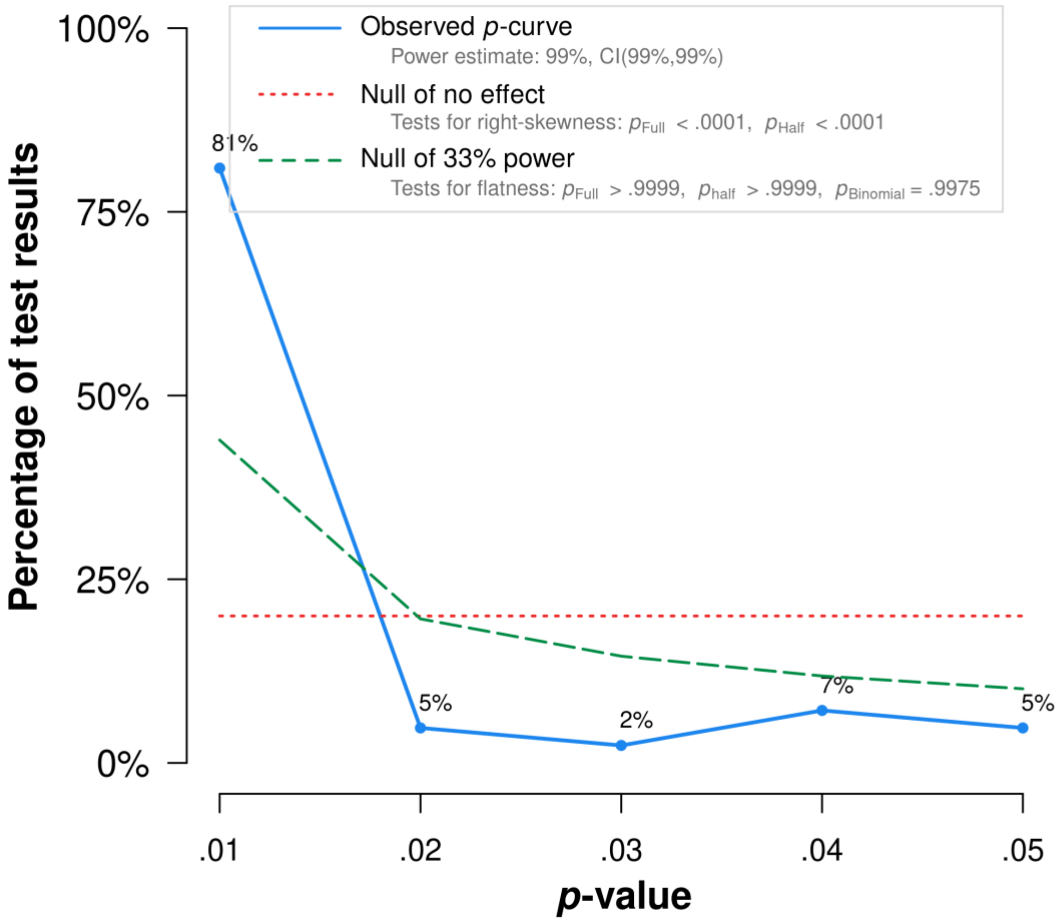


Note: The observed *p*-curve includes 11 statistically significant ($p < .05$) results, of which 10 are $p < .025$. There were 2 additional results entered but excluded from *p*-curve because they were $p > .05$.

Collective self

Figure 2.32

P-Curve for the Collective Self Data

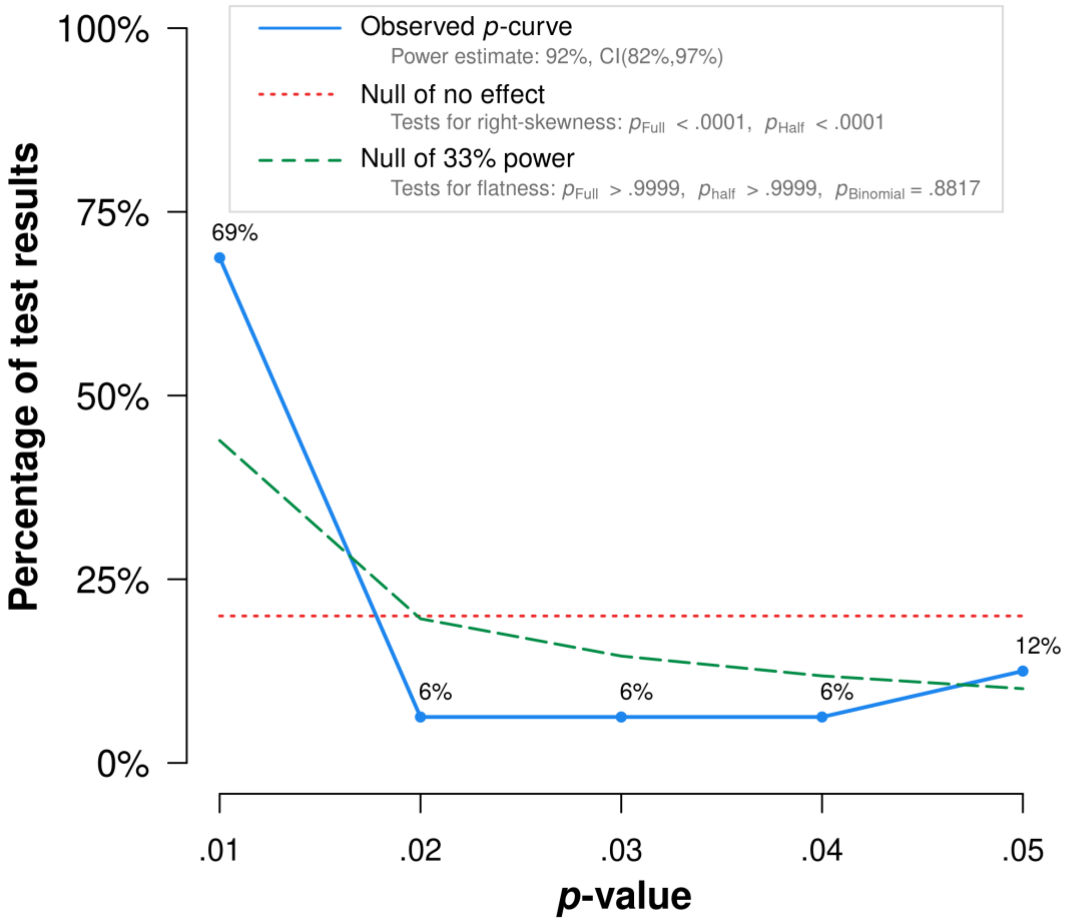


Note: The observed *p*-curve includes 42 statistically significant ($p < .05$) results, of which 37 are $p < .025$. There were 20 additional results entered but excluded from *p*-curve because they were $p > .05$.

Low ingroup identification

Figure 2.33

P-Curve for the Low Ingroup Identification Data

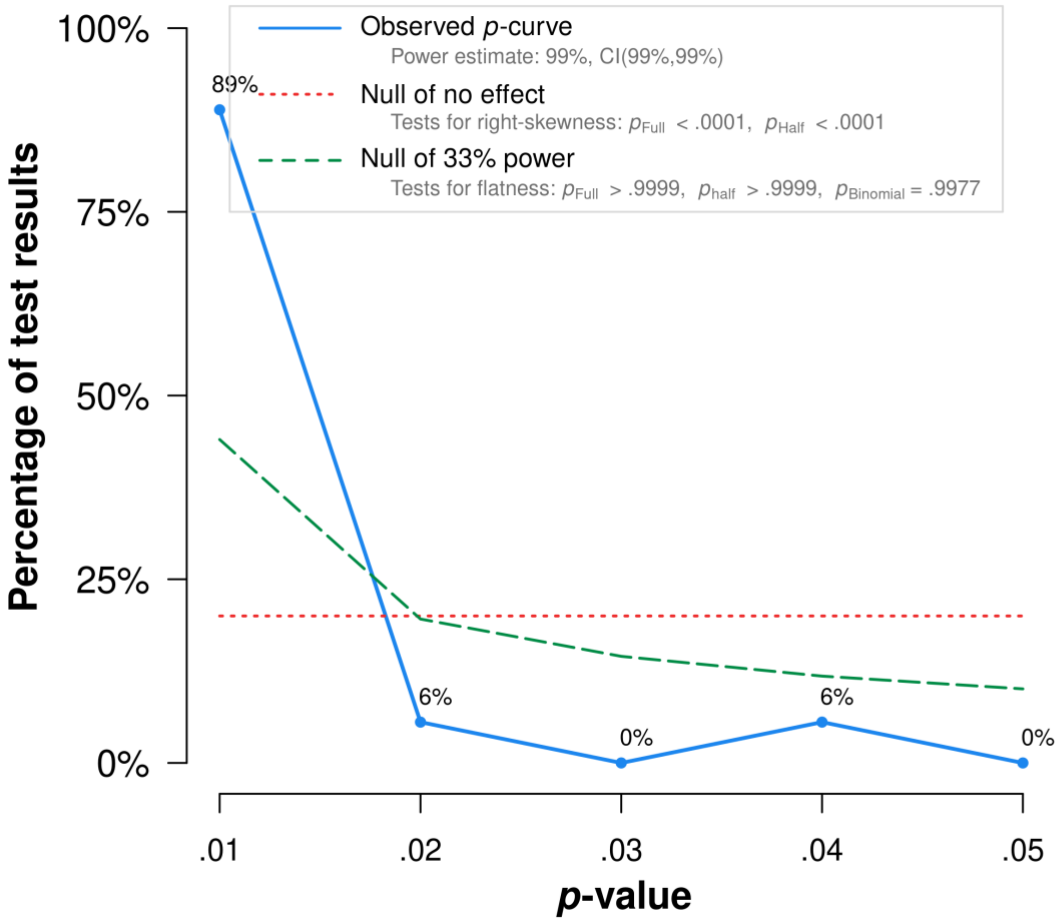


Note: The observed *p*-curve includes 16 statistically significant ($p < .05$) results, of which 13 are $p < .025$. There were 11 additional results entered but excluded from *p*-curve because they were $p > .05$.

Defensive ingroup identity

Figure 2.34

P-Curve for the Defensive Ingroup Identity Data

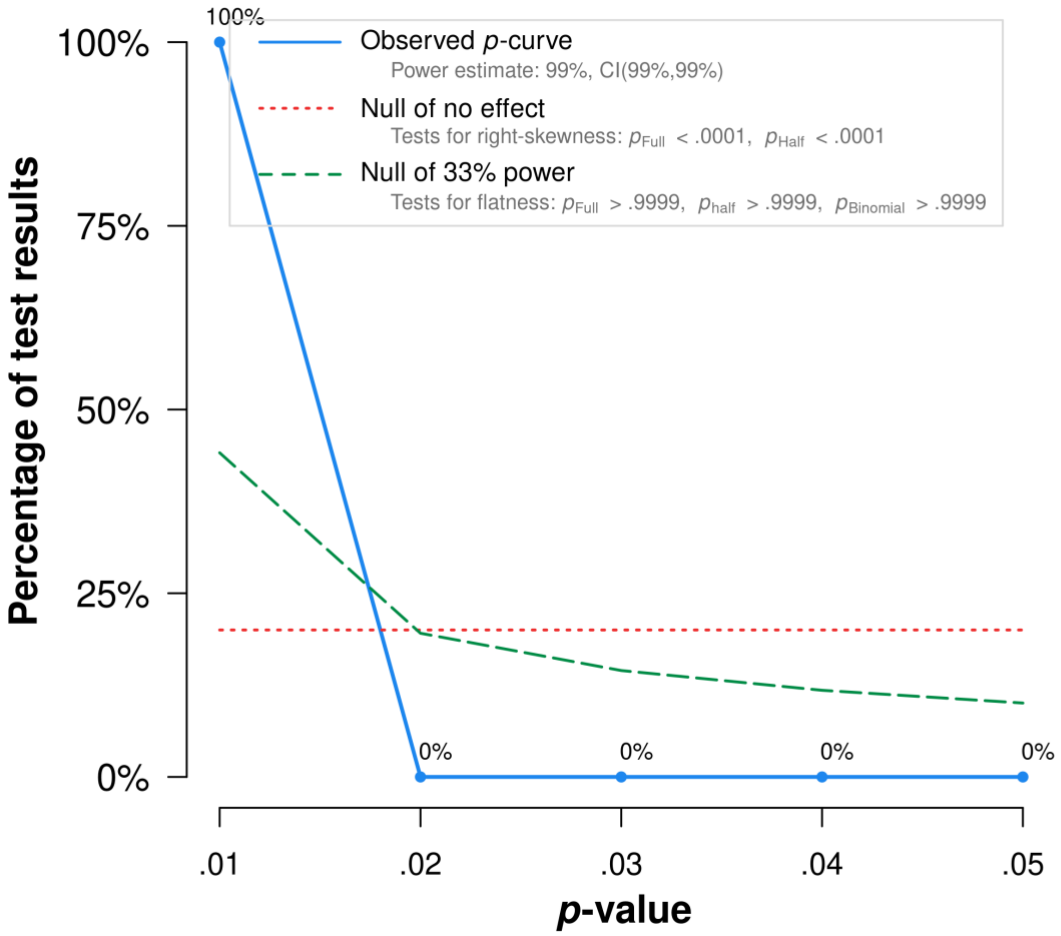


Note: The observed *p*-curve includes 18 statistically significant ($p < .05$) results, of which 17 are $p < .025$. There were 7 additional results entered but excluded from *p*-curve because they were $p > .05$.

Perceived ingroup victimhood

Figure 2.35

P-Curve for the Perceived Ingroup Victimhood Data



Note: The observed *p*-curve includes 4 statistically significant ($p < .05$) results, of which 4 are $p < .025$. There were no non-significant results entered.

Appendix E: Simple slopes for the multigroup analyses (Chapter 3)

Study 1

Figure 3.3

Simple Slopes Plot for the Relationship Between Conservative Ideology and Ethnic Collective Narcissism Among Both Ethnic Groups (Study 1)

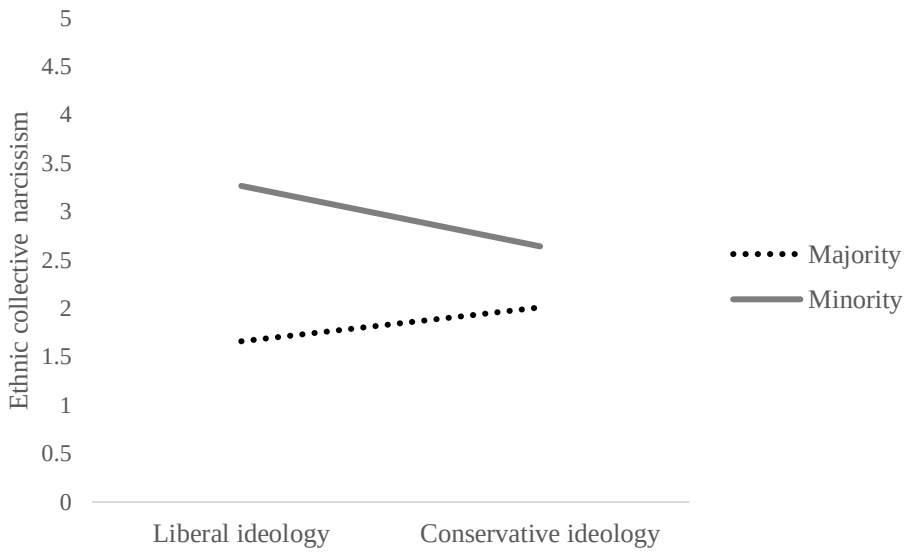


Figure 3.4

Simple Slopes Plot for the Relationship Between Conservative Ideology and Ethnic Ingroup Identification Among Both Ethnic Groups (Study 1)

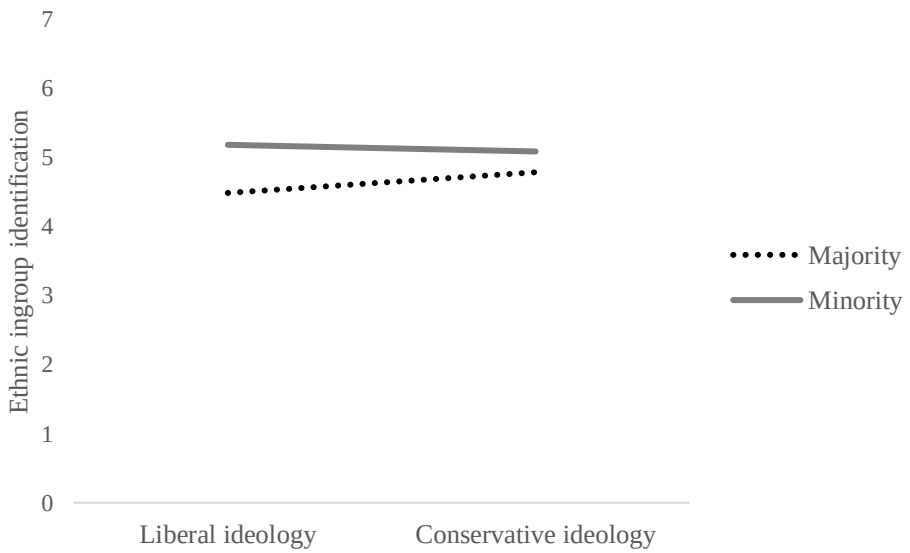


Figure 3.5

Simple Slopes Plot for the Relationship Between Conservative Ideology and Pro-Establishment Conspiracy Beliefs Among Both Ethnic Groups (Study 1)

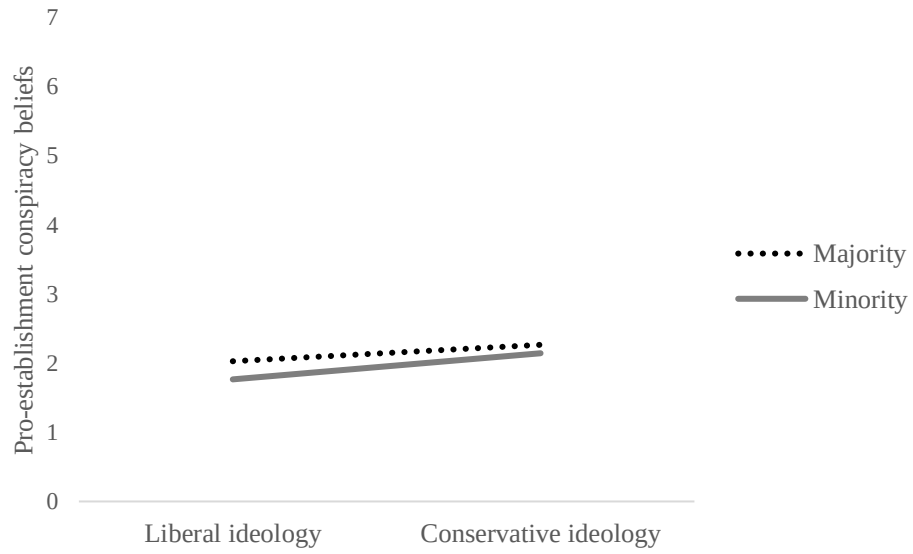


Figure 3.6

Simple Slopes Plot for the Relationship Between Conservative Ideology and Anti-Establishment Conspiracy Beliefs Among Both Ethnic Groups (Study 1)

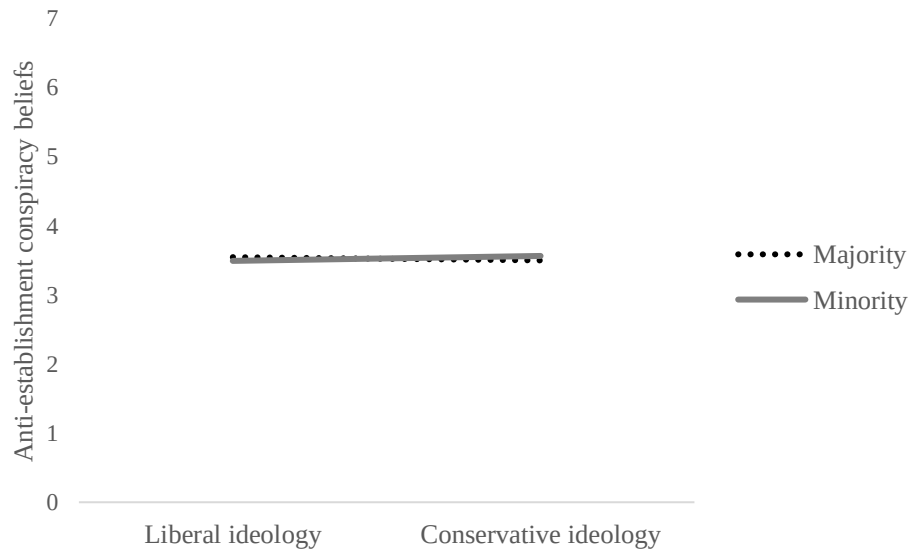
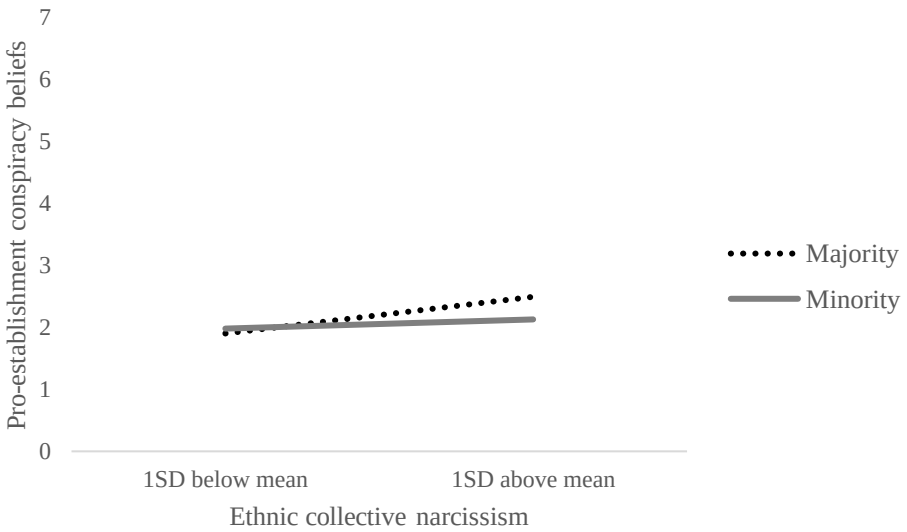


Figure 3.7

Simple Slopes Plot for the Relationship Between Ethnic Collective Narcissism and Pro-Establishment Conspiracy Beliefs Among Both Ethnic Groups (Study 1)



Study 2

Figure 3.8

Simple Slopes Plot for the Relationship Between Conservative Ideology and Ethnic Collective Narcissism Among Both Ethnic Groups (Study 2)

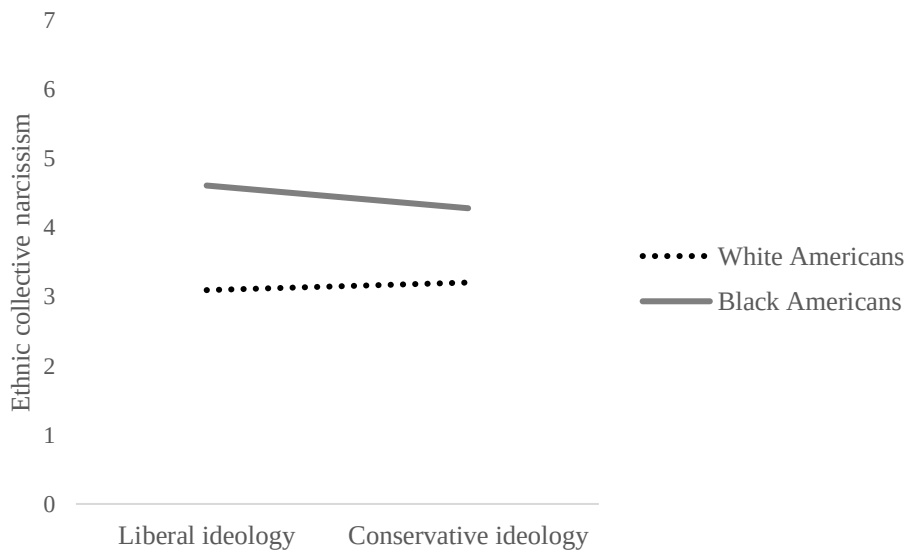


Figure 3.9

Simple Slopes Plot for the Relationship Between Conservative Ideology and Ethnic Ingroup Identification Among Both Ethnic Groups (Study 2)

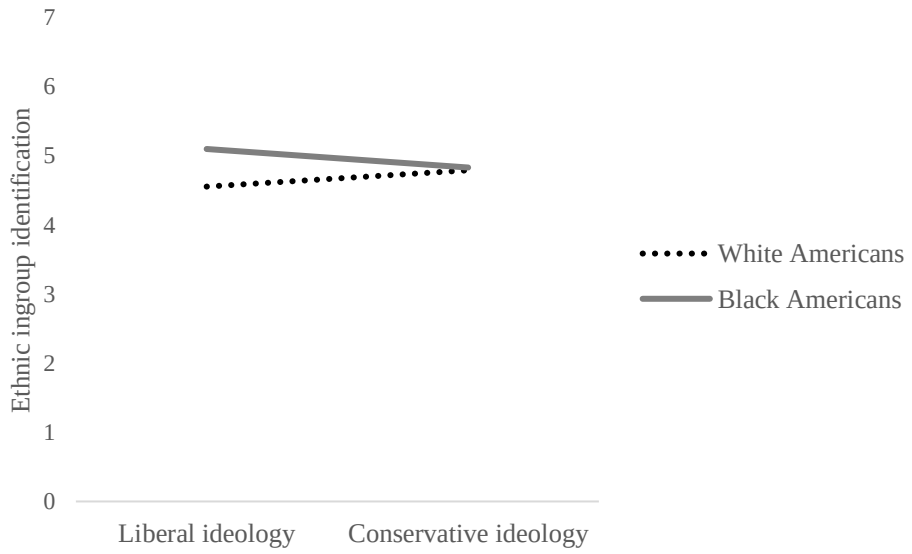


Figure 3.10

Simple Slopes Plot for the Relationship Between System Justification and Ethnic Ingroup Identification Among Both Ethnic Groups (Study 2)

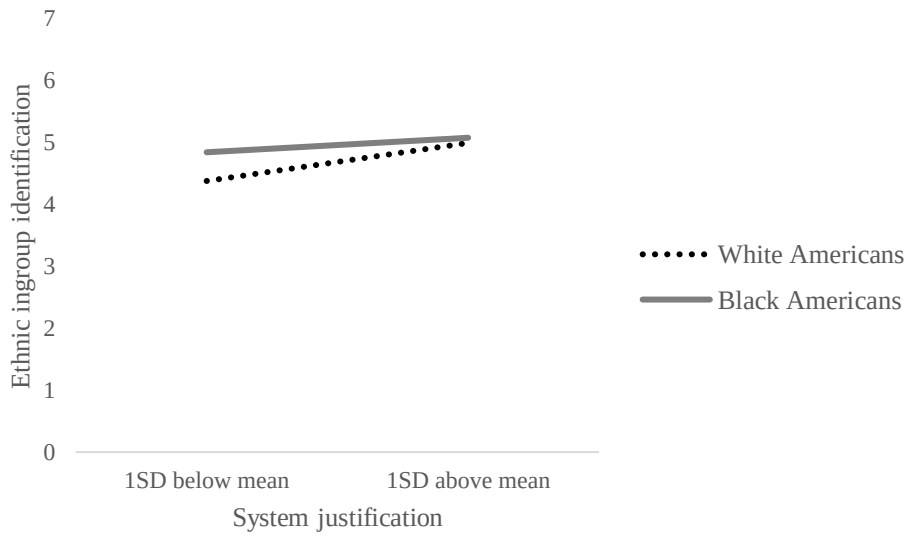


Figure 3.11

Simple Slopes Plot for the Relationship Between System Justification and Ethnic Collective Narcissism Among Both Ethnic Groups (Study 2)

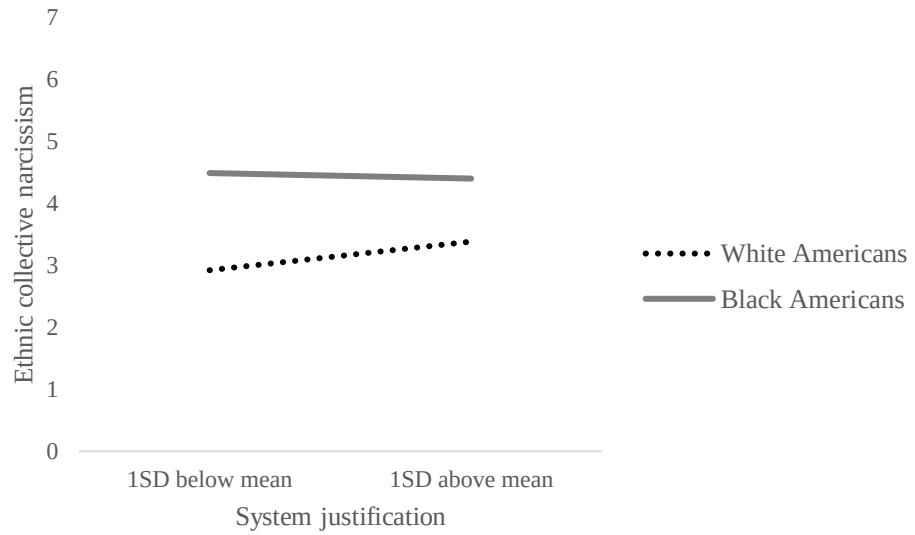


Figure 3.12

Simple Slopes Plot for the Relationship Between System Justification and Anti-Establishment Conspiracy Beliefs Among Both Ethnic Groups (Study 2)

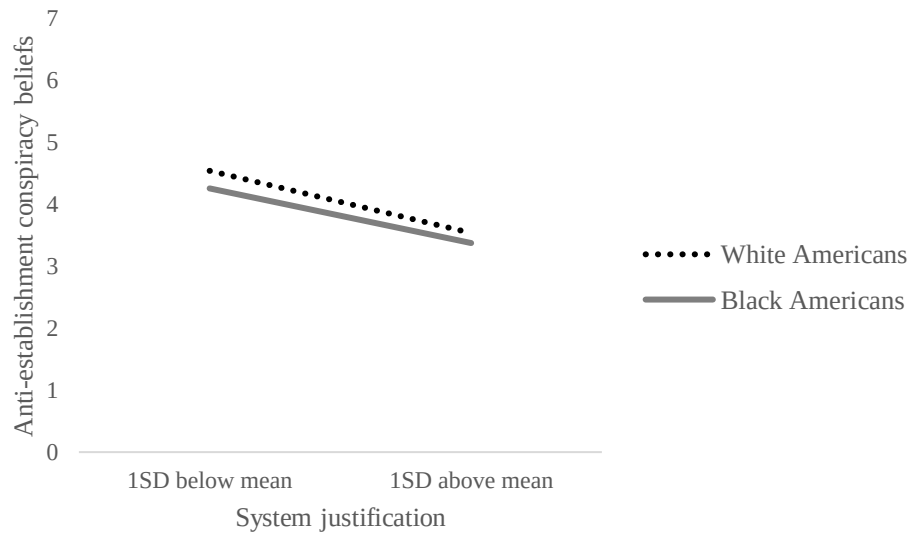


Figure 3.13

Simple Slopes Plot for the Relationship Between System Justification and Pro-Establishment Conspiracy Beliefs Among Both Ethnic Groups (Study 2)

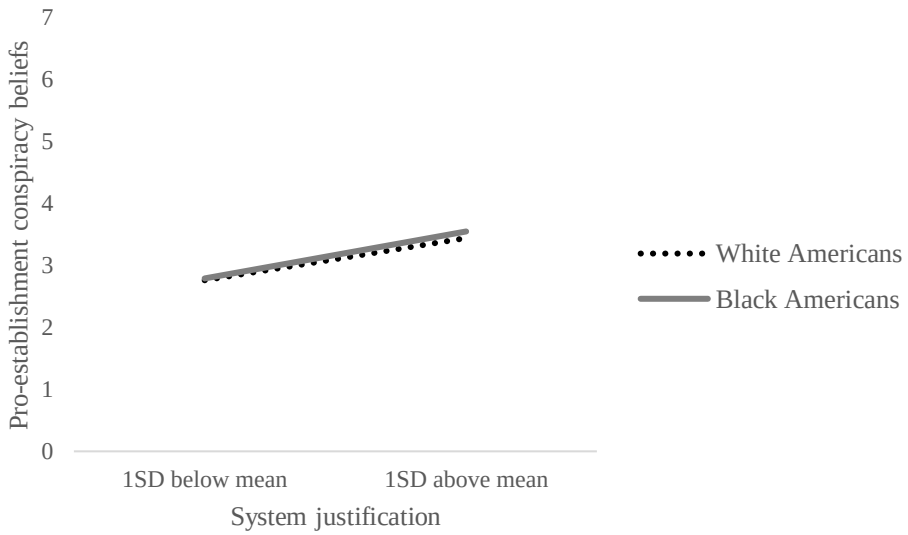


Figure 3.14

Simple Slopes Plot for the Relationship Between Ethnic Collective Narcissism and Pro-Establishment Conspiracy Beliefs Among Both Ethnic Groups (Study 2)

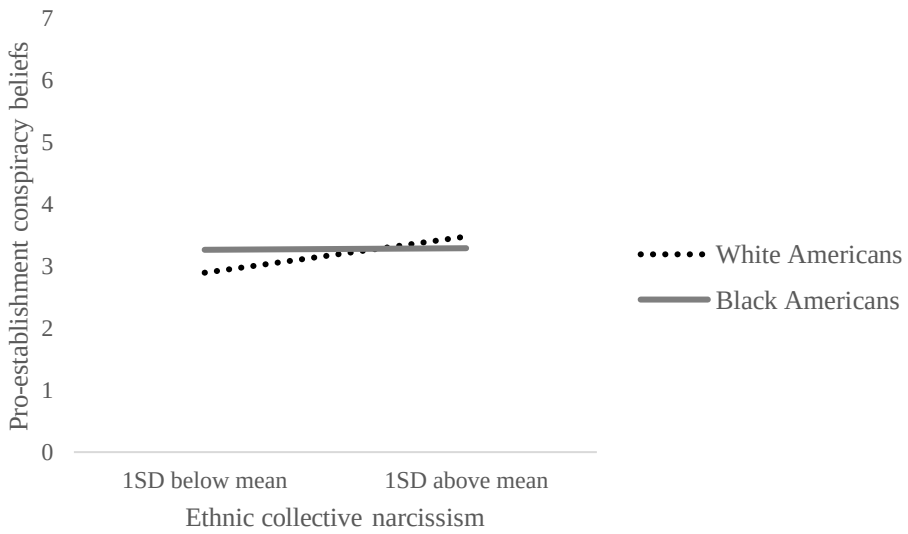
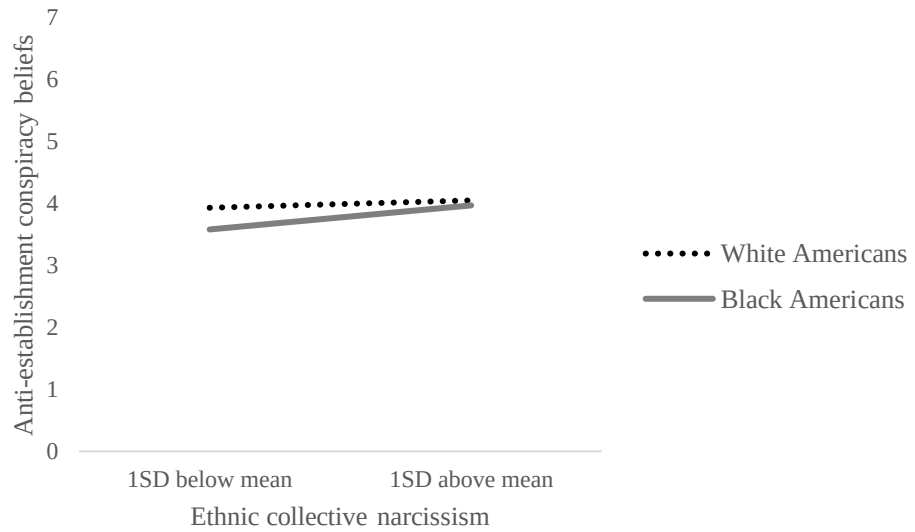


Figure 3.15

Simple Slopes Plot for the Relationship Between Ethnic Collective Narcissism and Anti-Establishment Conspiracy Beliefs Among Both Ethnic Groups (Study 2)



Appendix F: Curvilinear regression lines (Chapter 3)

Study 1

Figure 3.16

Curvilinear Regression Line for the Relationship Between Conservative Ideology and Pro-Establishment Conspiracy Beliefs Among Both Ethnic Groups (Study 1)

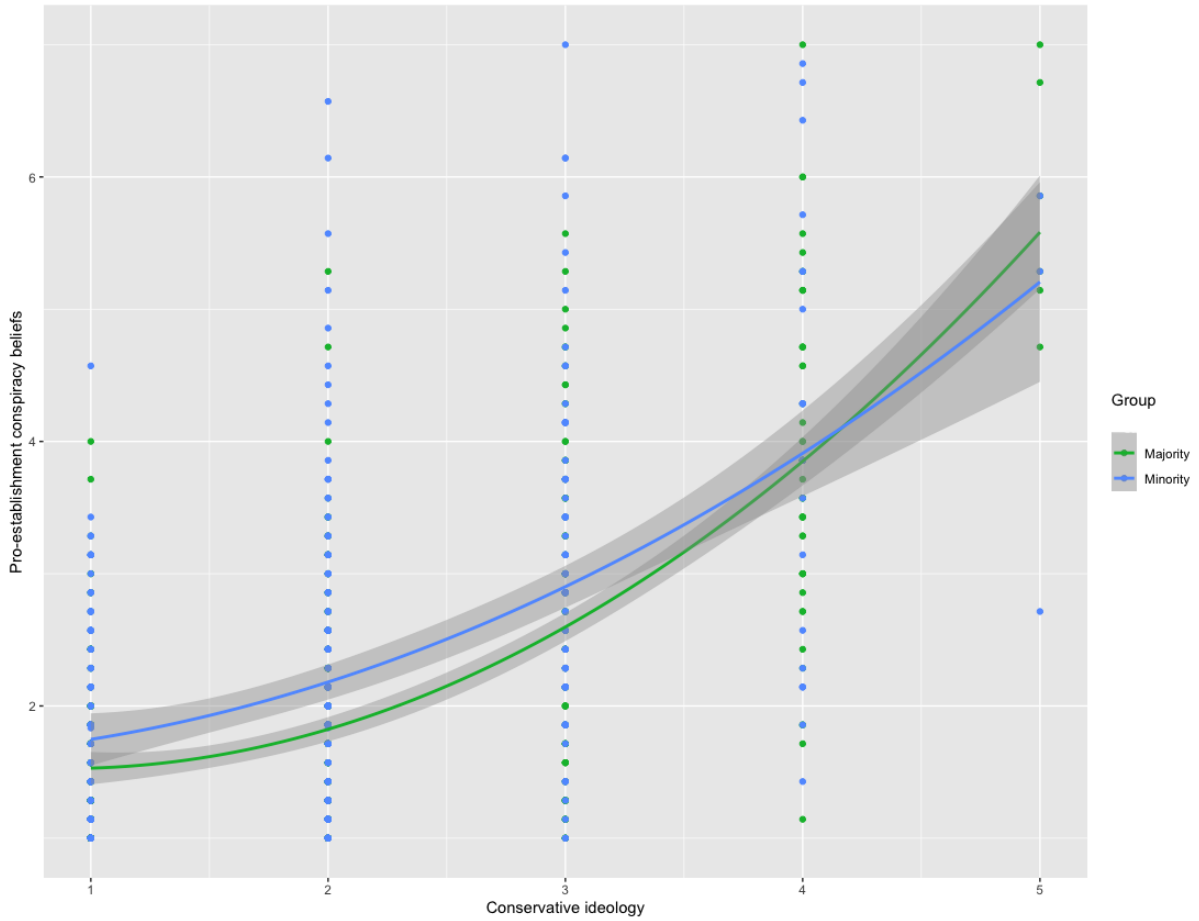


Figure 3.17

Curvilinear Regression Line for the Relationship Between Conservative Ideology and Ethnic Collective Narcissism Among Both Ethnic Groups (Study 1)

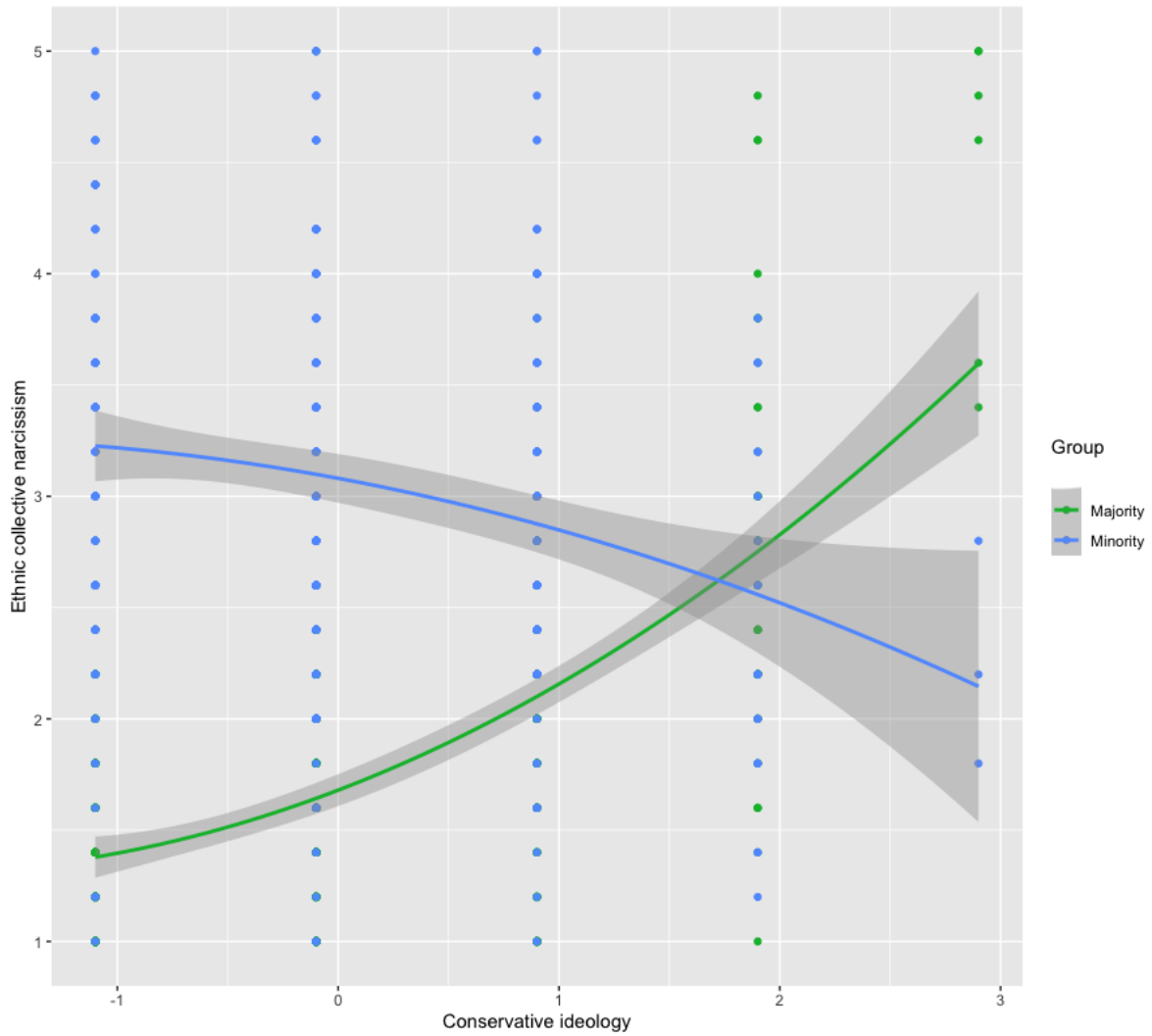
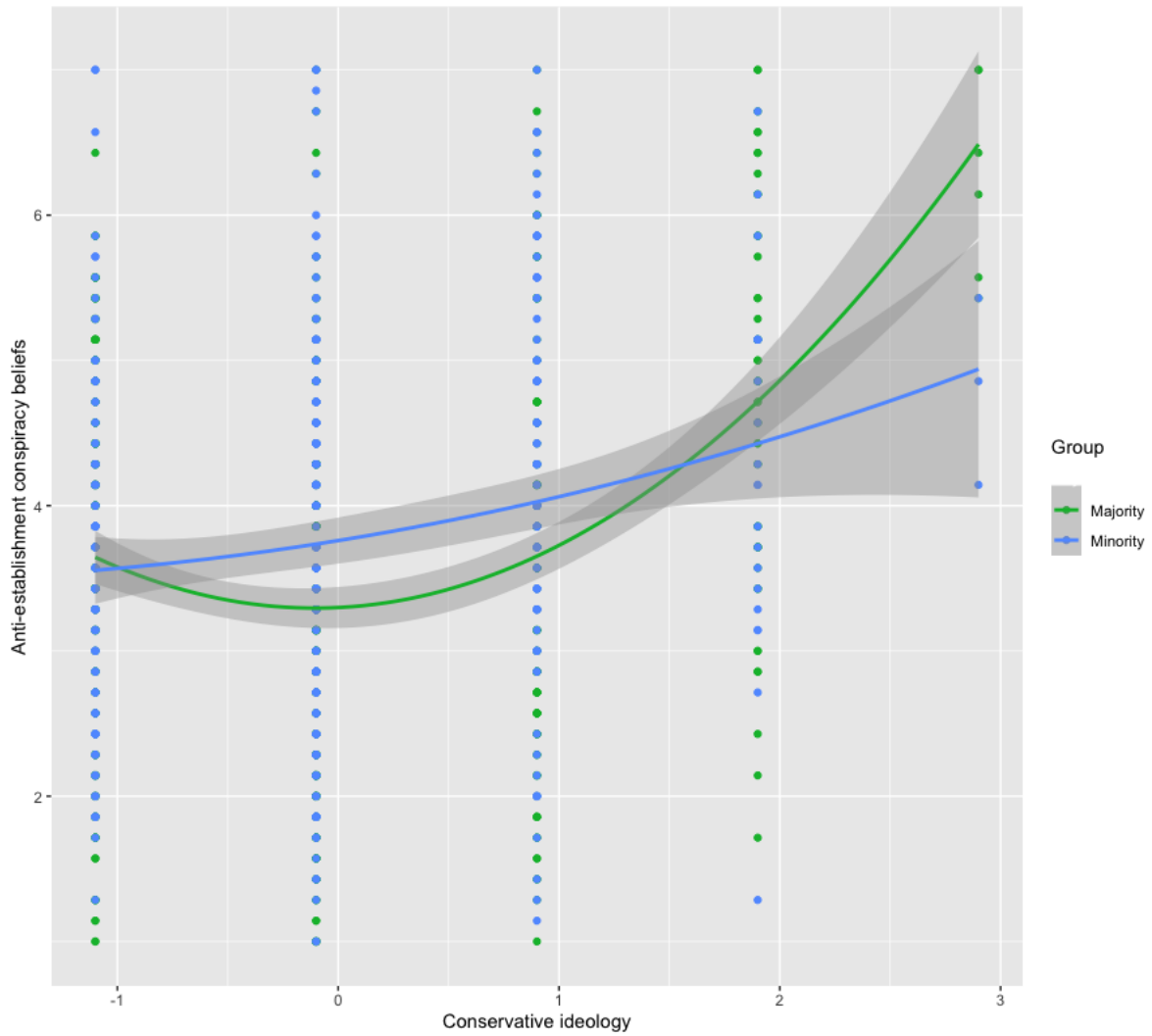


Figure 3.18

Curvilinear Regression Line for the Relationship Between Conservative Ideology and Anti-Establishment Conspiracy Beliefs Among Both Ethnic Groups (Study 1)



Study 2

Figure 3.19

Curvilinear Regression Line for the Relationship Between Political Ideology and Ethnic Ingroup Identification for Both Ethnic Groups (Study 2)