Needs and Motivations Underlying Collective Narcissism and In-group Identification

Irem Eker

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Declaration:

The research reported in this thesis is my own work, except for where indicated, and has not been submitted for examination as a part of a degree at any other institution. The author received a scholarship from the Turkish Ministry of Education in support of this research.

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Abstract

Collective narcissism reflects a belief in the greatness of one's in-group requiring recognition from other groups and has been linked to outgroup hostility, while in-group identification free of collective narcissism (secure in-group identity) has been linked to positive attitudes. Since the underpinning mechanisms of either are less well understood, this project investigates the needs and motives underlying each form of in-group identity. Chapter 1 suggests that while collective narcissism is likely to emanate from thwarted personal needs, secure in-group identity might be rooted in satisfied needs. The empirical chapters (chapters 2-4) examine individual and group needs as well as different types of motivations as psychological mechanisms underlying collective narcissism versus secure in-group identity. Studies 1-4 (Chapter 2), testing relationships between the need to belong and collective narcissism and secure in-group identity, yielded non-significant results. In the longitudinal Study 5 (Chapter 3), frustrated competence and dissatisfaction with personal relationships predicted higher collective narcissism over time. Satisfied personal autonomy and less competence frustration predicted higher secure in-group identity over time. In Study 6 (Chapter 3), frustrated group needs were related to higher collective narcissism both among advantaged and disadvantaged groups. Chapter 4 builds on self-determination theory and literature on religious orientations to examine types of motivations associated with the two types of in-group identity. In Studies 7, 8, and 10, self-determined motivations were associated with secure in-group identity whereas non-self-determined motivations were related to collective narcissism. In Studies 9 and 10, while intrinsic religiosity was associated with both collective narcissism and secure in-group identity, extrinsic religiosity was related to collective narcissism only. I conclude in Chapter 5. This dissertation provides evidence that frustrated needs and non-self-determined motives to identify are associated with collective narcissism while less frustrated needs and self-determined motives to identify are related to a more secure in-group identity.

CHAPTER 1[1]

In his February 2020 speech in Greenwich, Boris Johnson compared the UK to Superman. Discussing free trade negotiations, he said that there was a need for a "country ready to take off its Clark Kent spectacles and leap into the phone booth and emerge with its cloak flowing as the supercharged champion (…). I can tell you in all humility that the UK is ready for that role" (Prime Minister's Office, 2020). What is apparent in this comparison is not only the belief in the UK's alleged superpowers, but also that the UK is an underdog whose potential is not yet fully recognised (Von Tunzelmann, 2019). The idea that one's country, or any social group, is not getting the appreciation that it is due is captured by the concept of collective narcissism—a belief in in-group greatness that requires external recognition (Golec de Zavala, Cichocka, Eidelson, & Jayawickreme, 2009).

In this dissertation, I raise the question of what underlies collective narcissism and a more secure form of in-group identity. Through my studies, I aim to answer this question with respect to needs and motivations. To do so, I examine the role of the need to belong as a trait and a situational need (Chapter 2), frustration and satisfaction of other individual and group psychological needs (Chapter 3), as well as the types of motivations to identify (Chapter 4). Before expanding into the topic of this dissertation, I review the existing work on various forms of destructive in-group identity and discuss their relationship to the concept of collective narcissism. Then, I review the empirical evidence from different group and international contexts that reveal the undesired concomitants of collective narcissism in terms of intra- and intergroup relations. Finally, I discuss the potential political consequences of

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investment in the in-group image that is characteristic of collective narcissism. The literature review constitutes section 1.1 of this chapter. Then, I discuss secure in-group identity and its desired outcomes in section 1.2. In section 1.3, I discuss the origins of collective narcissism and secure in-group identity and develop the research question and hypotheses that are explored in this dissertation. In section 1.4, I present an overview of the empirical chapters.

1.1. In-group Identity and Destructive Forms of In-group Identity[2]

Identification with one's group(s) is often understood within the framework of the social identity theory (SIT, Tajfel & Turner, 1979). Tajfel (1981) defined social identity as "that part of the individual's self-concept which derives from his or her knowledge of membership to a social group (or groups) together with the value and the emotional significance attached to that membership" (p. 255). Due to this motivation to maintain a positive identity, people tend to discriminate in favour of the groups to which they belong (Tajfel & Turner, 1979). However, another tradition, rooted in the Frankfurt School, suggested that some forms of identity are more belligerent than others (Adorno, Frenkel-Brunswick, Levinson, & Sanford, 1950). Focusing especially on national identities, Adorno et al. (1950) called for a distinction between genuine patriotism and pseudo patriotism—"blind attachment to certain national cultural values, uncritical conformity with the prevailing

[2] In this thesis, I use the broad term "in-group identity" to refer to the different ways people identify with social groups. This is in line with Ellemers, Spears, and Doosje's (2002) suggestion to 'reserve the term "social identity" to refer to the *nature* or content of a particular identity' (p. 164, emphasis added). I reserve the term "in-group identification" to refer to group-level self-investment, that is centrality of ingroup identification to the self, ties to/solidarity with other ingroup members, and affect/satisfaction with one's group membership (Cameron, 2004*;* Leach et al., 2008).

group ways, and rejection of outgroups" (p. 107). Likewise, Schatz, Staub, and Lavine (1999) defined blind patriotism as "a rigid and inflexible attachment to country, characterized by unquestioning positive evaluation, staunch allegiance, and intolerance of criticism" (p. 153). Kosterman and Feshbach (1989) pointed to similar undertones in nationalism, which encompasses beliefs in national superiority and dominance (see also De Figueiredo & Elkins, 2003; Roccas, Sagiv, Schwartz, Halevy, & Eidelson, 2008). All these concepts have been linked to destructive and problematic intergroup attitudes. Cichocka and Cislak (2020) argue that they can all be rooted in group-based psychological defensiveness, which is captured by collective narcissism.

1.1.2. Collective narcissism.

In addition to their work on belligerent identities, the scholars of the Frankfurt School were also among the first to propose the idea that people can be vain or narcissistic about the groups to which they belong (Adorno, 1963/1998; Fromm, 1973). In its contemporary conceptualisation, collective narcissism is seen as form of in-group identity that underpins defensiveness and reflects an unrealistic belief in the greatness of an in-group that requires external recognition (Golec de Zavala et al., 2009). The idea that the idealized in-group is entitled to greater appreciation by others is central to collective narcissism. Collective narcissism can be understood as a counterpart of individual narcissism at the group level. As originally proposed by Fromm (1973), "in group narcissism, the object is not the individual but the group to which he belongs" (p. 203). In line with this idea, the commonly used Collective Narcissism Scale (Golec de Zavala et al., 2009) was based on measures of individual narcissism, such as the Narcissistic Personality Inventory (NPI; Emmons, 1987; Raskin & Terry, 1988). A sample item, "I insist upon my group getting the respect that is due to it", was inspired by an individual narcissism item, "I insist upon getting the respect that is

due to me". As subsequent studies showed, collective narcissism shows weak to moderate correlations with individual narcissism (Golec de Zavala et al., 2009; Golec de Zavala, 2018).

Measured with respect to national groups, collective narcissism (often referred to as "national narcissism" when applied to national contexts) is related to the other forms of defensive national identity. For example, in the national context, collective narcissism is correlated positively with national glorification, nationalism, and blind patriotism (Cichocka, Marchlewska, Golec de Zavala, & Olechowski, 2016; Golec de Zavala, Peker, Guerra, & Baran, 2016; Lyons, Kenworthy, Popan, 2010). Although collective narcissism and these constructs share similar characteristics (such as convictions of superiority and the idealization of a group), there are significant dissimilarities between these constructs and collective narcissism (Cichocka, 2016; Golec de Zavala, Dyduch-Hazar, & Lantos, 2019). To illustrate, nationalism reflects a desire to establish dominance, whereas collective narcissism in the national context captures concerns with protecting the nation's image and getting the recognition it is allegedly entitled to (Golec de Zavala et al., 2009). Adherence to a cohesive and idealized group is emphasized in the case of national glorification (Roccas, Klar, & Liviatan, 2006), while in the case of collective narcissism, there is more emphasis on feeling underappreciated by others (Golec de Zavala et al., 2009). Although these constructs are distinct, they tend to be related. It is plausible that the defensiveness of collective narcissism is more strongly predictive of the more dominating (i.e., nationalistic) or more aggrandising (i.e., glorifying) tendencies of national identity, depending on the context (Cichocka & Cislak, 2020).

In addition to these theoretical differences, unlike nationalism, national glorification or blind patriotism, the measurement of collective narcissism is free of direct references to nationality (Cichocka, 2016). Therefore, collective narcissism can be measured with respect to any existing groups, including nationality and ethnicity (Golec de Zavala et al., 2009),

university peers (Golec de Zavala, Cichocka, & Bilewicz, 2013), sport teams (Larkin, & Fink, 2019), religious denominations (Marchlewska, Cichocka, Łozowski, Gorska, & Winiewski, 2019), or organisations (Cichocka, Cislak, Gronfeldt, Wojcik, & Winiewski, 2020).

Outcomes associated with collective narcissism.

Intergroup Processes. Collective narcissism is associated with an extraordinary preoccupation with how the in-group is perceived or treated by others. Therefore, those who score high in collective narcissism are vigilant for potential sources of threat that can undermine the in-group and its reputation (Golec de Zavala et al., 2009). Those who score high in collective narcissism see insults even where they are not intended (Golec de Zavala et al., 2016). For example, national narcissism predicted excessive sensitivity to jokes or movies criticising one's nation (Golec de Zavala et al., 2016; Marchlewska, Cichocka, Jaworska, Golec de Zavala & Bilewicz, 2020). Those scoring high in national narcissism were also sensitive to threats to their culture: Chinese participants high in national narcissism showed negative attitudes towards the US when exposed to US celebrities on Chinese magazine covers (Gries, Sanders, Stroup, & Cai, 2015).

This threat-sensitivity is also evident in the robust positive association between collective narcissism and the belief that others conspire against one's group (Cichocka et al., 2016; see also Biddlestone, Cichocka, Žeželj, & Bilewicz, 2020). For example, Poles tend to believe that the first free parliamentary election in Poland is the symbol of the fall of Communism in Central and Eastern Europe (Cichocka et al., 2016). Among Polish participants, national narcissism was associated with a conviction that Western countries were purposefully undermining Poland's role in history by celebrating other events (such as the fall of Berlin wall) that mark the collapse of Communism (Cichocka et al., 2016; Study 1). Another study in Poland examined public attitudes after the crash of a Polish presidential

plane in 2010. The catastrophe happened in a Russian city of Smolensk and killed all the politicians aboard, including the Polish president. Polish national narcissism was associated with the conviction that Russia was secretly involved in the plane crash and this relationship was mediated by higher perceived threat. Along the same lines, American national narcissism was related to convictions that foreign governments conspire against the US (Cichocka et al., 2016; Study 3). During the 2016 US presidential election, national narcissism also predicted more conspiratorial thinking about the election among American voters (Federico & Golec de Zavala, 2018).

Collective narcissism is associated with conspiracy beliefs beyond the international context. For example, collective narcissism measured among Catholic participants was associated with the endorsement of a so-called gender conspiracy theory— a conviction that "gender studies and gender-equality activists represent an ideology secretly designed to harm traditional values and social arrangements" (Marchlewska et al., 2019; p. 766). Believing that other groups seek to undermine or control one's in-group can help explain why the group might be holding a disadvantaged and undervalued position. By shifting blame for misfortunes onto others, those scoring high in collective narcissism might seek to re-establish a grandiose image of the group (Cichocka, 2016; Cichocka & Cislak, 2020).

When the group does not receive the appreciation that it is allegedly due, those scoring high in collective narcissism tend to react defensively. According to Fromm (1973), "[t]hose whose narcissism refers to their group rather than to themselves as individuals are as sensitive as individual narcissists, and they react with rage to any wound, real or imaginary, inflicted upon their group" (p. 276). Thus, the defensive nature of collective narcissism manifests itself in aggressive and hostile responses to perceived humiliation or criticisms that target the in-group (Cichocka, 2016). In a series of experiments by Golec de Zavala, Cichocka, and Iskra-Golec (2013), participants were exposed to information that members of

a different group either praised or criticised their in-groups (nations or universities). Participants indicated the extent to which they wanted to respond with hostility (such as to humiliate or injure outgroup members). Those scoring high in collective narcissism were indeed willing to react with aggression when exposed to criticism. Their hostility was specifically directed at the offending outgroup, but not displaced to other neutral groups that were non-threatening to the in-group. Importantly, these effects were observed even when accounting for other variables typically associated with animosity at the interpersonal (e.g., individual narcissism) or intergroup (e.g., right-wing authoritarianism and social dominance orientation) level.

While retaliation and violence in intergroup relations are explicit ways to protect the in-group image, such reactions are not always possible or acceptable. In cases like this, the defensiveness associated with collective narcissism can manifest more subtly, for instance, via *schadenfreude* (Golec de Zavala et al., 2016). The term refers to taking joy from situations that cause adversity for other groups or individuals (Leach, Spears, Branscombe, & Doosje, 2003). In one study, Turkish participants were asked to read a fake newspaper report describing Turkey's wait to be admitted into the EU (Golec de Zavala et al., 2016; Study 1). National narcissism was associated with perceptions of this report as humiliating, which was further related to experiences of *schadenfreude* for Europe's economic crisis.

The associations between collective narcissism and open hostility are especially pronounced in contexts that are more accepting of violence as a means to achieve ideological goals. A series of studies conducted in Sri Lanka, Morocco and Indonesia compared the associations between collective narcissism and violent extremism in more versus less radical contexts (Jasko et al., 2019). For example, in Sri Lanka, authors compared two subgroups from Tamil ethnic community. While one subgroup consisted of former terrorists (Liberation Tigers of Tamil Eelam), the other one included community members of Tamil who never

belonged to a radical organization. The results revealed that collective narcissism measured in relation to the Tamil people as a group predicted ideological and violent extremism, but this relationship was especially strong for those participants who were members of a radical organization.

Accompanied by a lack of intergroup trust, collective narcissism also predicts more general negative attitudes towards groups which share a difficult history with the in-group. Cai and Gries (2013) demonstrated that national narcissism predicted reciprocal prejudice among Americans and Chinese. In Poland, national narcissism was related to anti-Semitism, and this relationship was driven by beliefs in Jews conspiring against Poles (Golec de Zavala & Cichocka, 2012; see also Dyduch-Hazar, Mrozinski, & Golec de Zavala, 2019). Similar effects were found beyond the context of international relations. Narcissism in relation to a gender-based group (namely, men) predicted stronger prejudice towards LGBT+ individuals (Marchlewska, Górska, Malinowska, & Kowalski, 2021). The general suspicion and negativity towards outgroups mean that national narcissism is also associated with the inability to forgive past grievances (Golec de Zavala et al., 2009). For example, in Poland it predicted lower willingness to forgive Germans for the World War II atrocities (Hamer, Penczek, & Bilewicz, 2018).

Given their focus on the in-group's recognition and their general predisposition for outgroup prejudice, those who score high in collective narcissism are also unlikely to express concern for disadvantages experienced by other groups. Górska et al. (2019) investigated the relationship between collective narcissism and willingness to participate in solidarity-based collective action. In a series of studies, national narcissism predicted lower willingness to act on behalf of disadvantaged groups such as refugees, women, and LGBT+ people. While national narcissism increases when people perceive their own group as disadvantaged

(Marchlewska, Cichocka, Panayiotou, Castellanos, & Batayneh, 2018; Study 2), their sensitivity to injustice does not seem to be afforded to outgroups that are treated unfairly.

Intragroup Processes. Several studies investigated the processes involved in idealising the in-group by those high in collective narcissism. For example, researchers argued that collective narcissism can manifest in the exaggerated evaluations of in-group greatness. Zaromb et al. (2018) asked citizens of 35 different countries to estimate their nations' contributions to world history in percentages. Summing across all average in-country estimates equalled 1156%, suggesting that people grossly exaggerate the contribution of their own nations. Similarly, Putnam, Ross, Soter, and Roediger (2018) demonstrated that Americans tended to exaggerate their home state's contribution to US history.

A separate line of inquiry examined how those scoring high in collective narcissism would judge their groups' actions that are morally questionable (Bocian, Cichocka, & Wojciszke, 2021). Two studies conducted in Poland and the UK compared judgements of ambiguous behaviour that benefitted either the in-group or the outgroup. Participants scoring high in national narcissism judged actions favouring the interests of an outgroup as less moral than very similar actions favouring the interests of their in-group. In another study, conducted in the US, authors asked participants to judge the US Senate's decision to confirm Brett Kavanaugh—a Republican nominee who was accused of sexual assault—to the Supreme Court (Abramson, 2018). Unsurprisingly, Republicans judged this nomination more favourably than Democrats, but this effect was especially strong among participants scoring high in partisan narcissism.

A preoccupation with the in-group's reputation also means that collective narcissism is associated with downplaying or challenging criticisms of the in-group. For example, Marchlewska et al. (2020) demonstrated that national narcissism was associated with protesting movies that dealt with instances of anti-Semitism in Poland. Two large studies,

also conducted in Poland, examined sexual abuse scandals in the Catholic Church. Catholic narcissism was associated with downplaying the priests' involvement in the abuse (Molenda, Marchlewska, Górska, Lipowska, & Malinowska, 2020). This association was driven by the perception that the Catholic Church is under attack. Overall, it seems that collective narcissism impedes the construal of an integrated image of the in-group that might consist of both negative and positive characteristics. Indeed, Klar and Bilewicz (2017) suggested that collective narcissism might turn in-group members into lay censors who reject any narratives that do not portray the in-group in a favourable light.

Collective narcissism is not only associated with attitudes towards other groups. It can also have important implications for relations within the group (Cichocka, 2016). Because collective narcissism stems from frustrated personal needs, it is associated with being concerned with how the group reflects on the individual more so than with the well-being of other members of the group (Cichocka, 2016). Therefore, despite seeming to be strongly committed to the group, those whose score high in collective narcissism might not actually benefit other members. Indeed, measured in the context of business or political organisations, collective narcissism predicted workers treating their co-workers instrumentally and using them for personal gains (Cichocka et al., 2020).

Collective narcissism is also associated with support for actions that promote personal agendas at the expense of other group members. The compensatory nature of collective narcissism translates into instrumental treatment of the in-group and, ultimately, lower loyalty. In one large survey conducted in Poland, national narcissism was associated with intentions to emigrate permanently if that meant one could be better off abroad (Marchlewska et al., 2020). In other studies, collective narcissism predicted willingness to conspire against one's in-group members and, in the national context, support for governmental policies that normalize citizen surveillance (Biddlestone, Cichocka, Główczewski, & Cislak, 2020). Taken

together, these studies illustrate that collective narcissism might have problematic consequences for the in-group as whole.

Political Outcomes. The dynamics of group processes and intergroup relations associated with collective narcissism shows why it might have important implications for political choices and behaviours. Although studies among political elites are scarce, partisan narcissism measured among Icelandic politicians was associated with politicking—the inclination to engage in secrecy, deception, and political blood-sport (Gronfeldt, Cichocka, Cislak, & Wyatt, 2020).

Other studies examined the link between voters' collective narcissism and political preferences. For example, collective narcissism emerges as a robust predictor of support for parties or candidates that can be considered populist. People scoring high in national narcissism were more likely to support Trump (vs. Clinton) in the 2016 US elections, even after controlling for important factors such as ideology, authoritarianism and race (Federico & Golec de Zavala, 2018; Marchlewska et al., 2018). National narcissism was also associated with voting for national-populist parties in Eastern Europe— the Law and Justice Party in Poland (Marchlewska et al., 2018) or the Fidesz Party in Hungry (Forgas & Lantos, 2019).

The need to show off a positive, strong, and independent in-group image implies that collective narcissism might predict decisions that can potentially harm the in-group in the long run. For example, in a series of studies, national narcissism was associated with lower support for pro-environmental policies, but higher support for investing in so called green washing—positioning one's group (e.g., company, or country) as environmentally friendly without behaving accordingly (Cislak, Cichocka, Wojcik, & Milfont, 2021). Thus, the focus was on making the group look good to the outside world, rather than actually working on behalf of the group. Collective narcissism also directly predicted support for anti-conservationist policies (Cislak, Wojcik, & Cichocka 2018). Among Polish participants,

national narcissism predicted more support for coal mining and deforestation of the Bialowieza Forest which is a part of UNESCO World Heritage Site. The relationship between national narcissism and support for the deforestation policy was mediated by the desire to be able to make political decisions independently. In a similar vein, the view that the European Union crippled national sovereignty and the capacity for independent decision-making of Britain was central during the 2016 referendum (Niblett, 2016). Therefore, unsurprisingly, national narcissism predicted supporting Brexit (Golec de Zavala, Guerra, & Simao, 2017; Marchlewska et al, 2018; for similar results on support for a potential Polexit in Poland, see Cislak, Pyrczak, Mikiewicz, & Cichocka, 2020).

Recent studies also indicated important implications of collective narcissism for public health issues. For example, national narcissism predicted beliefs in vaccination conspiracy theories, which in turn predicted support for anti-vaccination policies (Cislak, Marchlewska et al., in press). National narcissism also predicted greater belief in conspiracy theories about the COVID-19 pandemic, and likelihood to spread such theories (Sternisko, Cichocka, Cislak, & van Bavel, 2020). Public health crises, such as the global pandemic, can threaten the idealistic image of one's nation, especially if efforts to contain the spread of a disease is failing (Van Bavel et al., 2020; see also Lincoln, 2020). Thus, national narcissism might promote support for actions that would protect a strong in-group image, rather than the well-being of in-group members themselves. For example, in a scandal related to the alleged refusal of joining an EU ventilators scheme, PM Johnson was accused of prioritising "Brexit over breathing—so determined to act independently of the bloc that it would risk public health in the coronavirus crisis" (Guarascio, 2020, para. 4). Although it was later clarified that the opportunity to participate in the scheme was missed due to a miscommunication ("False Claim", 2020), we found that British national narcissism predicted support for refusing participation in the EU ventilators scheme—even if this would threaten the well-

being of Brits (Gronfeldt, Cichocka, Cislak, Sternisko, & Eker 2020). In a similar vein, recent studies from Indonesia demonstrated that national narcissism predicted resistance to humanitarian aid offered in the aftermath of natural disasters (Mashuri et al., 2020). Together, these results suggest that collective narcissism predicts great concern with autonomy and strong appearances, even if they can threaten the well-being of in-group members.

1.2. Secure In-group Identity

Collective narcissism assumes a positive view of the in-group. However, this does not mean that all forms of positive in-group identity are narcissistic. Just as one can distinguish individual narcissism (feelings of personal entitlement and superiority) from self-esteem (feeling worthy on equal plane with others; Brummelman, Thomaes, & Sedikides, 2016; Cichocka, Cislak, Stronge, Osborne, & Sibley, 2019), collective narcissism can be distinguished from genuine, secure forms of in-group identity (Cichocka, 2016; Golec de Zavala, Cichocka, & Bilewicz, 2013). These can include constructive forms of patriotism (Kosterman & Feshbach, 1989; Roccas et al., 2006; Schatz et al., 1999) or, beyond the national context, conventional measures of in-group identity with social groups, which capture a "Tajfelian" (Postmes, Haslam, & Jans, 2013, p. 599) vision of in-group identification comprised of ties to other group members, satisfaction with the group, and the importance of the group to the self (Cameron, 2004; e.g., group-level self-investment, Leach et al., 2008). Collective narcissism generally correlates moderately positively with conventionally measured in-group identification as they both capture positivity about the group. However, researchers co-vary out overlapping variance by including collective narcissism and conventional measures of in-group identification in the same regression models (Golec de Zavala, Cichocka, & Bilewicz, 2013; Marchlewska et al., 2020). When controlled for in-group identification, collective narcissism reflects the feelings of in-group entitlement and concerns about validating the in-group in the eyes of others (Golec de Zavala,

Cichocka, & Bilewicz, 2013). In contrast, co-varying out collective narcissism from the measures of in-group identification (Cameron, 2004; Leach et al., 2008) partials out the defensive narcissistic component and displays the effects of more secure in-group identity which is defined as an unassuming positive regard for an in-group that does not need external validation (Golec de Zavala, Cichocka, & Bilewicz, 2013).

This form of in-group identity is related to lower perceived threat and conspiracy beliefs (Cichocka et al., 2016), less enjoyment of other groups' misfortunes (Golec de Zavala et al., 2016), and less outgroup negativity (Golec de Zavala, Cichocka, & Bilewicz, 2013). It does not seem to predict hostile reactions to in-group criticism (Golec de Zavala, Cichocka, & Iskra-Golec, 2013). In fact, secure in-group identity predicted greater intergroup solidarity in the form of support for disadvantaged groups' collective action (Górska et al., 2019). Even less surprisingly, it predicts greater group loyalty (Marchlewska et al., 2020; see also Ellemers, Spears, & Doosje, 1997; Randsley de Moura, Abrams, Retter, Gunnarsdottir, & Ando, 2009) and less undesirable treatment of in-group members (Cichocka et al., 2020). This is likely because secure in-group identity predicts lesser concern with how the group reflects on the individual and greater willingness to realize one's potential by benefitting the group and its members (Cichocka, 2016).

1.3. Roots of Collective Narcissism and Secure In-group Identity

In the early theorization of the topic, Adorno (1993/1998) and Fromm (1973) posited that collective narcissism serves a compensatory function. Fromm (1973) argued that "Group narcissism (…) is extremely important as an element giving satisfaction to the members of the group and particularly to those who have few other reasons to feel proud and worthwhile" (p. 275). Thus, idealisation of the in-group is thought to help manage individual shortcomings such as low feelings of self-worth or lack of life satisfaction. Accordingly, recent studies show that collective narcissism indeed increases as a response to unsatisfied

personal motives (Cichocka, 2016). In particular, researchers examined the role of two motivations: personal control and self-esteem (Cichocka et al., 2018; Golec de Zavala, Federico et al., 2019). Cross-sectional, experimental, and longitudinal studies confirmed that low personal control—that is, individuals' feelings of not being able to control their life course—increased national narcissism (Cichocka et al., 2018; Marchlewska et al., 2020). Other researchers found that low self-esteem (measured as state and trait, and experimentally undermined via outgroup ostracism) also predicted national narcissism (Golec de Zavala, Federico et al., 2019). These studies suggest that when individuals feel that their personal control or self-worth is threatened, they try to use their social groups (in the case of these studies, their nations) to compensate these needs via collective narcissism. But interestingly, national narcissism does not seem to predict increased personal control or self-esteem over time in longitudinal studies (Cichocka et al., 2018; Study 4; Golec de Zavala, Federico et al., 2019; Study 6). While collective narcissism emerges as a response to individuals' frustrated needs, it does not seem to succeed in managing them.

Other studies also demonstrated that collective narcissism could increase when the group itself is seen as being threatened or undermined. For example, a study conducted in the UK found that British national narcissism increased when the UK was presented as being disadvantaged for a long time (vs. not) in its relationship with the EU (Marchlewska et al., 2018; Study 2). Thus, seeing the in-group as being mistreated and threatened might further increase collective narcissism.

Secure in-group identity is suggested to be underlined by satisfied personal needs (Cichocka, 2016). Although accounts rooted in the SIT propose that in-group identification increases in response to lacking personal needs (Brewer, 1991; Hogg, 2000; Tajfel & Turner, 1986), research indicates that a more secure in-group identity seems to emanate from a stronger sense of self. For example, it increases when people recall experiences of feeling

high (vs. low) in personal control (Cichocka et al., 2018; see also Golec de Zavala, Federico et al., 2019). Having high self-esteem predicted higher secure in-group identity across time (Golec de Zavala, Federico et al., 2019). These studies indicate that secure in-group identity is non-compensatory. In this previous research, secure in-group identity also predicted greater needs satisfaction across time (Cichocka et al., 2018; Golec de Zavala, Federico et al., 2019). Taking collective narcissism into account sheds light on the association between self-esteem and derogating outgroups. Although initial empirical evidence for the link between low self-esteem and outgroup derogation has been weak (e.g., Rubin & Hewstone, 1998), recent studies suggest that collective narcissism might link low self-esteem to intergroup derogation (Golec de Zavala, Federico et al., 2019).

Many studies investigated intergroup and political outcomes of collective narcissism and secure in-group identity, and a new strand of research examines their intragroup outcomes (see Cichocka & Cislak, 2020). However, the underpinning mechanisms of collective narcissism and secure in-group identity are less well understood (Cichocka et al., 2018; Golec de Zavala, Federico et al., 2019). Because collective narcissism and secure in-group identity are related to opposing inter- and intragroup outcomes, it is important to understand the other psychological mechanisms underlying each. In this dissertation, I hope to contribute to this field. To answer my research question of what underpins collective narcissism and secure in-group identity, I examine a broad range of needs and motivations that could be helpful in differentiating what underlies defensive (i.e., collective narcissism) and secure in-group identity. To this end, I will investigate the role of trait differences and situational threats to the need to belong (Baumeister & Leary, 1995), frustrated versus satisfied individual and group needs (Deci & Ryan, 2000; Parker, Ryan, Duineveld, & Bradshaw, 2019), and different types of motivations derived from the self-determination theory and studies on religion (Allport & Ross, 1967; Amiot & Sansfacon, 2011; Deci &

Ryan, 2000) in explaining collective narcissism and secure in-group identity. In doing so, this dissertation explores several different theoretical perspectives on personal (and group) needs and motivations to understand defensive and secure forms in-group identity.

1.3.1. Bridging the theories.

This dissertation is based on the theoretical assumption that personal frustrations lead people to identify in more narcissistic ways with their groups, whereas secure in-group identity is rooted in satisfied individual needs (Cichocka, 2016). Groups serve different functions for their members (Brown, 2000). Consequently, many accounts theorised about the motivational basis of in-group identification (Brewer, 2003). The first theorizations were mainly concerned with self-esteem motivation. Two hypotheses, derived from the SIT, contended that 1) intergroup discrimination should elevate self-esteem, and hence 2) low self-esteem should motivate discrimination (Abrams & Hogg, 1988; Tajfel & Turner, 1979). Social distinctiveness theory proposes that while assimilation in a group fulfils the motivation to belong, boundaries between groups satisfy the need to be distinctive (Brewer, 1991). Uncertainty-identity theory contends that people are motivated to mitigate uncertainty and this is achieved by identifying with a meaningful group (Hogg, 2000, 2007). These features—self-esteem, uncertainty reduction, and optimal distinctiveness—can be understood as individual level needs underlying in-group identification (Thomas et al., 2017; Vignoles, 2011). In-group identification seems to work with a function to alleviate a state that comes with a threat to a personal need. For example, people identify strongly with their groups when they lack self-certainty (Hogg, 2007; Hogg, Sherman, Dierselhuis, Maitner, & Moffitt, 2007), and threats to personal distinctiveness strengthen identification with distinctive groups (Pickett, Silver, & Brewer, 2002). This understanding of needs seems to be similar to the understanding of deficit needs which “operate only when the organism has been threatened or thwarted” (Ryan & Deci, 2017, p.251).

Bridging the earlier theorisations on SIT, Vignoles, Regalia, Manzi, Golledge and Scabini (2006) identified six motives (self-esteem, continuity, self-efficacy, distinctiveness, meaning and belongingness) underlying social identification (Postmes et al., 2013). This account suggests that irrespective of the individual-level of needs, people are motivated to identify with groups in an effort to satisfy one or more of these six motives (Vignoles et al., 2006; Vignoles & Moncaster, 2007). For example, identification with a social category increases to the extent that people derive personal self-esteem, meaningfulness, and distinctiveness from this group (Easterbrook & Vignoles, 2012). It is suggested that when identity motives are frustrated, people will passionately pursue their satisfaction (Vignoles, 2011) by defending their in-group (Smeekes, & Verkuyten, 2013). In addition, the strength of identity motivations could differ individually (Vignoles, Chryssochoou, Breakwell, 2002; Vignoles & Moncaster, 2007; see also Vignoles et al., 2006, Study 6). For example, those who score higher in national identification and have a stronger belongingness and distinctiveness motivation display more in-group favouritism (Vignoles & Moncaster, 2007).

Another approach rooted in the self-determination theory (SDT) offers a different perspective on motivations and needs (Deci & Ryan, 1985). Originally intended to understand and explain behaviours, SDT proposes that different motivations can stem from reasons that are autonomous or controlled (Deci & Ryan, 2000). Consequently, this perspective does not emphasize the *strength* of motivation but distinguishes *types* of motivations, namely self-determined versus non-self-determined ones. While the former ones involve autonomous reasons, the latter ones include controlled reasons to perform a behaviour (Deci & Ryan 2008). Applied to group settings, these motivations can reflect reasons why people identify with groups (i.e., identifying for more autonomous or controlled reasons, Amiot & Sansfacon, 2011). In past research, examining the types of motivations was helpful when explaining different forms of social identities (Amiot & Sansfacon, 2011). For

example, self-determined motivations were related to patriotism, whereas non-self-determined motivations were associated with nationalism (Amiot & Aubin, 2013; Amiot & Sansfacon, 2011). A similar approach distinguishing between different types of motivations to understand the desired and undesired concomitants of religiosity comes from studies on religion (Allport & Ross, 1967).

Deci and Ryan (2000) define three basic psychological needs and frame them as growth needs which do not need to be thwarted to motivate people (Ryan & Deci, 2017). These needs include autonomy (not being coerced), competence (achieving goals, e.g., self-efficacy, Bandura, 1982), and relatedness (being connected to other people e.g., the need to belong, Baumeister & Leary, 1995). According to this framework, satisfaction of these needs leads to better functioning, psychological growth and acquiring more autonomous motivations, whereas frustration of needs leads to controlled motivations (Deci & Ryan, 2000). Among these needs, relatedness has similarities with the need to belong as both indicate an innate need to be affiliated and connected with other people (Baumeister & Leary, 1995; Deci & Ryan, 2000). However, while Baumeister and Leary (1995) posit individual trait differences in the strength of this need, Deci and Ryan (2000) emphasize the importance of the end result: whether relatedness (autonomy and competence as well) is satisfied or not. To illustrate, a person might have strong need for food, but they will be fine as long as there is food (Deci & Ryan, 2000). The conceptualization of trait need to belong is also more similar to deficit reduction orientation (e.g., seeking acceptance and social relationships to reduce personal insecurities, Lavigne, Vallerand, & Crevier-Braud, 2011).

Ryan and Deci (2017) argue that certain socio-structures and political arrangements also have an effect on the individuals' need satisfaction and frustration. A recent theoretical advancement also adapted these individual needs to group settings and thus conceptualized them as group needs (Kachanoff, Wohl, Koestner, & Taylor, 2020; Parker et al., 2019). For

example, Kachanoff et al. (2020) suggest that people have a need to perceive that the group they belong to is autonomous (free to express their identity), competent (capable of achieving outcomes) and related (accepted by other groups) in relation to the rest of the society. This conceptualization manages to bridge group needs with the social identity tradition (Branscombe, Schmitt, & Harvey, 1999; Kachanoff et al., 2020; Tajfel & Turner, 1979).

1.3.2. Need to belong and SDT in relation to current research.

The need to belong is a strong and fundamental personal need and contributes to social identification (Baumeister & Leary, 1995; Brewer, 1991; Deci & Ryan, 2000; Vignoles et al., 2006). Research relying on Baumeister and Leary's theorisation (1995) operationalized it both as a trait variable and effects of thwarting need to belong as a situational variable (Leary, Kelly, Cottrell, & Schreindorfer, 2013; Williams, 2007). Collective narcissism was found to be responsive to threats to personal control and self-esteem (Cichocka et al., 2018; Golec de Zavala, Federico et al., 2019). These threatened needs were related to outgroup hostility and discrimination via collective narcissism. In contrast, satisfaction of these needs fostered secure in-group identity (Cichocka et al., 2018; Golec de Zavala, Federico et al., 2019). In fact, having higher personal control was related to having more positive attitudes towards outgroups via secure in-group identity (Marchlewska et al., 2020). Thus, belongingness as a fundamental need could be important when explaining the differing intergroup concomitants of collective narcissism and secure in-group identity. I investigate these links in Chapter 1.

SDT takes both the fulfilment and the frustration of the needs into account and suggests that scoring low in need fulfilment does not necessarily mean that needs are frustrated (Vansteenkiste, Ryan, Soenens, 2020). Cichocka (2016) refers to satisfaction versus frustration of needs when explaining secure in-group identity and collective narcissism. However, previous research conceptualized frustration of needs as scoring low in

control and self-esteem (Cichocka et al., 2018; Golec de Zavala, Federico et al., 2019; Marchlewska et al., 2020). Using both need satisfaction and frustration could give a better idea about the links between personal needs and collective narcissism versus secure in-group identity.

The antecedents of collective narcissism and secure in-group identity have been studied with respect to personal needs, but is studied less often with regard to group-related factors. However, in one study group-based disadvantages were related to higher collective narcissism (Marchlewska et al., 2018; Study 2). Thus, the idea that one's group members are getting less has been linked to collective narcissism. Hence, examining group needs should also provide further insight on the underpinnings of collective narcissism and secure in-group identity with respect to group-based variables. I examine SDT's perspective of individual needs and group needs in Chapter 3.

Collective narcissism reflects a seemingly strong love for the in-group that translates into defensiveness and hostility in intergroup relationships (Cichocka & Cislak, 2020; Marchlewska et al., 2020). However, as mentioned, this form of in-group identity does not translate into benefitting fellow members of the in-group (Cichocka et al., 2020). Rather, it is related to supporting actions that could harm the in-group in the long run just to present a positive and strong image (Cislak et al., 2018, 2021; Mashuri et al., 2020). Therefore, collective narcissism indicates a high identification in terms of its strength (e.g., superficial in-group love, Marchlewska et al., 2020) but does not result in the improvement of the situation of the in-group.

In contrast, secure in-group identity is related to positive attitudes and more tolerance towards outgroups (Golec de Zavala et al., 2009; Marchlewska et al., 2020). This form of in-group identity predicts being more committed to the in-group (Marchlewska et al., 2020). It is also linked to a lower need for external validation of the in-group (Golec de Zavala et al.,

2016; Golec de Zavala, Cichocka, & Iskra-Golec, 2013). Those who have higher secure in-group identity did not support policies that could cause in-group harm (Cislak et al., 2020; Cislak et al., 2018). Thus, secure in-group identity can contribute to both intergroup relations and betterment of the in-group.

According to the SDT, not the strength but the types of motivations are helpful in understanding these qualitative differences of outcomes (Vallerand, 2012). Similarly, types of religious orientations are used to explain positive and negative outcomes of religiosity (Allport & Ross, 1967). Given that inter- and intragroup concomitants of collective narcissism and secure in-group identity differ qualitatively, the type of identity motivations associating with each of them could differ as well. Based on this literature, I examine the type of motivations and how they associate with collective narcissism versus secure in-group identity in Chapter 4.

To summarize, theorisation and studies (Cichocka, 2016; Cichocka et al., 2018; Golec de Zavala, Federico et al., 2019) suggest that while lacking personal needs contribute to collective narcissism, satisfied personal needs contribute to secure in-group identity. Based on this literature, I broadly expected thwarted needs and self-determined motivations to be related to collective narcissism. In contrast, I expected satisfied needs and self-determined motivations to associate with secure in-group identity.

1.4. Overview of the Empirical Chapters

In ten studies, I examined how the need to belong, other basic psychological needs, and types of motivations might underlie defensiveness (e.g., collective narcissism) and security of in-group identity in different group contexts. In Chapter 2, I investigated the relationships between the need to belong and collective narcissism versus secure in-group identity. At the beginning of this chapter, I extend more on the conceptualization of belongingness from Baumeister and Leary (1995). The Pilot Study and Study 1 were

correlational and examined the need to belong as a trait variable. While the Pilot Study focused on a political group, Study 1 included national groups. Then, I conducted Studies 2, 3, and 4 with the aim to experimentally alter the state of need to belong (thwarted versus fulfilled). Studies 2 and 3 included national groups, and Study 4 focused on a student group. Finally, I present a meta-analysis synthesizing all the results in this chapter which did not support my predictions.

In Chapter 3, I address other basic psychological needs and their application in group settings in more depth. Here, I studied the associations between frustrated versus satisfied basic psychological needs (autonomy, competence, relatedness) and collective narcissism versus secure in-group identity with two studies. Study 5 is longitudinal and examined individual basic psychological needs in a national group. This study builds on Chapter 2 with respect to relatedness but extends it by investigating other needs such as autonomy and competence. Study 6 is correlational and investigated basic group needs in advantaged and disadvantaged ethnic groups. This chapter partially confirmed my predictions and shows some similarities between individual and group needs that are reflected in two forms of in-group identity.

In Chapter 4, I investigated the associations between self-determined versus non-self-determined motives and religious orientations and collective narcissism versus secure in-group identity in four studies. Studies 7 and 8 examined self-determined and non-self-determined motives in personally important groups and in a national group respectively. Study 9 investigated religious orientations in the context of religious groups. Finally, Study 10 examines both SDT motives and religious orientations in a religious group. This chapter further contributes to Study 5, and demonstrates that two forms of in-group identity are associated with different types of motives to identify. In all the studies I control for the

overlap between in-group identification and collective narcissism. In the results, I refer to in-group identification as secure in-group identity after doing so.

CHAPTER 2

> "Just as the individual is not alone in the group, nor any one society alone among the others, so man is not alone in the universe." (Lévi-Strauss, 1955/1992, p. 414).

2.1. Introduction

Anthropologist Lévi-Strauss (1955/1992) points out the importance of groups in helping people to achieve a sense of belongingness in his memoir. In parallel, psychologists propose that groups are important resources to fulfil individuals' needs of belongingness (Brewer, 1991; Correll & Park, 2005). In their seminal work, Baumeister and Leary (1995) propose that the need to belong is a fundamental and innate motivation for human beings which evolved primarily due to its capacity to increase chances of survival and reproduction. Relying on a broad literature, Baumeister and Leary (1995) define the need to belong as "a pervasive drive to form and maintain at least a minimum quantity of lasting, positive, and significant interpersonal relationships" (p. 497). In order to investigate exactly how it underpins collective narcissism versus secure in-group identity, the current chapter examines the need to belong in two ways: first, as an individual (trait) difference in need-strength; second, as a thwarted versus satisfied need.

2.1.2. Need to belong as an individual difference.

Baumeister and Leary (1995) view the need to belong as universal, although they acknowledge that there might be cultural and individual differences in its strength. In other words, while all people desire to be accepted and belonged, the strength of this desire varies (Leary et al., 2013). Consequently, Leary et al. (2013) developed a trait measure that assesses individual differences in the intensity of people's desire to be accepted and discomfort with rejection. In a series of studies, higher need to belong was found to be associated with more fear of criticism and rejection, higher tendency to have hurt feelings, more importance attributed to social identities but, at the same time, lower levels of self-esteem (Leary et al.,

2013). These studies suggest that striving for more belongingness is related to undesired traits and personal shortcomings for people.

While Baumeister and Leary (1995) posit individual variations in the need to belong, the trait measure of it (Leary et al., 2013) does not directly assess one's achieved sense of belonging. Baumeister and Leary (1995) state that the satisfaction of the need to belong derives from "affectively pleasant interactions with a few other people, and … these interactions must take place in the context of a temporally stable and enduring framework of affective concern for each other's welfare" (p. 497). Leary et al. (2013) reported that a higher need to belong did not correspond with a perceived lack of social support. Verhagen, Lodder, and Baumeister (2018) also showed that individual differences in the need to belong can be higher, lower, or matching the perceived satisfaction of it. In their study, lower self-esteem, and higher loneliness and depression scores were related to having a higher need to belong but lower levels of relatedness satisfaction. Thus, they concluded that the high but unmet need to belong is detrimental to individuals.

In contrast, some scholars argue that a stronger need to belong as a trait difference could be reflecting a deficit or insecurity in belongingness (Barnes Carvallo, Brown, & Osterman, 2010; Lavigne et al., 2011). Malone, Pillow, and Osman (2012) state that scoring low in trait need to belong could be understood as a sign of a higher sense of belongingness. A more detailed study investigating achieved belongingness and relatedness satisfaction found that a high need to belong is related to partially satisfying relationships and being in need of getting reassurance from other people (Pillow, Malone, & Hale, 2015). Although trait differences in the need to belong do not measure established belongingness, these studies together suggest that a stronger desire for it could reflect a more vulnerable or insecure self.

2.1.2. Thwarted versus satisfied need to belong.

The need to belong is satisfied when people are accepted by others and establish meaningful relationships (Baumeister & Leary, 1995). It can be thwarted by social exclusion and rejection (Baumeister, Brewer, Tice, & Twenge, 2007). Although it is difficult to differentiate these constructs, social exclusion pertains to experiences of being alone and isolated, while social rejection indicates explicit rejection of an individual from a group or a relationship (Leary, 2005; Twenge, Baumeister, Tice, & Stucke 2001; Williams, 2007). According to the socio-meter theory (Leary & Baumeister, 2000), state self-esteem monitors people's relational value and, therefore, it gauges social inclusion and exclusion. While social inclusion increases self-esteem, social exclusion threatens and depresses it (Leary & Baumeister, 2000). Williams (2001) defined another version of social exclusion, namely ostracism, as "being invisible and being excluded from the social interactions of those around you" (p. 2). Ostracism may also threaten needs of belongingness, control, meaningful existence, as well as self-esteem (Williams, 2009).

Researchers employed various paradigms to induce exclusion and acceptance, allowing them to alter belongingness momentarily in experiments. In one paradigm, for example, participants were assigned to experimental conditions in which they were told that they will end-up alone in the future (exclusion) or they will have fulfilling relationships (acceptance) based on bogus personality tests (Twenge et al., 2001; Study 1). Another method included allowing participants to get to know and interact with each other for a short amount of time (Nezlek, Kowalski, Leary, Blevins, & Holgate, 1997). After participants got acquainted, they were asked to note down two people partners from the group with whom they wanted to work. Participants who were assigned to the rejection condition learned that no-one from the group wanted to work with them, whereas participants in the acceptance condition learned that everyone wanted to work with them. (Twenge et al., 2001; Study 3). Another method includes evoking past experiences of personal rejection or inclusion (Pickett,

Gardner, & Knowles, 2004). Williams and Jarvis (2006) developed a ball-tossing paradigm—also known as Cyberball—to replicate the experiences of ostracism. With this paradigm, participants are told that they will play an online ball-tossing game with two other players. Unknown to the participants, the game is pre-programmed for inclusion and exclusion. Typically, in the exclusion (ostracism) condition, participants receive only one or two tosses at the beginning of the game. They do not receive any tosses during the rest of the game, whereas other players continue to play between themselves. In the inclusion condition, tosses are distributed equally. A recent method used "phubbing"—being ignored by a conversation partner during a social interaction because they favour their phone—to threaten belongingness (Chotpitayasunondh & Douglas, 2018).

Although the methods of the studies differ, the experience of exclusion is associated with undesired behavioural and psychological outcomes in general (cf. Leary, Twenge, & Quinlivan, 2006; Williams, Cheung, & Choi, 2000; Williams & Sommer, 1997). For example, being excluded predicts aggression towards both exclusionary targets and innocent third parties (Buckley, Winkel, & Leary, 2004; Kirkpatrick, Waugh, Valencia, & Webster, 2002; Twenge et al., 2001; Warburton, Williams, Cairns; 2006), derogation of exclusionary targets (Bourgeois & Leary, 2001), engaging in less prosocial behaviour (Twenge, Baumeister, DeWall, Ciarocco, & Bartels, 2007), as well as impaired self-regulation and less self-esteem (Baumeister, DeWall, Ciarocco, & Twenge, 2005; Leary & Baumeister, 2000). There are fewer studies focusing on the outcomes of inclusion. However, being accepted is related to desired outcomes such as higher self-esteem and positive emotions (Begen & Turner-Cobb, 2015; Blackhart, Nelson, Knowles, & Baumeister, 2009) as well increased trust towards others (Hillebrandt, Sebastian, & Blakemore, 2011). These studies demonstrate that thwarted belongingness results in personal shortcomings and maladaptive behaviours, whereas satisfied belongingness contributes towards a psychologically healthier self.

2.1.3. Need to belong and social groups.

More central to the idea that will be investigated in this chapter, fulfilment of the need to belong is not limited to interpersonal relationships. People can form very strong bonds with social groups (Hornsey & Jetten, 2004). Baumeister and Leary (1995) propose that the need to belong can be compensated by group memberships and, in doing so, groups have a substitute function. To illustrate, a person who does not have intimate or satisfactory relationships could identify with an ideological group to fulfil their need for belongingness (Baumeister & Leary, 1995). From the social identity tradition, optimal distinctiveness theory contends that assimilation in groups has the potential to satisfy belongingness needs (Brewer, 1991). Similarly, Correll and Park (2005) argue that groups that satisfy the need to belong and acceptance are perceived to be more meaningful. In line with these propositions, Hirsch and Clark (2019) suggest group membership as one of the routes to achieve belongingness.

Indeed, studies provide evidence that group membership can alleviate threats to belongingness. In three experiments, being a member of a majority group buffered against the experience of exclusion for participants who scored higher in the need to belong (Eck, Schoel, & Greifeneder, 2017). That is, they felt less threatened by social exclusion which was operationalised as imagined rejection (Study 1) and ostracism (Studies 2 & 3). In four studies, Knowles and Gardner (2008) demonstrated that situational factors which threaten individuals' need to belong activate group-related constructs. In all studies participants were asked to recall a rejection experience under the exclusion conditions. To measure the accessibility of group-related constructs, participants were also issued a word completion task in which the word could be completed in a way related to groups or unrelated to groups (Study 1). It was found that participants in the rejection condition completed the words in reference to social groups. In Study 2, after the recall task, participants were asked to

categorize group-related, meaningless, or neutral words all of which were matched lengthwise to measure group accessibility. They were also asked to list the groups that define who they are. In the exclusion condition, group-related words were categorized more quickly than the other words. In Studies 1 and 2, activation of group-related constructs resulted in increased self-esteem after exclusion. Study 3 revealed that participants perceived their social groups as more meaningful and important after rejection.

These studies examined group membership in relation to minimal (Eck et al., 2017) and idiosyncratic groups such as sororities, fraternities (Knowles & Gardner, 2008). However, a series of studies showed that after reliving an exclusion experience, participants were more committed to their religious affiliations (Aydin, Fischer, & Frey, 2010). Broad and abstract social categories such as nation or religion fulfil the need to belong through intragroup similarity (Easterbrook & Vignoles, 2013). Immigrants who feel excluded in the host country they live in, identify more with their ethnic and religious group (Maliepaard & Verkuyten, 2018; Verkuyten & Yildiz, 2007).

2.1.4. Need to belong and the two forms of in-group identity.

Collective narcissism serves a compensatory function for individuals' shortcomings, whereas secure in-group identity reflects a strong sense of self; therefore, it could be rooted in satisfied individual needs (Cichocka, 2016). Based on the literature reviewed previously, collective narcissism and secure in-group identity could be relating to need to belong in different ways. When measured as a trait variable, a higher need to belong was related to negative emotions, low self-esteem, feelings of having less control over life events (Leary et al., 2013) and less forgivingness (Barnes et al., 2010), all of which have been linked to collective narcissism (Cichocka et al., 2018; Golec de Zavala, 2019; Golec de Zavala, Federico et al., 2019; Hamer et al., 2018). Thus, a chronic high need for belongingness could be associated with collective narcissism.

Studies generally report and interpret the outcomes of the high end of the trait need to belong (Barnes et al., 2010; Leary et al., 2013), and it is reasonable to think low scores in the trait need to belong could be understood as being less sensitive or more resilient to rejection. If this understanding of the need to belong is indeed driven by deficits in relationships and neuroticism (Lavigne et al., 2011; Pillow et al., 2015), scoring low in this trait could indicate fewer personal shortcomings. For example, the negative relationship between need to belong and life satisfaction and happiness (Pillow et al., 2015) might suggest that those scoring low in the trait belongingness are more satisfied with their lives and feel happier. Golec de Zavala (2019) did find that positive emotionality and life satisfaction are related to higher secure in-group identity, suggesting some support for this hypothesis. Therefore, being lower in this trait could be reflected in secure in-group identity.

While experimental exclusions momentarily increase the need to belong by thwarting it, inclusion satisfies it (DeWall, Baumeister, & Vohs, 2008). After these manipulations, it was found that people increase in-group identification and use groups to manage the experience of being excluded. (Aydin et al., 2010; Eyck et al., 2017; Knowles & Gardner, 2008). Studies in group settings also reveal that in-group favouritism and outgroup derogation increase feelings of belonging to the in-group (Hunter et al., 2017; Study 1 & 2). For example, in one study participants who experienced a rejection blasted more distressing noise to outgroup members compared to participants in the baseline (Hunter et al., 2017; Study 3). Interestingly, this hostile response was observed both among included and excluded participants. However, these studies did not differentiate between collective narcissism and secure in-group identity. Collective narcissism robustly predicts outgroup hostility (see Cichocka & Cislak, 2020 for a review) and was related to symbolic aggression towards outgroups (Golec de Zavala, Federico et al., 2019). It could be possible that those who score high in collective narcissism display these undesired attitudes to outgroups as a means of

compensating for thwarted belongingness by connecting to their in-group. However, inclusion can contribute to higher control (Gerber & Wheeler, 2009), and it can increase a more secure in-group identity. In fact, the personal experience of being included was also positively related to in-group identification (Aydin et al., 2010).

2.2. Overview of Current Studies and Hypotheses

In this empirical chapter, I investigate the role of the strength of the need to belong (trait differences) and situational changes to it (thwarted versus satisfied) as predictors of collective narcissism versus secure in-group identity. The current studies test two hypotheses. With Hypothesis 1, I contend that the need to belong should be positively related with collective narcissism (H1a) but negatively with secure in-group identity (H1b). With Hypothesis 2, I contend that the thwarted need to belong (feelings of being excluded) should predict higher collective narcissism (H2a), whereas the satisfied need to belong (feelings of being included) should predict higher secure in-group identity (H2b). Pilot Study and Study 1 tested Hypothesis 1 with a correlational design. Studies 2, 3, and 4 aimed to manipulate individual levels of need to belong with experimental designs to test Hypothesis 2. Each experimental study used a different procedure to manipulate the need to belong: Study 2 included reliving a past experience of rejection, Study 3 implemented phubbing, and Study 4 used ostracism. All correlational and experimental studies were administered online through Qualtrics. However, online data collection was done in a laboratory setting for Study 4. In all the studies, I controlled for the overlap between collective narcissism and in-group identification. I do not have a specific prediction for demographics (age, gender), but following past research (Golec de Zavala et al., 2009; Marchlewska et al., 2018), I controlled for these variables as well.

2.3. Pilot Study

In this preliminary study, I examined the links between the need to belong and collective narcissism versus secure in-group identity. To do so, I relied on an available data set that included the variables of interest[3] in the context of a political party membership.

2.3.1. Method

Participants and Procedure.

This study consisted of participants who were elite members of a left-wing political party (the Left-Greens) in Iceland. The candidates who were listed by the party for the parliamentary and municipal elections between 2013 and 2017 were phoned and invited to take part in an online study. No compensation was offered in exchange for participation. The list included 388 candidates and was accessed through the Ministry of the Interior's archives (www.kosning.is). Two hundred and forty-five candidates participated in the study. Participants who provided partial or full data were retained for the further analysis. Accordingly, 31 participants were excluded from the further analyses as a result of not providing any data. The final sample consisted of 214 participants (110 women, 94 men, 10 preferred not to say) age ranging from 20 to 78 (M = 48.68, SD = 14.01). Participants responded to items on 7-point scales (1= *strongly disagree*, 7 = *strongly agree*).

Measures.

Need to belong. Need to belong was measured with a single item from Nichols and Webster (2013) "I have a strong need to belong".

Collective narcissism. Collective narcissism was measured with respect to participants' political party by using the nine-item Collective Narcissism Scale (Golec de

[3] The data was collected for Bjarki Gronfeldt's partial fulfilment of master's programme at the University of Kent. The data set includes other variables as well and was submitted for a publication focusing on a different set of research questions.

Zavala et al., 2009). One sample item read as "I insist upon the Left-Greens getting the respect they are due" (α = .81).

In-group identification. Identification was measured with respect to participants' political party with Three-Factor Identity Scale (Cameron, 2004). This measure includes 12 items, representing three components: ties "I feel strong ties to other members of Left-Greens", centrality "I often think that fact that I am a member of Left-Greens", and affect "In general, I am glad to be a member of Left-Greens" (α = .81).

2.3.2. Results

Descriptive statistics and zero-order correlations.

Table 2.1 displays the means and the standard deviations of the variables of interest, and the zero-order correlations between them. Both collective narcissism and in-group identification positively correlated with need to belong. There was a positive relationship between collective narcissism and in-group identification as well.

Table 2.1

Descriptive statistics and zero-order correlations among the variables in Pilot Study

Variables	*M*	*SD*	1	2
1. Need to belong	4.74	1.41	-	
2. Collective narcissism	3.92	0.96	.28***	-
3. In-group identification	5.09	0.84	.23***	.33***

Note. ***$p < .001$.

Need to belong predicting two forms of in-group identity.

I conducted two regression analyses to test the role of need to belong when predicting two forms of in-group identity. In the first analysis, I introduced collective narcissism as the outcome variable and need to belong as the predictor, along with age and gender. The second step of the analysis controls for in-group identification. The results are presented in Table 2.2.

In the first step, need to belong was associated positively with collective narcissism, β = .29, $p < .001$. Controlling for in-group identification, this relationship was still in the same direction and significant, β = .23, $p = .001$.

Table 2.2

Need to belong predicting collective narcissism (Pilot Study)

	Step 1			Step 2		
Predictors	*B(SE)*	β	*p*	*B(SE)*	β	*p*
Need to belong	0.20(0.05)	.29***	< .001	0.16(0.05)	.23**	.001
Age	0.00(0.01)	.06	.42	0.00(0.01)	.01	.91
Gender[1]	-0.23(0.13)	-.12	.08	-0.25(0.13)	-.12	.06
In-group identification		—		0.32(0.08)	.28***	< .001
F		7.29***			10.01***	
R^2		.10			.17	
ΔR^2		—			.07***	

Note. Gender[1] was coded as 0 = Male, 1 = Female.

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

In the second analysis, I introduced in-group identification as the outcome variable and need to belong as the predictor when controlling for age and gender. The second step of the analysis was controlled for collective narcissism. The results are presented in Table 2.3. In the first step, need to belong was positively associated with in-group identification, β = .23, $p = .001$. Controlling for collective narcissism, need to belong still positively predicted secure in-group identity, β = .15, $p = .03$.

Table 2.3

Need to belong predicting in-group identification (Pilot Study)

	Step 1			Step 2		
Predictors	*B(SE)*	β	*p*	*B(SE)*	β	*p*
Need to belong	0.14(0.04)	.23***	.001	0.09(0.04)	.15*	.03
Age	0.01(0.00)	.17*	.01	0.01(0.00)	.16*	.02
Gender[1]	0.04(0.12)	.02	.76	0.09(0.11)	.06	.41
Collective narcissism		—		0.25(0.06)	.29*	.02
F		5.89**			8.87***	
R^2		.08			.15	
ΔR^2		—			.07***	

Note. Gender[1] was coded as 0 = Male, 1 = Female.

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

2.3.3. Discussion

The Pilot Study focused on membership within a political party. The results partially confirmed Hypothesis 1 which expected a positive link between need to belong and collective narcissism and a negative association between need to belong and secure in-group identity. These results suggest that the more people have a need to belong, the more they identify with their group (either in a narcissistic or secure way). However, this study included only one item when assessing the need to belong ("I have a strong need to belong", Nichols & Webster, 2013). Because this is a general statement, it is not clear what participants were responding to when they said they have a strong need to belong.

2.4. Study 1

While the Pilot Study provided partial support for the first hypothesis, it only relied on a single-item measurement of need to belong. In Study 1, I investigated the same relationships with regard to national groups, but this time I employed a measure that assesses

trait differences in the strength of need to belong (Leary et al., 2013). This measure is more germane to the current research idea and makes references to interpersonal relations when investigating the need to be accepted or avoidance of rejection (Hirsh & Clark, 2019).

2.4.1. Method

Participants and Procedure.

Participants were undergraduate psychology students and were recruited via the Research Participation Scheme (RPS) at the University of Kent in exchange for one course-credit. I aimed to recruit as many participants as possible before the term ended. Data collection took place in the middle of the second semester between March and April in 2018. Eighty-two participants signed up to take part in the study; however, four of them dropped-out. The final data set consisted of 78 participants (55 female, 23 male), age ranging from 18 to 30 (M = 19.57, SD = 1.65). British participants formed the 71.8% of the sample. The rest of the participants were from different nationalities (10.03% Western, 14.01% Non-Western, and 3.8% preferred not to tell). Participants completed the measures that assessed collective narcissism and in-group identification in a random order.

Measures.

Need to Belong. Trait differences in the need to belong were measured with the Need to Belong Scale (Leary et al., 2013). The scale included ten items e.g. “I want other people to accept me”, and “It bothers me a great deal when I am not included in other people’s plans” (1 = *not at all*, 5 = *extremely*). Thus, higher scores indicate a stronger need to belong. The internal reliability of the scale was good (α = .82).

Collective Narcissism. Collective narcissism was measured with respect to participants’ self-reported nations by using the same measure in the previous study (α = .84).

In-group identification. Participants’ identification with their nations was assessed with the same scale that was used in the previous study (α = .81).

2.4.2. Results

Descriptive statistics and zero-order correlations.

Table 2.4 presents the descriptive statistics of need to belong, collective narcissism and in-group identification, and zero-order correlations among them. While collective narcissism and in-group identification were positively associated with each other, need to belong was not related to either of them.

Table 2.4

Descriptive statistics and zero-order correlations among the variables in Study 1

Variables	*M*	*SD*	1	2
1. Need to belong	3.43	0.66	-	
2. Collective narcissism	3.14	0.99	-.01	-
3. In-group identification	4.32	0.77	.04	.33**

Note. $^{**}p < .01$.

Need to belong predicting two forms of in-group identity.

The first regression analysis tested the role of need to belong in predicting collective narcissism when controlling for in-group identification. These results are presented in Table 2.5. Overall, the first step of the regression was not significant, F (3, 74) = 0.46, p = .71, R^2 = .02. The need to belong did not predict collective narcissism, β = .01, p = .94. The model became significant in the second step, F (4, 74) = 2.80, $p < .05$, R^2 = .14. However, collective narcissism was only predicted by in-group identification, β = .35, $p < .01$, and the effect of the need to belong remained non-significant, β = .00, p = .97.

Table 2.5

Need to belong predicting collective narcissism (Study 1)

	Step 1			Step 2		
Predictors	*B(SE)*	β	*p*	*B(SE)*	β	*p*
Need to belong	0.02(0.19)	.01	.94	0.01(0.17)	.00	.97
Age	0.07(0.07)	.12	.34	0.08(0.07)	.13	.25
Gender[1]	-0.15(0.26)	-.07	.56	-0.23(0.26)	-.11	.36
In-group identification		—		0.45(0.15)	.35**	.003
F		0.46			2.80*	
R^2		.02			.14	
ΔR^2		—			.12**	

Note. Gender[1] was coded as 0 = Male, 1 = Female.

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

The second regression analysis introduced in-group identification as the outcome variable and need to belong as the predictor while controlling for collective narcissism in the second step. The Table 2.6 displays the results. The model was not significant overall, F (3, 74) = 0.33, p = .81, R^2 = .01. Need to belong did not have a significant relationship with in-group identification, β = .02, p = .89. After collective narcissism was accounted for, the model became significant, F (4, 74) = 2.69, p = .04, R^2 = .14. However, controlling for collective narcissism, need to belong did not predict secure in-group identity, β = .01, p = .91.

Table 2.6

Need to belong predicting in-group identification (Study 1)

	Step 1			Step 2		
Predictors	*B(SE)*	β	*p*	*B(SE)*	β	*p*
Need to belong	0.02(0.14)	.02	.89	0.01(0.13)	.01	.91
Age	-0.02(0.06)	-.05	.71	-0.04(0.05)	-.08	.46
Gender[1]	0.17(0.20)	.10	.41	0.21(0.19)	.12	.27
Collective narcissism		—		0.27(0.09)	.35**	.003
F		0.33			2.69*	
R^2		.01			.14	
ΔR^2		—			.12**	

Note. Gender[1] was coded as 0 = Male, 1 = Female.

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

2.4.3. Discussion

The results from Study 1 did not confirm the Hypothesis 1. Unlike in the previous one, the need to belong was unrelated to collective narcissism. These results indicate that a chronic high need for belongingness, which means being uncomfortable with rejection, is not reflected in collective narcissism. Also, scoring low in this trait seems to be unrelated to secure in-group identity. The sample of Study 1 was not large due to its timing during the term and consisted of relatively young students. Perhaps in such a demographic the strength of the need to belong does not correspond to national identification. Overall, these two studies do not give clear results on how the need to belong is related to collective narcissism and secure in-group identity. Pilot Study and Study 1 included self-reports of individuals' need for belongingness as a trait variable. It is argued that this conceptualization of the need to belong reflects a deficit or insecurity (Barnes et al., 2010; Lavigne et al., 2011) and high scores might be suggestive of lower degrees of belongingness (Malone et al., 2012). Although these assumptions are reasonable, trait differences measured in Pilot Study and

Study 1 did not explicitly indicate the levels of achieved or thwarted belongingness. In fact, situational manipulations of exclusion and inclusion alter the state of belongingness: while the former threatens and thwarts the need to belong, the latter induces feelings of more belongingness and fulfils it (Barnes et al., 2010; DeWall et al., 2008). In the next set of studies, I alter the level of belongingness by experimental manipulations of exclusion and inclusion. This should allow us to see how frustrated versus satisfied belongingness are related to collective narcissism versus secure in-group identity.

2.5. Study 2

Collective narcissism increases in response to situational threats to personal needs (Cichocka, 2016). Secure in-group identity was fostered by fulfilment of individual needs (Cichocka, 2016; Cichocka et al., 2018; Golec de Zavala, Federico et al., 2019). Thus, I predicted that while being excluded should increase collective narcissism (H2a), being included should foster secure in-group identity (H2b). This experiment manipulated the need to belong by using a recalling task (Knowles & Gardner, 2008) to test Hypothesis 2 in a national context. The task asked participants to remember and write about a time when they felt rejected, accepted, or felt in pain (for the control condition).

2.5.1 Method

Participants and procedure.

An a priori power analysis (GPower, Faul, Eldfelder, Lang, & Buchner, 2007), with 80% power to detect a medium effect size of $f = .25$ (Cohen, 1988) suggested 159 participants in total for three conditions. Participants were undergraduate psychology students who were recruited through Research Participation Scheme (RPS) at the University of Kent. The study was advertised as being about recalling past experiences and the participants received one course credit in exchange for their participation. The data collection started in 2018 (November) and finished in 2019 (March). In total, 148 participants responded to the

study. However, 26 participants wrote about different experiences than the instructions were asked for. Thus, the final analysis consisted of 122 participants (102 women, 19 males, 1 unknown), aging in age from 18 to 30 (M = 19.10, SD = 1.64). Seventy six percent of the participants were British. The rest included various nationalities (12.3% were from different parts of the West and 11.5% were from elsewhere).

Participants were randomly allocated to three conditions: exclusion ($N_{rejected}$ = 48), inclusion ($N_{accepted}$ = 31), or control ($N_{control}$ = 41). All three conditions included an essay box with a 500-word limit for participants to write about their previous experiences. Participants in the exclusion condition were instructed to "write about a time in which you felt intensely rejected in some way, a time that you felt as if you did not belong. This rejection can be interpersonal in nature (e.g., a time in which someone broke up with you, or no longer wanted to be your friend) or can be a rejection from a group (e.g., a time in which you were chosen last for a team or excluded from a clique)." Participants in the inclusion condition were instructed to "write about a time in which you felt very accepted in some way, a time that you felt as if you belonged. This acceptance can be interpersonal in nature (e.g., a time in which someone wished to date you or wanted to be your friend) or can be an acceptance by a group (e.g., a time in which you were chosen for a team or included in a clique)." Finally, participants in the psychical pain condition were instructed to "write about a time in which you felt intense physical pain or distress. This physical distress can pertain to an injury (e.g., a time in which you broke a bone) or can pertain to a physical illness (e.g., a time in which you contracted mono or suffered through the flu)". Participants' answers were checked before the analyses to make sure they were consistent with the instructions.

Measures.

Collective narcissism. Collective narcissism was measured with regard to the participants' nation with the same scale in the previous studies (α = .88, *M* = 3.26, *SD* = 1.02).

In-group identification. In-group identification was assessed with respect to national identification by the same measure in the previous studies (α = .83, *M* = 4.36, *SD* = 0.78).

2.5.2. Results

Experimental conditions predicting two forms of in-group identity.

Collective narcissism and in-group identification were related to each other, *r* (122) = .34, *p* < .001. I conducted two multiple regression analyses to test the effects of experimental conditions (rejection vs. acceptance vs. control) on collective narcissism and secure in-group identity. To do so, I created two dummy variables prior to the analyses. While the first code compared rejection with the control condition, the second one compared rejection with acceptance. Two codes were introduced as predictors and each analysis was controlled for the overlap between collective narcissism and in-group identification in the second step. As shown in Table 2.7, the model was significant when controlling for in-group identification, *F* (5, 115) = 3.49, *p* = .006, R^2 = .13. However, there was no significant effect of rejection (vs. acceptance), β = -.17, *p* = .12, or rejection (vs. control), β = .09, p = .44, on collective narcissism.

Table 2.7

Effects of experimental conditions on collective narcissism (Study 2)

	Step 1			Step 2		
Predictors	*B(SE)*	β	*p*	*B(SE)*	β	*p*
Rejection (vs. control)	0.10(0.13)	.09	.44	0.12(0.13)	.10	.34
Rejection (vs. acceptance)	-0.17(0.15)	-.13	.26	-0.22(0.13)	-.17	.12
Age	-0.03(0.06)	-.04	.65	-0.03(0.06)	-.04	.64
Gender[1]	-0.12(0.26)	-.04	.64	-0.17(0.25)	-.06	.50
In-group identification		—		0.46(0.12)	.35***	< .001
F		0.45			3.49**	
R^2		.02			.13	
ΔR^2		—			.12***	

Note. The first code was rejection = -1, control = 1, acceptance = 0; the second code was rejection = -1, acceptance = 1, control = 0. Gender[1] was coded as 0 = Male, 1 = Female.

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

The second regression was conducted with in-group identification as the outcome variable and controlled for collective narcissism in the second step. The results are presented in Table 2.8. Similar to the previous results, the model was significant when controlling for collective narcissism, F (5, 115) = 4.78, p = .001, R^2 = .17. However, controlling for collective narcissism, rejection (vs. acceptance), β = .15, p = .15, did not have a significant effect on secure in-group identity.

Table 2.8

Effects of experimental conditions on in-group identification (Study 2)

	Step 1			Step 2		
Predictors	*B(SE)*	β	*p*	*B(SE)*	β	*p*
Rejection (vs. control)	-0.04(0.10)	-.04	.71	-0.06(0.10)	-.07	.50
Rejection (vs. acceptance)	0.11(0.11)	.11	.32	0.15(0.10)	.15	.15
Age	-0.11(0.04)	-.24*	.01	-0.11(0.04)	-.22*	.01
Gender[1]	0.09(0.19)	.04	.64	0.12(0.18)	.06	.67
Collective narcissism		—		0.26(0.07)	.34***	< .001
F		1.88			4.78**	
R^2		.07			.17	
ΔR^2		—			.11***	

Note. The first code was rejection = -1, control = 1, acceptance = 0; the second code was rejection = -1, acceptance = 1, control = 0. Gender[1] was coded as 0 = Male, 1 = Female.

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

2.5.3. Discussion

Hypothesis 2 predicted exclusion to increase collective narcissism (H2a) and inclusion to foster secure in-group identity (H2b). However, reliving personal experiences of rejection versus acceptance did not have a significant effect on collective narcissism. The current findings indicate that thwarted belongingness did not increase collective narcissism. Similarly, satisfied belongingness did not foster secure in-group identity.

Although the paradigm I used for this study is known to alter need to belong, it implements exclusion and inclusion through past experiences (Blackhart et al., 2009). It is still possible that recalled experiences are processed and understood in a meaningful way (Baumeister et al., 2007). Gerber and Wheeler (2009) demonstrated that directly evoking exclusion and inclusion during the experiments yields stronger results. Therefore, I use direct manipulations of exclusion and inclusion in Studies 3 and 4.

2.6. Study 3

This experiment tested Hypothesis 2 with a method that operationalised exclusion and inclusion with an animated video that depicts a dyadic social interaction (Chotpitayasunondh & Douglas, 2018). Participants were asked to imagine themselves as the person in the video who is either being phubbed or not phubbed by the interaction partner. Thus, the partner either ignored the participant during the interaction to use their phone (phubbing) or paid full attention to the participant by switching off their phone (no-phubbing). This method was shown to be effective in altering levels of belongingness (Chotpitayasunondh & Douglas, 2018).

2.6.1. Method

Participants and procedure.

An a priori power analysis with 80% power (Faul et al., 2007) to detect an average effect size of d = .43 for social psychology (Richard, Bond, Stokes-Zoota, 2003) determined the total sample size as 172 for a study with two conditions. To allow for exclusions, I recruited 180 participants. The study was advertised to a British sample on Prolific Academic as investigating the relationship between social interaction and broader identification processes, and participants received monetary compensation in turn for their participation. One hundred and eighty participants (130 female, 48 males, 2 unknown), ranging in age from 18 to 72 (M = 36.83, SD = 11.89) took part in the study. Six participants were from different nationalities. However, because the wording of the in-group identification and collective narcissism measure did not specify a particular national group, these participants were kept in the analyses. After participants gave their consent to participate in the study, they were randomly assigned to either the inclusion or exclusion condition following the method from Chotpitayasunondh and Douglas (2018). All the participants watched a short silent animation in which two people were having a face-to-face interaction. The conversation partner was

sitting with their face looking to the screen, therefore facing towards the participant. The other character was sitting closer to the participant and their back was turned to the screen. Participants were asked to imagine themselves as this character and having a conversation with the other person. Both characters were neutral with respect to their gender and ethnicity to avoid any confounds. In the inclusion condition, the conversation partner sits at the table and turns off their phone beforehand and engages in the conversation throughout the video. In the exclusion condition, the partner focuses on their phone during the video instead of paying attention to the conversation. The video animations for exclusion and inclusion conditions can be found at: https://www.youtube.com/embed/OU_EMgArQKM?rel=0 and https://www.youtube.com/embed/pcrLNMjVamw?rel=0 .

There were 91 participants in the inclusion condition and 89 in the exclusion condition. After participants finished watching the videos, they were asked to answer two attention-check questions: the colour of their partner's shirt (white) and the object on the table (a bottle). All the participants answered at least one of the attention checks correctly. Therefore, they were included in the further analyses.

Measures.

Collective narcissism. Collective narcissism was measured with regard to the participants' nation with the same scale in the previous studies (α = .91, M = 3.20, SD = 1.13).

In-group identification. In-group identification was assessed with respect to the participants' nation with the same scale in the previous studies (α = .85, M = 4.16, SD = 0.85).

2.6.2. Results

Effects of inclusion versus exclusion on two forms of in-group identity.

Similar to previous studies, there was a positive correlation between collective narcissism and in-group identification, r (180) = .37, $p < .001$. I contrast coded two experimental conditions (-1 = exclusion, 1 = inclusion) prior the main analysis. The first regression analysis tests the effects of experimental conditions on collective narcissism and controls for in-group identification in the second step. The results are presented in Table 2.9. The model was not significant overall, F (3, 176) = 1.53, p = .21, R^2 = .03, and experimental conditions did not have an effect on collective narcissism, β = .01, p = .91. When it was controlled for in-group identification in the second step, the model became significant F (4, 176) = 8.25, $p < .001$, R^2 = .16. However, collective narcissism was not predicted by experimental manipulations, β = -.02, p = .81.

Table 2.9

Effects of exclusion versus inclusion on collective narcissism (Study 3)

	Step 1			Step 2		
Predictors	*B(SE)*	β	*p*	*B(SE)*	β	*p*
Condition (exclusion = -1, inclusion = 1)	0.01(0.09)	.01	.91	-0.02(0.08)	-.02	.81
Age	-0.01(0.01)	-.08	.28	-0.01(0.01)	-.10	.16
Gender[1]	-0.33(0.19)	-.13	.09	-0.34(0.18)	-.13	.06
In-group identification		—		0.50(0.10)	.37***	< .001
F		1.53			8.25***	
R^2		.03			.16	
ΔR^2		—			.14***	

Note. Gender[1] was coded as 0 = Male, 1 = Female.

***$p < .001$.

Similar to the previous analysis, experimental conditions were entered as predictors in the second regression analysis. This time in-group identification was treated as an outcome variable while controlling for collective narcissism in the second step. The results are presented in Table 2.10. The first step of the model was not significant, F (3, 176) = 0.42, p = .74, R^2= .01, which indicates that manipulations did not have an effect on in-group identification. When collective narcissism was included in the second step, the model became significant, F (4, 176) = 7.29, $p < .001$, R^2= .15. However, experimental conditions did not yield a significant effect, β = .07, p = .36, on secure in-group identity (net of collective narcissism).

Table 2.10

Effects of exclusion versus inclusion on in-group identification (Study 3)

	Step 1			Step 2		
Predictors	*B(SE)*	β	*p*	*B(SE)*	β	*p*
Condition (exclusion = -1, inclusion = 1)	0.06(0.06)	.07	.37	0.06(0.06)	.07	.36
Age	0.00(0.00)	.05	.54	0.01(0.01)	.08	.28
Gender[1]	0.02(0.14)	.01	.87	0.11(0.14)	.06	.40
Collective narcissism		—		0.28(0.05)	.38***	< .001
F		0.42			7.29***	
R^2		.01			.15	
ΔR^2		—			.14***	

Note. Gender[1] was coded as 0 = Male, 1 = Female.

***$p < .001$.

2.6.3. Discussion

In Study 3, I used a direct manipulation to alter the need to belong when testing Hypothesis 2. While the phubbing condition intended to threaten the need to belong, the no-phubbing condition intended to fulfil it. With H2a, I predicted exclusion to increase collective narcissism. However, being ignored in a dyadic conversation did not have an effect on collective narcissism. With H2b, I predicted inclusion to increase secure in-group identity. Rejecting this prediction, inclusion in a dyadic conversation did not foster secure in-group identity. Both Studies 2 and 3 suggest that momentarily thwarted versus satisfied belongingness do not have an effect on collective narcissism versus secure in-group identity. These results suggests that collective narcissism could be more related to motives to enhance low personal control and self-esteem (Cichocka et al., 2018; Golec de Zavala, Federico et al., 2019), rather than desiring to achieve belongingness through groups.

Additionally, it is possible that the participants perceived phubbing as a normative behaviour (Chotpitayasunondh & Douglas, 2016). It is also reasonable to think that the no-phubbing condition is perceived as inducing a regular sense of belongingness, rather than really fulfilling it. The use of the phubbing method relied on participants imagining themselves as the person who was included or excluded on the screen. The task could be affected by participants' engagement in imagining the situation which in return would affect the perceived intensity of the manipulation. Although all the participants passed at least one attention check, it is possible that the experience of inclusion and exclusion was not that intense or personally meaningful. While Chotpitayasunondh and Douglas (2018) suggest that this method reflects a special form of ostracism, it may not be as engaging as the more typically used ball-tossing paradigm used to manipulate ostracism (Williams & Jarvis, 2006).

2.7. Study 4

As the final and the strongest test of the second hypothesis, I employed Cyberball to alter the need to belong in Study 4. Cyberball is considered to be the most potent way to induce exclusion and inclusion (Gerber & Wheeler, 2009). This method includes at least two people other than the participant (Williams & Jarvis, 2006). Thus, inclusion and ostracism technically come from more than one person which could make the experience more threatening or satisfactory (Blackhart et al., 2009; Gerber & Wheeler, 2009). In this study, I included a manipulation check to determine the effectiveness of experimental conditions.

2.7.1. Method

Participants and procedure.

I followed the power analysis from Study 3 but aimed to recruit two hundred participants to allow for exclusions. The data collection started in 2018 (December) and finished 2019 (February). Two hundred participants, who were first-year undergraduate psychology students, took part in the study in exchange for two course-credits. One

participant failed to complete the need threat measure, and three indicated that they were familiar with Cyberball at the end of the study. Therefore, four participants were excluded from the further analyses. The final data consisted of 196 participants (174 female, 22 male), age ranged from 18 to 54 (M = 19.11, SD = 2.78). Participants were seated in front of the computer screens in separate cubicles. After going through the consent form, participants were randomly allocated to the ostracism ($N_{ostracism}$ = 97) or inclusion ($N_{inclusion}$ = 99) condition. Next, they proceeded to the Cyberball server's welcome page. This page informed participants that they will play a ball-tossing game ostensibly with two other online players to practise mental visualizing. Unknown to the participants, partners in the game were in fact programmed by computer. Participants were instructed to visualize this experience as much as possible. Participants in the inclusion condition received one third of tosses and participants in the ostracism condition received the ball twice only at the beginning of the game (Williams et. al., 2000; Williams & Jarvis, 2006). After they played the game, they responded to a manipulation check and measures that assessed need-threat, collective narcissism, and in-group identification.[4]

Measures.

Manipulation check. Participants were asked to indicate to what extent they were included or excluded by the other participants during the game on a 5-point scale (1 = *excluded*, 5 = *included*).

Need Threat. Participants responded to twelve items on a 5-point scale (1 = *does not describe my feelings*, 5 = *clearly describes my feelings*) that assessed fundamental need-threat during the game (Zadro, Williams, & Richardson, 2004). These needs consisted of belonging: e.g. "I felt like an outsider during the game", control: e.g. "I felt in control during the game", self-esteem: e.g. "I felt that the other players failed to perceive me as a worthy and likeable

[4] The data includes measurement of empathy, but this was not a part of the hypothesis of this study.

person", and meaningful existence: e.g. "I felt as though my existence was meaningless during the game". Positively worded items were reverse coded for ease of interpretation and so higher numbers on this measure indicate a higher need threat (α = .94). For each component, Cronbach alpha coefficients were: belonging = .80, control = .84, self-esteem = .76, meaningful existence = .75.

Collective Narcissism. Collective narcissism was assessed with respect to university by using the same measure in the previous studies (α = .85).

In-group identification. In-group identification was measured with respect to participants' university with the same measure in the previous studies (α = .83).

2.7.2. Results

Descriptive statistics and zero-order correlations.

Means, standard deviations and the zero-order correlations between the variables are presented in table 2.11. The relationship between collective narcissism and in-group identification was not significant, r (196) = 10, p = .17. Need threat index did not relate to collective narcissism r (196) = .09, p = .22, or in-group identification r (196) = .05, p = .48. All the components of the need threat measure positively correlated with each other.

Table 2.11

Descriptive statistics and zero-order correlations between the variables (Study 4)

Variables	*M*	*SD*	1	2	3	4	5	6
1. Need threat	3.04	1.08	-					
2. Belonging	3.16	1.18	.94***	-				
3. Control	3.30	1.20	.92***	.83***	-			
4. Self-esteem	2.76	1.11	.91***	.83***	.79***	-		
5. Existence	2.94	1.22	.90***	.80***	.77***	.73***	-	
6. Collective narcissism	3.16	0.94	.09	.05	.10	.13	.05	-
7. In-group identification	4.84	0.81	.05	.05	.05	.05	.04	.10

Note. ***$p < .001$.

Effectiveness of manipulation.

An independent samples t-test was conducted to test the effectiveness of manipulation of the feeling of being included F (1,194) = 6.88, p = .009. Participants in the inclusion condition felt more accepted during the game (M = 4.25, SD = 0.84) than the participants in the ostracism condition (M = 1.48, SD = 0.56), t (171.63) = 27.24, p < .001, BCa 95% CI [2.57, 2.97]. This suggests that the experimental conditions worked effectively in the way that they were planned and participants perceived their assigned condition correctly. Another independent samples t-test compared need threat index scores between conditions, F (1, 194) = 3.53, p = .06. Those who were included scored lower in the need threat index (M = 2.11, SD = 0.50) than those who were ostracized (M = 3.99, SD = 0.57), t (194) = -24.35, p < .001, BCa 95% CI [-2.03, -1.72].

Effects of experimental conditions on two forms of in-group identity.

To test the effects of manipulation on collective narcissism and secure in-group identity, I contrast coded conditions (ostracism = -1, inclusion = 1) prior to the analyses. The first regression analysis included the contrast code as the predictor and collective narcissism as the criterion variable while controlling for in-group identification in the second step. The

results are presented in Table 2.12. The model was non-significant, F (3, 195) = 0.59, p = .62, R^2 = .01. Thus, experimental conditions did not predict collective narcissism, β = -.05, p = .52. Including in-group identification in the second step did not improve the model F (4, 195) = 1.13, p = .35, R^2 = .02. Again, in this step, neither experimental conditions, β = -.05, p = .51, nor in-group identification, β = .12, p = .10, were significant predictors of collective narcissism.

Table 2.12

Effects of ostracism versus inclusion on collective narcissism (Study 4)

	Step 1			Step 2		
Predictors	*B(SE)*	β		*B(SE)*	β	*p*
Condition (ostracism= -1, inclusion= 1)	-0.04(0.07)	-.05	.52	-0.04(0.07)	.05	.51
Age	0.01(0.03)	.01	.85	0.01(0.03)	.04	.62
Gender[1]	-0.24(0.22)	-.08	.27	-0.29(0.22)	-.10	.19
In-group identification		—		0.14(0.09)	.12	.10
F		.59			1.13	
R^2		.01			.02	
ΔR^2		—			.01	

Note. Gender[1] was coded as 0 = Male, 1 = Female.

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

Next, the analysis was repeated with contrast-coded conditions as predictors while changing the in-group identification as the criterion variable and controlling for collective narcissism in the second step (Table 2.13). The first step was significant F (3, 195) = 4.14, p = .007, R^2 = .06. Experimental conditions did not predict in-group identification, β = .00, p = .98. When the model was controlled for collective narcissism, secure in-group identity was not predicted by experimental manipulations, β = .01, p = .11.

Table 2.13

Effects of ostracism versus inclusion on in-group identification (Study 4)

	Step 1			Step 2		
Predictors	*B(SE)*	β	*p*	*B(SE)*	β	*p*
Condition (ostracism= -1, inclusion= 1)	0.00(0.06)	.00	.98	0.01(0.06)	.01	.92
Age	-0.06(0.02)	.19**	.008	-0.06(0.02)	.19**	.007
Gender[1]	0.31(0.18)	.12	.08	0.34(0.06)	.13	.06
In-group identification		—		0.10(0.06)	.12	.10
F		4.14**			3.81**	
R^2		.06			.07	
ΔR^2		—			.01	

Note. Gender[1] was coded as 0 = Male, 1 = Female.

**$p < .01$.

2.7.3. Discussion

Study 4 aimed to frustrate and satisfy the need to belong with Cyberball in which participants were excluded or included by two other people (Williams & Jarvis, 2006). Unlike in the previous studies, I demonstrated the effectiveness of the manipulations. Collective narcissism and in-group identification were assessed with respect to participants' university. Although Cyberball is the strongest procedure to alter belongingness (Gerber & Wheeler, 2009), similar to the previous experiments the results of this study did not support Hypothesis 2. Unlike my prediction (H2a), being ostracized did not elicit more collective narcissism. Again, conversely to H2b, being included did not increase secure in-group identity. Given that the need-threat index did not relate to either form of in-group identity, I did not test their roles as mediators.

An experimental manipulation to lower control fostered national collective narcissism, whereas experimentally heightened control boosted secure national identity (Cichocka et al., 2018; Study 3). Study 4 did not replicate these previous findings with respect to university identification. It is possible that these effects only occur in national groups. However, it is more likely that this insignificant effect is due to different experimental manipulations of control. In the previous study, participants were asked to write a time when they felt in control (or not) about in their lives. Perhaps sense of control with respect to a more significant event in the life-course has a more prominent role in relation to collective narcissism and secure in-group identity.

2.8. Meta-Analysis of the Current Studies

I performed a meta-analysis to combine the results of the studies in this chapter using a random effects model (Borenstein, Hedges, Higgins, & Rothstein, 2005). A summary of the studies and effect sizes across this chapter are presented in Table 2.14. For each study, effect sizes were computed for the associations between the need to belong and collective narcissism. For Pilot Study and Study 1, Pearson's *r* was obtained from the correlation estimates. For the experimental studies, *r* was calculated from the respective Cohen's *d*s that compared each condition. Finally, all *r*s were converted into Fisher's *z* standardized effect sizes.

Robust Variance Estimation (Hedges, Tipton, & Johnson, 2010) was used to determine the results of the random effects model. The overall effect size is small and non-significant, $z = .10$, 95% *CIs* [-.08, .27], $t\ (3.89) = 1.53$, $p = .203$, $r = .10$, $d = .20$. The effect size heterogeneity, $I^2 = 57.75\%$, and the between-study variance, $\tau^2 = .02$, were not notable, but the Bayes Factor provided moderate evidence for the null hypothesis, BF = 0.22. Therefore, the results of the meta-analysis suggest that there is no relationship between need to belong and collective narcissism.

Table 2.14

Summary of the Studies in Chapter 2

Study	Group type	*N*	Need to belong	H1	H2a	Effect size
Pilot Study	Political party	205	Measured need to belong	X		r = .28
Study 1	National	78	Measured need to belong	X		r = -.01
Study 2	National	122	Manipulated need to belong (recalling rejection vs. inclusion vs. control|)		X	r = .00 (rejection vs. control) r = .13 (control vs. inclusion) r = .11 (rejection vs. inclusion)
Study 3	National	180	Manipulated need to belong (phubbing vs. no phubbing)		X	r = .00 (phubbing vs. no phubbing)
Study 4	University	196	Manipulated need to belong (ostracism vs. inclusion)		X	r = .04 (ostracism vs. inclusion)

Note. H1 contented that need to belong will predict collective narcissism positively but in-group identification negatively, H2a predicted that threatened need to belong will increase collective narcissism. X indicates that null hypothesis was supported.

2.9. General Discussion: Chapter 2

Baumeister and Leary (1995) view the need to belong as an innate need and suggest that there are individual differences in its strength and that people can fulfil this need through group membership (Brewer, 1991; Hirsh & Clark, 2019). In five studies, I investigated its role in collective narcissism and secure in-group identity. The Pilot Study and Study 1 examined the trait need to belong as an individual difference. The conceptualization of the trait need to belong is proposed to reflect it as a deficiency or an insecurity (Barnes et al., 2010; Lavigne et al., 2011). A higher need to belong correlates with depressed self-esteem and negative emotionality (Leary et al., 2013) which are also associated with collective narcissism (Golec de Zavala 2019; Golec de Zavala, Federico et al., 2019). This trait was thought to be rooted in neuroticism and was found to have a negative relationship with life satisfaction and happiness (Pillow et al., 2015). I reasoned that those who score low in trait belongingness could be more satisfied with their lives and feel more positive emotions. These two variables were related to secure in-group identity (Golec de Zavala, 2019). Thus, I hypothesized that need to belong should be positively associated with collective narcissism but negatively with secure in-group identity (H1). While need to belong was related to both forms of in-group identity in the Pilot Study, it was unrelated to either of them in Study 1. These studies yielded inconsistent results.

In Studies 2, 3, and 4, I aimed to alter the need to belong momentarily (via exclusion and inclusion) to test the effects of it on collective narcissism and secure in-group identity. While the experience of exclusion threatens belongingness, being included fulfils it (DeWall et al., 2008). Because collective narcissism was hypothesized to compensate for individuals' deprived needs, I predicted exclusion to increase collective narcissism (H2a). Secure in-group identity is assumed to stem from satiated individual needs. Thus, I hypothesized inclusion to boost secure in-group identity (H2b). Given that there are many methods to threaten or

alleviate this need (Wirth, 2016), I chose recalling an individual experience, phubbing and Cyberball for Studies 2, 3, and 4, respectively. Among these procedures, phubbing and Cyberball directly induce rejection and inclusion during the study. Recalling past experiences does so indirectly (Gerber & Wheeler, 2009). Neither of the experimental studies supported the second hypothesis (H2a & H2b). Furthermore, a meta-analysis that synthesized the results of all the studies in this chapter posited that need to belong was unrelated to collective narcissism.

Although group membership is one of the routes to establish belongingness (Hirsh & Clark, 2019) and collective narcissism is theorized to satisfy many needs (Cichocka, 2016), current studies suggest that those who identify narcissistically are not primarily motivated by a need to belong when identifying with the groups they are a member of. It is possible that collective narcissism is underlined by other needs more strongly (Cichocka et al., 2018). For example, while exclusion coming from an outgroup increased national collective narcissism (Golec de Zavala, Federico et al., 2019[5]; Study 7), this relationship was mediated by threatened state self-esteem, rather than by the need to belong. In the current Study 4, lower self-esteem was not related to collective narcissism. Golec de Zavala, Federico et al. (2019; Study 7) operationalised exclusion as participants watching in-group members being excluded by outgroup members in a Cyberball game. Thus, this study threatened state self-esteem in a specific way in relation to group (Martiny & Rubin, 2016). Those who score high in collective narcissism are mainly concerned with other groups recognizing their in-group (Golec de Zavala et al., 2009). Watching the in-group being excluded from the ball-tossing game must have signalled a lack of recognition and hence threatened self-esteem. It seems

[5] This paper was published after the data collection of Chapter 2.

like the link between lowered state self-esteem and collective narcissism only works if the self-esteem threat is related to the group.

Furthermore, the sociometer theory contends that low trait self-esteem indicates a general deprivation in achieved belongingness, state self-esteem gauges for inclusion (Leary, 2012). Those who score high in trait self-esteem perceive themselves as more accepted and supported by other people (Leary & MacDonald, 2003). In a series of studies by Golec de Zavala, Federico et al. (2019), low trait self-esteem predicted collective narcissism whereas, high trait self-esteem was related to secure in-group identity. Recent studies found that status and inclusion predicted high trait self-esteem but the former only predicted trait narcissism (Mahadevan, Gregg, & Sedikides, 2020). These authors also contend that inclusion and status might be conflated when threatening the need to belong. Individual narcissism is related to being sensitive to exclusion (Allen, VanDellen, & Campbell, 2013), just as collective narcissism was responsive to intergroup exclusion (Golec de Zavala, Federico et al., 2019). However, Valcke et al. (2020) argue that being reactive to exclusion may not be the same thing as need for inclusion. It is plausible that narcissistic investment into a group comes from wanting to secure one's status through group membership without necessarily being motivated for fulfilling the need to belong through their group.

Given that desiring to compensate for low personal control and self-esteem was related to outgroup hostility through collective narcissism (Cichocka et al., 2018; Golec de Zavala, Federico et al., 2019), I reasoned that striving to increase belongingness through groups could be another factor underlying these negative attitudes. However, not desiring to achieve belongingness as a group member could be problematic in itself. Cichocka (2016) argues that those who are high in collective narcissism are not concerned with the well-being of the other group members. Past research also demonstrated that collective narcissism is associated with intentions to exploit other in-group members and to leave the group for

personal material gains (Cichocka et al., 2020; Marchlewska et al., 2020). Not being motivated to achieve belongingness through a group could explain why collective narcissism does not benefit the in-group.

Hirsh and Clark (2019) posit that while different paths help people have a sense of belongingness (e.g., communal relationships with others, minor sociability, general approbation, and group membership), satiation of one path might reduce the need for others. This could explain why being included did not increase secure in-group identity in the experimental studies. In past research, exclusion increased access to group-related constructs (Knowles & Gardner, 2008) and being a member of a majority group (e.g., large in size) buffered against exclusion (Eck et al., 2017). Easterbrook and Vignoles (2013) found that social categories satisfy the need to belong via increased intragroup similarities. However, threatening the need to belong (Studies 2, 3, and 4) did not foster in-group identification either (when not controlling for collective narcissism). It is also possible that intimate groups (e.g., friends, family) or groups providing more security (e.g., religion) could have a better buffering effect after immediate threats to belongingness (Aydin et al., 2010; Knowles & Gardner, 2008), rather than national categories. The current studies did not confirm the hypotheses I contended. However, they still contribute to the understanding of collective narcissism and secure in-group identity by investigating links between individual differences and group processes, which is an overlooked domain (Valcke et al., 2020).

2.9.1. Limitation and future studies.

These studies are not without limitations. Study 1 included relatively low numbers of participants due to the time it was conducted in the term, and Study 3 had dropouts due to the writing that the recall task required. Also, only one experimental study (Study 4) included manipulation checks probing the extent to which participants felt being included or excluded. While the methods that were chosen are established and known to elicit experiences of

inclusion and exclusion (Wirth, 2016), future studies may benefit from measuring the intensity of these experiences after the manipulations.

Valcke et al. (2020) argue that the need to belong is a complex phenomenon and that the measure that I used to assess it in Study 1 (Leary et al., 2013) focuses more on negative responses to exclusion and ignores the positive sides of inclusion. Investigating different aspects of the need to belong (Lavigne et al., 2011; Valcke et al., 2020) might shed light on opposing intragroup concomitants of collective narcissism and secure in-group identity. Also, I threatened belongingness with respect to interpersonal relationships in this chapter. When people experience perceived personal discrimination based on a group membership (e.g., ethnicity, race), they identify strongly with their in-group to manage their belongingness and self-esteem needs (Branscombe et al., 1999). Being excluded by in-group members threatens belongingness and can increase identification with radical ideologies as well (Schaafsma & Williams, 2012). Perhaps future studies investigating the need to belong in relation to collective narcissism and secure in-group identity can refer to these accounts.

Collective narcissism is related to a narrow definition of *true or worthy* members with respect to national groups and exclusionist views towards members who do conform to prototypical standards (Golec de Zavala et al., 2019). Discriminating within the group (in-group exclusion) could be a way to establish a personal sense of belongingness for group members (Pickett & Brewer, 2005). High identifiers felt more threatened when they had false feedback saying that they are not prototypical and indicated that they dislike non-prototypical in-group members (Schmitt & Branscombe, 2001). Future studies could manipulate prototypicality to test whether it increases in-group exclusion through in-group identification or collective narcissism.

I aimed to manipulate achieved belongingness momentarily with experiments. However, the procedures in Studies 2 (phubbing) and 4 (Cyberball) could raise concerns

about external and ecological validity – that is, the issue of whether exclusion is experienced in the same way in real life (Chotpitayasunondh & Douglas, 2018; Wesselman et al., 2016). In fact, only Study 2 focused on people's personal experiences from their own lives. The instructions of this study encouraged people to think about their most recent experiences. However, the responses of participants involved a mixture of recent and distant incidents and sometimes did not indicate a specific time reference which is problematic because people may process past experiences in a different way than fresh ones (Baumeister et al., 2007).

Therefore, ongoing experiences of being accepted or rejected by significant others could be more crucial when understanding the role of belongingness (i.e., relatedness) underlying collective narcissism and secure in-group identity. In the next chapter, I follow up on this possibility with respect to relatedness, but I also investigate autonomy and competence needs by relying on SDT. I also examine autonomy, competence, and relatedness as group needs underlying collective narcissism and secure in-group identity. Thus, the next chapter both follows up and extends the current one.

CHAPTER 3

3.1. Introduction

SDT identified autonomy, competence, and relatedness as basic psychological needs (Deci & Ryan, 2000). Although individuals may differ in how strongly they desire each need, SDT is mainly concerned with the outcomes of their satisfaction and frustration (Ryan & Deci, 2017). Basic needs are social nutrients and prerequisites for human flourishing and well-being (Deci & Ryan, 2000). In contrast, experiencing frustration of basic needs might lead people to develop defensive mechanisms to overcome the unpleasant feelings associated with the thwarting of needs (Deci & Ryan, 2000). Accordingly, the SDT approach is mainly used to understand how the satisfaction and frustration of basic psychological needs are related to well-being (Ryan & Deci, 2017). Cichocka (2016) suggests that collective narcissism is underlined by frustrated needs, whereas secure in-group identity is more likely to emanate from fulfilled needs. Therefore, SDT can be helpful in disentangling the role of thwarted and satisfied needs underpinning collective narcissism versus secure in-group identity. Recently, researchers also adapted these needs to group contexts as well and referred to them as group needs (Kachanoff et al., 2020; Parker et al., 2019). In this chapter, I investigate them as basic individual needs (Study 5) and group needs (Study 6) in relation to collective narcissism and secure in-group identity. First, I address their meanings and concomitants when they are investigated as individual needs. In the introduction to Study 6, I explain in more detail how these needs are applied in group contexts.

3.1.2. Self-determination theory and psychological needs.

Basic psychological needs involve autonomy, competence, and relatedness (Deci & Ryan, 2000; Ryan, 1995). Satisfaction of these needs is essential for psychological growth and well-being, whereas frustration leads to undesired outcomes such as ill-being or defensiveness (Deci & Ryan, 2000). While autonomy satisfaction refers to feelings of

volition and ownership in terms of one's experiences and behaviours, autonomy frustration refers to feeling coerced (Chen et al., 2015; Deci & Ryan; 2000). Competence satisfaction refers to feelings of being able to attain desired outcomes, conversely competence frustration indicates feelings of insecurity about one's capacity or efficacy (Chen et al., 2015; Ryan, 1995). Relatedness satisfaction involves feelings of being cared for and caring of significant others (Deci & Ryan, 2000), whereas relatedness frustration indicates feelings of being rejected and lacking meaningful relationships (Chen et al., 2015).

The SDT tradition takes both fulfilment and frustration of these needs into account and suggests that scoring low in need fulfilment does not equate to the threatening experience that comes with need frustration (Vansteenkiste et al., 2020). Need frustration has been linked to depression (Chen et al., 2015), obsessive thinking (Vahlstein, Mutter, Oettingen, & Gollwitzer, 2020) as well as problematic behaviours in domain-specific contexts (e.g., bullying and dishonesty in school, Hein, Koka, & Hagger, 2015; Kanat-Maymon, Benjamin, Stavsky, Shoshani, & Roth, 2015). In contrast, general need satisfaction is associated with desired outcomes for individuals such as well-being (Chen et al., 2015; Church et al., 2013), self-esteem (Thogersen-Ntoumani & Ntoumanis, 2007) and positive affect (Ng et al., 2012). Domain-specific need satisfaction predicted satisfaction in the workplace (Ilardi, Leone, Kasser, & Ryan, 1993; Van der Broeck, Vansteenkiste, De Witte, Soenens, Lens, 2010), achievement in education (Marshik, Ashton, & Algina, 2017), or more energy and positive affect in sports (Bartholomew, Ntoumanis, Ryan, Bosch, & Thogersen-Ntoumani, 2011). In addition to individual and interpersonal outcomes, the satisfaction of these needs is related to behaviours that indicate being concerned for other people and community. For example, need satisfaction positively predicts prosocial behaviours towards others (Jang, Reeve, Cheon, & Song, 2020; Tian, Zhang, & Huebner, 2018). Two longitudinal studies demonstrated that

having need supporting parents was related to being more concerned with other people and predicted a higher proclivity to engage in politics later in life (Wuttke, 2020).

3.1.3. Frustration of basic needs and collective narcissism.

Deci and Ryan (2000) argue that the frustration of needs could lead people to defensive and compensatory adaptations. In parallel, collective narcissism is seen as a compensatory identification through which people (at least) try to satisfy their unfulfilled individual needs (Cichocka, 2016). Therefore, I argue that collective narcissism could be a compensatory tool at the group level for all these frustrated needs. Although defensive accommodations may protect people from the negative experience that comes with frustration of basic needs, they may further jeopardize need satisfaction (Deci & Ryan, 2000). Studies show that although collective narcissism increases momentarily in response to low personal control, and self-esteem (Cichocka et al., 2018; Golec de Zavala, Federico et al., 2019), it does not predict feelings of high self-esteem or personal control across time.

Less personal autonomy predicted accepting only positive qualities describing the in-group (Legault et al., 2017; Study 1). Those who were less autonomous were only satisfied with their in-group when they thought about the positive side of it (Legault et al., 2017; Study 2). Collective narcissism is associated with being reactive when presented with the negative features of national in-groups (Golec de Zavala et al., 2016). Frustration of individual autonomy could underlie the link between collective narcissism and denying undesired actions that are committed by in-group members as these would cast a negative light on the in-group (e.g., anti-Semitism in Poland, Golec de Zavala & Cichocka, 2012; e.g., sexual abuse scandals, Molenda et al., 2020). Also, deprivation of autonomy was thought to underlie the link between less personal control and autonomy (Cichocka et al., 2018). Although there are nuances, competence is similar to self-efficacy (Bandura, 1982; Deci & Ryan, 2000). Personal feelings of being less efficacious lead participants to contribute less to

the welfare of the in-group (Kerr & Kaufman-Gilliland, 1997). Collective narcissism is associated with less personal control (Cichocka et al., 2018; Marchlewska et al., 2020) and not being concerned with fellow in-group members (Cichocka et al., 2020). Moreover, Deci and Ryan (2000) suggest that a longing for control could indicate frustrated competence. Thus, frustration of individual competence could be underlying these previous findings. When people lack relatedness, they may try to seek proxies through which they can get self-esteem as a compensation (Deci & Ryan, 2000; Ryan & Deci, 2017). Collective narcissism might be such a proxy at the group level. Consequently, I expect frustration of basic needs (autonomy, competence, and relatedness) to positively predict collective narcissism (H3)[6].

3.1.4. Satisfaction of basic needs and secure in-group identity.

The satisfaction of basic needs contributes individuals to grow psychologically (Deci & Ryan, 2000; Vansteenkiste & Ryan, 2013). Cichocka (2016) proposes that secure in-group identity might reflect a strong sense of self of the group members. Thus, secure in-group identity can be underlined by satisfied basic needs. Those who have a sufficient level of satisfied autonomy, relatedness and competence can contribute to their communities more (Deci & Ryan, 2000). Secure in-group identity predicts higher loyalty to in-group (Marchlewska et al., 2020) and less instrumental treatment of fellow in-group members (Cichocka et al., 2020). Therefore, with satisfied needs people should be concerned with enhancing their in-group, rather than clinging on to a defensive identity.

[6] Although my prediction might on the surface seem to be contradictory to the results of the studies in the previous chapter in terms of relatedness, the measurement of relatedness in this chapter includes current fulfilled and thwarted experiences of it with respect to valued others (Chen et al., 2015). The trait measure I used in Chapter 1 does not measure achieved relatedness and focuses on a general need to be accepted (Hirsh & Clark, 2019).

High personal autonomy predicted accepting both negative and positive qualities attached to an ethnic and a novel group (Legault et al., 2017; Studies 1 and 2). In the second study, those who scored high in autonomy were satisfied with their in-group regardless of positive or negative representations of it. Secure in-group identity predicted less in-group defensiveness when confronted with negative sides of the in-group (Golec de Zavala et al., 2016; Golec de Zavala, Cichocka, & Iskra-Golec, 2013). Satisfaction of autonomy might be an underlying factor behind these previous findings. Increased personal control predicted more secure in-group identity (Cichocka et al., 2018; Marchlewska et al., 2020). Feeling competent contributes to feelings of having more control (Muris, Schouten, Meesters, & Gijsbers, 2003). Therefore, satisfaction of competence might be associated with secure in-group identity. A general measurement of valuing being a group member predicted more relatedness satisfaction on the individual level (Valcke et al., 2020). This relationship could be in the reverse way as well: having more satisfactory relationships might be associated with a more secure form of in-group identity. Thus, I expect satisfaction of basic needs (autonomy, competence, and relatedness) to predict a more secure form of in-group identity (H4).

3.2. Study 5

I hypothesized that frustrated autonomy, competence, and relatedness should predict more collective narcissism (H3). In contrast, I contended that satisfaction of these needs should predict more secure in-group identity (H4). In Study 5, I tested these hypotheses longitudinally in a national sample.

3.2.1. Method

Participants and procedure.

The study was advertised in Prolific Academic with a pre-screening that targeted British participants. The data collection took place on 18th November 2018. Overall, 408 participants took part in the survey and were granted monetary compensation in return.

Participants responded to questionnaires that assessed frustration and satisfaction of each psychological need, collective narcissism, and in-group identification (the latter two were presented in a random order). Twenty-three participants indicated identifying with a different nationality and 8 participants did not indicate any nationality. These were excluded from further analysis to keep the sample characteristics uniform. Therefore, the final data set for Time 1 consisted of 377 participants who identified as British (256 female, 116 male, 5 unknown and 88% of them White British). The age ranged from 18 to 71 (M = 35.51, SD = 11.76). The second wave of data collection took part six weeks later[7] and all British participants who took part in the first data collection were invited to the study again. Among those, 297 participants (202 female, 90 male, 5 unknown) completed the measures again. The age ranged from 18 to 72 at Time 2(M = 36.49, SD = 12.01).

Measures.

Basic Psychological Need Satisfaction and Frustration. General satisfaction and frustration of basic psychological needs was assessed with the 24-item measure from Chen et al. (2015). This measure has six components that tap into needs satisfaction (e.g., autonomy: "I feel a sense of choice and freedom in the things I undertake", competence: "I feel confident that I can do things well", and relatedness: "I feel that the people I care about also care about me) and frustration (autonomy: "I feel pressured to do too many things, competence: "I have serious doubts about whether I can do things well", and relatedness: "I feel that people who are important to me are cold and distant towards me"). Participants were asked to think to what extent each sentence was true for themselves at that time and

[7] The six weeks gap was based on a previous study which investigated the link between personal control and collective narcissism across time (Cichocka et al., 2018; Study 4).

responded to items on 5-point scales (*1= Completely untrue, 5 = Completely true*). I computed six subscores to examine the satisfaction and frustration of each need.

Collective Narcissism. Collective narcissism was measured with respect to participants' national group with 9-item version of the Collective Narcissism Scale (Golec de Zavala et al., 2009).

In-group Identification. Identification with respect to national group was measured with the measure from Cameron (2004) as in previous studies.

Political ideology. Participants' political views were measured with a single item on a 5-point scale in which participants were asked to indicate on a scale stretching from extremely left-wing to extremely right-wing, where they would place themselves. Thus, higher scores indicate having more right-wing ideology.

3.2.2. Results

Descriptive statistics.

Means, standard deviations and reliability coefficients of the measures are presented in Table 3.1. All the measures showed satisfactory internal consistency in Time 1 and in Time 2.

Table 3.1

Descriptive statistics (Time 1 & Time 2)

	Time 1		Time 2	
	M (*SD*)	α	*M* (*SD*)	α
Individual autonomy satisfaction	3.55 (0.79)	.86	3.51 (0.83)	.87
Individual competence satisfaction	3.55 (0.89)	.92	3.56 (0.90)	.93
Individual relatedness satisfaction	4.02 (0.85)	.92	4.01 (0.84)	.92
Individual autonomy frustration	2.88 (0.93)	.87	2.82 (0.94)	.87
Individual competence frustration	2.68 (1.03)	.90	2.62 (1.06)	.92
Individual relatedness frustration	1.95 (0.90)	.87	1.99 (0.95)	.89
Collective narcissism	3.10 (1.41)	.90	3.08 (1.14)	.90
In-group identification	4.10 (0.86)	.84	4.08 (0.87)	.86
Political ideology	2.67 (0.84)	-	-	-

Note. $N_{\text{Time 1}} = 377$, $N_{\text{Time 2}} = 297$.

Zero-order correlations across time 1 and time 2.

Zero-order correlations[8] between the variables across two time points are presented in Table 3.2. Time 2 in-group identification had positive relationships with all the satisfied Time 1 individual needs, whereas this relationship was inverse for frustrated Time 1 individual needs. Time 2 collective narcissism only related to Time 1 in-group identification and Time 1 collective narcissism.

[8] Separate intercorrelations among the variables for Time 1 (Table A1) and Time 2 (Table A2) can be found in Appendix A.

Table 3.2

Zero-order correlations across the main variables (Time 1 & Time 2)

Variables	T2 IASAT	T2 ICSAT	T2 IRSAT	T2 IAFRU	T2 ICFRU	T2 IRFRU	T2 CN	T2 ING
1. T1 Individual autonomy satisfaction	.70***	.42**	.43***	-.40***	-.37***	-.33***	.03	.26***
2. T1 Individual competence satisfaction	.44***	.70***	.36***	-.33***	-.58***	-.41***	.01	.30***
3. T1 Individual relatedness satisfaction	.41***	.35***	.69***	-.32***	-.31***	-.47***	-.05	.17**
4. T1 Individual autonomy frustration	-.46***	-.31***	-.31***	.65***	.34***	.35***	.01	-18**
5. T1 Individual competence frustration	-.46***	-.64***	-.41***	.45***	.75***	.58***	.00	-.39***
6. T1 Individual relatedness frustration	-.38***	-.32***	-.51***	.37***	.40***	.66***	.05	-.15*
7. T1 Collective narcissism	.04	.14*	-.06	.05	-.02	.07	.74***	.44***
8. T1 In-group identification	.27***	.36***	.23***	-.16***	-.29***	-.25***	.40***	.75***

Note. T1 = Time 1, T2 = Time 2. T2 IASAT = T2 Individual autonomy satisfaction, T2 ICSAT = T2 Individual competence satisfaction, T2 IRSAT = T2 Individual relatedness satisfaction, T2 IAFRU= T2 Individual autonomy frustration, T2 ICFRU = T2 Individual competence frustration, T2 IRFRU = T2 Individual relatedness frustration, T2 CN = T2 Collective narcissism, T2 ING = T2 In-group identification.

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

Cross-lagged paths.

Here, I tested whether frustrated psychological needs predict more collective narcissism (H3) and whether satisfied psychological needs predict more secure in-group identity (H4) longitudinally. To do so, I estimated a cross-lagged panel model on Mplus, using a maximum likelihood estimation (Muthen & Muthen, 1998-2017). The model was estimated with observed variables[9]. The standardized coefficients from the cross-lagged model are presented in Figure 3.1. Because the model was saturated, I do not report fit indices. Frustration of competence from Time 1 positively predicted Time 2 collective narcissism, $B = 0.13$, $SE = 0.06$, $p = .04$. Satisfied and frustrated relatedness from Time 1 negatively predicted Time 2 collective narcissism, $B = -0.15$, $SE = 0.06$, $p = .03$, and $B = -0.14$, $SE = 0.07$, $p = .03$ respectively. Satisfaction of autonomy from Time 1 predicted higher secure in-group identity at Time 2, $B = 0.11$, $SE = 0.05$, $p = .03$. Frustration of competence from Time 1 negatively predicted secure in-group identity at Time 2, $B = -0.13$, $SE = 0.04$, $p = .003$. Time 1 collective narcissism predicted lesser relatedness satisfaction, $B = -0.10$, $SE = 0.04$ $p = .003$, but higher competence frustration, $B = 0.08$, $SE = 0.04$, $p = .05$, and relatedness frustration, $B = 0.08$, $SE = 0.03$, $p = .02$, at Time 2.

[9] First, I aimed to test the relationships with a structural equation model. After establishing the factorial structures of the measures, I examined the stability of the model with autoregressive paths. This test generated a warning for the model identification and posited a problem involving Time 2 in-group identification. An examination of the Tech 4 output showed that this variable did not have a negative residual variance and its correlation with other latent variables were smaller than 1. According to Muthen (2006), this can indicate a linear dependency between two latent variables. I suspected a linear dependency between collective narcissism and in-group identification. To keep both of them in the model, I continued the analysis with observed variables.

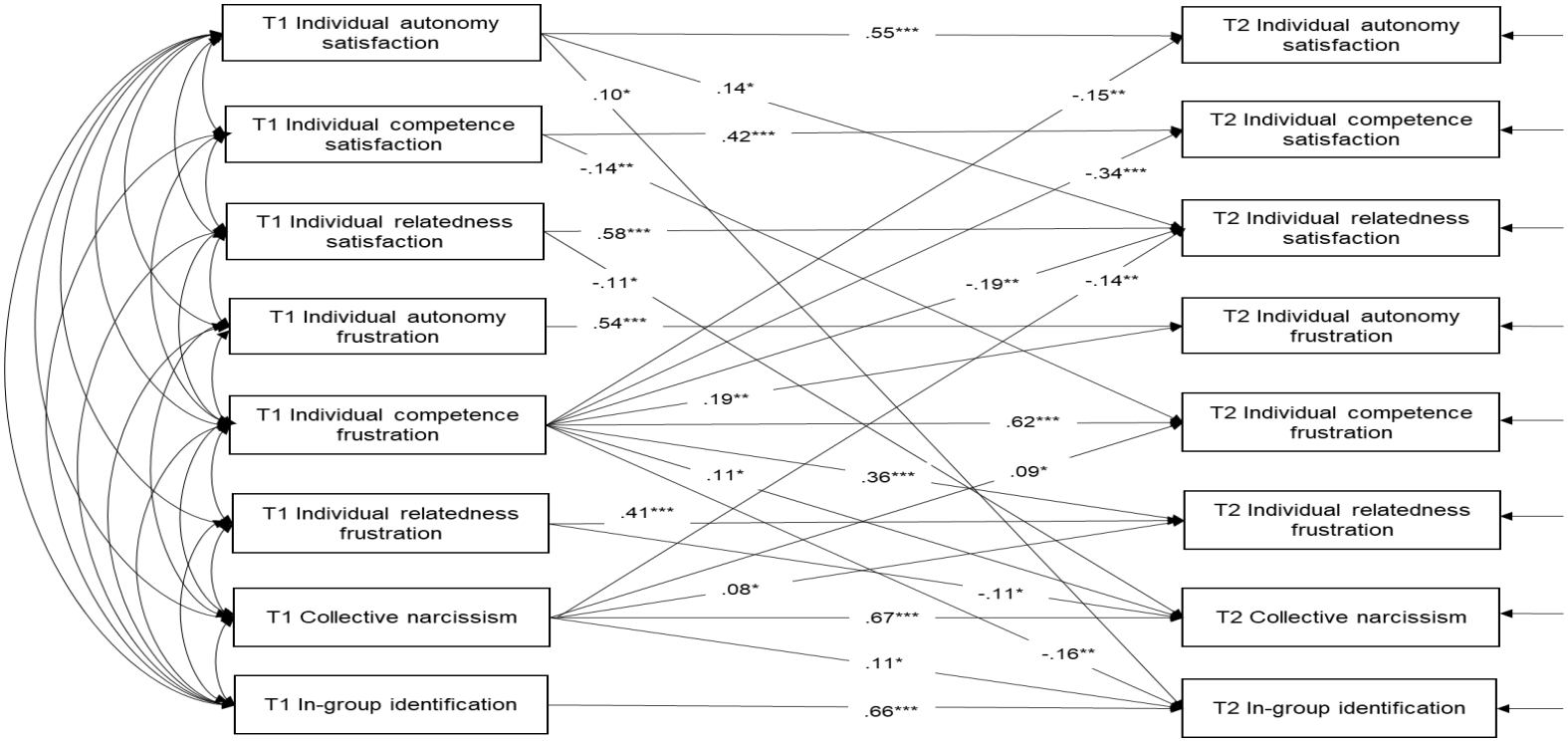

Figure 3.1. Standardized path coefficients from the cross-lagged panel model (Study 5). T1 = Time 1, T2 = Time 2. Age, gender (0 = female, 1 = male), ethnicity (0 = White British, 1 = Other), and political ideology were also introduced as covariates in the model. All the cross-lagged paths from Time 1 to Time 2 were tested but only significant ones were included in the figure. Covariances between T1 variables were estimated by Mplus but excluded from the figure for simplicity.

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

3.2.3 Discussion

Deci and Ryan (2000) argue that while frustrated individual needs lead people to be more defensive, satisfied needs lead to growth and healthy functioning. Collective narcissism reflects a defensiveness with respect to in-groups (Golec de Zavala et al., 2009) and has been theorised to stem from frustrated needs (Cichocka, 2016). In-group identification (when controlled for collective narcissism) is secure (rather than defensive) and possibly originates from fulfilled needs (Cichocka, 2016). Consequently, I predicted frustrated autonomy, competence, and relatedness to predict collective narcissism (H3). However, I contented that satisfaction of autonomy, competence and relatedness would predict a more secure from of in-group identity (H4). I tested these predictions longitudinally in a national context. The results partially confirmed the hypotheses.

H3 was only supported with respect to competence frustration. Time 2 collective narcissism was predicted by more competence frustration at Time 1, suggesting that those who question their capacities and feel like a failure identify with their nation in a more narcissistic way. Both feelings of lacking personal autonomy (i.e., being pressured when carrying daily activities and tasks, Chen et al., 2015), and competency could diminish one's sense of personal control (Deci & Ryan, 2017; Muris et al., 2003). The link between less personal control and collective narcissism might have been underlined by frustrated competence, rather than autonomy frustration as previously suggested (Cichocka et al., 2018). I expected frustrated autonomy to predict collective narcissism given that those who scored low in dispositional autonomy were only accepting positive qualities of their groups (Legault et al., 2017). However, the measure of autonomy in the current study was not assessing it as a dispositional variable. This could be the reason for this insignificant relationship. Interestingly, both less relatedness satisfaction and less relatedness frustration at Time 1 predicted higher collective narcissism at Time 2. People tune their opinions to the

opinions and judgements of others depending on their relational needs and their knowledge of those opinions (Echterhoff, Higgins, & Levine, 2009). For example, imagining having an interaction with a conservative parent increased participants' scores in system justification in an attempt to align their views with the parent (Jost, Ledgerwood, & Hardin, 2008). This could explain why both dissatisfaction and less frustration of relatedness were related to higher collective narcissism. In other words, people might be adjusting their narcissistic beliefs about their nation according to the opinions' held across their social networks.

This finding also complements Chapter 1 where I investigated the need to belong trait and situational threats to belongingness and collective narcissism. These findings suggest that it is not a general need for belongingness (Leary et al., 2013) or experimental threats (Twenge et al., 2007) but a more complicated mechanism with respect to ongoing meaningful relationships that might be linking personal relatedness and collective narcissism. I did not have a specific prediction for the relationship between collective narcissism at Time 1 and frustrated needs at Time 2. However, the results also showed that the higher collective narcissism at Time 1 predicted more relatedness dissatisfaction and competence frustration in Time 2. In the previous studies, collective narcissism did not increase personal control or self-esteem across time (Cichocka et al., 2018; Golec de Zavala, Federico et al., 2019). The current findings corroborate and extend the previous research and are consistent with the proposition that with deprived needs, people resort to defensive mechanisms which further risk satisfaction of them (Deci & Ryan, 2000). Although in-group identification increases personal relatedness and efficacy (Vignoles et al., 2006), the defensive form of in-group identity may thwart it as well.

H4 expected a relationship between satisfied individual needs (autonomy, competence, and relatedness) and a more secure in-group identity. Only Time 1 autonomy satisfaction predicted secure in-group identity at Time 2. This suggests that the more people

feel free what they do and pursue (Chen et al., 2015), the more they identify with their national in-group in a secure way. Satisfied individual competence from Time 1 did not predict secure in-group identity at Time 2. Interestingly, as a complementary finding, having less competence frustration at Time 1 predicted more secure in-group identity at Time 2. Secure in-group identity was found to be emanating from feelings of higher personal control (Cichocka, et al., 2018). The current results seem to be consistent with this previous finding and posit that less frustrated competence could be contributing to high personal control. Also, secure in-group identity predicts more tolerant intergroup feelings and less defensiveness when group members encounter negative appraisals of their in-group (Golec de Zavala et al., 2016; Golec de Zavala, Cichocka, & Bilewicz, 2013). High personal autonomy could also be helpful in explaining these previous findings given that it predicts a healthy image of one's in-group which includes both positive and negative characteristics (Leagult et al., 2017). Having more satisfactory personal relationships at Time 1 did predict secure in-group identity at Time 2, suggesting that this variable does not underpin secure in-group identity.

I did not have a prediction for the relationship between Time 1 secure in-group identity and need satisfaction at Time 2. Interestingly, Time 1 secure in-group identity did not predict satisfied needs at Time 2. In-group identification satisfies belongingness and self-efficacy (Vignoles et al., 2006). While it is common to ask participants how much relatedness or competence the relevant social identity or group affords to them (Kyprianides, Easterbrook, & Brown, 2019; Vignoles et al., 2006), the items in Study 5 investigated participants' personal relatedness and competence. Thus, this could explain the non-existent relationships. These results showed that satisfied or at least less frustrated personal needs (an indication of a better personal psychological functioning, Deci & Ryan, 2000) can be reflected in a more secure in-group identity.

3.2.4. Limitations and future directions.

Study 5 offered partial support to the hypotheses. However, the study was conducted in the context of British identity specifically, limiting the opportunity to generalise the results. Similar studies should be done in different national contexts. Future studies can also benefit from operationalising collective narcissism with respect to different groups such as teams or religions when investigating these psychological needs. For example, a football fan feeling that they are not competent, or not related in their personal life might invest in the team they support in a more narcissistic way. Also, this study includes only two waves, thus it cannot claim strong causality. I could only examine between-person changes with respect to personal needs. However, another approach to investigate these needs is to study within-person variability (Ryan & Deci, 2017). Future studies can also benefit from random intercept cross-lagged models that require three waves of data at a minimum and that allow for decomposing within person associations from between person ones (Hamaker, Kuiper, & Grasman, 2015). Alternatively, future research could aim to cluster need profiles (Warburton, Wang, Bartholomew, Tuff & Bishop, 2020) underlying collective narcissism and secure in-group identity.

3.3. Group Psychological Needs

Deci and Ryan (2017) propose that certain societal and political arrangements can be detrimental for members of different social groups by undermining their individual needs. Advancing the theory to group contexts, Kachanoff et al. (2020) suggest that people need to perceive the group they belong as being autonomous, competent, and related to the rest of the society. Group autonomy refers to group members' freedom to determine and express their values and identity (Kachanoff et al., 2020; Parker et al., 2019). Group competence includes feelings that one's group is able to pursue and achieve desired outcomes (Parker et al., 2019). The description of group competence can be understood in parallel to collective efficacy (i.e., group members' beliefs that they can accomplish change through collective efforts Bandura,

1995; Van Zomeren, Spears, Fishcher, & Leach, 2004). Finally, relatedness involves feelings that one's social group is accepted by other groups and thus included as a part of the society (Parker et al., 2019). These definitions can be understood as perceived satisfaction of these group needs. However, experiencing one's social group as oppressed or controlled when determining their values and identity or believing one's group cannot strive for important outcomes and is excluded from the larger society should lead to a deficiency in these needs (Kachanoff et al., 2020). I investigate the associations between satisfied versus frustrated group needs and how they are related to collective narcissism versus secure in-group identity among advantaged (White Americans) and disadvantaged (Black Americans) groups in US. While doing so, I follow the idea that both members of advantaged and disadvantaged groups can experience satisfied and frustrated group needs (Kachanoff, Kteily, Khullar, Park, & Taylor, 2020).

3.3.1. Frustration of group needs among disadvantaged groups.

Members of disadvantaged groups by definition are more likely to struggle with systemic difficulties (Jardina, 2019) which effect their material conditions such as living standards, employment, and wealth (Equality and Human Rights Commission, 2020; Weller & Hanks, 2018). However, we can interpret other available statistics as examples of frustrated psychological group needs. Frustration of competence indicates feelings that one's group cannot achieve valued outcomes (Kachanoff et al., 2020). As an example of this, a large national survey, conducted by Pew Research Center (2016) showed that 21% of Black Americans believed that the Black Lives Matter movement is unlikely to be effective and 43% of Black Americans stated that they do not believe that there will be the necessary systemic changes leading to equal rights. A similar proportion of Black Americans indicated that racial debates will not improve their lives in 2020 (Pew Research Center). They also experience frustrated group relatedness (Branscombe et al., 1999; Kachanoff et al., 2020).

According to the Pew Research Center report (2020), a high percentage of Black Americans indicate that they experience discrimination such as unjust treatment in stores, restaurants, and hospitals. Native Americans indicated having similar experiences of discrimination from the rest of the society (Findling et al., 2019). Members of disadvantaged groups should also experience oppression when deciding their values and expressing their identities which indicates frustrated group autonomy (Kachanoff et al., 2020; Parker et al., 2019). To illustrate, China prohibited the use of Uyghur ethnic language in schools (Mortimer, 2017) and native languages of Aboriginals were banned for a long time in Australia (Rademaker, 2019). In some states in the US, ethnic studies were banned from school curriculums under the claim of being divisive (Delgado, 2013). Many European countries ban Muslim women from wearing full-face covering veils in public (BBC, 2018) out of concerns for national security and integration (Saiya & Manchanda, 2020). The UK is exempt from these regulations (BBC, 2018). However, a poll conducted with British citizens found that more than half of the participants think the values of Muslim people are not compatible with the values of British people (Talwar, 2016).

The examples I presented in the above do not mean that disadvantaged group members will always experience group needs frustration. Some progressive social and political developments may exemplify satisfaction of group competence (a feeling that one's group can influence the society they live in and achieve outcomes) among Blacks (Parker et al., 2019). For example, the Black Lives Matter movement was legally recognized in the UK and raised donations adding up to £1.2 million pounds (Gayle, 2020). In the US, police officers who were responsible for the death of George Floyd were arrested and had increased charges due to widespread protests (O'Brien, 2020). There are many celebratory events through which African Americans express the aspects of their cultural identities (Gay, 2006). In parallel, events such as National Hispanic Heritage Month in the US (Borge, 2020) and

National Indigenous Peoples Day in Canada (Kudelik, 2018) allow the members of these groups to express their cultural identity and thus this could be contributing to group autonomy satisfaction (Kachanoff et al., 2020). Black Americans indicated anti-Black biases to be on a decline between the 1950s and 2000s (Norton & Sommers, 2011). This may indicate that there is variation towards in satisfied group relatedness in comparison to the rest of the society.

3.3.2. Frustration of needs among advantaged groups.

It is perhaps easier to comprehend thwarted group needs with respect to disadvantaged groups. However, it is suggested that members of advantaged groups also experience group needs frustrations. For example, they might feel restrictions to their group autonomy (Kachanoff, Kteily et al., 2020). Frustration of competence and relatedness applies to advantaged groups as well. Many advantaged groups entertained more structural power and privileges historically (Sidanius & Petrocik, 2001). However, with recent social and political changes members of these groups are concerned about their position and values in the society (Jardina, 2019). In both Britain's Brexit vote and Donald Trump's election win in 2016, electorates were concerned with both the economic side of immigration and the potential for immigration to be erosive to dominant cultural identities (Fukuyama, 2018; Kaufman, 2018). Ford and Goodwin (2014) refer to the term "left-behind" while explaining the rising votes for United Kingdom Independence Party (UKIP) which positioned itself on side of leaving the EU. The term refers to a portion of voters who are White working class, less educated, and more economically deprived as well as not being able to adapt to cultural changes (Ford & Goodwin, 2014). Especially for the working class, unions could be quite important for establishing group competence as they negotiate for the rights of their members. However, with the transformation of the economy, the power of labour unions diminished a great deal in the UK (Ford & Goodwin, 2014; Tippet, 2020). Unions are

supported by neither Republicans nor Democrats in the US and lost their capacity to represent workers by 29% between 1953 and 2015 (Wright, 2016). This trend could be understood as frustration of group competence at least for a portion of advantaged group members.

Perceived threat to existing dominant cultural values and identities (Fukuyama, 2018) may reflect a frustration of group autonomy for advantaged groups. For example, the death of African American George Floyd due to police violence caused protests in the US as well as in other countries (BBC, 2020). During the protests, statues of Confederate leaders and Columbus were pulled down or vandalized (Taylor, 2020) because these symbols were considered as offensive to Black Americans and seen as representatives of historical racism (Williams, Armitage, & Stein, 2020). Similar instances occurred in other parts of Europe such as the UK (Guy, 2020). However, reflecting the public split on the issue (Holland, 2020), soon after there was a counter protest and petitions in the UK that demanded to keep controversial monuments such as the statue of Churchill in Westminster (Parveen, Tait, Sabbagh, & Dodd, 2020; Sabbagh, 2020). In a response, Boris Johnson (2020) wrote on Twitter that "…Yes, he sometime expressed opinions that were and are unacceptable to us today, but he was a hero, and he fully deserves his memorial". As an example of restrictions to the expression of identity, the wording of Christmas wishes also involved some controversy as well (Kachanoff, Kteily et al., 2020). The use of Happy Holidays instead of Merry Christmas became popular over the years as a means of being more inclusive towards believers of non-Christian religions and nonbelievers in the West (Stack, 2016). However, some perceive the use of Happy Holidays as eradicating Christian identity (Stack, 2016).

There is also a tendency growing among White Americans to perceive themselves as being discriminated against (Wilkins, Wellman, & Kaiser, 2013). Norton and Sommers (2011) analysed a dataset that covers a period of fifty years (between the 1950s and the 2000s) and reported that White Americans express an increase in anti-White biases.

According to the authors, this finding reflects the zero-sum perception of White Americans on racism (i.e., anti-White biases are increasing as anti-Black biases are decreasing). In 2016, the Public Religion Research Institute asked Americans if they think anti-White discrimination is becoming a growing problem. While 57% percent of White Americans responded in agreement, this percentage increased up to 66% among White working-class Americans. All these examples suggest members of advantaged groups can also experience deficits in their group needs.

3.3.4. Psychological outcomes associated with group needs.

Satisfaction and frustration of group needs are usually studied in relation to individuals' well-being. A series of experimental studies manipulated the experience of group autonomy (satisfied vs. frustrated) by a recall task among participants who belong to LGBTQ+ community (Kachanoff, Cooligan, Caouette, & Wohl, 2020). The results generally highlight a positive link between experiencing group autonomy (vs. lacking) and psychological well-being which was mediated by increased feelings of personal autonomy. Both in correlational, longitudinal, and experimental studies, feeling that one's group lacks autonomy predicted less personal well-being via diminished personal autonomy (Kachanoff, Taylor, Caouette, Khullar, & Wohl, 2019). Among disadvantaged groups, satisfaction of needs was positively related to general well-being, whereas frustrated group needs were linked to less well-being (Parker et al., 2019). Interestingly, in this study, both satisfaction and frustration of needs was related to centrality of identity. Both among Black and White Americans, frustration of autonomy predicted support for collective action movements which support causes for the interest of their own group and desire for more group power (Black Lives Matter and White Lives Matter respectively; Kachanoff, Kteily et al., 2020).

3.3.5. Group needs underlying two forms of in-group identity.

Frustrated group needs.

Recall that collective narcissism reflects a belief in the greatness of an in-group that is contingent on external recognition (Golec de Zavala et al, 2009). Previous research provides some examples linking collective narcissism to frustrated group needs. Ostracism coming from an outgroup (Britain) increased national collective narcissism among American participants (Golec de Zavala, Federico et al., Study 7). This finding indicates a sensitivity to frustration of group relatedness. The feelings of group-based personal discrimination in a society foster ethnic in-group identification across members of disadvantaged groups (such as African Americans) as a way to protect self-esteem and well-being (Branscombe et al., 1999). However, a meta-analysis showed that group-based rejection negatively affects the well-being of members of advantaged groups as well (Schmitt, Branscombe, Postmes, & Garcia, 2014). Collective narcissism did not increase personal self-esteem over time and was elevated after outgroup ostracism when controlling for in-group identification (Golec de Zavala, Federico, et al., 2019). Thus, frustration of group relatedness might be underlying collective narcissism both for advantaged and disadvantaged group members.

With group-based autonomy frustration, people feel like their group cannot determine their values, identities and what to pursue in a free fashion (Parker et al., 2019; Kachanoff, Kteily et al., 2020). A study conducted in China showed that those scoring high in collective narcissism were sensitive to cues that may signal a threat to symbols of dominant cultural identity (Gries et al., 2015). In Poland, religious collective narcissism was related to seeing people who disseminate gender equality ideas as agents of a dangerous feminist ideology which is threatening to dominant Christian values and identity (Marchlewska et al., 2019). National collective narcissism among Polish participants predicted support for anti-environmentalist policies just to assert that their national group can make internal decisions independent of the EU (Cislak et al., 2018). These studies therefore suggest a further link between frustrated group autonomy and collective narcissism even across members of

advantaged groups and long-established nations. Therefore, frustrated group autonomy could be associated with collective narcissism both for advantaged and disadvantaged groups.

There is no explicit direct link between collective narcissism and group competence. However, national collective narcissism increases in response to the unjust treatment of in-group. In Study 2 by Marchlewska et al. (2018), participants' scores in British national narcissism increased after reading a text describing the UK as experiencing long-term disadvantages due to its membership in the EU. In other studies, group based relative deprivation—subjective feelings of one's group getting less in comparison to other groups (Runciman, 1966)—related to ethnic collective narcissism among Black Britons and national narcissism among Americans (Golec de Zavala et al., 2009; Study 2; Marchlewska et al., 2018; Study 3). Among White Australians, group-based relative deprivation predicted more nationalism (Sengupta, Osborne, & Sibley, 2019). Group based relative deprivation was also related to separatist nationalism among members of disadvantaged groups (e.g., Scottish nationalism, Abrams & Grant, 2012). Experiences of group-based relative deprivation might suggest that one's in-group is not capable of achieving important group-related outcomes (e.g., competence frustration). Thus, collective narcissism could be underlined by competence frustration.

Satisfied group needs.

Being included and respected by other groups in a society reflects satisfied group relatedness (Kachanoff et al., 2020). For example, inclusion coming from an outgroup increased secure in-group identity with the in-group when controlling for collective narcissism (Golec de Zavala, Federico et al., 2019; Study 7). During a ball-tossing game, participants who were included by a rival outgroup indicated warmer feelings towards that group (Gonsalkorale & Williams, 2007). In other studies, satisfaction of group relatedness increased the centrality of in-group identification among disadvantaged groups (Parker et al.,

2019). Being accepted and included by other groups should be a positive experience for both advantaged and disadvantaged groups. Therefore, satisfied group relatedness could be related to secure in-group identity for both groups.

Competence satisfaction refers to believing one's in-group can influence its social context and attain outcomes (Kachanoff et al., 2020). Increased collective efficacy (which is similar to satisfied group competence) was found to foster in-group identification among members of disadvantaged groups (van Zomeren, Leach, & Spears, 2010; see also Grant, Abrams, Robertson, & Gray, 2014). Although I gave examples of frustrated group needs among advantaged groups, members of these groups still indicated examples of competencies they have and how positive they feel about their identities (Jardina, 2019). As a result, satisfied group competence could underlie a more secure in-group identity for both advantaged and disadvantaged groups.

Acknowledgement of cultural identities could help members of ethnic groups feel positive about their in-group (Deaux & Verkuyten, 2014; Verkuyten, 2005, 2006; Wolsko, Park, & Judd, 2006). Thus, feeling free to determine cultural values and identities could be associated with higher secure in-group identity among members of disadvantaged groups. In open-ended questions, White Americans also indicated being proud of their cultures and being supportive of events that celebrate their ethnic background as well (Jardina, 2019). Therefore, the experience of group autonomy satisfaction might be related to a more secure form of in-group identity among members of advantaged groups as well.

3.4. Study 6

In Study 6, I investigated the associations between frustrated versus satisfied group needs and collective narcissism versus secure in-group identity. I expect frustrated group autonomy, competence, and relatedness to be associated with collective narcissism among members of advantaged and disadvantaged groups (H5). In contrast, I predict satisfaction of

collective autonomy, competence, and relatedness to be related to secure in-group identity among advantaged and disadvantaged groups (H6). I tested these hypotheses in a correlational study among Black and White Americans. While doing so, I also controlled for subjective social status, ideology, age, and gender.

3.4.1. Method

Participants and procedures.

The data collection lasted for one month before the 2020 general election in the US. I aimed to recruit as many participants as possible to allow for potential data loss. Although I did not investigate voting intentions, I considered that participants' perceptions of their ethnic group could be affected by the election results. Participants were recruited through social media (Reddit and Facebook) and Prolific Academic. Reddit is one of the most popular social media websites in US and involves thousands of subreddits through which people discuss their ideas and post content on an issue that subreddit is dedicated to (Amaya, Bach, Keusch, & Kreuter, 2019). I posted the online link to the study on various US city subreddits (i.e., online discussion forums for American citizens), and Facebook groups in which Americans debate political issues. Participants from these forums were mostly White Americans and participants were not compensated in return. Because the initial data collection was not successful in recruiting Black participants, I relied on Prolific to top up the sample[10]. These participants were granted monetary compensation. On social media, 426 participants showed interest in the study. Among those, 269 White and 13 Black Americans provided partial or full responses and were included in the further analysis. Two hundred Black Americans were reached through Prolific Academic. The final data set included responses from 482

[10] I asked for consent from group moderators before posting the study. Moderators of ethnically diverse Facebook and Reddit groups indicated that they do not allow research related queries on their pages.

participants[11]. For White Americans (67 female, 134 male, 68 unknown), age ranged from 18 to 70 (*M* = 34.81, *SD* = 10.69). For Black Americans (110 female, 100 male, 3 unknown) age ranged from 18 to 74 (*M* = 31.61, *SD* = 10.36).

After indicating their ethnicity, participants responded to measures that assessed group needs, collective narcissism, and in-group identification. I also measured subjective social status and ideology as covariate variables. All the measures were presented in a random order. I embedded a code to each item to replace "my group" with the ethnicity self-reported at the beginning. Unless stated otherwise, participants responded to measures on a scale from 1= *strongly disagree* to 7 = *strongly agree*. I present descriptive statistics for all the measures in Table 3.3.

Measures.

Group Needs Satisfaction and Frustration. Participants' opinions on what their group members experience in the US was measured with Group Needs Scale (Parker et al., 2019). The scale consists of six components assessing satisfaction (autonomy: e.g., "My group is free to live in accordance with their beliefs", competence: e.g. "My group is able to accomplish their aims", relatedness: e.g., "My group is included in the larger culture") and frustration (autonomy: e.g., "My group remains oppressed in many ways", competence: e.g., "My group has little power or influence", relatedness: e.g., "My group has been isolated and often rejected by other groups") of group needs[12].

[11] Regional frequencies for White Americans were South (58%), West (21.9%), Midwest (13%), and North East (7.1%). Regional frequencies for Black Americans were South (52.6%), North East (21.6%), Midwest (13.1%), and West (12.7%).

[12] I conducted separate confirmatory factor analyses (CFA) for two groups. See Appendix A for details.

Collective Narcissism. Ethnic collective narcissism was assessed with a short, five-item version of the Collective Narcissism Scale (Golec de Zavala, Cichocka, & Bilewicz, 2013).

In-group Identification. Identification with ethnic group was measured with the same measure as in previous studies (Cameron, 2004).

Subjective Social Status. Participants' perceived status in US society was measured with Mac Arthur Subjective Social Status Scale (Adler, Epel, Castellazzo, & Ickovics, 2000). Participants were represented with a ladder with ten rungs and explained that while the first rung refers to people who are worst off in the society, the tenth rung refers to those who are the best off. Then they were asked to place themselves in comparison to the rest of the society. Thus, the responses changes from 1 to 10, and higher numbers indicate a higher perceived social status.

Political ideology. Participants placed their political views on a single item ranging from very liberal to very conservative, with higher scores indicating higher conservatism.

3.4.2. Results

Descriptive properties of the measures.

Table 3.3 displays the means, standard deviations, and reliability coefficients for all the measures for both groups. All the measures showed satisfactory internal consistencies for both Black and White Americans. An independent samples t-test showed that Whites scored significantly higher on subjective social status than Blacks, t (433.186) = 8.06, $p < .001$.

Table 3.3

Descriptive statistics of all the measures (Study 6)

	Black Americans		White Americans	
	M (*SD*)	α	*M* (*SD*)	α
Group autonomy satisfaction	5.07 (1.50)	.88	5.87 (1.07)	.88
Group competence satisfaction	5.13 (1.18)	.85	5.25 (1.02)	.84
Group relatedness satisfaction	3.73 (1.47)	.85	5.60 (1.06)	.76
Group autonomy frustration	5.71 (1.24)	.90	2.54 (1.46)	.88
Group competence frustration	3.24 (1.25)	.70	2.68 (1.09)	.72
Group relatedness frustration	5.15 (1.20)	.79	2.45 (1.27)	.77
Collective narcissism	5.14 (1.15)	.82	1.95 (1.13)	.84
In-group identification	5.43 (1.05)	.87	4.06 (0.83)	.76
Political ideology	2.46 (1.86)	-	2.26 (1.82)	-
Subjective social status	4.96 (1.50)	-	6.30 (2.01)	-

Note. $N_{\text{Black Americans}} = 213$, $N_{\text{White Americans}} = 269$.

Zero-order correlations among the main variables.

Correlations among all the main variables are presented in Table 3.4, separately for Blacks and Whites. For Black Americans, collective narcissism was positively correlated with all frustrated group needs, but negatively with satisfied group autonomy and relatedness. In-group identification was positively associated with frustrated group autonomy and relatedness. For White Americans, collective narcissism was positively related to frustrated group needs, but negatively to satisfied group needs. In-group identification had a positive relationship with frustrated group autonomy, but a negative relationship with frustrated group relatedness.

Table 3.4

Zero-order correlations across the main variables

Variables	1	2	3	4	5	6	7	8
1. Group autonomy satisfaction	-	.46***	.40***	-.18**	-.19**	-.27***	-.14*	.04
2. Group competence satisfaction	.53***	-	.32***	-.10	-.46***	-.15*	-.06	.10
3. Group relatedness satisfaction	.58***	.53***	-	-.48***	-.23*	-.61***	-.33***	-.14*
4. Group autonomy frustration	-.53***	-.41***	-.47***	-	.19**	.69***	.60***	.35***
5. Group competence frustration	-.48***	-.55***	-.45***	.53***	-	.28***	.24***	-.11
6. Group relatedness frustration	-.54***	-.45***	-.65***	.72***	.60***	-	.55***	.25***
7. Collective narcissism	-.36***	-.23***	-.37***	.67***	.43***	.66***	-	.53***
8. In-group identification	-.11	.07	.02	.23**	-.16*	.07	.40***	-

Note. Correlations for Black Americans are presented above, and correlations for White Americans below, the diagonal of the table.

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

Group needs predicting two forms of in-group identity.

To test the unique role of frustrated and satisfied group needs on collective narcissism and secure in-group identity, I conducted two regressions in Mplus8 using maximum likelihood estimation (Muthen & Muthen, 1998-2017). In the first analysis, I regressed collective narcissism onto group needs while controlling for in-group identification, age, gender, political ideology, and subjective social status ($R^2_{\text{White Americans}} = .66$, $p < .001$, $R^2_{\text{Black Americans}} = .55$, $p < .001$)[13]. In the second analysis, I regressed in-group identification on needs while controlling for the same demographic covariates and collective narcissism ($R^2_{\text{White Americans}} = 0.34$, $p < .001$, $R^2_{\text{Black Americans}} = .39$, $p < .001$). The standardized path coefficients for both groups are displayed in Table 3.5.

For Black Americans, frustrated group autonomy ($B = 0.29$, $SE = 0.06$, $p < .001$), competence ($B = 0.17$, $SE = 0.05$, $p = .001$) and relatedness ($B = 0.18$, $SE = 0.07$ $p = .009$) positively predicted collective narcissism. Secure in-group identity was negatively predicted by frustrated group competence ($B = -0.16$, $SE = 0.07$, $p = .002$). For White Americans, frustrated group autonomy ($B = 0.18$, $SE = 0.05$, $p = .001$), competence ($B = 0.15$, $SE = 0.06$, p = .01), relatedness ($B = .35$, $SE = 0.06$, $p < .001$) as well as conservative ideology ($B = 0.13$, $SE = 0.03$, $p < .001$) positively predicted collective narcissism. Autonomy satisfaction ($B = -.013$, $SE = 0.06$ $p = .04$), competence frustration ($B = -.014$, $SE = 0.07$, $p < .001$), and relatedness frustration ($B = -0.14$, $SE = 0.07$, $p < .001$) negatively predicted secure in-group identity.

Group differences.

[13] I used posthoc power analyses to determine observed power for which effect sizes refer to $f^2 = .02$ (small), $f^2 = .15$ (medium), $f^2 = .35$ (large) (Gpower, Faul et al., 2007). The effect sizes were large (Whites, $f^2 = 1.94$; Blacks, $f^2 = 1.22$) and the power exceeded .99 when predicting collective narcissism. Again, the effect sizes were large (Whites, $f^2 = .52$; Blacks $f^2 = .64$) and the power exceeded .99 when predicting secure in-group identity.

Finally, I compared the differences in the beta coefficients of the independent variables when predicting collective narcissism and secure in-group identity across two groups. First, I labelled the paths predicting collective narcissism for Blacks and Whites. Then I defined parameter differences and constrained them to be equal across two groups, Wald $\chi^2 = 13.69$, $p = .13$. Conservative ideology was more pronounced in predicting collective narcissism among White Americans than among Black Americans, *diff* = 0.09, $p = .04$. Also, frustration of group relatedness seemed marginally more pronounced when predicting collective narcissism for White Americans than Black Americans, *diff* = 0.17, $p = .07$. Then, I labelled the paths predicting secure in-group identity for Blacks and Whites. I defined parameter differences and constrained them to be equal, Wald $\chi^2 = 22.52$, $p < .001$. Autonomy satisfaction was more prominent when predicting secure in-group identity for White Americans than Black Americans, *diff* = -0.16, $p = .04$. Having more a liberal political ideology was marginally more predictive of secure in-group identity for Black Americans than White Americans, *diff* = 0.09, $p = .06$

Table 3.5

Group needs predicting two forms of in-group identity (Study 6)

	Model 1 DV = Collective narcissism				Model 2 DV = In-group identification			
	Black Americans		White Americans		Black Americans		White Americans	
Predictors	β	*p*	β	*p*	β	*p*	β	*p*
Autonomy satisfaction	-.03	.64	.04	.54	.05	.48	**-.17**	.04
Competence satisfaction	.02	.79	.09	.09	.02	.75	-.01	.94
Relatedness satisfaction	.02	.82	.02	.72	-.04	.57	.09	.27
Autonomy frustration	**.32**	< .001	**.23**	.001	.10	.24	.18	.07
Competence frustration	**.19**	.001	**.14**	.01	**-.20**	.002	**-.39**	< .001
Relatedness frustration	**.19**	.009	**.39**	< .001	-.05	.59	**-.22**	.04
Subjective social status	.08	.11	.05	.27	.11	.06	.03	.62
Age	-.06	.27	-.02	.71	.02	.79	.01	.91
Gender	-.04	.39	-.00	.90	-.03	.58	-.03	.62
Political ideology	.07	.18	**.21**	< .001	-.07	.25	.11	.12
In-group identification	**.40**	< .001	**.26**	< .001	-	-	-	-
Collective narcissism	-	-	-	-	**.55**	< .001	**.49**	< .001

Note. Gender was coded as 0 = Female, 1 = Male. Significant β values are in bold.

Analyses when not controlled for overlap.

I also conducted the same analyses while not controlling for the overlap between collective narcissism and in-group identification. When not controlled for in-group identification, frustrated competence was insignificant in predicting collective narcissism for White Americans, $B = 0.06$, $SE = 0.06$, $p = .38$. Group needs predicting collective narcissism for Black Americans remained the same. Not controlling for collective narcissism, relatedness frustration did not predict in-group identification for Whites, $B = -0.03$, $SE = 0.07$, $p = .70$. Autonomy frustration positively predicted in-group identification for Whites, $B = 0.19$, $SE = 0.06$, $p = .001$. When not controlled for collective narcissism, frustrated group autonomy predicted higher in-group identification for Blacks, $B = 0.29$, $SE = 0.07$, $p < .001$. When I did not control for collective narcissism, competence frustration did not predict in-group identification among Blacks. $B = -0.09$, $SE = 0.06$, $p = .09$. Here, I only reported the changing patterns of results. More details can be found in Table A3 (Appendix A).

3.4.3. Discussion

Study 6 investigated whether and how frustrated versus satisfied group needs are related to collective narcissism versus secure in-group identity among advantaged and disadvantaged groups. I hypothesized that frustrated group autonomy, competence and relatedness would be associated with collective narcissism for both advantaged and disadvantaged groups (H5). I also predicted that satisfaction of collective autonomy, competence and relatedness would be related to secure in-group identity among advantaged and disadvantaged groups (H6). I tested these links among Black and White Americans in a correlational study.

The pattern of results confirmed H5. For both Black and White Americans, indicating that their group members are not free to determine their values and are being controlled (autonomy frustration), feeling that their group members cannot achieve important outcomes

(competence frustration), and expressing that their group members are rejected and stigmatized (relatedness frustration) were associated with higher collective narcissism. Experiences of frustrated group competence may explain the link between collective narcissism and blaming other groups for the adversities happening to the in-group (Cichocka & Cislak, 2020; Cichocka et al., 2016). Group competence should be more likely to be hampered for disadvantaged groups as a result of social hierarchies (Sidanius & Pratto, 1999). However, experiencing one's group as unable to make a change might play in role group members' further victimization of the in-group (Noor, Shnabel, Halabi, & Nadler, 2012).

Experiencing relatedness and autonomy frustration might also lead members of advantaged and disadvantaged groups to support policies and actions that improve these needs and interests of their groups (Kaufman, 2018; Jardina, 2019; Kachanoff, Kteily et al., 2020). However, regulations concerned with the interests of one group might make members of other groups feel that their needs and interests are being ignored. This is evident in advantaged group members' negative views of affirmative action policies (Crosby, Iyer, Clayton, Downing, 2003; Renfro, Duran, Stephan, & Clason, 2006). My current findings posit that although affirmative action is done with the intention to improve the conditions of disadvantaged groups, White ethnic collective narcissism might lead to backlash.

Although it is obvious that disadvantaged groups suffer from needs deficiencies with respect to autonomy, relatedness, and competence, advantaged groups seem to feel similar restrictions with the recent social and political changes (Ford & Goodwin, 2014; Jardina, 2019; Kachanoff, Kteily et al., 2020). Overall, these results suggest that regardless of the status of the groups, thwarted collective needs can underlie ethnic collective narcissism, which in this case reflects a belief that one's ethnic group is underappreciated and entitled to better treatment.

The results did not support the predicted positive link between satisfied group needs and secure in-group identity among advantaged and disadvantaged groups (H6). Satisfaction of group needs is possibly a "usual" experience for the members of advantaged groups. For example, being accepted by the rest of the society, being able achieve one's aims, and being able to express one's identity might be an ordinary experience for members of advantaged groups given that they have a more privileged position in the society (Jardina, 2019). White identity may be invisible to the extent that advantaged group members continue to experience the usual social arrangements (Jardina, 2019). Therefore, experiencing satisfied group needs might be decreasing the salience of ethnic identity for disadvantaged groups as well.

Less frustrated group competence (for Black and White Americans) was related to secure in-group identity when controlling for collective narcissism. Not including collective narcissism in the analysis makes this relationship non-significant for Blacks. Also, competence frustration was associated with collective narcissism for Whites only when I controlled for in-group identification. These results suggest that the less people believe that their group's competence is frustrated, the more likely they are to have a secure in-group identity. Thus, the degree of competence frustration is likely crucial for understanding the foundations of secure in-group identity. Although group efficacy strengthens in-group identification across members of disadvantaged groups (Van Zomeren et al., 2010), it seems to be also contributing to a more secure in-group identity for advantaged and disadvantaged group members.

Experiencing less frustrated group relatedness predicted higher secure in-group identity for White Americans. When the analysis is not controlled for collective narcissism, this relationship becomes insignificant. It seems like perceiving one's group as less isolated and rejected by other groups (Kachanoff et al., 2020) is also reflected in an in-group identity that is more secure. Experiencing less satisfied group autonomy was related to higher secure

in-group identity (net of collective narcissism) for White Americans. When the analysis is performed without collective narcissism, both frustrated and less satisfied group autonomy were associated with higher in-group identification among Whites. Frustrated group autonomy predicts more in-group identification for Blacks while not controlling for collective narcissism. This is in line with the previous literature which suggests that social identities provide people with norms, values, and a sense of collective continuity (Sani, 2008; Tajfel & Turner, 1979). However, accounting for collective narcissism and in-group identification might allow us to see how each one reflects deprivation or dissatisfaction of this need.

The current results indicate that not taking collective narcissism into account might conceal how group needs are reflected in the ethnic in-group identification. Jardina (2019) argues that experiences of unfair treatment of ethnic group may increase identification among Whites (Jardina, 2019). Some researchers have aimed at understanding how ethnic in-group identification among Whites links to in-group defensiveness and have examined it in relation to perceived threats to groups (e.g., existential, Bai & Federico, 2020; economic and political, Craig & Richeson, 2014; relatedness, Craig & Richeson, 2017; status, Major, Blodorn, & Blascovich, 2018). In these studies, ethnic identification is generally assessed only using the centrality component of the in-group identification measures (Major et al., 2018; Wolsko et al., 2006). However, political scientists and social psychologists posit that White Americans who identify with their ethnic group may not necessarily have negative attitudes towards other ethnic groups (Bai, 2020; Brewer, 1999; Jardina, 2019; Major et al., 2018). For those who identify in a narcissistic way, the group should be very central to the self (Golec de Zavala et al., 2009). Given the robust link between collective narcissism and hostile outgroup attitudes (Cichocka & Cislak 2020), it is possible that it is not White ethnic identification, but ethnic collective narcissism that makes people more prone to be more defensive on behalf of their ethnic group.

3.4.5. Limitations and future directions.

Study 6 relied on a correlational design and was conducted in the US where racial and ethnic issues were at the forefront of popular discussion during 2020. Thus, it does not allow me to draw causal links or generalize the results. Future studies should test these relationships in different national contexts. Many European countries have a diverse demographic characteristic due to different ethnicities. Satisfied and frustrated group needs could be helpful in explaining collective narcissism and secure in-group identity among members of advantaged and disadvantaged groups in these countries as well. Although it is reasonable to think that experiencing one's group needs as frustrated (vs. satisfied) will have an effect on how in-group members will identify with that group, this study does not rule out the possibility of reverse and bidirectional relationships. For example, those who score high in collective narcissism might perceive the needs of their group as more frustrated. Then, perceiving more frustrated group needs could contribute to a more narcissistic identity. Future studies should employ longitudinal designs to establish the direction of these relationships.

Another limitation comes from different methods of data collection. While I recruited White American participants through social media, I had to top up the sample on Prolific Academic for most of the Black American participants. The different ethnic backgrounds of the participants were reflected in how they scored on subjective social status. As expected, White participants reported higher scores in this variable. However, recruiting participants through social media could raise concerns about the quality of the data. That said, Schatz (2017) suggests that sources like Reddit offers samples that are not overused in many studies, and I received many messages from participants showing genuine interest in the study.

3.5. General Discussion: Chapter 3

In this chapter I relied on the framework of basic needs rooted in SDT. I examined them as individual (Study 5) and group needs (Study 6). In general, I hypothesized that frustrated individual and group needs would be associated with collective narcissism, whereas I predicted that satisfaction individual and group needs would be associated with secure in-group identity.

In Study 5, I found that questioning self-capacity and experiencing failures (e.g., frustrated individual competence, Chen et al., 2015) was related to collective narcissism. In Study 6, I demonstrated that experiences of one's group members' failure to achieve outcomes that are important for their group (e.g., frustrated group competence, Parker et al., 2019) was associated with collective narcissism as well. It seems that individual and group-based competence frustration are reflected in collective narcissism. Individual (Study 5) and group-based competence frustration (Study 6) had a negative relationship with secure in-group identity. This means experiencing less insecurity over self-efficacy and perceiving the group as less likely to fail in mobilizing change are reflected in a more secure in-group identity. Being a member of a less competent group has a negative impact on group members' perception of personal competency and control (Schmader, Johns, & Forbes, 2008; Tiessen, Taylor, & Kirmayer, 2009). The current studies suggest that individuals' competency experiences about themselves may be similar to how they experience the group's competency. SDT does not define a hierarchy between needs (Ryan & Deci, 2017). However, in group domains competence (i.e., group efficacy, Van Zomeren et al., 2004) could be more crucial when striving for group autonomy and relatedness. Thinking that self and group are less incompetent could contribute to further pursuing other group needs (autonomy, relatedness) in a persistent and normative way (Tausch et al., 2011) possibly through a secure form of in-group identity. Those who identify in a narcissistic way might react with defiance (Vansteenkiste & Ryan, 2013) when group autonomy and relatedness are challenged, but

these attempts might not be fruitful in benefitting the in-group. For example, collective narcissism might predict anger-based or non-normative collective actions (Tausch et al., 2011; Van Zomeren et al., 2004).

I demonstrated that feeling that one is free to choose what to do (e.g., individual autonomy satisfaction, Deci & Ryan, 2000) was related to secure in-group identity (Study 5). Satisfied group autonomy indicates the experience that one's group members can freely express their identity and live in-line with their values (Parker et al., 2019). Less satisfied (but not deprived) group autonomy was associated with secure in-group identity among members of an advantaged group (Study 6). This indicates that both feelings of personal volition in daily life and that one's group members are less free to determine or assert their values might be reflected in a more secure form of in-group identity. Rather than the frustration of individual autonomy (Study 5), the frustration of group autonomy seems to be more helpful in explaining collective narcissism. In Study 6, the feeling that one's group cannot determine what they pursue and the feeling of constraints to the expression of one's identity (e.g., frustrated group autonomy, Parker et al., 2019; Kachanoff et al., 2020) were reflected in collective narcissism. Interestingly, although autonomy should be essential for a continuous and distinctive identity (Sani, 2008; Tajfel & Turner, 1979), in-group identification did not mediate the link between thwarted group autonomy and hostile reactions towards other groups that restricted this need (Kachanoff, Kteily, et al., 2020; Study 4). It is possible that such a relationship could be mediated by collective narcissism, rather than secure in-group identity.

Less loneliness and isolation and being less satisfied with personal relationships were reflected in collective narcissism (Study 5), so collective narcissism seems to shift with respect to these variables. Study 6 suggests that frustration of group relatedness (e.g., perceiving the group as being stigmatized and rejected, Parker et al., 2019) could be a more

reliable indicator of collective narcissism than individual relatedness. Satisfaction of individual (Study 5) and group-based relatedness (Study 6) seem not to underpin secure in-group identity. Nevertheless, Study 6 suggests that less frustrated group relatedness could be reflected in secure in-group identity in an advantaged group.

While Studies 5 and 6 demonstrated links between individual and group needs and two forms of in-group identity, they are separate investigations. Thus, we cannot interpret these needs as nested structures. For example, Kachanoff et al. (2019) found that personal autonomy was more prone to change compared with group autonomy. The same logic could apply to other personal basic needs as well. After all, people construe their understanding of groups in a more abstract way than their understanding of self (Turner & Reynolds, 2012). To distinguish whether group or individual needs are more prominent in predicting collective narcissism and secure in-group identity, future studies should assess these variables at the same time and use multilevel modelling (Christ, Sibley, & Wagner, 2012). With this limitation in mind, Studies 5 and 6 contribute to understanding the underpinnings of collective narcissism and secure in-group identity by demonstrating that while frustrated personal and group needs are associated with the former, satisfied or less frustrated personal and group needs are linked to the latter.

Deci and Ryan (2000) suggest that satisfaction and frustration of personal needs in particular have an effect on the type of motivations people have. For example, people with satisfied needs tend to acquire more autonomous (i.e., self-determined) motivations, whereas those with frustrated needs have more controlled (i.e., non-self-determined) motivations While not focusing on underlying needs, studies on religion propose to differentiate between the different types of religious orientations as well. In the next chapter, I examine how different types of motivations and religious orientations to identify are related to collective narcissism versus secure in-group identity.

CHAPTER 4[14]

> "Immature love says: I love you because I need you. Mature love says: I need you because I love you." (Fromm, 1957/1995, p. 32).

4.1. Introduction

Different types of love stem from different motives. As argued by Fromm (1957/1995), while immature love is conditioned on satisfying one's own needs, mature love is unconditional and needs the love-object only because of the emotions one feels for them. These feelings are not limited to interpersonal relationships. In fact, positive feelings towards a particular group are an element of identification with this group (Leach et al., 2008; Tajfel, 1981). These groups range from intimacy groups (e.g., family, friends) to abstract categories (e.g., nation, ethnicity, religion, Hogg & Abrams, 1998). People identify with these categories in various ways (Adorno et al., 1950). The variation includes patriotism versus nationalism (Kosterman & Feshbach, 1989), constructive versus blind patriotism (Schatz et al., 1999), secure versus insecure attachment (Jackson & Smith, 1999), or national attachment versus glorification (Roccas et al., 2006). The first counterparts in these pairs are more constructive ways to identify with a group, whereas the latter ones are more belligerent and defensive (e.g., Cichocka, 2016; Golec de Zavala & Schatz, 2013).

In this project, I focus on a form of in-group identity that underlies defensiveness, namely collective narcissism. I examine the motivations underlying collective narcissism and compare them to the motivations underlying a more secure form of in-group identity. The literature on collective narcissism has extensively investigated its outcomes (Cichocka & Cislak, 2020). However, research examining its antecedents is still limited and to date has

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focused mostly on the levels of specific needs, such as the need for personal control (Cichocka et al., 2018; see also Golec de Zavala, Federico et al., 2019).

Examining a broad array of motivations (i.e., reasons why people identify with a particular group) is still needed to map what underpins defensiveness and security of in-group identity. To do so, I rely on motivational frameworks stemming from the SDT (Amiot & Aubin, 2013; Amiot & Sansfacon, 2011) and studies of religious orientations (Allport & Ross, 1967), which suggest that different types of motives can result in different types of identities. Thus, in the current research I go beyond investigating levels of personal needs in isolation and contribute to the existing literature on collective narcissism and social identification by bridging two comprehensive theories of types of motivations. As a secondary purpose, I also examine how motives identified by the SDT map onto religious orientations.

4.1.2 Defensive and secure forms of in-group identity.

Collective narcissism reflects a belief in in-group greatness that is contingent on external validation (Golec de Zavala et al., 2009). It is associated with convictions that the in-group is exceptional, entitled to privileged treatment but not sufficiently recognized by others (Golec de Zavala, Federico et al., 2019). Applied in national contexts, collective narcissism positively correlates with other types of extreme identities such as nationalism (Golec de et al, 2016, Study 3; Lyons et al., 2010), and blind patriotism (Golec de Zavala et al., 2016, Study 3). However, compared to measures that assess blind patriotism and nationalism, items investigating collective narcissism are context free. Therefore, collective narcissism can be measured in reference to various groups (e.g., religion, university peers) besides national ones.

Previous studies provide evidence that collective narcissism predicts problematic outcomes in intergroup relations and politics. When operationalized in national group

contexts, collective narcissism predicted spiteful responses to in-group criticism (Golec de Zavala, Cichocka, & Iskra-Golec, 2013), enjoying other groups' misfortune (Golec de Zavala et al., 2016), less intergroup forgiveness (Golec de Zavala, et al., 2009), lower intergroup solidarity (Gorska et al., 2019), and overall greater prejudice toward outgroups (Cai & Gries, 2013; Golec de Zavala & Cichocka, 2012). With respect to religion, collective narcissism predicted support for extremism and violence especially among people who belong to radical or tightly bonded groups (Jasko et al., 2019; Yustisia, Putra, Kavanagh, Whitehouse, & Rufaedah, 2020). National collective narcissism was also related to support for populist leaders among American, Hungarian and Polish voters (Federico & Golec de Zavala, 2018; Forgas & Lantos, 2019; Marchlewska et al., 2018).

Collective narcissism usually positively correlates with measures of in-group identification, that is centrality of in-group to the self, being satisfied with group membership, and feelings of bonds with other in-group members (Cameron, 2004; e.g., group-level self-investment component, Leach et al., 2008). This is because collective narcissism and in-group identification both reflect a positive regard for the in-group (Cichocka, 2016). Covarying out collective narcissism from the measures of in-group identification eliminates the desire to constantly validate the in-group in the eyes of others and allows researchers to observe a secure in-group identity—an unassuming positive regard for the in-group (Golec de Zavala, Cichocka, & Bilewicz, 2013).

Such in-group identity is linked to more positive attitudes not only towards in-group but also outgroup members (Cichocka & Cislak, 2020; Golec de Zavala, Cichocka, & Bilewicz, 2013; Gorska et al., 2019). In contrast, collective narcissism net of in-group identification, reflects defensive entitlement and concern about external recognition of the in-group (Golec de Zavala, Cichocka, & Bilewicz, 2013; Golec de Zavala et al., 2019; Marchlewska et al., 2020). Given their dramatically different implications for inter- and

intragroup relations, it is important to understand the motivations underlying the two types of in-group identity I focus on this in this project.

While theorising rooted in the SIT would suggest that in-group identification and favouritism stem from frustrated personal needs (Abrams & Hogg, 1988; Capozza, Brown, Aharpour, & Falvo, 2006; Hogg, 2000), recent studies suggest that this would indeed depend on the type of in-group identity. Cichocka (2016) suggested that collective narcissism stems from unsatisfied personal needs, whereas a more secure in-group identity might be rooted in fulfilled personal needs. Past experimental and longitudinal studies focused specifically on needs for personal control (Cichocka et al., 2018) or positive self-worth (Golec de Zavala, Federico et al., 2019) as the antecedents of these two forms of in-group identity. Threatened personal control and low self-esteem increased collective narcissism, suggesting collective narcissism can be considered as compensatory. Interestingly, longitudinal studies suggest that collective narcissism did not serve to satisfy these needs (Cichocka et al., 2018; Golec de Zavala, Federico et al., 2019). In contrast, high perceived personal control and high self-esteem fostered secure in-group identity (Cichocka et al., 2018; Golec de Zavala, Federico et al., 2019), suggesting it is non-compensatory. Secure in-group identity also contributed to the future satisfaction of personal needs (Cichocka et al., 2018).

While this research provided first evidence for the compensatory versus non-compensatory nature of collective narcissism and secure in-group identity respectively, it focused on isolated personal needs and on national identities only. I propose to investigate the motivations underlying two forms of identity by incorporating research and theorising that focuses on the types of motivations, rather than the amount of motivation (Pargament, 2002; Ryan & Deci, 2000; Vallerand, 2012). Studying different types of motivations should provide a nuanced understanding of the underpinnings of collective narcissism and secure in-group identity and provide a theoretical explanation for their differing outcomes. I rely on SDT

(Amiot & Sansfacon, 2011; Deci & Ryan, 2000) as my main framework as it covers a broad range of motivations and organizes them systematically. I complement this approach with a similar (although admittedly less nuanced) framework used in studies of religion that considers the different types of individual motivations in religious orientations (Allport & Ross, 1967).

4.1.3. Self-determination theory and motivations

SDT was originally formulated to differentiate between motivations that underlie behaviours (Deci & Ryan, 1985). The main difference is between intrinsic and extrinsic motivations: while with the former a behaviour is performed for the inherent satisfaction it brings, with the latter the activity is done for a separable outcome or contingency (Deci & Ryan, 2000). To help picture the distinction, a clear example of an intrinsically motivated action would be something like doing a painting simply for the satisfaction the painting of it brings, while an extrinsically motivated action would be doing a painting in order to sell it and make some money. In the latter, it is extrinsically motivated because one could perform many different possible activities in order to achieve the outcome which is not the case for the former. However, this is not to imply that extrinsically motivated actions are necessarily non-autonomous. Some extrinsic motivations are more volitional, and hence could be considered more autonomous (Deci & Ryan, 2000). Building on this, SDT identifies six motivations and clusters them in two categories: self-determined versus non-self-determined motives (Deci & Ryan, 2008). While self-determined motivations reflect more autonomy, non-self-determined motivations reflect being controlled by external and internal contingencies (Deci & Ryan, 2008).

The premises of SDT have been used to understand why and how people identify with social groups (Amiot & Aubin, 2013; Amiot & Sansfacon, 2011). Individuals embrace an identity for different reasons and individual motivations reflect these reasons (Ryan & Deci,

2003). Self-determined motivations (Amiot & Sansfacon, 2011; Ryan & Deci, 2003) include *intrinsic motivation* (identifying only for the inherent pleasure and satisfaction that is derived from an identity, not for an end product), *integrated regulation* (identifying because the identity is consistent with individual's other values and beliefs) and *identified regulation* (identifying because the identity is personally important and allows individuals to reach their goals and objectives). Non-self-determined motivations include *introjected regulation* (identifying because of internal pressures and identity contingent self-worth), and *external regulation* (identifying to attain prestige or positive social comparisons that come with an identity), as well as amotivation (belief that identity will not provide any desired outcomes) (Amiot & Sansfacon, 2011; Legault & Amiot, 2014).

At the individual level, self-determined motivations predict more desirable outcomes in education (e.g., better school achievement; Black & Deci, 2000; Miserandino, 1996), health (e.g., energy Nix, Ryan, Manly, & Deci, 1999), or sports (e.g., less burnout Lonsdale, Hodge, & Rose, 2009). Non-self-determined motivations, in contrast, predict less desirable outcomes for individuals, including higher drop-out rates in sport and school (Pelletier, Fortier, Vallerand, & Briere, 2001; Vallerand, Fortier, & Guay; 1997), or general depletion of energy (Moller, Deci & Ryan, 2006). Within a group context, non-self-determined motivations were linked to turnover intentions in organizations (Gillet, Gagne, Sauvagere, & Fouquereau, 2013) and the acceptance of cheating in teams (Ntoumanis & Standage, 2009).

Applied to national identity, non-self-determined motivations predicted nationalism whereas self-determined motivations generally predicted patriotism (Amiot & Aubin, 2013, Amiot & Sansfacon, 2011). Intrinsic motivation was an exception in this case as it was positively associated with both nationalism and patriotism as well as in-group biases (Amiot & Sansfacon, 2011; Study 2 & Study 3). Although the strength of motivations was linked to increased in-group identification (Abrams & Hogg, 1988; Brewer, 1991; Hogg, 2000;

Vignoles, 2011), new research showed that types of motivations show different associations with different types of identities (Amiot & Sansfacon, 2011). Based on this literature, I sought to examine how individual motivations to identify from the perspective of SDT were associated with collective narcissism versus a more secure in-group identity.

4.1.4. Self-Determined and Non-Self Determined Motives in Relation to Two Forms of In-group Identity

Studies highlight that people who are narcissistic about their social group seek to compensate their unfilled needs through it (Cichocka et al., 2018; Golec de Zavala, Federico et al., 2019; Marchlewska et al., 2020). According to SDT, unmet personal needs underpin non-self-determined motivations, thus these motives are compensatory (Deci & Ryan, 2000). Studies show that non-self-determined motives are linked to higher perceptions of threat and defensiveness in interpersonal relations because they are dependent on internal (i.e., ego-related) and external contingencies (Hodgins & Knee, 2002; Hodgins, Koestner, & Duncan, 1996). Ryan and Deci (2003) later suggested that these motivations may lead people to compensatory identities which do not satisfy the initial lack in the personal need. Thus, I argue that collective narcissism could be underlined by non-self-determined motives.

In contrast, satisfied needs underpin more self-determined motivations, hence they are not compensatory (Deci & Ryan, 2000). People with satisfied needs pursue more autonomous (i.e., self-determined) motivations which further contribute to fulfilled needs (Deci & Ryan, 2000). Past research has found that in-group identification alleviates threats to belongingness, self-esteem, and control (Branscombe et al., 1999; Greenaway et al., 2015). Studies differentiating between collective narcissism and secure in-group identity showed that secure in-group identity increases self-esteem and control (Cichocka et al., 2018; Golec de Zavala, Federico et al., 2019). It is possible that people with satisfied needs can benefit from secure in-group identity when there is a threat to these needs without showing

intergroup hostility. Therefore, I argue that secure in-group identity could be underlined by self-determined motives which reflect more autonomous reasons to identify in group contexts (Amiot Sansfacon, 2011; Deci & Ryan, 2000).

Although I broadly predict differences in self-determined and non-self-determined motives underlying collective narcissism and secure in-group identity, they both reflect strong feelings about one's social groups (Cichocka, 2016). Hence, certain motivations might be related to both of them. Below, I specify the expected differences and similarities across the motivations when predicting collective narcissism versus secure in-group identity.

External and introjected regulations reflect identifying to attain internal and external rewards that come with an identity (Ryan & Deci, 2003). Low feelings of self-worth and higher tendency to self-criticise were related to collective narcissism (Golec de Zavala, 2019; Golec de Zavala, Federico et al., 2019), Therefore, I anticipated introjected regulation (identifying due to internal pressures and self-worth) to be associated with higher collective narcissism. Collective narcissism is also characterised by beliefs in the in-group's superiority and feelings of being entitled to special treatment (Cichocka, 2016). I then expected external regulation (identifying for recognition and prestige) to be associated with collective narcissism.

While amotivation is considered a non-self-determined motive, it tends to be negatively related to other motives (e.g., external and introjected, Amiot & Sansfacon, 2011). Therefore, amotivation (the belief that identity will not provide a desirable outcome) should be negatively associated with both collective narcissism and secure in-group identity.

Secure in-group identity stems from feelings of being able to control the course of one's life (Cichocka et al., 2018). Such experiences are closely related to autonomy, that is experiencing a behaviour as emanating from the self, rather than being externally controlled. When intrinsically motivated, people perceive themselves as engaging activities

autonomously (Ryan & Deci, 2000). Perceptions of identifying autonomously with a group positively correlated with commitment (Sheldon & Bettencourt, 2002). Feelings of high self-esteem that indicates perceptions of a worthy self was associated with secure in-group identity over time (Golec de Zavala, Federico et al., 2019). Having more stable self-esteem predicted more identified regulation and intrinsic motivation (Kernis, Paradise, Whitaker, Wheatman, & Goldman, 2000) which indicates that people with a secure self do things for personally important reasons and the inherent joy they bring. It is reasonable to think that people with a stable self will rely on these motivations when they identify. Having internally important norms and values when evaluating a group predicted behaviours that promote the group (Tyler & Blader, 2002). Thus, I expect intrinsic motivation (identifying for the inherent pleasure driven from an identity) and identified regulation (identifying because identity allows achieving personally important objectives) from self-determined motivations to be related to secure in-group identity.

Both in case of defensive and secure in-group identity, I capture people's beliefs about groups that are relevant to them. Thus, from the SIT perspective, identity should be a central part of the self (Tajfel, 1981; Turner, 1982). According to SDT, this is thought to happen via integrated regulation (identifying because identity is coherent with other values and beliefs; Gagne & Deci, 2005). Although SDT initially placed integrated regulation in self-determined motives (Deci & Ryan, 2000), more recent work suggests that the internalization of an identity to the self may not indicate how it is internalized (Sicilia, Alcarez-Ibanez, Lirola, Burgueno, & Maher, 2018). For example, both a radical and non-radical religious person could say that their religious identity is coherent with their other values and integrated in their life. New studies demonstrated that integrated regulation was related to both harmonious and obsessive passion towards activities (Sicilia et al., 2018). While the harmonious passion refers to being flexible and in control of passion, obsessive

passion reflects being rigid and controlled by the passion (Vallerand et al., 2003). Considering these recent findings, I then predicted that integrated regulation should be associated with both collective narcissism and secure in-group identity.

4.1.5. Religious Orientations

A complementary perspective to SDT stems from research on religious orientations—the motivations behind religious beliefs (Hunt & King, 1971). Individual and intergroup outcomes associated with people's religious beliefs depend on the motivations behind it (Hall, Matz, & Wood, 2010; Pargament, 2002). Although these are individual motivations, religion could be considered a social identification (Hall et al., 2010; Ysseldyk, Matheson, & Anisman, 2010) and religious orientations determine to what extent an individual identifies with it (Hogg, Adelman, & Blagg, 2010). Thus, religious orientations could also determine an individuals' social identification with their religious groups.

In a similar vein to the SDT, research on the psychology of religion focuses on different types of motivations (Pargament, 2002; Ryan & Deci, 2000). In fact, we can observe some parallels between self-determination theorising and work on religious orientations, differentiating between intrinsic and extrinsic orientations (Neyrinck, Lens, Vansteenkiste, 2005). People with intrinsic religious orientation (i.e., intrinsic religiosity) internalize religious teachings and integrate them into their daily lives (Allport & Ross, 1967). The measurement of intrinsic religiosity reflects motivations for endorsement and the degree of integration of religion in daily life (Neyrinck, et al., 2005). Thus, intrinsic religiosity bears closer resemblance to *integrated* regulation from SDT (rather than to the similarly called intrinsic motivation; Neyrinck et al., 2005). In one study, Neyrinck, Lens, Vansteenkiste, and Soonens (2010) compared SDT motivations with religious orientations and found that self-determined motivations (combination of integrated and identified regulations) predicted intrinsic religiosity. Although two measures were combined in this study, previous

theorisation (Neyrinck et al., 2005) draws out more similarity between intrinsic religiosity and integrated regulation.

Extrinsic religious orientation (i.e., extrinsic religiosity) refers to being motivated to value and practise religion to attain separable, non-religious outcomes (Allport & Ross, 1967). Gorsuch and McPherson (1989) further differentiated between extrinsic social and extrinsic personal religiosity considering the types of these outcomes. While extrinsic social religiosity means being motivated to approach religion to establish social gains (e.g., networks and status), extrinsic personal religiosity means being motivated to obtain personal gains (e.g., security or comfort) through religion. The theoretical overlap for extrinsic religiosity and SDT is less straightforward because religious orientations do not make an explicit reference to being internally/externally controlled (non-self-determined) and volitional (self-determined) in its measurement (see Neyrinck et al., 2005 for a detailed discussion). In previous work, non-self-determined motivations (a combination of external and introjected regulations) predicted extrinsic social religiosity, but not extrinsic personal religiosity (Neyrinck et al., 2010). Integrated and identified motivations did not predict either of the extrinsic religious orientations (Neyrinck et al., 2010). This study suggests that at least extrinsic social religiosity is more akin to external and introjected regulations.

In this research, I predict that collective narcissism might be underlined by extrinsic personal and social religiosity. Many studies investigate these orientations combined together, and there is converging evidence that extrinsic religiosity is related to being more prejudiced and hostile towards other religious groups (Batson, Schoenrade, Ventis, 1993; Hall et al., 2010; Lynch, Palestis, & Trivers, 2017). Extrinsic religiosity was also related to being vengeful (Greer, Berman, Varan, Bobrycki, & Watson, 2005). All these variables have been linked to collective narcissism, rather than secure in-group identity (Cichocka & Cislak, 2020; Dyduch-Hazar & Mrozinski, 2021). As preliminary evidence, Golec de Zavala and

Bierwiaczonek (2020; Study 2) found a positive correlation between extrinsic social and personal religiosity and religious collective narcissism.[15] Thus, I expect extrinsic social and personal religiosity to be related to collective narcissism.

Predictions for intrinsic religiosity are less straightforward. Early work on religion might suggest intrinsic religiosity could be linked to a more secure identity. For example, Allport and Ross (1967) suggested that people with intrinsic religiosity are less prejudiced (see also Golec de Zavala, Cichocka, Orehek, & Abdollahi, 2012). However, other studies yielded mixed results, with the relationship between intrinsic religiosity and prejudice ranging from being positive to negative and null (Hall et al., 2010; Hansen & Ryder, 2016; Herek, 1987). These inconsistent outcomes could suggest that the integration of religion does not indicate how it is internalized or the content of religious teachings being taken on (just as integrated regulation does not indicate how identity is internalized; Sicilia et al., 2018). Indeed, intrinsic religiosity has been shown to correlate with a rigid, hostile understanding of religion (Ghorpade, Lackritz, & Moore, 2010). In the study by Golec de Zavala and Bierwiaczonek (2020; Study 2) intrinsic religiosity was also correlated with religious collective narcissism. Thus, just as I predicted that collective narcissism and secure in-group identity would both be associated with integrated regulation, they are also both likely to be associated with intrinsic religiosity.

4.2. Overview of the Studies

I investigated how the types of individual motivations are related to collective narcissism versus secure in-group identity. To increase generalizability, I tested the predictions in different group contexts. First, I tested the hypotheses on self-determined and non-self-determined motives in personally important groups (Study 7) and in a national group

[15] In this study, religious orientations were not examined as predictors of collective narcissism.

(Study 8). In Study 9, I tested the predictions about religious orientations in religious groups. In Study 10, I again focused on a religious identity to replicate the findings, and to compare how the two motivational approaches map onto each other. In all studies, I used regression analyses and controlled for the overlap between collective narcissism and in-group identification. Variance inflation factor (VIF) was below 10 across all studies, confirming that multicollinearity was not a problem (Tabachnick & Fidell, 2007). I also examined the relationship between individual motivations and separate components of in-group identification and tested the results when not controlling for the overlap between collective narcissism and in-group identification (I report results of these in Appendix B). Although I did not have any specific predictions for demographic variables (e.g., age and gender), I included them as covariates to rule out any confounding effects (and noted that exclusion of these variables does not change predicted relationships—see Appendix B for details). The data is available at https://osf.io/f4vmq/?view_only=ed3f0bbcd0574fce802e8aae013f91f8[16]. Participants responded to items on 7-point scales (1= *strongly disagree*, 7 = *strongly agree*) in all studies.

4.3. Study 7

In Study 7, I applied SDT's perspective and tested the relationships between different types of motives and collective narcissism versus secure in-group identity in personally important groups. I anticipated external, introjected and integrated regulations to be positively associated with collective narcissism. I proposed that identified, integrated and intrinsic motivations to be positively related to secure in-group identity. Amotivation should have a negative relationship with both collective narcissism and secure in-group identity.

[16] I measured attachment to social groups (Study 7) and entitativity (Study 8) for exploratory purposes.

Participants were asked to indicate the most important group they belong to and responded to the rest of the questions regarding that group.

4.3.1. Method

Participants and procedure.

An a priori power analysis using Gpower (Faul et al., 2007) determined the sample size of 200 with .80 power to detect an average effect size of $r = .21$ in social psychology (Vazire, 2016). I recruited 246 first year psychology students who were granted a course-credit in exchange for participation in an online study. Thirty-four participants failed to indicate any group or dropped out. Therefore, the final analyses included 212 participants (191 female, 20 male, 1 unknown), with age ranging from 18 to 33 ($M = 18.93$, $SD = 1.90$). I measured individual motivations to identify, collective narcissism and in-group identification, in a randomised order.

Measures.

Motivations to identify. Motivations to identify were assessed with 18 items that investigate the reasons why individuals identify with a group (Amiot & Sansfacon, 2011). This measure includes six regulations: intrinsic (e.g. “Because I experience pleasure and satisfaction from being a member of this group”), integrated (e.g. “Because being a member of this group is really part who I am”), identified (e.g. “Because being a member of this group allows me to achieve important goals”), introjected (e.g. “Because being a member of this group makes me feel like I am a valuable person”), external (e.g. “Because being a member of this group allows me to compare positively to other groups of people in society”) regulations and amotivation (e.g. “Honestly I don’t know; I truly have the impression of not

fitting in as a member of this group"). I computed six sub-scores[17] following Amiot and Sansfacon (2011).

Collective narcissism. Collective narcissism was measured with respect to the in-group participants indicated with nine items (Golec de Zavala et al., 2009), e.g., "My group deserves special treatment" and "It really makes me angry when other criticize my group".

In-group identification. In-group identification was measured with respect to the group participants indicated with the Three-Factor Identity measure (Cameron, 2004). This measure includes 12 items, representing three components: ties "I feel strong ties to other members of my group", centrality "I often think that fact that I am a member of my group", and affect "In general, I am glad to be a member of my group".

4.3.2. Results

The personally important groups indicated by participants are displayed in Table 4.1. Descriptive properties of the measures, and zero-order correlations between the variables are presented in Table 4.2. There were significant positive correlations between in-group identification and individual motivations to identify (both self-determined and non-self-determined) apart from amotivation. Collective narcissism had a positive correlation with all motivations except intrinsic motivation. In this sample, collective narcissism and in-group identification did not correlate.

[17] I conducted a CFA for this scale. See Appendix B for details.

Table 4.1.

Self-reported personally important groups (Study 7)

	N	%
Educational	57	26.9
Intimacy	55	25.9
Recreational	43	20.3
Occupational	17	8.0
National, Gender, Sexual Orientation	16	7.5
Religious	14	6.6
Other*	10	4.7
Total	212	100

Note. This classification was based on DeMarco & Newheiser (2019). *Other groups included categories such as gamers and vegetarians which could not be classified in neither of the previous categories.

Table 4.2

Descriptive statistics and zero-order correlations between the variables in Study 7

Variables	*M*	*SD*	α	1	2	3	4	5	6	7
1. Intrinsic motivation	5.41	1.03	.86	-						
2. Integrated regulation	5.17	1.22	.89	.71***	-					
3. Identified regulation	5.20	1.17	.80	.44***	.60***	-				
4. Introjected regulation	3.94	1.17	.60	.38***	.41***	.43***	-			
5. External regulation	3.86	1.19	.62	.26***	.34***	.48***	.49***	-		
6. Amotivation	2.51	1.34	.88	.43***	.47***	-.30***	.03	-.01	-	
7. Collective narcissism	3.53	0.99	.85	.04	.26***	.25***	.22**	.44***	.14*	-
8. In-group identification	5.08	0.83	.86	.65***	.68***	.46***	.27***	.22**	.63***	.11

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

Regression analyses.

I conducted regression analyses with individual motivations to identify as predictors of two forms of in-group identity. The results are displayed in Table 4.3. In the first analysis, non-self- determined motivations (i.e., external regulation and amotivation) positively predicted collective narcissism. With respect to self-determined motivations, integrated regulation positively predicted collective narcissism. However, intrinsic motivation predicted it negatively. In the second analysis, self-determined motivations (i.e., intrinsic motivation, integrated regulation) predicted secure in-group identity. Amotivation from non-self-determined motivations negatively predicted secure in-group identity.

Table 4.3

Individual motivations predicting two forms of in-group identity (Study 7)

	Model 1 DV= Collective narcissism						Model 2 DV= In-group identification					
	Step 1			Step 2			Step 1			Step 2		
Predictors	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*
Age	0.03(0.04)	.05	.53	0.02(0.03)	.03	.66	-0.10(0.03)	**-.22****	.002	-0.01(0.02)	-.01	.81
Gender[1]	-0.32(0.23)	-.10	.17	-0.23(0.20)	-.07	.24	0.03(0.19)	.01	.89	0.05(0.12)	.02	.70
In-group identification	0.13(0.08)	.11	.11	0.20(0.11)	.17	.08		—			—	
Collective narcissism		—			—		0.09(0.06)	.11	.11	0.08(0.04)	.09	.08
Intrinsic motivation				-0.28(0.08)	**-.29****	.001				0.22(0.05)	**.27*****	< .001
Integrated regulation				0.32(0.08)	**.39*****	< .001				0.16(0.05)	**.23****	.002
Identified regulation				-0.00(0.07)	-.00	.97				0.04(0.04)	.06	.29
Introjected regulation				-0.06(0.06)	-.07	.33				0.03(0.04)	.05	.38
External regulation				0.32(0.06)	**.39*****	< .001				-0.02(0.04)	-.03	.56
Amotivation				0.23(0.06)	**.32*****	< .001				-0.25(0.03)	**-.40*****	< .001
F		1.52			10.58***			4.22**			39.16***	
R^2		.02			.32			.04			.62	
ΔR^2					.30***						.58***	

Note. Gender[1] was coded as Male = 0, Female = 1.

Significant β values are in bold.

4.3.3. Discussion

The results of Study 7 partially supported my hypotheses. I expected external regulation (identifying for recognition and prestige) and introjected regulation (identifying out of internal pressures and identity contingent self-worth) from non-self-determined motivations to be associated with higher collective narcissism. I confirmed my prediction for external regulation but not for introjected regulation. In Study 7, I wanted to test if the hypotheses hold across various groups. Due to monetary concerns, this study was conducted among university students and they mostly indicated educational, intimacy, and recreational groups. These groups could be considered interpersonal network groups (Easterbrook & Vignoles, 2012). Perhaps identifying out of internal pressures and contingent self-worth (introjected regulation) is not reflected in narcissistic identity with these groups. Some research suggests that abstract social categories (i.e., nationality, ethnicity) might better at managing feelings of low self-esteem (Johnson et al., 2006; see also Golec de Zavala, Federico et al., 2019), which is related to introjected regulation. However, in this sample, only a small number of participants indicated such broader social categories which did not allow me to look at this link separately.

As expected, I found that intrinsic motivation (identifying for the inherent satisfaction) was related to secure in-group identity. The more people are motivated to approach an identity only for the joy of it and not seeing it as a means to an end, the more likely they were to securely identify with their groups. I did not have a specific hypothesis for the relationship between intrinsic motivation and collective narcissism, but I found a negative association between these variables. This suggests that the more people embraced an identity for the inherent joy of it, the less likely they were to be narcissistic about their groups. SDT proposes that intrinsic motivation reflects a higher degree of autonomy (Ryan & Deci, 2003), which is associated with feelings of personal control (Fisher, 1978). Thus, these findings are

in line with past work linking high personal control with secure in-group identity and low personal control with collective narcissism (Cichocka et al., 2018; Marchlewska et al., 2020).

Both collective narcissism and secure in-group identity assume an investment in a group. I expected integrated regulation (identifying because the identity is coherent with values and beliefs) to be associated with both. The results were in line with this prediction. Amotivation includes thoughts that the identification will not provide a desired outcome (Legault & Amiot, 2014). Thus, I expected it to be negatively associated with collective narcissism and secure in-group identity. The relationship between amotivation and secure in-group identity was in line with this hypothesis. However, this regulation was positively related to collective narcissism. Although somewhat surprising, this effect might reflect the underlying concern about the in-group not being recognized by others characteristic of collective narcissism (Golec de Zavala et al., 2009).

Having high and stable self-esteem was associated with identified regulation (Kernis et al., 2000). Because high self-esteem was linked to secure in-group identity (Golec de Zavala, Federico et al., 2019), I reasoned that people with a more stable self might rely on identified regulation when they identify. The current results did not confirm this prediction. Task-oriented groups (i.e., occupation, teams, educational) provide achievement, and intimacy groups (i.e., family, friends) mostly fulfil relational needs (Johnson et al., 2006). However, the identified regulation subscale measured personally important goals in an abstract way, rather than by specifying them. This could explain the lack of the hypothesized relationship.

4.4. Study 8

In Study 8, I examined the same predictions as in Study 1 in the context of the national in-group specifically. I hoped that this would provide a clearer pattern of results, as well as make the results more comparable with past work that focuses on SDT motives in investigating nationalism and patriotism with respect to national identities (Amiot & Aubin, 2013; Amiot & Sansfacon, 2011; Study 2). In later studies, items assessing identified regulation were worded more specifically to capture personally important reasons (Amiot & Aubin, 2013). Thus, in Study 2, I employed this new version of the SDT measure.[18]

4.4.1. Method

Participants and procedure.

As in Study 1, I aimed for a sample size of 200. I recruited 203 American participants via Prolific Academic. Seven participants indicated different nationalities and were excluded from analyses. The final sample included 196 participants (104 female, 88 male, 4 unknown), age ranged from 18 to 76 (M = 31.96, SD = 11.06). Participants were first presented with the measure that assessed individual motivations to identify, and then with the other measures in a random order.

Measures.

Motivations to identify. Motivations to identify as American were measured with 18 items by Amiot & Aubin (2013). The items that assess identified regulation differed from the original measure that was used in Study 1. A sample item for this subscale was “Because being American allows me to have the quality of life I want”. I computed six subscales as in

[18] I received the measure from the first author in French (Amiot & Aubin, 2013). Thus, it was translated (and back-translated) for the purposes of this study. These translations were compatible, and I used the measure in English.

the previous study but dropped one item from identified regulation subscale based on a CFA (see Appendix B for details)

Collective narcissism. Collective narcissism was assessed with a short, five-item version of the Collective Narcissism Scale, administered in relation to one's nationality (Golec de Zavala, Cichocka, Bilewicz, 2013).

In-group identification was measured with respect to nationality with the same scale as in Study 7.

4.4.2. Results

Descriptive properties of the measures, and zero-order correlations between the variables are presented in the Table 4.4. Collective narcissism and in-group identification were positively correlated with both self-determined (intrinsic, integrated and identified regulations), and non-self-determined motivations (introjected and external regulations). Collective narcissism was positively correlated with in-group identification.

Table 4.4

Descriptive statistics and zero-order correlations between the variables in Study 8

Variables	*M*	*SD*	α	1	2	3	4	5	6	7
1. Intrinsic motivation	3.68	1.57	.87	-						
2. Integrated regulation	3.86	1.85	.93	.86***	-					
3. Identified regulation	4.38	1.65	.81	.74***	.79***	-				
4. Introjected regulation	2.32	1.16	.69	.58***	.61***	.44***	-			
5. External regulation	3.24	1.50	.87	.73***	.68***	.68***	.61***	-		
6. Amotivation	3.66	1.53	.81	-.59***	-.71***	.71***	-.29***	-.47***	-	
7. Collective narcissism	2.41	1.22	.87	.61***	.63***	.47***	.55***	.59***	-.35***	-
8. In-group identification	4.08	1.12	.90	.81***	.84***	.79***	.45***	.62***	-.74***	.54***

Note. $^{***}p < .001$.

Regression analyses.

I conducted regressions to examine the roles of individual motivations when predicting two forms of in-group identity. These results are presented in Table 4.5. In the first analysis, non-self-determined motivations (i.e., external, and introjected regulations) positively predicted collective narcissism. In terms of self-determined motivations, integrated regulation positively predicted collective narcissism. In the second analysis, self-determined motivations (i.e., intrinsic, integrated and identified) predicted more secure in-group identity. Amotivation (non-self-determined) negatively predicted secure in-group identity.

Table 4.5

Individual motivations predicting two forms of in-group identity (Study 8)

	Model 1 DV= Collective narcissism						Model 2 DV= In-group identification					
	Step 1			Step 2			Step 1			Step 2		
Predictors	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*
Age	0.01(0.01)	.10	.14	0.02(0.01)	**.14**	.01	0.01(0.00)	**.14****	.03	0.00(0.00)	-.00	.97
Gender[1]	0.20(0.15)	.08	.18	0.18(0.13)	.08	.16	0.02(0.14)	.01	.91	-0.02(0.08)	-.01	.76
In-group identification	0.55(0.07)	**.50*****	< .001	0.12(0.13)	.11	.32		—			—	
Collective narcissism		—			—		0.45(0.06)	**.50*****	< .001	0.04(0.04)	.05	.32
Intrinsic motivation				0.05(0.09)	.07	.56				0.23(0.05)	**.32*****	< .001
Integrated regulation				0.25(0.09)	**.38****	.005				0.18(0.05)	**.29****	.001
Identified regulation				-0.13(0.08)	-.17	.10				0.13(0.04)	**.19****	.003
Introjected regulation				0.17(0.07)	**.16****	.03				-0.07(0.05)	-.07	.13
External regulation				0.23(0.07)	**.29****	.001				-0.02(0.04)	-.02	.69
Amotivation				0.12(0.07)	.15	.09				-0.16(0.04)	**-.22*****	< .001
F		25.86***			19.99***			26.37**			39.16***	
R^2		.29			.50			.30			.79	
ΔR^2					.21***						.49***	

Note. Gender[1] was coded as Male = 0, Female = 1.

Significant β values are in bold.

4.4.3. Discussion

The findings of Study 8, conducted in the context of a national group, confirmed most of my predictions. I expected and found that non-self-determined motives (namely introjected and external regulations) were positively associated with collective narcissism. External regulation, which reflects the need to engage in positive intergroup comparisons or gain prestige, was linked to collective narcissism consistently both in Studies 7 and 8. In Study 8, I additionally found that introjected regulation, which reflects having an identity contingent self-worth and self-imposed pressures to identify, was also associated with collective narcissism. Thus, motivations that are controlled by rewards and self-obligations seem to underlie collective narcissism.

I also confirmed my predictions regarding self-determined motives. As in Study 7, intrinsic motivation was associated with secure in-group identity. Those who were more motivated to identify for the inherent pleasure that is derived from an identity tended to report higher secure in-group identity. Past studies suggested that intrinsic motivation may not be beneficial in group settings as it was related to nationalism and in-group biases (Amiot & Aubin, 2013; Amiot & Sansfacon, 2011). However, in both Studies 7 and 8, I observed a positive link only between intrinsic motivation and secure in-group identity. These findings suggest that nationalism might still capture feelings of inherent pleasure from national identification. In contrast, collective narcissism was either unrelated (Study 8) or negatively related (Study 7) to intrinsic motivation, implying that the motives to have genuine satisfaction from an identity are not reflected in collective narcissism. This finding suggests that collective narcissism might capture identity defensiveness more directly than nationalism.

In line with the hypotheses, identified regulation—a self-determined motive capturing identifying because identity allows group members to accomplish personally valued

objectives— had a positive relationship with secure in-group identity. This implies that a more secure form of in-group identity is commensurate with the feeling that identification helps individuals to achieve their objectives (Greenway, Amiot, Louis, & Bentley, 2017). The final self-determined motive, integrated regulation, was positively related to both secure in-group identity and collective narcissism. Embracing an identity because it is coherent with other personal values and beliefs could be reflected in either form of in-group identity. This motive reflects an integration of various identities into the self (Deci & Ryan, 2000). Given that both collective narcissism and secure in-group identity reflect an emotional investment in a group, the positive relationship between them and integrated regulation is conceivable and consistent with the social identity perspective (Leach et al., 2008; Tajfel, 1981).

I anticipated a negative relationship between amotivation (non-self-determined) and both forms of identities. This prediction held true for secure in-group identity in both Studies 7 and 8. While amotivation was positively associated with collective narcissism in Study 7, this link was non-significant in Study 8. Amotivation is a belief that identity will not provide desired outcomes (Amiot & Sansfacon, 2011). It seems that the more people perceive identity as fruitful and their reasons behind group membership are clear, the more likely they are to identify with the in-group. However, collective narcissism does not seem to reflect a similar process.

4.5. Study 9

In Study 9, I investigated a less nuanced intrinsic versus extrinsic differentiation with respect to religious orientations and tested how it is linked to collective narcissism and secure in-group identity. Intrinsic religiosity was related to both positive and negative outcomes (Hall et al., 2010). There is a theoretical overlap between integrated regulation and intrinsic religiosity (Neyrinck et al., 2005). Hence, I predicted intrinsic religiosity to be associated with collective narcissism and secure in-group identity. Unlike SDT motives, religious

orientations do not make a controlled versus volitional distinction (Neyrinck et al., 2005). Yet, extrinsic social religiosity was associated with external and introjected regulations (Neyrinck et al., 2010). In general, extrinsic religiosity predicted being vengeful and outgroup hostility (Greer et al., 2005; Lynch et al., 2017). Therefore, I expected extrinsic social and extrinsic personal religiosity to be related to collective narcissism. I tested these predictions in a survey of religious people who identify with different religious denominations. Given that religious orientations might differ depending on the religion (Ysseldyk et al., 2010), I controlled the analyses for Christian and non-Christian affiliations in addition to age and gender.

4.5.1. Method

Participants and procedure.

This study used the Time 3.5 sample of the New Zealand Attitudes and Values Study (Sibley, 2018), which included the variables of interest.[19] The original dataset included 4,514 participants. Participants who indicated being religious were asked to indicate their religious affiliations (which I coded 0= Non-Christian, 1= Christian) and respond to questions about their religiosity. The final dataset consisted of 1,690 participants (1,118 female, 544 male and 28 unknown) who reported being religious and provided either partial or full information on the measures that I am interested in. Participants' age ranged from 18 to 92 (M = 50.45, SD = 16.15).

Measures.

[19] Quest and religious fundamentalism were also measured as religious orientations but were not a part of my hypotheses. I included them in other regression analyses along with the main variables of interest. The associations between the primarily interested variables did not change. See Appendix B.

Short forms of the measures were used due to space limitations (Osborne, Milojev, Sibley, 2016).

Intrinsic religiosity. Intrinsic religiosity was measured with three items (Feagin, 1964): “My religious beliefs are what really behind my whole approach to life”, “I try hard to carry my religion over into all my other dealings in life”, “It is important for to spend periods of time in private thought and meditation”.

Extrinsic personal religiosity. Extrinsic personal religiosity was assessed with three items (Feagin, 1964): “The purpose of prayer is to gain relief and protection”, “What religion offers me most is comfort when sorrows and misfortune strike”, and “The purpose of prayer is to secure a happy and peaceful life”.

Extrinsic social religiosity. Extrinsic social religiosity was measured with three items (Gorsuch & McPherson, 1989): “I go to Church because it helps me to make friends”, “I go to church mostly to spend my time with my friends”, “I go to church mainly because I enjoy seeing the people I know there”.

Religious identification. Identification with religion was measured with a single item (Hoverd & Sibley, 2010): “How important is your religion to how you see yourself?”

Collective narcissism. Collective narcissism was measured with respect to religious identity using three items from Golec de Zavala et al. (2009): “I insist upon my religious group/denomination getting the respect that is due to it”, “If my religious group/denomination had a major say in the world, the world would be a much better place”, and “The true worth of my religious group/denomination is often misunderstood”.

4.5.2. Results

Descriptive statistics of the measures, and zero-order correlations between the variables are displayed in Table 4.6. In-group identification and collective narcissism were positively correlated with all types of religious orientations.

Table 4.6

Descriptive statistics and zero-order correlations among the variables in Study 9

Variables	*M*	*SD*	α	1	2	3	4
1. Intrinsic religiosity	4.87	1.41	.72	-			
2. EP religiosity	3.89	1.39	.71	.18***	-		
3. ES religiosity	2.27	1.24	.86	.13***	.20***	-	
4. Collective narcissism	3.62	1.41	.69	.44***	.22***	.24***	-
5. In-group identification	4.85	1.87	-	.68***	.14***	.12***	.50***

Note. EP = Extrinsic personal, ES = Extrinsic social.

***$p < .001$.

Regression analyses

I conducted regression analyses to test how religious orientations are related to two forms of in-group identity. These results are displayed in Table 4.7. In line with the hypotheses, intrinsic orientation positively predicted collective narcissism and secure in-group identity. However, extrinsic social and extrinsic personal religiosity only significantly (and positively) predicted collective narcissism.

Table 4.7

Religious orientations predicting two forms of in-group identity (Study 9)

	Model 1 DV= Collective narcissism						Model 2 DV= In-group identification					
	Step 1			Step 2			Step 1			Step 2		
Predictors	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*
Age	-0.01(0.00)	**-.08****	.001	-0.01(0.00)	**-.11*****	< .001	-0.00(0.00)	-.02	.47	-0.01(0.00)	**-.10*****	< .001
Gender[1]	0.26(0.07)	**.09*****	< .001	0.30(0.07)	**.10*****	< .001	-0.23(0.09)	**-.06***	.02	0.02(0.08)	.00	.82
Christianity[2]	-0.42(0.11)	**-.09*****	< .001	-0.48(0.10)	**-.10*****	< .001	0.18(0.14)	.03	.29	0.24(0.12)	**.04***	.04
In-group identification	0.37(0.02)	**.50*****	< .001	0.25(0.02)	**.34*****	< .001		—			—	
Collective narcissism		—			—		0.67(0.03)	**.51*****	< .001	0.32(0.03)	**.24*****	< .001
Intrinsic religiosity				0.18(0.03)	**.18*****	< .001				0.78(0.03)	**.59*****	< .001
EP religiosity				0.12(0.02)	**.12*****	< .001				-0.03(0.03)	-.02	.32
ES religiosity				0.18(0.03)	**.16*****	< .001				-0.02(0.03)	-.01	.46
F		129.60***			101.90***			120.48***			222.59***	
R^2		.27			.34			.26			.53	
ΔR^2					.07***						.27***	

Note. Gender[1] was coded as Female = 0, Male = 1. Christian affiliation[2] was coded as 0 = Non-Christian, 1= Christian. EP = Extrinsic personal, ES = Extrinsic social.

Significant β values are in bold.

4.5.3. Discussion

Study 9 supported my predictions that collective narcissism and secure in-group identity are related to different types of religious orientations. Extrinsic social (similar to external and introjected regulations; Neyrinck et al., 2010) and personal religiosity were associated with collective narcissism. This indicates that doing religious activities for social gains and for attaining solace were related to higher collective narcissism. Intrinsic religious orientation—a concept akin to integrated regulation we measured in Studies 1 and 2—predicted both collective narcissism and secure in-group identity. This result points out that religion unifies other aspects of life both for those high in collective narcissism and secure in-group identity. This was consistent with the results I observed in Studies 7 and 8. While it is possible that the importance of orientations might vary across religious groups (Ysseldyk et al., 2010), I observed the reported relationships even after controlling for self-reported Christian versus non-Christian affiliations.

4.6. Study 10

While Study 9 confirmed my predictions, it only included one item measuring in-group identification that tapped into the personal importance of the religion. Also, my predictions about introjected and identified regulations were only supported in Study 8. In Study 10, I aimed to further confirm my predictions for SDT and religious orientations with respect religion as a social identification. I also examined how religious orientations are related to the SDT taxonomy of motivations when they are assessed as motives to identify. I do not have specific hypotheses regarding these relationships. However, considering past research (Neyrinck et al., 2010), integrated regulation is likely to be associated with integrated regulation. External and introjected regulations are likely to be related to extrinsic social religiosity. As I stated earlier, I expected intrinsic motivation, integrated, and identified regulations to be related to secure in-group identity. I predicted integrated, introjected and

external regulations to be associated with collective narcissism. Amotivation should have a negative relationship with both forms of in-group identity. I held the same hypotheses for religious orientations.

4.6.1. Method

Participants and procedure.

An a priori power analysis (Faul et al., 2007) indicated the sample size as 402 to replicate the smallest effect size across Studies 7 and 8 ($\beta = 0.16$) with .90 power. I recruited 414 participants through Prolific Academic to allow for possible exclusions. Although I invited religious and Christian participants to take part, I asked at the beginning of the study if they believe in God and identify as Christian to ensure the effectiveness of the pre-screening. Fifteen participants indicated that they do not identify as Christian, and thus were excluded from further analyses. The final dataset consisted of 399 participants (191 female, 207 male, 1 unknown) who are religious and identify as Christian. The age ranged from 18 to 84 ($M = 37.63$, $SD = 14.08$).

Measures.

Individual motivations to identify. Individual motivations to identify as Christian were measured with the scale (Amiot & Aubin, 2013) in Study 2. I computed the six subscales as in the previous studies.

Religious orientations. Religious orientations were measured with 12-item Age Universal I-E Scale (Maltby, 1999) which is derived and revised from Allport and Ross (1967). It includes six items measuring intrinsic religiosity (e.g., “I try hard to live all my life according to my religious beliefs”), three items assessing extrinsic personal religiosity (e.g., “What religion offers me most is comfort in times of trouble and sorrow”), and three items assessing extrinsic social religiosity (e.g., “I go to church because it helps me make friends”). In line with Maltby (1999), I computed three subscores.

Collective narcissism. Collective narcissism was assessed with respect to Christian identity with the 5-item short form as in Study 8.

In-group identification. In-group identification was measured with respect to Christian identity with the measure as in previous studies.

4.6.2. Results

Descriptive statistics and zero-order correlations between the variables are presented in Table 4.8. Note that identified regulation had a low reliability, and I also observed problems with the factor structure of the scale when this subscale was included. The CFA indicated that the identified regulation factor had large correlations with factors of intrinsic motivation and integrated regulation (see Appendix B). To ensure comparability with Studies 7 and 8, I kept identified regulation in the analyses. However, the results for this subscale should be interpreted with caution. As can be discerned from Table 4.8, intrinsic religiosity most strongly correlated with integrated regulation. In general, extrinsic personal religiosity had moderate and large positive correlations with both self-determined and non-self-determined motives. Interestingly, extrinsic social religiosity had a positive relationship with amotivation.

Table 4.8

Descriptive statistics and zero-order correlations among the variables in Study 4

Variables	*M*	*SD*	α	1	2	3	4	5	6	7	8	9	10
1. Intrinsic motivation	4.34	1.39	.72	-									
2. Integrated regulation	5.76	1.23	.89	.40***	-								
3. Identified regulation	4.68	1.20	.56	.68***	.50***	-							
4. Introjected regulation	3.65	1.49	.66	.52***	.23***	.55***	-						
5. External regulation	3.02	1.56	.81	.59***	.11*	.63***	.59***	-					
6. Amotivation	2.19	1.30	.83	-.03	-.52***	-.13**	.11*	.22***	-				
7. Intrinsic religiosity	5.45	1.12	.89	.34***	.71***	.44***	.19***	.18***	-.46***	-			
8. EP religiosity	5.23	1.15	.73	.48***	.33**	.51***	.43***	.43***	-.02	.38***	-		
9. ES religiosity	3.15	1.52	.91	.26***	-.08	.29***	.17**	.26**	.23***	-.05	.16***	-	
10. Collective narcissism	3.69	1.48	.86	.43***	.45***	.49***	.44***	.51***	-.18***	.49***	.34***	.08	-
11. In-group identification	5.35	1.04	.89	.38***	.73***	.49***	.18***	.16***	-.61***	.72***	.26***	-.07	.51***

Note. EP = Extrinsic personal, ES = Extrinsic social.

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

I also tested how religious orientations (Allport & Ross, 1967) map onto SDT motivations (Deci & Ryan, 2000). These results are presented in Table 4.9. Integrated and external regulations predicted intrinsic religiosity. Introjected, identified, integrated regulations and intrinsic motivation predicted extrinsic personal religiosity. While identified regulation and intrinsic motivation was positively associated with extrinsic social religiosity, this relationship was the inverse for integrated regulation.

Table 4.9

Motivations from SDT predicting religious orientations (Study 10)

	DV = Intrinsic religiosity						DV = Extrinsic personal religiosity						DV = Extrinsic social religiosity					
	Step 1			Step 2			Step 1			Step 2			Step 1			Step 2		
Predictors	*B(SE)*	β	*p*	*B (SE)*	β	*p*	*B(SE)*	β	*p*	*B(SE)*	β	*p*	*B(SE)*	β	*p*	*B(SE)*	β	*p*
Age	0.01(0.00)	**.18*****	< .001	0.01(0.00)	**.08***	.03	-0.01(0.00)	-.07	.18	-0.01(0.00)	**.11***	.01	0.01(0.01)	-.04	.37	-0.00(0.01)	-.03	.51
Gender[1]	0.12(0.11)	.05	.28	0.00(0.08)	.00	.96	0.12(0.12)	.05	.31	0.18(0.10)	.08	.08	-0.46(0.15)	**.15****	.002	-0.33(0.15)	**-.11***	.02
Intrinsic motivation				-0.03(0.04)	-.03	.50				0.14(0.05)	**.17*****	.006				0.21(0.07)	**.19****	.006
Integrated regulation				0.55(0.05)	**.60*****	< .001				0.14(0.06)	**.15***	.01				-0.23(0.08)	**-.19****	.004
Identified regulation				0.05(0.05)	.05	.37				0.17(0.08)	**.18****	.008				0.46(0.10)	**.37*****	< .001
Introjected regulation				0.03(0.03)	-.04	.43				0.10(0.04)	**.14***	.01				-0.06(0.06)	-.06	.30
External regulation				0.12(0.04)	**.16****	.003				0.09(0.05)	.12	.08				-0.09(0.07)	-.09	.20
Amotivation				-0.14(0.07)	**-.16*****	< .001				0.03(0.05)	.03	.55				0.22(0.07)	**.19****	.001
F		7.60**			58.99***			1.35			25.48***			5.31**			1.72***	
R^2		.04			.55			.00			.34			.03			.19	
ΔR^2					.51***						.34***						.16***	

Note. Gender[1] was coded as Male = 0, Female = 1.

Significant β values are in bold.

Associations between SDT motives, religious orientations and the two forms of identity.

First, I conducted regression analyses to confirm my hypotheses for SDT motivations. These results are presented in Table 4.10. Introjected, external (non-self-determined motivations) and integrated regulations (self-determined) positively predicted collective narcissism. Self-determined motivations (i.e., integrated and identified regulations) positively predicted secure in-group identity. Amotivation and introjected regulation negatively predicted secure in-group identity, although this relationship was small for the latter.

I then conducted regressions including religious orientations as predictors to replicate Study 9. These results are presented in Table 4.11. Extrinsic personal and intrinsic religiosity predicted collective narcissism. Secure in-group identity was predicted only by intrinsic religiosity.

Table 4.10

SDT individual motivations predicting two forms of in-group identity (Study 10)

	Model 1 DV= Collective narcissism						Model 2 DV= In-group identification					
	Step 1			Step 2			Step 1			Step 2		
Predictors	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*
Age	-0.00(0.01)	-.03	.50	0.01(0.00)	.02	.54	0.02(0.00)	**.20*****	< .001	0.01(0.00)	**.10****	.001
Gender[1]	-0.39(0.13)	**-.13****	.002	-0.15(0.11)	-.05	.20	0.26(0.09)	**.12****	.003	0.06(0.06)	.03	.37
In-group identification	0.75(0.06)	**.53*****	< .001	0.47(0.09)	**.33*****	< .001		—			—	
Collective narcissism		—			—		0.36(0.03)	**.50*****	< .001	0.14(0.04)	**.20*****	< .001
Intrinsic motivation				-0.05(0.06)	-.05	.37				0.04(0.03)	.05	.27
Integrated regulation				0.26(0.07)	**.21*****	< .001				0.32(0.04)	**.37*****	< .001
Identified regulation				-0.15(0.08)	-.12	.06				0.14(0.04)	**.16****	.001
Introjected regulation				0.16(0.05)	**.17****	.001				-0.06(0.03)	**-.09***	.03
External regulation				0.40(0.06)	**.39****	< .001				0.01(0.03)	.02	.68
Amotivation				0.01(0.06)	.00	.08				-0.26(0.03)	**-.33*****	< .001
F		51.20***			40.87***			61.44***			94.32***	
R^2		.28			.49			.32			.69	
ΔR^2					.21***						.37***	

Note. Gender[1] was coded as Male = 0, Female = 1.

Significant β values are in bold.

Table 4.11

Religious orientations predicting two forms of in-group identity (Study 10)

	Model 1 DV= Collective narcissism						Model 2 DV= In-group identification					
	Step 1			Step 2			Step 1			Step 2		
Predictors	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*
Age	-0.00(0.01)	-.03	.50	0.00(0.00)	-.00	.94	0.02(0.00)	**.20*****	< .001	0.01(0.00)	**.11****	.001
Gender[1]	-0.39(0.13)	**-.13****	.002	-0.38(0.12)	**-.13****	.002	0.26(0.09)	**.12****	.003	0.13(0.07)	.06	.06
In-group identification	0.75(0.06)	**.53*****	< .001	0.50(0.09)	**.35*****	< .001		—			—	
Collective narcissism		—			—		0.36(0.03)	**.50*****	< .001	0.16(0.03)	**.23*****	< .001
Intrinsic religiosity				0.24(0.08)	**.18****	.004				0.55(0.04)	**.59*****	< .001
EP religiosity				0.23(0.06)	**.18*****	< .001				-0.03(0.03)	-.04	.34
ES religiosity				0.05(0.04)	.05	.20				-0.02(0.02)	-.03	.33
F		51.20***			34.29***			61.44***			86.94***	
R^2		.28			.35			.32			.57	
ΔR^2					.06***						.25***	

Note. Gender[1] was coded as Male = 0, Female = 1. EP = Extrinsic personal, ES = Extrinsic social.

Significant β values are in bold.

4.6.3. Discussion

In Study 10, I examined how religious orientations map onto SDT motives. Consistent with previous theorisation and studies (Neyrinck et al., 2005, 2010), I found that intrinsic religiosity reflects integrated regulation. Additionally, I found that external regulation is related to intrinsic religiosity, which is in line with past research demonstrating a link between intrinsic religiosity and a desire to enhance one's personal image through religion (Sedikides & Gebauer, 2010). Non-self-determined motives (i.e., introjected, and external regulations) have been linked to extrinsic social religiosity (Neyrinck et al., 2010). In contrast, I found that self-determined motives (i.e., identified regulation and intrinsic motivation) were related to extrinsic social religiosity. The results indicate that extrinsic religiosity might mean a desire to establish belongingness through religion, which could be a personally important reason to identify and bring more satisfaction with identity. SDT motives were not related to extrinsic personal religiosity in the past research (Neyrinck et al., 2010). I found that self-determined (intrinsic motivation, identified, and integrated regulations) and non-self-determined (introjected) motivations were related to extrinsic personal religiosity. Thus, in line with the previous theorisation (Neyrinck et al., 2005), desiring to gain personal security and comfort through religion could be done either more freely or out of internal pressures. These results suggest that SDT motivations better differentiate what underlies defensiveness and security of in-group identity.

With the current study, I also had the opportunity to directly compare how the motives derived from SDT and religious orientations are linked to collective narcissism and secure in-group identity. As predicted, external, introjected, and integrated regulations were related to collective narcissism. These results are consistent with Studies 7 and 8, and indicate that identifying to attain positive intergroup comparisons and prestige, to avoid internal pressures and to manage contingent self-esteem, and seeing identification as being coherent

with other values were reflected in collective narcissism. In line with Study 9, intrinsic and extrinsic personal religiosity were related to collective narcissism. I did not find a relationship between extrinsic social religiosity and collective narcissism.

I confirmed my predictions for identified and integrated regulations as they were associated with secure in-group identity. While these results are consistent with Study 8, they should be interpreted cautiously with respect to identified regulation. Identifying to achieve personally important goals and indicating that it is consistent with other beliefs were reflected in secure in-group identity. Similar to Study 9, intrinsic religiosity was associated with more secure in-group identity. Interestingly, intrinsic motivation from SDT was unrelated to secure in-group identity in this study. Although this finding is surprising in comparison to Studies 7 and 8, measures assessing SDT motives with respect to religious activities exclude the intrinsic motivation component (Neyrinck, Vansteenkiste, Lens, Duriez, & Hutsebaut, 2006; Ryan, Rigby, & King, 1993). I kept intrinsic motivation to make my studies comparable. Perhaps intrinsic motivation defined within SDT is not applicable to religious social identity. Unlike studies 7 and 8, this motivation was unrelated to any component of in-group identification (see Appendix B).

As in Studies 7 and 8, higher amotivation (believing that identity will not bring any outcomes) was related to having less secure identification. This variable was unrelated to collective narcissism. I did not have a specific prediction for the association between introjected regulation and in-group identification but found a small negative relationship. This suggests that those who identify out of internal pressures and contingent self-esteem are less likely to have secure in-group identity.

4.7. General Discussion: Chapter 4

In four studies, I investigated motivations and orientations underlying collective narcissism and secure in-group identity. While Study 7 focused on various groups that were

personally important for participants, Study 8 focused on nationality and Studies 9 and 10 on religion. Studies 7, 8, and 10 inspected motivations identified by the SDT in different groups. Studies 9 and 10 examined religious orientations. Overall, I observed that secure in-group identity and collective narcissism were associated with a different set of motives to identify.

In general, non-self-determined motivations driven by external or internal controls were associated with collective narcissism. Among these, I confirmed that external regulation (e.g., identifying for recognition and prestige, Studies 7, 8 and 10) and introjected regulation (e.g., identity dependent self-worth and internal pressures, Studies 8 and 10) were associated with higher collective narcissism. In Study 9, extrinsic social and personal religiosity were related to collective narcissism as expected. However, only extrinsic personal religiosity was linked to collective narcissism in Study 10. I anticipated amotivation (e.g., the beliefs that identity will not provide a useful outcome) among self-determined motivations to be negatively associated with collective narcissism but, surprisingly, I found a positive relationship between them in Study 7 (and a non-significant relationship in Studies 8 and 10).

These studies highlight that those who identify for controlled reasons tend to report higher collective narcissism. These results are consistent with past research suggesting that collective narcissism is a way of managing personal needs, such as the need for personal control (Cichocka et al., 2018) and positive self-esteem (Golec de Zavala, Federico et al., 2019). Feelings of self-worth provided by identities might be considered a beneficial outcome (Vignoles, 2011). However, people with low-self-esteem tend to rely on contingencies to extract self-esteem (Duriez & Klimstra, 2011). Being motivated to identify mostly to gain self-worth could lead people to identify in a narcissistic way (see Golec de Zavala, Federico et al., 2019). In this case, the image of the in-group becomes the proxy of one's individual self-worth. These findings could explain why people high in collective narcissism defend the grandiose group image vehemently (Golec de Zavala, Cichocka, & Iskra-Golec, 2013) and

support populist leaders who promise to assert the greatness of their group (Marchlewska et al., 2018).

The positive relationship between extrinsic religious orientations and collective narcissism indicate that identity is not embraced only for the sake of religion but for other ends. Considering Studies 3 and 4, extrinsic personal religiosity might be related to collective narcissism due to self-imposed pressures and insecurities. Extrinsic social religiosity was related to collective narcissism only in Study 3. Thus, it should be less important when explaining defensiveness of in-group identity.

Secure in-group identity was generally associated with self-determined motives that reflect autonomous reasons to identify. It was associated with intrinsic motivation (Studies 7 and 8), integrated regulation (Studies 7, 8, and 10), and identified regulation (Studies 8 and 10). Similarly, in Studies 9 and 10, secure religious identity was associated with intrinsic religiosity (akin to integrated regulation). These results suggest that identifying because one's identity is inherently satisfying (intrinsic), coherent with one's values (integrated), and allows one to reach personally important objectives (identified) underlies a more secure in-group identity. According to SIT, favourable in-group comparisons are crucial for achieving and maintaining a positive social identity (Tajfel & Turner, 1986). The current results show that a secure form of in-group identity could be driven by autonomous (non-comparative) reasons to identify. Deci and Ryan (2000) propose that self-determined motives bring an experience of autonomy. Even if some identities are ascribed, people still have some freedom when they are construing those (Vignoles, 2011). Thus, I argue that this form of in-group identity is embraced more freely and not conditional on identity-dependent rewards.

Indeed, past research linked feelings of personal control to secure in-group identity and theorised that this could be underpinned by autonomy (Cichocka et al., 2018). Such in-group identity is likely to be secure and reflect genuine positive attachment toward an in-

group (Cichocka, 2016; Golec de Zavala, Cichocka, & Bilewicz, 2013). The SDT framework sheds light on why secure in-group identity is often associated with desired outcomes. Higher levels of in-group loyalty (Marchlewska et al., 2020) could be attributed to intrinsic motivation. Identifying for the inherent joy derived from the group should make individuals less likely to leave them. Hodgins and Knee (2002) argue that autonomous people should be less defensive in general, including in the context of intergroup relations. The link I found in Studies 7 and 8 between intrinsic motivation and secure in-group identity explain why the latter has been linked to intergroup tolerance (Golec de Zavala, Cichocka, & Bilewicz, 2013). Amiot and Sansfacon (2011) reported a positive relationship between intrinsic motivation and in-group biases. Although I did not investigate in-group biases, the results suggest that intrinsic motivation is unlikely to predict them through secure in-group identity.

Even though integrated regulation (being motivated to identify because it unifies with other values) is self-determined, I expected and found that it had a positive relationship with both forms of in-group identity. The positive links from intrinsic religiosity (integrating religion into life) and collective narcissism mirrors a similar pattern in Studies 9 and 10. Through integrated motivation and intrinsic religious orientation, religious identification could be a central part of the self (Allport & Ross, 1967; Gagne & Deci, 2005). While integrated regulation is related to beneficial outcomes at the personal level (Deci & Ryan, 2000), its combination with controlled motivations might link to more identity centrality and defensiveness in group contexts. However, a true integration of an identity requires being comfortable with inconsistent values and acknowledging negative qualities of a group (Amiot, de la Sablonniere, Terry, & Smith, 2007; Legault et al., 2017), which is possibly related to secure in-group identity rather than collective narcissism.

4.7.1. Limitations and future studies

The current research is not without limitations. The correlational design of the studies prohibits me from drawing causal conclusions. I reasoned that different motivations underpin different forms of identity. However, these links could be reversed (e.g., those who are higher in collective narcissism may be identifying for more controlled reasons) or bidirectional (e.g., having more autonomous motives predict secure in-group identity and autonomous motives supporting personal needs may predict more secure identity). Future studies should test these possibilities by employing longitudinal methods.

Future work should aim to examine these processes in other social groups and other contexts. Although I aimed to cover various groups, I still relied on Western, educated, industrialized, rich and democratic samples (Henrich, Heine, & Norenzayan, 2010) in the data. Future studies are also needed to improve the measurement properties of the individual motivations scale, especially considering the problems with the identified regulation subscale. Future studies should also examine whether the positive link between integrated regulation and both forms of in-group identity is mediated by different types of passion (obsessive vs. harmonious) towards groups (Rip, Vallerand, & Lafreniere, 2012). The comparison between the SDT taxonomy of motivations and religious orientations suggests that the latter approach should be further refined theoretically.

4.7.2. Conclusion.

By bridging two frameworks of individual motivations, the current research contributes to understanding the motivational foundations of collective narcissism and secure in-group identity in various groups. I found that the integration of an identity to the self and daily life is common for both collective narcissism and secure in-group identity. However, each form of in-group identity was accompanied by different sets of motivations. While collective narcissism is conditional on identity contingent privileges, benefits, and self-worth, secure in-group identity seems to capture freely motivated love for the in-group. Overall,

determining the motivations behind collective narcissism and secure in-group identity helps us understand their dramatically different outcomes in terms of in intra- and intergroup processes and politics.

CHAPTER 5

Within this dissertation, I investigated a broad range of needs and motivations underlying collective narcissism and secure in-group identity. While doing so, I bridged different theoretical accounts and understandings of basic needs and motivations (Allport & Ross, 1967; Baumeister & Leary, 1995; Deci & Ryan, 2000). In ten studies relying on experimental, longitudinal, and cross-sectional methodology, I examined the need to belong (trait, thwarted vs. satisfied), personal and group needs (autonomy, competence, relatedness), as well as individual motivations (self-determined vs. non-self-determined, and religious orientations) to identify the motivational concomitants of collective narcissism and secure in-group identity. These studies operationalised these identities with respect to a political party, a university, self-reported personally important groups, nations, ethnicities, and religions. Overall, this dissertation provides evidence that frustrated needs (personal and group) and non-self-determined motives to identify are associated with collective narcissism. It also demonstrates that less frustrated needs (personal and group), and self-determined motives to identify are related to a more secure form of in-group identity.

The literature on collective narcissism is skewed towards investigating its intergroup concomitants and recent studies examine how it affects intragroup processes (Cichocka & Cislak, 2020). This thesis provided a range of evidence that helps better understand the needs and motivations contributing to collective narcissism and secure in-group identity. By doing so, it consolidated and extended the previous research on the motivational foundations of collective narcissism and secure in-group identity (Cichocka et al., 2018; Golec de Zavala, Federico et al., 2019). In this Chapter, I first present a general discussion for the key findings from empirical chapters (2-4). Then, I discuss the theoretical contributions and practical and research implications of the current findings. Finally, I discuss the limitations and potential ways to improve and follow up on the current findings.

5.1. Summary

Cichocka (2016) posits that collective narcissism could emanate from various unfulfilled personal needs, whereas secure in-group identity could stem from satisfied individual needs. However, to date studies investigating the personal needs underlying collective narcissism focused mostly on personal control and self-esteem (Cichocka et al., 2018; Golec de Zavala, Federico et al., 2019). The aim of this dissertation was to investigate a broader set of needs and motivations to elucidate the psychological underpinnings of defensiveness (e.g., collective narcissism) and security of in-group identity. This dissertation included three empirical chapters focusing respectively on belongingness, basic psychological needs, and motivations.

In the first empirical chapter (Chapter 2), I relied on a well-known approach to examine belongingness which emphasize individual differences in its strength and mostly focuses on the immediate effects when it is frustrated (Baumeister & Leary, 1995; Begen & Turner-Cobb, 2015). Lavigne et al. (2011) suggested that a stronger need for belongingness reflects one's personal insecurities. I investigated whether chronic or momentarily induced need to belong is related to collective narcissism and secure in-group identity. The studies yielded mixed results. A meta-analysis demonstrated that need for belongingness was not related to collective narcissism. While previous research showed that collective narcissism increases in response to immediate threats to personal control and self-esteem (Cichocka et al., 2018; Golec de Zavala, Federico et al., 2019), the current findings posit that it does not work in the same way when the threat targets belongingness.

These findings suggested that satisfying the need to belong through groups is not associated with collective narcissism. In Chapter 3, I sought to understand how frustration versus satisfaction of other basic needs was associated with collective narcissism versus secure in-group identity. Grounded in SDT, this chapter examined competence, relatedness,

and autonomy needs, both in their individual (Study 5), and group-level manifestations (Study 6). Among these needs, individual relatedness is akin to belongingness in Chapter 2 (Baumeister & Leary, 1995). However, SDT examines the ongoing satisfaction and frustration of personal relatedness (along with competence and autonomy) in daily life (Ryan & Deci, 2017), rather than investigating the strength of this need (Baumeister & Leary, 1995).

In Study 5, I demonstrated that frustrated competence and less relatedness satisfaction predicted higher collective narcissism across time. This indicates that collective narcissism increases to the extent that people question their effectance and have fewer personal connections in their daily lives. Consistent with the past theorisation (Cichocka, 2016), these findings show that collective narcissism reflects the personal shortcomings of individuals.

Satisfaction of autonomy and less competence frustration predicted higher secure in-group identity across time. Therefore, we can say that secure in-group identity increases when people perceive themselves as freer to act in ways that reflect their will and feel less insecure about their abilities in daily life. In line with the previous theoretical proposition (Cichocka, 2016), this finding indicates that secure in-group identity could reflect group members' personal strengths.

In Study 6, I showed that frustrated group needs for autonomy and relatedness predict collective narcissism, regardless of the status of the groups. Higher group competence frustration was also associated with higher collective narcissism, whereas lower group competence frustration was related to secure in-group identity, although both associations were clearer when I accounted for the overlap between collective narcissism and identification.

Taken together, frustration of individual competence, unsatisfactory relationships, and frustrated group needs were reflected in collective narcissism. More individual autonomy and

less deprivation of individual and group competence were reflected in secure in-group identity. In particular, the results on group competence in Study 6 posit that this component is crucial for in-group identification.

In Chapter 4, I considered the types of the motivations to identify. Again, relying mainly on SDT, I sought to demonstrate how self-determined versus non-self-determined motivations were associated with secure in-group identity versus collective narcissism. I also examined how religious orientations are related to two forms of in-group identity (Study 9) and compared two motivational approaches (Study 10). Studies 7-10 found that integration of an identity was common for both collective narcissism and secure in-group identity. Apart from this commonality, collective narcissism was linked to non-self-determined motivations (introjected and external) and extrinsic personal religiosity. In contrast, secure in-group identity was generally linked to self-determined motivations (intrinsic, identified) to identify. In particular, satisfaction of personal autonomy appears to contribute to the development of intrinsic motivation (Deci & Ryan, 2000; Ryan & Deci, 2017). Thus, the positive link between personal autonomy satisfaction and secure in-group identity (Study 5) and the positive relationship between intrinsic motivation and secure in-group identity (Studies 7 and 8) are consistent with this proposition.

5.2. Theoretical Contributions

Collective narcissism refers to a belief in the greatness of an in-group that needs to be externally acknowledged (Golec de Zavala, et al., 2009). Researchers found that collective narcissism stems from thwarted personal needs and buffers them in the short-run (Cichocka et al., 2018; Golec de Zavala, Federico et al., 2019). In-group identification involves ties to fellow group members, centrality of the group to the self, and positive feelings towards the group (Cameron, 2004; Leach et al., 2008; Postmes et al., 2013). Motivational accounts of social identification suggest that people satisfy a variety of motivations and needs through

identifying with in-groups (Vignoles et al., 2006). In contrast, theorisation on collective narcissism suggests that when controlled for collective narcissism, in-group identification tends to be more secure (Golec de Zavala, Cichocka, & Bilewicz, 2013). Such a form of in-group identity could emanate from satisfied personal needs (Cichocka, 2016). This dissertation bears theoretical contributions to both approaches which I outline below.

First, collective narcissism seems to be associated with experiences of personal competence frustration. Cichocka et al. (2018) argued that lacking personal autonomy should contribute to less personal control which underlies collective narcissism. According to Deci and Ryan (2000), both deprivation of competence and autonomy may lead people to have a compensatory desire for control. The current results posit that the relationship between collective narcissism and less personal control could be underpinned by frustration of competence rather than autonomy. This is reasonable given that competence and control are rooted in a common idea: that people are efficacious when engaging with their environment (Landau, Kay & Whitson, 2015; Leander & Chartrand, 2017). For narcissistic people, competence might be derived from contexts in which they can compare themselves against external standards (Morf, Weir, & Davidov, 2000). Collective narcissism has a moderate correlation with individual narcissism (Golec de Zavala, 2018). Those who are high in collective narcissism could be relying on deprived competence as an indicator of low personal control in reference to external standards, rather than frustrated autonomy (i.e., feelings of being obliged to do things in daily life and not having choice).

When personal competence is frustrated, people feel insecure about their ability to attain outcomes and experience feelings of inferiority (Chen et al., 2015; Dieleman et al., 2018) which could further facilitate introjected regulation (Deci & Ryan, 2000). Thus, the positive link between introjected regulation to identify (identifying out of self-inflicted pressures and identity dependent self-esteem, Amiot & Sansfacon, 2011) is in line with this

reasoning. Feeling competent could be an important factor underlying personal self-esteem (Tafarodi & Swann, 1995; see also Deci & Ryan, 1995). However, relying on competence for self-esteem, especially if it is unstable, could make people more defensive (Rhodewalt & Vohs, 2005). Although previous studies make a connection between low self-esteem and collective narcissism (Golec de Zavala, Federico, et al., 2019), this relationship could be due to frustrated personal competence. People with frustrated competence might be seeking to exert dominance and self-esteem, which are not innate needs (Ryan & Deci, 2017), and collective narcissism might be a proxy to establish that. Overall, these findings suggest that deprivation or lower satisfaction of individual basic needs, both of which harm the healthy psychological functioning of individuals (Deci & Ryan, 2000; Vansteenkiste & Ryan, 2013), might be reflected in a defensive form of in-group identity. These personal defects could be related to group members' pursuit of more external ends through collective narcissism.

The associations between personal relatedness and collective narcissism seem less straightforward and depend on the operationalization of belongingness. This need was only associated with collective narcissism when investigated as satisfaction and frustration of relatedness with respect to ongoing meaningful relations. Both less frustrated and less satisfied relatedness predicted higher collective narcissism. These relationships could be moderated by opinions regarding national identification in participants' immediate personal relationships. However, external regulation to identify (identifying because identity brings prestige or positive comparisons, Amiot & Sansfacon, 2011) was more robustly related to collective narcissism. Just as individual narcissists do not value being affiliated with others (Grapsas, Brummelman, Back, & Denissen, 2020), these findings suggest that even though collective narcissism fluctuates depending on the personal relations, collective narcissists are not mainly concerned with attaining belongingness through groups.

The current findings contribute to the understanding of collective narcissism by also showing its links to frustrated group needs. Experiencing one's group as facing stigmatization and rejection (relatedness frustration), unable to mobilize to achieve outcomes (competence frustration), and unfree in determining what to pursue, or unable to express identity (autonomy frustration) all predicted higher collective narcissism. Although collective narcissism refers to a grandiose image of the in-group (Cichocka & Cislak, 2020), the current findings are consistent with Marchlewska et al. (2018) and suggest this exceptional view of the group could be based on experiences of deprived group needs. These findings are in line with the argument that powerful groups might lack autonomy (Kachanoff, Kteily, et al., 2020) and demonstrates that they can experience relatedness and competence frustration as well. Frustration of autonomy indicates that group values or faith of a group is controlled or influenced by other groups (Parker et al., 2019). Although frustration of group-based relatedness indicates a threat to belongingness in the larger culture (Parker et al., 2019), for those who identify in a narcissistic way it could mean more of a threat to group-based esteem. Experience of frustrated group competence indicates that those who identify in a narcissistic way seem to undermine the potential capacity of their group to attain outcomes, even though they perceive the group itself to be exceptional (Golec de Zavala et al., 2009). According Tajfel and Turner (1986), conflicting group interests could result in higher in-group identification. The current results posit that deprived group needs, which to some extent reflect competing interests, could lead to ethnic collective narcissism.

When we review the findings for secure in-group identity, we can see a different pattern of results. Satisfaction of individual autonomy and less competence frustration was related to higher secure in-group identity. Autonomy (feelings of freedom and choice, Deci & Ryan, 2000) seems to be closely related to both internal locus of causality (one owns their behaviour, deCharms, 1968; Ryan & Deci, 2017) and internal locus of control (outcomes in

life can be controlled internally, Rotter, 1996). Those who feel that they are the initiator of their own behaviours might perceive having more internal control in their lives. Autonomous people accept both the negative and positive characteristics of the groups they belong to (Legault et al., 2017). Satisfied autonomy should also contribute to intrinsic motivation (Deci & Ryan, 2000). Intrinsic motivation to identify (identifying for the pleasure that comes with an identity, not for an end, Amiot & Sansfacon, 2011) consistently predicted secure in-group identity (Studies 7 and 8).

Moreover, autonomy contributes to the emergence of true self-esteem, which comes from acting in line with a stable sense of self rather than being contingent on other standards (Deci & Ryan, 1995). People with more internal locus of control report higher feelings of being worthy and self-acceptance (Pruessner et al., 2005). Experiencing oneself as less incompetent should also increase perceived personal control (Leander & Chartrand, 2017). In fact, both fulfilment of autonomy and feeling less incompetent might be underlying the previous findings which revealed a positive link between secure in-group identity, high self-worth, and high personal control (Cichocka et al., 2018; Golec de Zavala, Federico et al., 2019; Marchlewska et al., 2020).

According to the SIT tradition, self-enhancement (Tajfel & Turner, 1979) and low self-esteem (Corollary 2 of the self-esteem hypothesis, Abrams & Hogg, 1988) threatened distinctiveness and belongingness (Brewer, 1991; Pickett et al., 2002) and lacking subjective certainty (Hogg, 2000) motivated in-group identification. These unfilled personal needs also motivate discrimination of outgroups and in-group favouritism (Capozza et al., 2006; Jetten, Spears, & Manstead, 1997; Mullin & Hogg, 1999; cf., Rubin & Hewstone, 1998 for self-esteem). Similarly, building on SIT, the group-based control restoration model proposes that lack of personal control increases in-group identification and defensiveness (Fritsche et al., 2013; Stollberg, Fritsche, & Backer, 2015). All these accounts rely on the assumption that

deprivation of the proposed individual needs foster in-group identification as a way to compensate for this deficit. In contrast, SDT proposes that especially basic psychological needs do not need to be deprived or unmet to motivate people (Ryan & Deci, 2017). The current findings are more in line with SDT and with previous studies linking satisfied personal control and high self-esteem to secure in-group identity (Cichocka et al., 2018; Golec de Zavala, Federico et al., 2019). The findings also demonstrated that satisfaction of personal autonomy and less competence frustration of group members (at the individual level) could contribute to a secure form of in-group identity.

People with satisfied basic needs will not be primarily concerned with gratifying those needs (Ryan, Soenens, & Vansteenkiste, 2019). However, SDT proposes that when personal needs are fulfilled, people will still engage in situations that contribute to these needs (Ryan & Deci, 2017). Coming from the SIT perspective, Vignoles (2011) did not make a reference to levels of personal needs but still contented that people are motivated to identify with groups through which they can get self-esteem, self-efficacy, continuity, distinctiveness, belongingness, and meaning. Combined with the SDT approach (Ryan & Deci, 2017), asking participants to what extent identification makes them feel related or efficacious (Easterbrook & Vignoles, 2012; Vignoles et al., 2006) may not necessarily mean that people seek to satisfy these needs through groups. In fact, the positive relationship between personal need satisfaction and in-group identification (Greenaway, Cruwys, Haslam, & Jetten, 2016; Greeanaway et al., 2015) could be due to identification strengthening the existing levels of satisfied personal needs, rather than just being an attempt to gratify a lack of them. In contrast, people with frustrated needs could resort to collective narcissism to compensate for these personal shortcomings.

Experiences of less group competence frustration were an especially common predictor of secure in-group identity both for the advantaged and disadvantaged groups

(Study 6). Groups help their members to achieve goals that cannot be attained individually (Greenaway et al., 2015). In Studies 8 and 10, identified regulation (identifying because identity helps to reach personally important objectives) was related to secure in-group identity. Individual feelings of less incompetency and experiencing less group incompetency seem to further contributing to a secure form of in-group identity.

Frustrated group autonomy, competence, and relatedness studied here could be understood as specific cases of group-based deprivation. I found that less frustrated group competence and relatedness predicted more secure in-group identity for the advantaged ethnic group. Thus, the current findings can contribute to the literature on the relationships between in-group identification and relative deprivation, which to date has yielded mixed results (Abrams, Hinkle, & Tomlins, 1999; Lalonde & Cameron, 1993; Petta & Walker, 1992; Zagefka & Brown, 2005). The current results indicate that seeing less deficits in group needs could facilitate a more secure in-group identity. When members of advantaged groups perceive that they are deprived, they report more prejudice towards disadvantaged groups (Pettigrew et al., 2008). Then, advantaged group members' perceptions of their group needs as less frustrated could buffer the negative attitudes towards disadvantaged groups through a secure ethnic identity. Less frustrated competence predicted higher secure in-group identity for the disadvantaged ethnic group which could translate into taking the necessary actions to enhance the status of their group (Van Zomeren et al., 2004).

5.2.1. Practical Implications

Collective narcissism is associated with undesired concomitants with respect to intra- and intergroup relations (Cichocka & Cislak, 2020). A few studies suggest that increasing personal self-esteem and personal control could diminish it (Cichocka et al., 2018; Golec de Zavala, Federico et al., 2019). The current studies suggest that it could be also attenuated through satisfaction of basic psychological needs and promoting self-determined motivations.

Parenting styles form an important basis for need satisfaction that contributes a great deal to the type of motivations people have (Soenens, Deci, & Vansteenkiste, 2017). Children with parents who promote extrinsic goals or frustrate their needs tend to pursue external goals (Kasser, Ryan, Zax, & Sameroff, 1995) and have more social dominance orientation (i.e., justifying hierarchies in the society, Duriez, Soenens, Vansteenkiste, 2007). In contrast, parental support for fulfilling individual needs predicts more trust in authorities, concern for other people later in life, engaging in politics, and promotes self-determined motivations (Chua & Philippe, 2015; Ryan & Deci, 2017; Wuttke, 2020). Thus, one way to reduce collective narcissism could be educating parents to support the competence and autonomy of children which could promote more self-determined motivations and a secure way to identify with the various groups they belong to.

The link between frustrated group needs and collective narcissism posits that acknowledging group needs could be an important factor in reducing collective narcissism. Doing this requires implementing policies that allow both advantaged and disadvantaged group members to assert their identities and values, to feel included in the society, and to feel that their group can achieve important outcomes. Given that different groups in a society might have conflicting interests (Jardina, 2019), this is not an easy solution. Some cultural values and practices are seen as being at odds with Western values and raise national security concerns (e.g., Islam, Talwar, 2016; e.g., veil, Saiya & Manchanda, 2020). However, simply prohibiting clothes that are a part of a cultural identity due to concerns on security paradoxically risks more extremism coming from these groups (Saiya & Manchanda, 2020). In addition, political correctness is perceived as a way for politicians to avoid addressing socially important issues and erosive to dominant cultural values (Gaston, 2019). Concerns over political correctness and free-speech are related to the normalization of far-right ideologies (Mulhall, 2019). Egalitarian goals and valuing diversity are more long-lasting and

effective in prejudice regulation when endorsed autonomously (Legault, Green-Demers, Grant, & Chung, 2007; Legault, Gutsell, & Inzlicht, 2011). Thus, making policies considering the needs of all groups in a society or explaining the reasons shaping the socio-political atmosphere to the public could be essential to avoid the perception of debates as threats to group needs or the perception of being coerced by an elite. Doing so could help to tackle collective narcissism and to facilitate intergroup harmony through secure in-group identity.

5.2.2. Implications for Future Studies

The current studies bring new research questions for future studies to further refine the antecedents, outcomes and functions of in-group identification and collective narcissism. Although SDT is studied when examining groups and in-group identification, these studies were built on the promises of SIT (e.g., how identification satisfies personal needs; Amiot, Terry, Wirawan, & Grice, 2010; Greenaway et al., 2017; Kyprianides et al., 2019). For instance, studying personal levels of satisfied versus frustrated needs and investigating how they link to identity motivations (Vignoles, 2011) could help disentangling whether in-group identification really compensates for or strengthens the needs of group members. In the light of the current results, the latter seems more likely to be observed when collective narcissism is accounted for. Furthermore, future studies could also examine how identity motivations identified within the SIT framework (Vignoles, 2011) map onto SDT's taxonomy of motivations (Deci & Ryan, 2000).

The current findings from Studies 5 and 6 also have an implication for how collective narcissism might affect group members' well-being. One study demonstrated that collective narcissism was related to less life satisfaction (when controlling for in-group identification; Golec de Zavala, 2019). I did not ask participants to what extent their identity makes them feel competent, related, and autonomous. However, collective narcissism was related to more

frustrated individual needs and only frustrated them more after six weeks (e.g., competence and relatedness, Study 5). Therefore, collective narcissism is likely to be associated with less psychological well-being.

Frustrated group needs have a negative effect on personal well-being (Kachanoff, Cooligan, et al., 2020). Perceived discrimination against one's group and group-based relative deprivation are negatively related to well-being but high in-group identification inverses this relationship (Branscombe et al., 1999; Sengupta et al., 2019). But in these studies, perceived group-based disadvantages had a positive relationship with in-group identification. If less frustrated group needs are also linked to more secure in-group identity as in Study 6, then well-being should not be adversely affected. Considering the positive relationship between frustrated group needs and collective narcissism, it is possible that the well-being of those who identify in a narcissistic way is worsened by group-based deprivations. Future studies should investigate these links to elucidate how frustrated group needs are related to psychological well-being through collective narcissism.

Another implication of my research on frustrated group needs bears on the question of whether these experiences link to solidarity, especially among minority groups. Burson and Godfrey (2020) identify competitiveness (such as over victimhood or material resources such jobs) and threats to group identity as barriers to solidarity between disadvantaged groups. Experiences of frustrated group needs could link to more competitive in-group victimhood (Noor et al., 2012) through collective narcissism. Thus, collective narcissism among members of disadvantaged groups might create frictions in social movements.

The studies in Chapter 4 also offer implications for future studies aiming to understand how self-determined and non-self-determined motivations are related to intragroup processes such as dissent through collective narcissism and secure in-group identity. It is already known that collective narcissism predicts minimizing the importance of

wrongdoings that are committed by the in-group members (Bocian et al., 2021; Molenda et al., 2020). The normative conflict model argues that "tough love" for the in-group makes group members more prone to dissent when a group norm is harmful for the in-group in the long run (Packer, 2008). It is shown that members with lower in-group identification (compared to members with high in-group identification) prioritise self-interests over group interests (Packer & Chasteen, 2010). However, it has been argued that collective narcissism is similarly motivated by self-interest (Cichocka et al., 2020) and non-self-determined reasons (external and introjected) to identify with groups. Thus, those high in collective narcissism may prefer to be silent as long as harmful group norms do not cause problems for themselves or do not hurt the in-group's image. In contrast, people with a more secure in-group identity may dissent following the collective interests in order to correct an in-group norm they perceive to be wrong.

5.3. Limitations, Directions for Future Research, and Ceveats

The current research is not without limitations. First, I mostly relied on correlational studies, apart from Chapter 2. Future studies should aim towards establishing causal links between motivations, group needs, collective narcissism, and secure in-group identity. Although it is not easy to do this for groups that already exist in real life, Ryan and Deci (2017) argued that policies might constrain group needs. Therefore, presenting participants with proposed policies supposedly coming from politicians could trigger experiences of restraints to group autonomy, relatedness, and competence.

Chapter 4 brings the question of whether we can manipulate motivations to identify, especially when it comes to abstract social categories. Yampolsky and Amiot (2013) asked participants to write about self-determined or non-self-determined motivations to identify with their home province (Quebec). Priming non-self-determined motivations was effective in increasing biases for participants with a high in-group identification. However, priming

self-determined motivations did not have an effect on the strength of identification and biases. This may be because people have quite stable reasons or orientations to identify with their nations or religions. To address this, future studies could try to examine the effects of messages of self-determined and non-self-determined motivations to identify coming from leaders, since other studies have established that leaders can play a role in transforming group values and norms (Abrams, Ransley de Moura, Marques, & Hutchison, 2008).

Another limitation is the type of groups used in the current research. While I relied on different groups, most of my studies still mostly focused on already-existing large social categories such as nations, ethnicities, and religions. Deaux, Reid, Mizrahi, and Cotting (1999) argue that groups might function in different ways and people's motives to identify may differ depending on the type of group. Thus, the current findings could only be suggestive with respect to abstract social groups and cannot be extrapolated to minimal ad-hoc groups (Tajfel, Billig, Bundy, & Flament, 1971). However, collective narcissism can be measured with respect to organizations and sports teams as well (Cichocka et al., 2020; Larkin & Fink, 2019). Therefore, the current findings could serve as a basis for investigating how personal needs and motivations to identify are reflected in collective narcissism with respect to these types of groups.

Finally, it is unclear whether the current findings replicate in other national, ethnic, and religious contexts. For example, achieving belongingness through group membership could be more important for people who live in collectivistic cultures (Markus & Kitayama, 1991). Future studies are needed to strengthen the current links between basic personal needs, collective narcissism, and secure in-group identity. Frustrated group needs might work better for understanding ethnic and national identity processes in multicultural societies or in countries that are/were subjected to interventions. Autonomy, competence, and relatedness needs of different groups are likely to clash with each other or be undermined under these

circumstances. Future studies could investigate these needs with respect to different ethnic and national groups.

5.4. Conclusion

To conclude, this dissertation sought to elucidate how needs and motivations are reflected in people's beliefs about the various social groups they may identify with. It shows that frustrated or less satisfied individual and group needs are associated with collective narcissism—a belief that one's group deserves special recognition for its greatness. Given that collective narcissism can be a threat to social cohesion, group members with less psychological growth who desire to use the group for their personal ends one-sidedly could wither away the potential of the groups to which they belong. In-group identification includes having strong bonds to groups, being satisfied with group membership, and perceiving the group as an important part of the self. Controlling for collective narcissism, in-group identification actually reflects a secure form of in-group identity. Individuals with more psychological growth can reflect their qualities on such an in-group identity and can appreciate the group for more autonomous reasons and for its own worth. This could translate into a mutually beneficial relationship in which the group and its members flourish together without a desire for external recognition or a desire to discriminate against outgroups to feel positive about the in-group.

References

Abrams, D., & Grant, P. R. (2012). Testing the social identity relative deprivation (SIRD) model of change: The political rise of Scottish nationalism. *British Journal of Social Psychology*, *51*(4), 674-689. https://doi.org/10.1111/j.2044-8309.2011.02032.x

Abrams, D., & Hogg, M. A. (1988). Comments on the motivational status of self-esteem in social identity and intergroup discrimination. *European Journal of Social Psychology*, *18*, 317-334. https://doi.org/10.1002/ejsp.2420180403

Abrams, D., Hinkle, S., & Tomlins, M. (1999). Leaving Hong Kong?: The roles of attitude, subjective norm, perceived control, social identity and relative deprivation. *International Journal of Intercultural Relations*, *23*(2), 319-338. https://doi.org/10.1016/S0147-1767(98)00041-8

Abrams, D., Randsley de Moura, G., Marques, J. M., & Hutchison, P. (2008). Innovation credit: When can leaders oppose their group's norms? *Journal of Personality and Social Psychology*, *95*(3), 662–678. https://doi.org/10.1037/0022-3514.95.3.662

Abramson, A. (2018, September 18). Read the letter from Christine Blasey Ford's lawyers requesting an FBI inquiry into Kavanaugh allegetion. *Time.* Retrieved from https://time.com/5400239/christine-blasey-ford-investigation-letter/

Adler, N. E., Epel, E. S., Castellazzo, G., & Ickovics, J. R. (2000). Relationship of subjective and objective social status with psychological and physiological functioning: Preliminary data in healthy White women. *Health Psychology*, *19*(6), 586-592. https://doi.org/10.1037/0278-6133.19.6.586

Adorno, T. (1963/1998). *Critical models: Interventions and catchwords.* New York, NY: Columbia University Press.

Adorno, T., Frenkel-Brunswik., E., Levinson, D. J., & Sanford, R. N., (1950). *The authoritarian personality*. New York, NY; Harper & Row.

Allen, A. B., & vanDellen, M. R., & Campbell, W. K. (2013). Individual differences in responses to social exclusion: Self-esteem, narcissism, and self-compassion. In C. N. DeWall (Ed.), *The Oxford handbook of social exclusion*, (pp. 220-227). Oxford University Press.

Allport, G. W., & Ross, J. M. (1967). Personal religious orientation and prejudice. *Journal of Personality and Social Psychology, 5*(4), 432-443. http://dx.doi.org/10.1037/h0021212

Altemeyer, B., & Hunsberger, B. (1992). Authoritarianism, religious fundamentalism, quest, and prejudice. *Journal for the Psychology of Religion, 2*(2), 113-133. https://doi.org/10.1207/s15327582ijpr0202_5

Amaya, A., Bach, R., Keusch, F., & Kreuter, F. (2019). New data sources in social science research: Things to know before working with Reddit data. *Social Science Computer Review*, 1-18, https://doi.org/10.1177/0894439319893305

Amiot, C. E., & Aubin, R. (2013). Why and how are you attached to your social group? Investigating different forms of social identification. *British Journal of Social Psychology*, *52*(3), 563-586. https://doi.org/10.1111/bjso.12004

Amiot, C. E., & Sansfacon, S. (2011). Motivations to identify with social groups: A look at their positive and negative consequences. *Group Dynamics: Theory, Research, and Practice*, *15*(2), 105-127. http://dx.doi.org/10.1037/a0023158

Amiot, C. E., de la Sablonniere, R., Terry, D. J., & Smith, J. R. (2007). Integration of social identities in the self: Toward a cognitive-developmental model. *Personality and Social Psychology Review*, *11*, 364-388. https://doi.org/10.1177/1088868307304091

Amiot, C. E., Terry, D. J., Wirawan, D., & Grice, T. (2010). Changes in social identities over time: The role of coping and adaptation processes. *British Journal of Social Psychology*, *49*(4), 803-826. https://doi.org/10.1348/014466609X480624

Aydin, N., Fischer, P., & Frey, D. (2010). Turning to God in the face of ostracism: Effects of social exclusion on religiousness. *Personality and Social Psychology Bulletin, 36,* 742-753. https://doi.org/10.1177/0146167210367491

Bai, H. (2020). Whites' racial identity centrality and social dominance orientation are interactively associated with far-right extremism. *British Journal of Social Psychology, 59,* 387-404. https://doi.org/10.1111/bjso.12350

Bai, H., & Federico, C. M. (2020). Collective existential threat mediates White population decline's effect on defensive reactions. *Group Processes & Intergroup Relations, 22*(4), 1–17. https://doi.org/10.1177/1368430219839763

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist, 37*(2), 122-147. https://doi.org/10.1037/0003-066X.37.2.122

Bandura, A. (1995). Exercise of personal and collective efficacy in changing societies. In A. Bandura (Ed.), *Self-efficacy in changing societies* (pp. 1–45). Cambridge, England: Cambridge University Press.

Barnes, C. D., & Carvallo, M., Brown, R. P., & Osterman, L. (2010). Forgiveness and need to belong. *Personality and Social Psychology Bulletin, 36,* 1148-1160. https://doi.org/10.1177/0146167210378852

Bartholomew, K. J., Ntoumanis, N., Ryan, R. M., Bosch, J. A., & Thogersen-Ntoumani, C. (2011). Self-determination theory and diminished functioning: The role of interpersonal control and psychological need thwarting. *Personality and Social Psychology Bulletin, 37*(11), 1459-1473. https://doi.org/10.1177/0146167211413125

Batson, C. D., & Ventis, W. L. (1982). *The religious experience: A social psychological perspective*. New York: Oxford University Press.

Batson, C. D., Schoenrade, P., & Ventis, W. L. (1993). *Religion and the individual: A social-psychological perspective*. Oxford University Press.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*(3), 497-529. https://doi.org/10.1037/0033-2909.117.3.497

Baumeister, R. F., Brewer, L. E., Tice, D. M., & Twenge, J. M. (2007). Thwarting the need to belong: Understanding the interpersonal and inner effects of social exclusion. *Social and Personality Psychology Compass, 1*, 506-520. https://doi.org/10.1111/j.1751-9004.2007.00020.x

Baumeister, R. F., DeWall, C. N., Ciarocco, N. J., & Twenge, J. M. (2005). Social exclusion impairs self-regulation. *Attitudes and Social Cognition, 88*(4), 589-604. https://doi.org/10.1037/0022-3514.88.4.589

BBC (2018, May 31). The Islamic veil across Europe. Retrieved from https://www.bbc.co.uk/news/world-europe-13038095

BBC (2020, June 11). Confederate and Colombus statues toppled by US protesters. Retrieved from https://www.bbc.co.uk/news/world-us-canada-53005243

Begen, F. M., & Turner-Cobb, J. M. (2015). Benefits of belonging: Experimental manipulation of social inclusion to enhance psychological and physiological health parameters. *Psychology & Health, 30*(5), 568-582. https://doi.org/10.1080/08870446.2014.991734

Biddlestone, M., Cichocka, A., Główczewski, M., & Cislak, A. (2020). *Their own worst enemy? Collective narcissists are willing to conspire against their in-group*. Manuscript submitted for publication.

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). London: Routledge.

Black, A. E., & Deci, E. L. (2000). The effects of instructors' autonomy support and students' autonomous motivation on learning organic chemistry: A self-determination theory perspective. *Science Education*, *84*(6), 740–756. https://doi.org/10.1002/1098-237X(200011)84:6<740::AID-SCE4>3.0.CO;2-3

Blackhart, G. C., Nelson, B. C., Knowles, M. L., & Baumeister, R. F. (2009). Rejection elicits emotional reactions but neither causes immediate distress nor lowers self-esteem: A meta-analytic review of 192 studies on social exclusion. *Personality and Social Psychology Review*, *13*(4), 269-309. https://doi.org/10.1177/1088868309346065

Bocian, K., Cichocka, A., & Wojciszke, B. (2021). Moral tribalism: Moral judgments of actions supporting ingroup interests depend on collective narcissism. *Journal of Experimental Psychology*, *93*, Article 104098. https://doi.org/10.1016/j.jesp.2020.104098

Borenstein, M., Hedges, L., Higgins, J., & Rothstein, H. (2005). *Comprehensive meta-analysis Version 2*. Englewood, NJ: Biostat.

Borge, J. (2020, July 21). What is Hispanic Heritage Month –and who celebrates it? *The Oprah Magazine*. Retrieved from https://www.oprahmag.com/life/a28134135/hispanic-heritage-month/

Bourgeois, K. S., & Leary, M. R. (2001). Coping with rejection: Derogating those who choose us last. *Motivation and Emotion*, *25*(2), 101-111. https://doi.org/10.1023/A:1010661825137

Branscombe, N. R., Schmitt, M. T., & Harvey, R. D. (1999). Perceiving pervasive discrimination among African Americans: Implications for group identification and well-being. *Journal of Personality and Social Psychology*, *77*(1), 135-149. https://doi.org/10.1037/0022-3514.77.1.135

Brewer, M. B. (1991). The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin*, 17, 475-482. https://doi.org/10.1177/0146167291175001

Brewer, M. B. (1999). The psychology of prejudice: Ingroup love and outgroup hate? *Journal of Social Issues*, *55*(3), 429-444. https://doi.org/10.1111/0022-4537.00126

Brewer, M. B. (2003). Optimal distinctiveness, social identity, and the self. In M. R. Leary, & J. P. Tangney (Eds.), *Handbook of self and identity* (pp. 480-491). New York, NY: Guilford Press.

Brown, R. (2000). Social identity theory: Past achievements, current problems, and future challenges. *European Journal of Social Psychology*, *30*(6), 745-778. https://doi.org/10.1002/1099-0992(200011/12)30:6<745::AID-EJSP24>3.0.CO;2-O

Brummelman, E., Thomaes, S., & Sedikides, C. (2016). Separating self-esteem from narcissism. *Current Directions in Psychological Science*, *25*, 8-13. https://doi.org/10.1177/0963721415619737

Buckley, K. E., Winkel, R. E., & Leary, M. R. (2004). Reactions to acceptance and rejection: Effects of level and sequence of relational evaluation. *Journal of Experimental Social Psychology*, *40*, 14-28. https://doi.org/10.1016/S0022-1031(03)00064-7

Burson, E., & Godfrey, E. B. (2020). Intraminority solidarity: The role of critical consciousness. *European Journal of Social Psychology*, *50*(6), 1362-1377. https://doi.org/10.1002/ejsp.2679

Cai, H., & Gries P. (2013). National narcissism: internal dimensions and international correlates. *PsyCh Journal*, *2*, 122-132. https://doi.org/10.1002/pchj.26

Cameron, J. E. (2004). A three-factor model of social identity. *Self and Identity*, *3*, 239-262. https://doi.org/10.1080/13576500444000047

Capozza, D., Brown, R., Aharpour, S., & Falvo, R. (2006). A comparison of motivational theories of identification. In R. Brown, & D. Capozza (Eds.), *Social identities: Motivational, emotional and cultural influences* (pp. 51-72). Psychology Press.

Chen, B., Vansteenkiste, M., Beyers, W., Boone, L., Deci, E. L., Van der Kaap-Deeder, J., . . . Verstuyf, J. (2015). Basic psychological need satisfaction, need frustration, and need strenght across four cultures. *Motivation and Emotion*, *39*, 216-236. https://doi.org/10.1007/s11031-014-9450-1

Chotpitayasunondh, V., & Douglas, K. M. (2016). How "phubbing" becomes the norm: The antecedents and consequences of snubbing via smartphone. *Computers in Human Behavior*, *63*, 9–18. https://doi.org/10.1016/j.chb.2016.05.018

Chotpitayasunondh, V., & Douglas, K. M. (2018). The effects of phubbing on social interaction. *Journal of Applied Social Psychology*, *48*(6), 304-316. https://doi.org/10.1111/jasp.12506

Christ, O., Sibley, C. G., & Wagner, U. (2012). Multilevel modelling in personality and social psychology. In K. Deaux & M. Snyder (Eds.), *The Oxford handbook of personality and social psychology* (pp. 239–260). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780195398991.013.0010

Chua, S. N., & Philippe, F. L. (2015). Autonomy supportive fathers beget system-supporting children: The role of autonomy support on protesting behavior. *Personality and Individual Differences*, *86*, 348-353. https://doi.org/10.1016/j.paid.2015.06.038

Church, A. T., Katigbak, M. S., Locke, K. D., Zhang, H., Shen, J., Vargas-Flores, J. D. J., . . . Ching, C. M. (2013). Need satisfaction and well-being: Testing self-determination theory in eight cultures. *Journal of Cross-Cultural Psychology*, *44*(4), 507-534. https://doi.org/10.1177/0022022112466590

Cichocka, A. (2016). Understanding defensive and secure in-group positivity: The role of collective narcissism. *European Review of Social Psychology*, *27*, 283-317. https://doi.org/10.1080/10463283.2016.1252530

Cichocka, A., & Cislak, A. (2020). Nationalism as collective narcissism. *Current Opinion in Behavioral Sciences*, *34*, 69-74. https://doi.org/10.1016/j.cobeha.2019.12.013

Cichocka, A., Cislak, A., Grondfeldt, B., Wojcik, A., & Winiewski, M. (2020). *Can ingroup love harm the in-group? Collective narcissism and exploitation of in-group members*. Manuscript submitted for publication.

Cichocka, A., Cislak, A., Stronge, S., Osborne, D., & Sibley, C. (2019). Does high self-esteem foster narcissism? Testing the bidirectional relationships between self-esteem, narcissistic admiration and rivalry. *Journal of Research in Personality*, *83*, 103882. https://doi.org/10.1016/j.jrp.2019.103882

Cichocka, A., Golec de Zavala, A., Marchlewska, M., Bilewicz, M., Jaworska, M., & Olechowski, M. (2018). Personal control decreases narcissistic but increases non-narcissistic in-group positivity. *Journal of Personality*, *86*, 465-480. https://doi.org/10.1111/jopy.12328

Cichocka, A., Marchlewska, M., Golec de Zavala, A., & Olechowski, M. (2016). "They will not control us": Ingroup positivity and belief in intergroup conspiracies. *British Journal of Psychology*, *107*, 556-576. https://doi.org/10.1111/bjop.12158

Cislak, A., Cichocka, A., Wojcik, A., & Milfont, T. (2021). Words not deeds: National narcissism, national identification, and support for greenwashing versus genuine proenvironmental campaigns. *Journal of Environmental Psychology*, *74*, Article 101576. https://doi.org/10.1016/j.jenvp.2021.101576

Cislak, A., Marchlewska, M., Wojcik, A., Śliwiński, K., Molenda, Z., Szczepańska, D. & Cichocka, A. (in press). National narcissism and support for anti-vaccination policy:

The mediating role of vaccination conspiracy beliefs. *Group Processes & Intergroup Relations*. Retrieved from https://kar.kent.ac.uk/85719/

Cislak, A., Pyrczak, M., Mikiewicz, A., & Cichocka, A. (2020). Brexit and Polexit: Collective narcissism is associated with the support for leaving the European Union. *Social Psychological Bulletin*, *15*(1), Article e2645. https://doi.org/10.32872/spb.2645

Cislak, A., Wojcik, A. D., & Cichocka, A. (2018). Cutting the forest down to save your face: Narcissistic national identification predicts support for anti-conservation policies. *Journal of Environmental Psychology*, *59*, 65-73. https://doi.org/10.1016/j.jenvp.2018.08.009

Cohen, J. (1988). *Statistical power analysis for the behavioural sciences*. New Jersey: Lawrence Erlbaum Associates.

Correll, J, & Park, B. (2005). A model of the ingroup as a social resource. *Personality and Social Psychology Review*, *9*(4), 341-359. https://doi.org/10.1207/s15327957pspr0904_4

Craig, M. A., & Richeson, J. A. (2014). More diverse yet less tolerant? How the increasingly diverse racial landscape affects White Americans' racial attitudes. *Personality and Social Psychology Bulletin*, *40*, 750-761. https://doi.org/10.1177/0146167214524993

Craig, M. A., & Richeson, J. A. (2017). Information about the US racial demographic shift triggers concerns about anti-White discrimination among the prospective White "minority". *PLoS ONE*, *12*(9), e0185389. https://doi.org/10.1371/journal.pone.0185389

Crosby, F. J., Iyer, A., Clayton. S., & Downing, R. A. (2003). Affirmative action: Psychological data and the policy debates. *American Psychologist*, *58*(2), 93-115. https://doi.org/10.1037/0003-066X.58.2.93

de Figueiredo, R. J. P., & Elkins, Z. (2003). Are patriots bigots? An inquiry into the vices of in-group pride. *American Journal of Political Science*, *47*, 171-188. https://doi.org/10.1111/1540-5907.00012

Deaux, K., & Verkuyten, M. (2014). The social psychology of multiculturalism: Identity and intergroup relations. In V. Benet-Martinez & Y.-Y. Hong (Eds.), *The Oxford handbook of multicultural identity* (pp. 118–138). Oxford University Press.

Deaux, K., Reid, A., Mizrahi, K., & Cotting, D. (1999). Connecting the person to the social: The functions of social identification. In T. R. Tyler, R. M. Kramer, & O. P. John (Eds.), *The psychology of the social self* (pp. 91-113). Mahwah, NJ: Earlbaum.

deCharms, R. (1968). *Personal causation*. New York: Academic.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behaviour*. New York, NY: Plenum.

Deci, E. L., & Ryan, R. M. (1995). Human autonomy: The basis of true self-esteem. In M. H. Kernis (Ed.), *Plenum series in social/clinical psychology. Efficacy, agency, and self-esteem* (pp. 31-49). Plenum Press.

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behaviour. *Psychological Inquiry*, *11*(4), 227-268. http://dx.doi.org/10.1207/S15327965PLI1104_01

Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology*, *49*(3), 182-185. https://doi.org/10.1037/a0012801

Delgado, R. (2013). Precious knowledge: State bans on ethnic studies, book traffickers (librotraficantes), and a new type of race trial. *North Carolina Law Review*, *91*. https://ssrn.com/abstract=2274898

DeMarco, T. C., & Newheiser, A. K. (2019). Attachment to groups: Relationships with group esteem, self-esteem, and investment in ingroups. *European Journal of Social Psychology*, *49*(1), 63-75. https://doi.org/10.1002/ejsp.2500

DeWall, C. N., Baumeister, R. F., & Vohs, K. D. (2008). Satiated with belongingness? Effects of acceptance, rejection, task framing of self-regulatory performance. *Journal of Personality and Social Psychology*, *95*(6), 1367-1382. https://doi.org/10.1037/a0012632

Dieleman, L. M., Pauw, S. S. W., Soenens, B., Mabbe, E., Campbell, R., & Prinzie, P. (2018). Relations between problem behaviours, perceived symptom severity and parenting in adolescents and emerging adults with ASD: The mediating role of parental psychological need frustration. *Research in Developmental Disabilities*, *73*, 21-30. https://doi.org/10.1016/j.ridd.2017.12.012

Duriez, B., & Klimstra, T. (2011). Intrinsic and extrinsic goals, need satisfaction, and well-being: Longitudinal dynamics among college students. *KULeuven: Internal report.* Retrieved from https://bartduriez.com/academic/intrinsic-versus-extrinsic-goals-need-satisfaction-and-well-being-longitudinal-dynamics

Duriez, B., Soenens, B., & Vansteenkiste, M. (2007). In search of antecedents of adolescent authoritarianism: The relative contribution of parental goal promotion and parenting style dimensions. *European Journal of Personality*, *21*(4), 507-527. https://doi.org/10.1002/per.623

Dyduch-Hazar, K., & Mrozinski, B. (2021). Opposite associations of collective narcissism and in-group satisfaction with intergroup aggression via belief in the hedonistic function of revenge. *PLoS ONE*, *16*(3), e0247814. https://doi.org/10.1371/journal.pone.0247814

Dyduch-Hazar, K., Mrozinski, B., & Golec de Zavala, A. (2019). Collective narcissism and in-group satisfaction predict opposite attitudes toward refugees via attribution of hostility. *Frontiers in Psychology, 10,* Article 1901. https://doi.org/10.3389/fpsyg.2019.01901

Easterbrook, M., & Vignoles, V. L. (2012). Different groups, different motives: Identity motives underlying changes in identification with novel groups. *Personality and Social Psychology Bulletin*, *38*(8), 1066-1080. https://doi.org/10.1177/0146167212444614

Easterbrook, M., & Vignoles, V. L. (2013). What does it mean to belong? Interpersonal bonds and intragroup similarities as predictors of felt belonging in different types of groups. *European Journal of Social Psychology*, *43*, 455-462. https://doi.org/10.1002/ejsp.1972

Echterhoff, G., Higgins, E. T., & Levine, J. M. (2009). Shared reality: Experiencing commonality with others' inner states about the world. *Perspectives on Psychological Science*, *4*(5), 496-521. https://doi.org/10.1111/j.1745-6924.2009.01161.x

Eck, J., Schoel, C., Greifeneder, R. (2017). Belonging to a majority reduces the immediate need threat from ostracism in individuals with a high need to belong. *European Journal of Social Psychology, 47*, 273-288. https://doi.org/10.1002/ejsp.2233

Ellemers, N., Spears, R., & Doosje, B. (1997). Sticking together or falling apart: In-group identification as a psychological determinant of group commitment versus individual mobility. *Journal of Personality and Social Psychology, 72*, 617–626. https://doi.org/10.1037/0022-3514.72.3.617

Ellemers, N., Spears, R., & Doosje, B. (2002). Self and social identity. *Annual Review of Psychology*, *53*, 161-186. https://doi.org/10.1146/annurev.psych.53.100901.135228

Emmons, R. A. (1987). Narcissism: Theory and measurement. *Journal of Personality and Social Psychology, 52*, 11-17. https://doi.org/10.1037/0022-3514.52.1.11

Equality and Human Rights Commission. (2020). *Healing a divided Britain: the need for a comprehensive rave equality strategy*. Retrieved from https://www.equalityhumanrights.com/sites/default/files/healing_a_divided_britain_-_the_need_for_a_comprehensive_race_equality_strategy_final.pdf

False claim: Boris Johnson refused offer of 50,000 ventilators from the European Union. (2020, April 8). *Reuters.* Retrieved from https://www.reuters.com/article/uk-factcheck-johnson-ventilators-europe/falseclaim-boris-johnson-refused-offer-of-50000-ventilators-from-the-european-union-idUSKCN21Q350

Faul, F., Eldfelder, E., Lang, A., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioural, and biomedical sciences. *Behaviour Research Methods, 39*, 175-191. https://doi.org/10.3758/BF03193146

Feagin, J. R. (1964). Prejudice and religious types: A focused study of Southern fundamentalists. *Journal for the Scientific Study of Religion, 4*, 3-13. http://dx.doi.org/10.2307/1385200

Federico, C., & Golec de Zavala, A. (2018). Collective narcissism and the 2016 US presidential vote. *Public Opinion Quarterly, 82*, 110-121. https://doi.org/10.1093/poq/nfx048

Findling, M. G., Casey, L. S., Fryberg, S. A., Hafner, S., Blendon, R. J., Benson, J. M., . . . Miller, C. (2019). Discrimination in the United States: Experiences of Native Americans. *Health Services Research, 54*, 1431–1441. https://doi.org/10.1111/1475-6773.13224

Fisher, C. D. (1978). The effects of personal control, competence, and extrinsic reward systems on intrinsic motivation. *Organizational Behaviour and Human Performance, 21*, 273-288. https://doi.org/10.1016/0030-5073(78)90054-5

Ford, R., & Goodwin, M. (2014). Understanding UKIP: Identity, social change, and the left behind. *The Political Quarterly*, *85*, 277-284. https://doi.org/10.1111/1467-923X.12099

Forgas, J. P., & Lantos, D. (2019). Understanding populism: collective narcissism and the collapse of democracy in Hungary. In J. P. Forgas, K. Fiedler, & W. Crano (Eds.), *Applications of social psychology: How social psychology can contribute solution of real-world problems* (pp. 267-291). New York: Psychology Press.

Fritsche, I., Jonas, E., Ablasser, C., Beyer, M., Kuban, J., Manger, A. M., & Schultz, M. (2013). The power of we: Evidence for group-based control. *Journal of Experimental Social Psychology*, *49*(1), 19-32. https://doi.org/10.1016/j.jesp.2012.07.014

Fromm, E. (1957/1995). *The art of loving.* London, UK: Thorsons.

Fromm, E. (1973). *The anatomy of human destructiveness.* London, UK: Pimlico/Random House.

Fukuyama, F. (2018). *Identity: Contemporary identity politics and the struggle for recognition.* London: Profile Books.

Gagne, M., & Deci, E. (2005). Self-determination theory and work motivation. *Journal of Organizational Behaviour*, 26, 331-362. https://doi.org/10.1002/job.322

Gaston, S. (2019). Outrage, offence, and common sense: Public opinion on political correctness in the United Kingdom. Opinium Research. Retrieved from https://www.opinium.com/wp-content/uploads/2019/08/Outrage-Offence-and-Common-Sense-Public-Opinion-on-Political-Correctness-in-the-United-Kingdom.pdf

Gay, K. (2006). *African American holidays, festivals, and celebrations*. Detroit MI: Omnigraphics.

Gayle, D. (2020, October 23). BLM UK gains legal status and renames as Black Liberation Movement UK. *The Guardian.* Retrieved from https://www.theguardian.com/world/2020/oct/23/blm-uk-gains-legal-status-with-renaming-as-black-liberation-movement-uk

Gerber, J., & Wheeler, L. (2009). On being rejected: A meta-analysis of experimental research on rejection. *Perspectives on Psychological Science*, *4*(5), 468-488. https://doi.org/10.1111/j.1745-6924.2009.01158.x

Ghorpade, J., Lackritz, J. R., & Moore, R. (2010). Intrinsic religious orientation: The conservative Christian connection. *The International Journal for the Psychology of Religion*, *20*(3), 201-218. https://doi.org/10.1080/10508619.2010.481230

Gillet, N., Gagne, M., Sauvagere, S., & Fouquereau, E. (2013). The role of supervisor autonomy support, organizational support, and autonomous and controlled motivation in predicting employees' satisfaction and turnover intentions. *European Journal of Work and Organizational Psychology*, *22*, 450-460. https://doi.org/10.1080/1359432X.2012.665228

Golec de Zavala, A. (2018). Collective narcissism: antecedents and consequences of exaggeration of the in-group image. In A. Hermann, Brunell, A, & Foster, J (Eds.), *Handbook of trait narcissism: Key advances, research methods, and controversies* (pp. 79-89). New York: Springer.

Golec de Zavala, A. (2019). Collective narcissism and in-group satisfaction are associated with different emotional profiles and psychological well-being. *Frontiers in Psychology*, *10*, Article 203. https://doi.org/10.3389/fpsyg.2019.00203

Golec de Zavala, A., & Bierwiaczonek, K. (2020). Male, national, and religious collective narcissism predict sexism. *Sex Roles*, *84*, 680-700. https://doi.org/10.1007/s11199-020-01193-3

Golec de Zavala, A., & Cichocka, A. (2012). Collective narcissism and anti-Semitism in Poland. *Group Processes & Intergroup Relations*, *15*, 213–229. https://doi.org/10.1177/1368430211420891

Golec de Zavala, A., & Schatz, R. T. (2013). Extreme forms of ingroup positivity and their negative consequences for intergroup relations. In A. Golec de Zavala & A. Cichocka (Eds.), *Social psychology of social problems: The intergroup context* (pp. 203-227). London, United Kingdom: Palgrave Macmillan.

Golec de Zavala, A., Cichocka, A., & Bilewicz, M. (2013). The paradox of in-group love: Differentiating collective narcissism advances understanding of the relationship between in-group and out-group attitudes. *Journal of Personality*, *81*, 16-28. https://doi.org/10.1111/j.1467-6494.2012.00779.x

Golec de Zavala, A., Cichocka, A., & Iskra-Golec, I. (2013). Collective narcissism moderates the effect of in-group image threat on intergroup hostility. *Journal of Personality and Social Psychology*, *104*, 1019-1039. https://doi.org/10.1037/a0032215

Golec de Zavala, A., Cichocka, A., Eidelson, R., & Jayawickreme, N. (2009). Collective narcissism and its social consequences. *Journal of Personality and Social Psychology*, *97*, 1074-1096. https://doi.org/10.1037/a0016904

Golec de Zavala, A., Cichocka, A., Orehek, E., & Abdollahi, A. (2012). Intrinsic religiosity reduces intergroup hostility under mortality salience. *European Journal of Social Psychology*, *42*(4), 451-461. https://doi.org/10.1002/ejsp.1843

Golec de Zavala, A., Dyduch-Hazar, K., & Lantos, D. (2019). Collective narcissism: Consequences of investing worth in the ingroup's image. *Advances in Political Psychology*, *40*, 37-74. https://doi.org/10.1111/pops.12569

Golec de Zavala, A., Federico, C. M., Sedikides, C., Guerra, R., Lantos, D., Mrozinski, B., . . . Baran T. (2019). Low-self-esteem predicts out-group derogation via collective narcissism, but this relationship is obscured by in-group satisfaction. *Journal of Personality and Social Psychology*, *119*(3), 741-764. http://dx.doi.org/10.1037/pspp0000260

Golec de Zavala, A., Guerra, R., & Simao, C. (2017). The relationship between the Brexit vote and individual predictors of prejudice: Collective narcissism, right wing authoritarianism, social dominance orientation. *Frontiers in Psychology*, *8*, Article 2023. https://doi.org/10.3389/fpsyg.2017.02023

Golec de Zavala, A., Peker, M., Guerra, R., & Baran, T. (2016). Collective narcissism predicts hypersensitivity to in-group insult and direct and indirect retaliatory intergroup hostility. *European Journal of Personality*, *30*, 532-551. https://doi.org/10.1002/per.2067

Gonsalkorale, K., & Williams, K. D. (2007). KKK won't let me play: Ostracism even by a despised outgroup hurts. *European Journal of Social Psychology*, *37*, 1176–1186. https://doi.org/10.1002/ejsp.392

Górska, P., Stefaniak, A., Malinowska, K., Lipowska, K., Marchlewska, M., Budziszewska, M., & Maciantowicz, O. (2019). Too great to act in solidarity: The negative relationship between collective narcissism and solidarity-based collective action. *European Journal of Social Psychology*, *50*, 561-178. https://doi.org/10.1002/ejsp.2638

Gorsuch, R. L., & McPherson, S. E. (1989). Intrinsic/extrinsic measurement: I/E-revised and single-item scales. *Journal for the Scientific Study of Religion*, *28*, 348–354. http://dx.doi.org/10.2307/1386745

Grant, P. R., Abrams, D., Robertson, D. W., & Gray, J. (2014). Predicting protests by disadvantaged skilled immigrants: A test of an integrated social identity, relative deprivation, collective efficacy (SIRDE) model. *Social Justice Research*, *28*, 76-101. https://doi.org/10.1007/s11211-014-0229-z

Grapsas, S., Brummelman, E., Back, M. D., & Denissen, J. J. A. (2020). The "Why" and "How" of narcissism: A process model of narcissistic status pursuit. *Perspectives on Psychological Science*, *15*(1), 150-172. https://doi.org/10.1177/1745691619873350

Greenaway, K. H., Cruwys, T., Haslam, S. A., & Jetten, J. (2016). Social identities promote well-being because they satisfy global psychological needs. *European Journal of Social Psychology*, 46(3), 294-307. https://doi.org/10.1002/ejsp.2169

Greenaway, K. H., Haslam, S. A., Cruwys, T., Branscombe, N. R., Ysseldyk, R. & Heldreth, C. (2015). From "We" to "Me": Group identification enhances perceived personal control with consequences for health and well-being. *Interpersonal Relations and Group Processes*, *109*(1), 53-74. http://dx.doi.org/10.1037/pspi0000019

Greenaway, K., Amiot, C. E., Louis, W. R., & Bentley, S. V. (2017). The role of psychological need satisfaction in promoting student identification. In K. I. Mavor, M. Platow & Bizumic (Eds.), *The self, social identity, and educational contexts* (pp. 176-192). New York: Routledge.

Greer, T., Berman, M., Varan, V., Bobrycki, L., & Watson, S. (2005). We are a religious people; we are a vengeful people. *Journal for the Scientific Study of Religion*, *44*(1), 45-57. https://doi.org/10.1111/j.1468-5906.2005.00264.x

Gries, P., Sanders, M. A., Stroup, D. A., & Cai, H. (2015). Hollywood in China: How American popular culture shapes Chinese views of the "beautiful imperialist" – an experimental analysis. *The China Quarterly*, *224*, 1070-1082. https://doi.org/10.1017/S0305741015000831

Grondfeldt, B., Cichocka, A., Cislak, A., & Wyatt, M. (2020, September 23). Partisanship and political work: Differential associations of partisan identification and partisan narcissism with politicians' skills and performance. PsyArXiv. https://doi.org/10.31234/osf.io/ke4tr

Grondfeldt, B., Cichocka, A., Cislak, A., Sternisko, A., & Eker, I. (2020). *A small price to pay: National narcissism predicts the sacrifice of in-group members during the COVID-19 pandemic.* Manuscript submitted for publication.

Guarascio, F. (2020, March 27). EU says Britain had chance to join ventilator procurement scheme. *Reuters.* Retrieved from https://www.reuters.com/article/us-health-coronavirus-britain-ventilator/eu-says-britain-had-chance-to-join-ventilator-procurement-scheme-idUSKBN21E2IC

Guy, J. (2020, June 11). Britain's imperialist monuments face a bitter reckoning amid Black Lives Matter protests. *CNN*. Retrieved from https://edition.cnn.com/style/article/uk-statues-protest-movement-scli-intl-gbr/index.html

Hall, D. L., Matz, D. C., & Wood, W. (2010). Why don't we practice what we preach? A meta-analytic review of religious racism. *Personality and Social Psychology Review*, *14*(1), 126-139. https://doi.org/10.1177/1088868309352179

Hamaker, E. L., Kuiper, R. M., & Grasman, R. P. P. P. (2015). A critique of the cross-lagged panel model. *Psychological Methods*, *20*(1), 102-116. https://doi.org/10.1037/a0038889

Hamer, K., Penczek, M., & Bilewicz, M. (2018). Between universalistic and defensive forms of group attachment: The indirect effects of national identification on intergroup forgiveness. *Personality and Individual Differences*, *131*, 15-20. https://doi.org/10.1016/j.paid.2018.03.052

Hansen, I. G., & Ryder, A. (2016). In search of a "religion proper": Intrinsic religiosity and coalitional rigidity make opposing predictions of intergroup hostility across religious groups. *Journal of Cross-Cultural Psychology*, *47*(6), 835-857. https://doi.org/10.1177/0022022116644983

Hedges, L. V., Tipton, E., & Johnson, M. C. (2010). Robust variance estimation in meta-regression with dependent effect size estimates. *Research Synthesis Methods*, *1*(1), 39-65. https://doi.org/10.1002/jrsm.5

Hein, V., Koka, A., & Hagger, M. S. (2015). Relationships between perceived teachers' controlling behaviour, psychological need thwarting, anger and bullying behaviour in high-school students. *Journal of Adolescence*, *42*, 103–114. https://doi.org/10.1016/j.adolescence.2015.04.003

Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences*, *33*, 61-83. https://doi.org/10.1017/S0140525X0999152X

Herek, G. M. (1987). Religious orientation and prejudice: A comparison of racial and sexual attitudes. *Personality and Social Psychology Bulletin* 13(1), 34–44. https://doi.org/10.1177/0146167287131003

Hillebrandt, H., Sebastian, C., & Blakemore, S. J. (2011). Experimentally induced social inclusion influences behavior on trust games. *Cognitive Neuroscience*, *2*(1), 27-33. https://doi.org/10.1080/17588928.2010.515020

Hirsch, J. L., & Clark, M. S. (2019). Multiple paths to belonging that we should study together. *Perspectives on Psychological Science, 14*(2), 238-255. https://doi.org/10.1177/1745691618803629

Hodgins, H. S., & Knee, C. R. (2002). The integrating self and conscious experience. In E. L. Deci & R. M. Ryan (Eds.), *The handbook of self-determination research* (pp. 87-100). Rochester, NY: University of Rochester Press.

Hodgins, H. S., Koestner, R., & Duncan, N. (1996). On the compatibility of autonomy and relatedness. *Personality and Social Psychology Bulletin*, 22(3), 227-237. https://doi.org/10.1177/0146167296223001

Hogg, M. A. & Abrams. D. (1998). *Social identifications: A social psychology of intergroup relations and group processes.* Taylor & Francis/Routledge

Hogg, M. A. (2000). Subjective uncertainty reduction through self-categorization: A motivational theory of social identity processes. *European Review of Social Psychology*, *11*(1), 223-255. https://doi.org/10.1080/14792772043000040

Hogg, M. A. (2007). Uncertainty-identity theory. In M. P. Zanna (Ed.), Advances in experimental social psychology (Vol. 39, pp. 69-126). San Diego, CA: Academic Press.

Hogg, M. A., Adelman., J. R., & Blagg, R. D. (2010). Religion in the face of uncertainty: An uncertainty-identity theory account of religiousness. *Personality and Social Psychology Review*, *14*(1), 72-83. https://doi.org/10.1177/1088868309349692

Hogg, M. A., Sherman, D. K., Dierselhuis, J., Maitner, A. T., & Moffit, G. (2007). Uncertainty, entitativity and group identification. *Journal of Experimental Social Psychology*, *43*(1), 135-142. https://doi.org/10.1016/j.jesp.2005.12.008

Holland, J. (2020, June 10). Pulling down controversial statues doesn't mean we are airbrushing the past. *Sky News*. Retrieved from https://news.sky.com/story/pulling-down-controversial-statues-doesnt-mean-we-are-airbrushing-the-past-12004165

Hornsey, M. J., & Jetten, J. (2004). The individual within the group: Balancing the need to belong with the need to be different. *Personality and Social Psychology Review*, *8*(3), 248-264. https://doi.org/10.1207/s15327957pspr0803_2

Hoverd, W., & Sibley, C. G. (2010). Religious and denominational diversity in New Zealand 2009. *New Zealand Sociology*, *25*(2), 59-88.

Hunt, R. A., & King, M. B. (1971). The intrinsic-extrinsic concept: A review and evaluation. *Journal for the Scientific Study of Religion*, *10*, 339-356. https://doi.org/10.2307/1384780

Hunter, J. A., Platow, M. J., Moradi, S., Banks, M., Hayhurst, J., Kafka, S., . . . Ruffman, T. (2017). Subjective belonging and in-group favouritism. *Journal of Experimental Social Psychology*, *73*, 136-146. http://dx.doi.org/10.1016/j.jesp.2017.06.010

Ilardi, B. C., Leone, D., Kasser, T., & Ryan, R. M. (1993). Employee and supervisor ratings of motivation: Main effects and discrepancies associated with job satisfaction and adjustment in a factory setting. *Journal of Applied Social Psychology*, *23*, 1789–1805. https://doi.org/10.1111/j.1559-1816.1993.tb01066.x

Jackson, J. W., & Smith, E. R. (1999). Conceptualizing social identity: A new framework and evidence for the impact of different dimensions. *Personality and Social Psychology Bulletin*, *25*(1), 120-135. https://doi.org/10.1177/0146167299025001010

Jang, H. R., Reeve, J., Cheon, S. H., & Song, Y. G. (2020). Dual process to explain longitudinal gains in physical education students' prosocial and antisocial behaviour: Need satisfaction from autonomy support and need frustration from interpersonal

control. *Sports, Exercise, and Performance Psychology*, *9*(3), 471-487. https://doi.org/10.1037/spy0000168

Jardina, A. (2019). *White identity politics*. New York, NY: Cambridge University Press.

Jasko, K., Webber, D., Kruglanski, A. W., Gelfand, M., Taufiqurrohman, M., Hettiarachchi, M., & Gunaratna R. (2019). Social context moderates the effects of quest for significance on violent extremism. *Journal of Personality and Social Psychology*, *118*, 1165-1187. https://doi.org/10.1037/pspi0000198

Jetten, J., Spears, R., & Manstead, A. S. R. (1997). Strength of identification and intergroup differentiation: The influence of group norms. *European Journal of Social Psychology*, *27*(5), 603-609. https://doi.org/10.1002/(SICI)1099-0992(199709/10)27:5<603::AID-EJSP816>3.0.CO;2-B

Johnson, A. L., Crawford, M. T., Sherman, S. J., Rutchick, A. M., Hamilton, D. L., Ferreira, M. B., & Petrocelli, J. V. (2006). A functional perspective on group memberships: Differential need fulfillment in a group typology. *Journal of Experimental Social Psychology*, *42*(6), 707-719. https://doi.org/10.1016/j.jesp.2005.08.002

Johnson, B. (2020). *PM speech in Greenwich: 3 February 2020* [Transcript]. Retrieved from https://www.gov.uk/government/speeches/pm-speech-in-greenwich-3-february-2020

Johnson, B. [@BorisJohnson]. (2020, June 12). It is absurd and shameful that this national monument should today be at risk of attack by violent protestors. Yes, he sometime expressed opinions that were and are unacceptable to us today, but he was a hero, and he fully deserves his memorial. 2/8 [Tweet]. Retrieved from https://twitter.com/BorisJohnson/status/1271388181343145986

Jost, T. J., Ledgerwood, A., & Hardin, C. D. (2008). Shared reality, system justification, and the relational basis of ideological beliefs. *Social and Personality Psychology Compass*, *2*(1), 171-186. https://doi.org/10.1111/j.1751-9004.2007.00056.x

Kachanoff, F. J., Cooligan, F., Caouette, J., & Wohl, M. J. A. (2020). Free to fly the rainbow flag: the relation between collective autonomy and psychological well-being amongst LGBTQ+ individuals. *Self and Identity*. Advance online publication. https://doi.org/10.1080/15298868.2020.1768890

Kachanoff, F. J., Kteily, N. S., Khullar, T. H., Park, H. J., & Taylor, D. M. (2020). Determining our destiny: Do restrictions to collective autonomy fuel collective action? Journal of Personality and Social Psychology, *119*(3), 600–632. https://doi.org/10.1037/pspi0000217

Kachanoff, F. J., Taylor, D. M., Caouette, J., Khullar, T. H., & Wohl, M. J. A. (2019). The chains on all my people are the chains on me: Restrictions to collective autonomy undermine the personal autonomy and psychological well-being of group members. *Journal of Personality and Social Psychology*, *116*(1), 141-165. https://doi.org/10.1037/pspp0000177

Kachanoff, F. J., Wohl, M. J. A., Koestner, R., & Taylor, D. M. (2020). Them, Us and I: How group contexts influence basic psychological needs. *Current Directions in Psychological Science*, *29*, 47-54. https://doi.org/10.1177/0963721419884318

Kanat-Maymon, Y., Benjamin, M., Stavsky, A., Shoshani, A., & Roth, G. (2015). The role of basic need fulfillment in academic dishonesty: A self-determination theory perspective. *Contemporary Educational Psychology*, *43*, 1–9. https://doi.org/10.1016/j.cedpsych.2015.08.002

Kasser, T., Ryan, R. M., Zax, M., & Sameroff, A. J. (1995). The relations of maternal and social environments to late adolescents' materialistic and prosocial values. *Developmental Psychology, 31*(6), 907–914. https://doi.org/10.1037/0012-1649.31.6.907

Kaufman, E. (2018). *Whiteshift: Populism, immigration and the future of White majorities*. London: Penguin Books.

Kernis, M. H., Paradise, A. W., Whitaker, D. J., Wheatman, S. R., & Goldman, B. N. (2000). Master of one's psychological domain? Not likely if one's self-esteem is unstable. *Personality and Social Psychology Bulletin*, *26*(10), 1297-1305. https://doi.org/10.1177/0146167200262010

Kerr, N. L., & Kaufman-Gilliland, C. M. (1997). ". . . and besides, I probably couldn't have made a difference anyway": Justification of social dilemma defection via perceived self-inefficacy. *Journal of Experimental Social Psychology*, *33*(3), 211–230. https://doi.org/10.1006/jesp.1996.1319

Kirkpatrick, L. A., Waugh, C. E., Valencia, A., & Webster, G. D. (2002). The functional domain specificity of self-esteem and the differential prediction of aggression. *Journal of Personality and Social Psychology*, *82*(5), 756-767. https://doi.org/10.1037/0022-3514.82.5.756

Klar, Y., & Bilewicz, M. (2017). From socially motivated lay historians to lay censors: Epistemic conformity and defensive group identification. *Memory Studies*, *10*, 334-346. https://doi.org/10.1177/1750698017701616

Knowles, M. L., & Gardner, W. L. (2008). Benefits of membership: The activation and amplification of group identities in response to social rejection. *Personality and Social Psychology Bulletin*, *34*(9), 1200-1213. https://doi.org/10.1177/0146167208320062

Kojetin, B. A., McIntosh, D. N., Bridges, R. A., & Spilka, B. (1987). Quest: Constructive search or religious conflict? *Journal for the Scientific Study of Religion*, 26, 111–115. https://doi.org/10.2307/1385845

Kosterman R., & Feshbach, S. (1989). Toward a measure of patriotic and nationalistic attitudes. *Political Psychology*, *10*(2), 257-274. https://doi.org/10.2307/3791647

Kudelik, G. (2018, January 5). National Indigenous People Day. *The Canadian Encylopedia*. Retrieved from https://www.thecanadianencyclopedia.ca/en/article/national-aboriginal-day

Kyprianides, A., Easterbrook, M. J., & Brown, R. (2019). *Group identities benefit well-being by satisfying needs. Journal of Experimental Social Psychology*, *84*, Article 103836. https://doi.org/10.1016/j.jesp.2019.103836

Lalonde, R. N., & Cameron, J. E. (1993). An intergroup perspective on immigrant acculturation with a focus on collective strategies. *International Journal of Psychology*, *28*(1), 57-74. https://doi.org/10.1080/00207599308246918

Landau, M. J., Kay, A. C., & Whitson, J. A. (2015). Compensatory control and the appeal of structured world. *Psychological Bulletin*, *141*(3), 694-722. http://dx.doi.org/10.1037/a0038703

Larkin, B., & Fink, J. S. (2019). Toward a better understanding of fan aggression and dysfunction: The moderating role of collective narcissism. *Journal of Sport Management*, *33*, 69-78. https://doi.org/10.1123/jsm.2018-0012

Lavigne, G. L., Vallerand, R. J., & Crevier-Braud, L. (2011). The fundamental need to belong: On the distinction between growth and deficit-reduction orientations. *Personality and Social Psychology Bulletin*, *37*(9), 1185-1201. https://doi.org/10.1177/0146167211405995

Leach, C. W., Spears, R., Branscombe, N. R., & Doosje, B. (2003). Malicious pleasure: Schadenfreude at the suffering of another group. *Journal of Personality and Social Psychology*, *84*, 932-943. https://doi.org/10.1037/0022-3514.84.5.932

Leach, C. W., van Zomeren, M., Zebel, S., Vliek, M. L. W., Pennekamp, S. F., Doosje, B., . . . Spears, R. (2008). Group-level self-definition and self-investment: A hierarchical (multicomponent) model of in-group identification. *Journal of Personality and Social Psychology*, *95*, 144–165. https://doi.org/10.1037/0022-3514.95.1.144

Leander, N. P., & Chartrand, T. L. (2017). On thwarted goals and displaced agression: A compensatory competence model. *Journal of Experimental Social Psychology*, 72, 88-100. https://doi.org/10.1016/j.jesp.2017.04.010

Leary, M. R. (2005). Varieties of interpersonal rejection. In K. D. Williams, J. P. Forgas, & W. V. Hippel (Eds.), *Sydney Symposium of Social Psychology series. The social outcast: Ostracism, social exclusion, rejection, and bullying* (pp. 35-51). New York: Psychology Press.

Leary, M. R. (2012). Sociometer theory. In P. A. M. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories of social psychology* (Vol. 2, pp. 141-159). SAGE Publications Ltd.

Leary, M. R., & Baumeister, R. F. (2000). The nature and function of self-esteem: Sociometer theory. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 32, pp. 1-62). San Diego Academic Press. https://doi.org/10.1016/S0065-2601(00)80003-9

Leary, M. R., Kelly, K. M., Cottrell, C. A., & Schreindorfer, L. S. (2013). Construct validity of the need to belong scale: Mapping the nomological network. *Journal of Personality Assessment*, *95*(6), 610-624. https://doi.org/10.1080/00223891.2013.819511

Leary, M. R., Twenge, J. M., & Quinlivan, E. (2006). Interpersonal rejection as a determinant of anger and aggression. *Personality and Social Psychology Review*, *10*(2), 111-132. https://doi.org/10.1207/s15327957pspr1002_2

Leary, M.R., & MacDonald, G. (2003). Individual differences in self-esteem: A review and theoretical integration. In M. R. Leary and J. P. Tangney (Eds.), *Handbook of self and identity* (pp. 401–418). New York, NY: Guilford Press.

Legault, L., & Amiot, C E. (2014). The role of autonomy in intergroup processes: Toward an integration of self-determination theory and intergroup approaches. In N. Weinstein (Ed.), *Human motivation and interpersonal relationships: Theory, research and applications* (pp. 159-190). Springer, Dordrecht. https://doi.org/10.1007/978-94-017-8542-6_8

Legault, L., Green-Demers, I., Grant, P., & Chung, J. (2007). On the self-regulation of implicit and explicit prejudice: A self-determination theory perspective. *Personality and Social Psychology Bulletin*, *33*(5), 732-749. https://doi.org/10.1177/0146167206298564

Legault, L., Gutsell, J. N., & Inzlicht, M. (2011). Ironic effects of antiprejudice messages: How motivational interventions can reduce (but also increase) prejudice. *Psychological Science*, *22*(12), 1472-1477. https://doi.org/10.1177/0956797611427918

Legault, L., Weinstein, N., Mitchell, J., Inzlicht, M., Pyke, K., & Upal, A. (2017). Owning up to negative ingroup traits: How personal autonomy promotes the integration of group identity. *Journal of Personality*, *85*(5), 687-701. https://doi.org/10.1111/jopy.12277

Lévi-Strauss, C. (1955/1992). *Tristes tropiques* (J. Weightman, & D. Weightman Trans.). London: Penguin Books.

Lincoln, M. (2020). Study the role of hubris in nations' COVID-19 response. *Nature*, *585*(7825). Article 325. https://doi.org/10.1038/d41586-020-02596-8

Lonsdale, A., Hodge, K., & Rose, E. (2009). Athlete burnout in elite sport: A self-determination perspective. *Journal of Sports Sciences*, 27(8), 785-795. https://doi.org/10.1080/02640410902929366

Lynch, R., Palestis, B. G., & Trivers, R. (2017). Religious devotion and extrinsic religiosity affect in-group alturism and out-group hostility oppositely in Rural Jamaica. *Evolutionary Psychological Science*, *3*, 335-344. https://doi.org/10.1007/s40806-017-0103-y

Lyons, P. A., Kenworthy, J., & Popan, J. (2010). Ingroup identification and group level narcissism as predictors of U.S. citizens' attitudes and behavior toward Arab immigrants. *Personality and Social Psychology Bulletin*, *36*, 1267–1280. https://doi.org/10.1177/0146167210380604

Mahadevan, N., Gregg, A. P., & Sedikides, C. (2019). Is self-regard a sociometer or a hierometer? Self-esteem tracks status and inclusion, narcissism tracks status. *Personality Process and Individual Differences*, *116*, 444-466. https://doi.org/10.1037/pspp0000189

Major, B., Blodorn, A., & Blascovich, G. M. (2018). The threat of increasing diversity: Why many White Americans support Trump in the 2016 presidential election. *Group Processes & Intergroup Relations*, *21*(6), 931-940. https://doi.org/10.1177/1368430216677304

Maliepaard, M., & Verkuyten, M. (2018). National disidentification and minority identity: a study among Muslims in Western Europe. *Self and Identity*, *17*(1), 75-91. https://doi.org/10.1080/15298868.2017.1323792

Malone, G. P., Pillow, D. R., & Osman, A. (2012). The general belongingness scale (GBS): Assessing achieved belongingness. *Personality and Individual Differences*, *52*(3), 311-316. https://doi.org/10.1016/j.paid.2011.10.027

Maltby, J. (1999). The internal structure of a derived, revised, and amended measure of religious orientation scale: The "age-universal" I-E scale-12. *Social Behaviour and Personality*, 27(4), 407-412. https://doi.org/10.2224/sbp.1999.27.4.407

Marchlewska, M., Cichocka, A., Jaworska, M., Golec de Zavala, A., & Bilewicz, M. (2020). Superficial ingroup love? Collective narcissism predicts ingroup image defense, outgroup prejudice, and lower ingroup loyalty. *British Journal of Social Psychology*, *59*(4), 857-875. https://doi.org/10.1111/bjso.12367

Marchlewska, M., Cichocka, A., Łozowski, F., Górska, P., & Winiewski, M. (2019). In search of an imaginary enemy: Catholic collective narcissism and the endorsement of gender conspiracy beliefs. *The Journal of Social Psychology*, *159*, 766-779. https://doi.org/10.1080/00224545.2019.1586637

Marchlewska, M., Cichocka, A., Panayiotou, O., Cattellanos, K., & Batayneh, J. (2018). Populism as identity politics: Perceived in-group disadvantage, collective narcissism, and support for populism. *Social Psychological and Personality Science*, *9*, 151-162. https://doi.org/10.1177/1948550617732393

Marchlewska, M., Górska, P., Malinowska, K., & Kowalski, J. (2021). Threatened masculinity: Gender-related collective narcissism predicts prejudice toward gay and lesbian people among heterosexual men in Poland. *Journal of Homosexuality*. https://doi.org/10.1080/00918369.2021.1907067

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, *98*(2), 224-253. https://doi.org/10.1037/0033-295X.98.2.224

Marshik, T., Ashton, P. T., & Algina, J. (2017). Teachers' and students' needs for autonomy, competence, and relatedness as predictors of students' achievement. *Social Psychology of Education, 20*, 39–67. https://doi.org/10.1007/s11218-016-9360-z

Martiny, S. E., & Rubin, M. (2016). Towards a clearer understanding of social identity theory's self-esteem hypothesis. In S. McKeown, R. Haji, & N. Ferguson (Eds.), *Understanding peace and conflict through social identity theory: Contemporary global perspectives* (pp. 19-32). New York, NY: Springer. https://doi.org/10.1007/978-3-319-29869-6_2

Mashuri, A., van Leeuwen, E., Zaduqisti, E., Sukmawati, F., Sakdiah, H., & Herani, I. (2020). The psychological antecedents of resistance to humanitarian aid. *Group Processes & Intergroup Relations*. Advance online publication. https://doi.org/10.1177/1368430220962179

Miserandino, M. (1996). Children who do well in school: Individual differences in perceived competence and autonomy in above-average children. *Journal of Educational Psychology*, *88*(2), 203-214. https://doi.org/10.1037/0022-0663.88.2.203

Molenda, Z., Marchlewska, M., Gorska, P., Lipowska, K., & Malinowska, K. (2020). *The fear of criticism? Catholic collective narcissism and paedophilia myths acceptance.* Manuscript submitted for publication.

Moller, A. C., Deci, E. L., & Ryan, R. M. (2006). Choice and ego-depletion: The moderating role of autonomy. *Personality and Social Psychology Bulletin*, 32, 1024-1036. https://doi.org/10.1177/0146167206288008

Mora, L. E., Stavrinides, P., & McDermut W. (2014). Religious fundamentalism and religious orientation among the Greek Orthodox. *Journal of Religion & Health*, 53, 1498-1513. https://doi.org/10.1007/s10943-013-9734-x

Morf, C. C., Weir, C., & Davidov, M. (2000). Narcisisism and intrinsic motivation: The role of goal congruence. *Journal of Experimental Psychology*, *36*(4), 424-438. https://doi.org/10.1006/jesp.1999.1421

Mortimer, C. (2017, August 3). China's Muslim minority banned from using their own language in schools. *Independent*. Retrieved from https://www.independent.co.uk/news/world/asia/china-muslim-minority-school-language-ban-han-xinjiang-uyghur-hotan-hetian-government-communist-party-a7873446.html

Mulhall, J. (2019). Modernising and mainstreaming: The contemporary British far right. HOPE not hate research report. Retrieved from https://www.gov.uk/government/publications/modernising-and-mainstreaming-the-contemporary-british-far-right

Mullin, B. A., & Hogg, M. A. (1999). Motivations for group membership: The role of subjective importance and uncertainty reduction. *Basic and Applied Social Psychology*, *21*(2), 91-102. https://doi.org/10.1207/15324839951036443

Muris, P., Schouten, E., Meesters, C., & Gijsbers, H. (2003). Contingency-competence-control-related beliefs and symptoms of anxiety and depression in a young adolescent sample. *Child Psychiatry and Human Development*, *33*, 325-339. https://doi.org/10.1023/A:1023040430308

Muthen, L. K. (2006, October 18). Warning re linear dependency [Msg 2]. Message posted to http://www.statmodel.com/discussion/messages/11/1720.html?1558656188

Muthén, L. K., & Muthén, B. O. (1998–2017). *MPLUS user's guide*. Los Angeles, CA: Muthén & Muthén.

Neyrinck, B., Lens W., Vansteenkiste, M., & Soenens, B. (2010). Updating Allport's and Batson's framework of religious orientations: A reevaluation from the perspective of self-determination theory and Wulff's social cognitive model. *Journal for the Scientific Study of Religion*, *49*(3), 425-438. https://doi.org/10.1111/j.1468-5906.2010.01520.x

Neyrinck, B., Lens, W., & Vansteenkiste, M. (2005). Goals and regulations of religiosity: A motivational analysis. In M. L. Maehr, & S. Karabenick (Eds.), *Advances in motivation and achievement* (pp. 77-106). Greenwich, CT: Jai Press.

Neyrinck, B., Vansteenkiste, M., Lens, W., Duriez, B., & Hutsebaut, D. (2006). Cognitive, affective and behavioral correlates of internalization of regulations for religious activities. *Motivation and Emotion*, *30*, 321-332. https://doi.org/10.1007/s11031-006-9048-3

Nezlek, J. B., Kowalski, R. M., Leary, M. R., Blevins, T., & Holgate, S. (1997). Personality moderators of reactions to interpersonal rejection: Depression and trait self-esteem. *Personality and Social Psychology Bulletin*, *23*, 1235-1244. https://doi.org/10.1177/01461672972312001

Ng, J. Y. Y., Ntoumanis, N., Thogersen-Ntoumani, C., Deci, E. L., Ryan, R. M., Duda, J. L., & Williams, G. C. (2012). Self-determination theory applied to health contexts: A meta-analysis. *Perspectives on Psychological Science*, *7*(4), 325–340. https://doi.org/10.1177/1745691612447309

Niblett, R. (2016). Britain, EU, and the sovereignty myth. *Chatham House research paper.* Retrieved from https://www.chathamhouse.org/publication/britain-eu-and-sovereignty-myth

Nichols, A. L., & Webster, G. D. (2013). The single-item need to belong scale. *Personality and Individual Differences*, *55*(2), 189-192. https://doi.org/10.1016/j.paid.2013.02.018

Nix, G. A., Ryan, R. M., Manly, J. B., & Deci, E. L. (1999). Revitalization through self-regulation: The effects of autonomous and controlled motivation on happiness and vitality. *Journal of Experimental Social Psychology*, 35, 266-284. https://doi.org/10.1006/jesp.1999.1382

Noor, M., Shnabel, N., Halabi, S., & Nadler, A. (2012). When suffering begets suffering: The psychology of competitive victimhood between adversarial groups in violent conflicts. *Personality and Social Psychology Review*, *16*(4), 351-374. https://doi.org/10.1177/1088868312440048

Norton, M, I., & Sommers, S. R. (2011). Whites see racism as a zero-sum game that they are now losing. *Perspectives on Psychological Science*, *6*, 215-218. https://doi.org/10.1177/1745691611406922

Ntoumanis, N., & Standage, M. (2009). Morality in sport: A self-determination theory perspective. *Journal of Applied Sport Psychology*, *21*, 365-380. https://doi.org/10.1080/10413200903036040

O'Brien, B. (2020, June 3). New charges against Minneapolis policemen as protests continue. *Reuters.* Retrieved from https://www.reuters.com/article/us-minneapolis-police-protests/new-charges-against-minneapolis-policemen-as-protests-continue-idUSKBN23A1FY

Osborne, D., Milojev, P., & Sibley, C. G. (2016). Examining the indirect effects of religious orientations on well-being through personal locus of control. *European Journal of Social Psychology*, *46*, 492-505. https://doi.org/10.1002/ejsp.2182

Packer, D. J. (2008). On being both with us and against us: A normative conflict model of dissent in social groups. *Personality and Social Psychology Review*, *12*(1), 50–72. https://doi.org/10.1177/1088868307309606

Packer, D. J., & Chasteen, A. L. (2010). Loyal deviance: Testing normative conflict model of dissent in social groups. *Personality and Social Psychology Bulletin*, *36*(1), 5-18. https://doi.org/10.1177/0146167209350628

Pargament, K. I. (2002). The bitter and the sweet: An evaluation of the costs and benefits of religiousness. *Psychological Inquiry*, *13*(3), 168-181. https://doi.org/10.1207/S15327965PLI1303_02

Parker, P. D., Ryan, R. M., Duineveld, J. J., & Bradshaw, E. L. (2019). Validation of the social identity group need satisfaction and frustration scale. PsyArXiv. https://doi.org/10.31234/osf.io/ycbwe

Parveen, N., Tait, R., Sabbagh, D., & Dodd, V. (2020, June 11). Tensions rise over race and heritage as more statues are attacked. *The Guardian*. Retrieved from https://www.theguardian.com/us-news/2020/jun/11/fears-of-violence-stop-london-racism-protest-as-statue-attacks-continue

Pelletier, L. G., Fortier, M. S., Vallerand, R. J., & Brière, N. M. (2001). Associations among perceived autonomy support, forms of self-regulation, and persistence: A prospective study. *Motivation and Emotion*, *25*(4), 279–306. https://doi.org/10.1023/A:1014805132406

Petta, G., & Walker, I. (1992). Relative deprivation and ethnic identity. *British Journal of Social Psychology*, *31*(4), 285-293. https://doi.org/10.1111/j.2044-8309.1992.tb00973.x

Pettigrew, T. F., Christ, O., Wagner, U., Meertens, R. W., van Rick, R., & Zick, A. (2008). Relative deprivation and intergroup prejudice. *Journal of Social Issues*, *64*(2), 385-401. https://doi.org/10.1111/j.1540-4560.2008.00567.x

Pew Research Center (2016). On views of race and inequality, Blacks and Whites are worlds apart. Retrieved from https://www.pewsocialtrends.org/2016/06/27/on-views-of-race-and-inequality-blacks-and-whites-are-worlds-apart/

Pew Research Center (2020). Amid national reckoning, Americans divided on whether increased focus on race will lead to major policy change. Retrieved from

https://www.pewresearch.org/social-trends/2020/10/06/amid-national-reckoning-americans-divided-on-whether-increased-focus-on-race-will-lead-to-major-policy-change/

Pickett, C. L., & Brewer, M. B. (2005). The role of exclusion in maintaining ingroup inclusion. In D. Abrams, M. A. Hogg, & J. M. Marques (Eds.), *The social psychology of inclusion and exclusion* (pp. 89-111). Psychology Press.

Pickett, C. L., Gardner, W. L., & Knowles, M. (2004). Getting a cue: the need to belong and enhanced sensitivity to social cues. *Personality and Social Psychology Bulletin*, *30*, 1095-1107. https://doi.org/10.1177/0146167203262085

Pickett, C. L., Silver, M. D., & Brewer, M. B. (2002). The impact of assimilation and differentiation needs on perceived group importance and perceptions of ingroup size. *Personality and Social Psychology Bulletin*, *28*(4), 546-568. https://doi.org/10.1177/0146167202287011

Pillow, D. R., Malone, G. P., & Hale, W. (2015). The need to belong and its association with a fully satisfying relationships: A tale of two measures. *Personality and Individual Differences*, *74*, 259-264. https://doi.org/10.1016/j.paid.2014.10.031

Postmes, T., Haslam, S. A., & Jans, L. (2013). A single-item measure of social identification: Reliability, validity, and utility. *British Journal of Social Psychology*, *52*, 597-617. https://doi.org/10.1111/bjso.12006

Pruessner, J. C., Baldwin, M. W., Dedovic, K., Renwick, R., Mahani, K., Lord, C., . . . Lupien, S. (2005). Self-esteem, locus of control, hippocampal volume, and cortisol regulation in young and old adulthood. *NeuroImage*, *28*(4), 815-826. https://doi.org/10.1016/j.neuroimage.2005.06.014

Public Religion Research Institute (2016). How immigration and concerns about cultural changes are shaping the 2016 election. Retrieved from https://www.prri.org/wp-content/uploads/2016/06/PRRI-Brookings-2016-Immigration-survey-report.pdf

Putnam, A. L., Ross, M. Q., Soter, L. K., & Roediger, H. L. (2018). Collective narcissism: Americans exaggerate the role of their home state in appraising U.S. history. *Psychological Science*, *29*, 1414-1422. https://doi.org/10.1177/0956797618772504

Rademaker, L. (2019, May 30). Thre great Australian silencing: The elimination of Aboriginal languages and the legacy of colonization. *ABC News*. Retrieved from https://www.abc.net.au/religion/the-elimination-of-aboriginal-languages-and-the-legacy-of-colon/10731474

Randsley de Moura, G., Abrams, D., Retter, C., Gunnarsdottir, S., & Ando, K. (2009). Identification as organizational anchor: How identification and job satisfaction combine to predict turnover intention. *European Journal of Social Psychology*, *39*, 540-557. https://doi.org/10.1002/ejsp.553

Raskin, R., & Terry, H. (1988). A principal-components analysis of the Narcissistic Personality Inventory and further evidence of its construct validity. *Journal of Personality and Social Psychology*, *54*, 890-902. https://doi.org/10.1037/0022-3514.54.5.890

Renfro, C. L., Duran, A., Stephan, W. G., & Clason, D. L. (2006). The role of threat in attitudes toward affirmative action and its beneficiaries. *Journal of Applied Social Psychology*, *36*, 41-74. https://doi.org/10.1111/j.0021-9029.2006.00003.x

Rhodewalt, F., & Vohs, K. D. (2005). Defensive strategies, motivation, and the self: A self-regulatory process view. In A. J. Elliot, & C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 548-555). New York, NY: Guilford Press.

Richard, F. D., Bond, C. F., & Stokes-Zoota, J. J. (2003). One hundred years of social psychology quantitatively described. *Review of General Psychology*, *7*(4), 331-363. https://doi.org/10.1037/1089-2680.7.4.331

Rip, B., Vallerand, R. J., & Lafreniere, M. A. K. (2012). Passion for a cause, passion for a creed: On ideological passion, identity threat, and extremism. *Journal of Personality*, *80*(3), 573-602. https://doi.org/10.1111/j.1467-6494.2011.00743.x

Roccas, S., Klar, Y., & Liviatan, I. (2006). The paradox of group-based guilt: Modes of national identification, conflict vehemence, and reactions to the in-group's moral violations. *Journal of Personality and Social Psychology*, *91*, 698–711. https://doi.org/10.1037/0022-3514.91.4.698

Roccas, S., Sagiv, L., Schwartz, S., Halevy, N., & Eidelson, R. (2008). Toward a unifying model of identification with groups: Integrating theoretical perspectives. *Personality and Social Psychology Review*, *12*, 280-306. https://doi.org/10.1177/1088868308319225

Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied*, *80*(1), 1–28. https://doi.org/10.1037/h0092976

Rubin, M., & Hewstone, M. (1998). Social identity theory's self-esteem hypothesis: A review and some suggestions for clarification. *Personality and Social Psychology Review*, *2*, 40-62. https://doi.org/10.1207/s15327957pspr0201_3

Runciman, W. G. (1966). *Relative deprivation and social justice: A study of attitudes to social inequality in twentieth-century England.* Berkeley, CA: University of California Press.

Ryan R. M. & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology, 25*, 54-67. https://doi.org/10.1006/ceps.1999.1020

Ryan, R. M. (1995). Psychological needs and the facilitation of integrative processes. *Journal of Personality*, *63*(3), 397-427. https://doi.org/10.1111/j.1467-6494.1995.tb00501.x

Ryan, R. M., & Deci, E. L. (2003). On assimilating identities to the self: A self-determination theory perspective on internalization and integrity within cultures. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (pp. 253-274). New York, NY: Guilford Press.

Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. New York, NY: Guilford Press.

Ryan, R. M., Rigby, S., & King, K. (1993). Two types of religious internalization and their relations to religious orientations and mental health. *Journal of Personality and Social Psychology*, *65*, 586-596. https://doi.org/10.1037/0022-3514.65.3.586

Ryan, R. M., Soenens, B., & Vansteenkiste, M. (2019). Reflections on self-determination theory as an organizing framework for personality psychology: Interfaces, integrations, issues, and unfinished business. *Journal of Personality*, *87*(1), 115-145. https://doi.org/10.1111/jopy.12440

Sabbagh, D. (2020, June 10). Campaigners fear far-right ‘defence’ of statues such as Churchill’s. *The Guardian*. Retrieved from https://www.theguardian.com/world/2020/jun/10/far-right-protesters-plan-defence-of-statues-such-as-churchills

Saiya, N., & Manchanda, S. (2020). Do burqa bans make us safer? Veil prohibitions amd terrorism in Europe. *Journal of European Public Policy*, *27*, 1781-1800. https://doi.org/10.1080/13501763.2019.1681494

Sani, F. (2008). *Self continuity: Individual and collective perspectives*. Psychology Press.

Schaafsma, J. & Williams, K. D. (2012). Exclusion, intergroup hostility, and religious fundamentalism. *Journal of Experimental Social Psychology*, *48*, 829-837. https://doi.org/10.1016/j.jesp.2012.02.015

Schatz, I. (2017). Fast, free, and targeted: Reddit as a source for recruiting participants online. *Social Science Computer Review*, *35*(4), 537-549. https://doi.org/10.1177/0894439316650163

Schatz, R. T., Staub, E., & Lavine, H. (1999). On the varieties of national attachment: Blind versus constructive patriotism. *Political Psychology*, *20*, 151–174. https://doi.org/10.1111/0162-895X.00140

Schmader, T., Johns, M., & Forbes, C. (2008). An integrated process model of stereotype threat effects on performance. *Psychological Review*, *115*(2), 336–356. https://doi.org/10.1037/0033-295X.115.2.336

Schmitt, M. T., & Branscombe, N. R. (2001). The good, the bad, and the manly: Threats to one's prototypicality and evaluations of fellow in-group members. *Journal of Experimental Psychology*, *37*(6), 510-517. https://doi.org/10.1006/jesp.2001.1476

Schmitt, M. T., Branscombe, N. R., Postmes, T., & Garcia, A. (2014). The consequences of perceived discrimination for psychological well-being: A meta-analytic review. *Psychological Bulletin*, *140*(4), 921-948. https://doi.org/10.1037/a0035754

Sedikides, C., & Gebauer, J. E. (2010). Religiosity as self-enhancement: A meta-analysis of the relation between socially desirable responding and religiosity. *Personality and Social Psychology Review*, *14*(1), 17-36. https://doi.org/10.1177/1088868309351002

Sengupta, N, Osborne, D., & Sibley, C. G. (2019). On the psychological function of Nationalistic "Whitelash". *Political Psychology*, *40*(4), 759-775. https://doi.org/10.1111/pops.12563

Sheldon, K., & Bettencourt, B. A. (2002). Psychological need-satisfaction and subjective well-being within social groups. *British Journal of Social Psychology, 41*, 25-38. https://doi.org/10.1348/014466602165036

Sibley, C. G. (2018). *Sampling procedure and sample details for the New Zealand Attitudes and Values Study*. NZAVS Technical Documents, e01. Retrieved from https://cdn.auckland.ac.nz/assets/psych/about/our-research/nzavs/NZAVSTechnicalDocuments/NZAVS-Technical-Documents-e01-Sampling-Procedure-and-Sample-Details.pdf

Sicilia, A., Alcarez-Ibanez, M., Lirola, M. J., Burgueno, R., & Maher, A. (2018). Exercise motivational regulations and exercise addiction: The mediating role of passion. *Journal of Behavioral Addictions, 7*(2), 482-492. https://doi.org/10.1556/2006.7.2018.36

Sidanius, J. & Pratto, F. (1999). *Social dominance: An intergroup theory of social hierarchy and opression*. Cambridge University Press. https://doi.org/10.1017/CBO9781139175043

Sidanius, J., & Petrocik, J. R. (2001). Communal and national identity in a multi-ethnic state: A comparison of three perspectives. In R. D. Ashmore, L. Jussim, & D. Wilder (Eds.), *Social identity, intergroup conflict, and conflict resolution* (pp. 101-129). Oxford, England: Oxford University Press.

Smeekes, A., & Verkuyten, M. (2013). Collective self-continuity. Group identification and in-group defense. *Journal of Experimental Social Psychology, 49*(6), 984-994. https://doi.org/10.1016/j.jesp.2013.06.004

Soenens, B., Deci, E. L., & Vansteenkiste, M. (2017). How parents contribute to children's psychological health: The critical role of psychological need support. In L.

Wehmeyer, T. D. Little, S. J. Lopez, K. A. Shogren, & R. Ryan (Eds.), Development of self-determination through the life-course (pp. 171-187). New York: Springer.

Stack, L. (2016, December 19). How the 'War on Christmas' controversy was created. *The New York Times*. Retrieved from https://www.nytimes.com/2016/12/19/us/war-on-christmas-controversy.html

Sternisko, A., Cichocka, A., Cislak, A., & Van Bavel, J. J. (2020, May 21). Collective narcissism predicts the belief and dissemination of conspiracy theories during the COVID-19 pandemic. PsyArXiv. https://doi.org/10.31234/osf.io/4c6av

Stollberg, J., Fritsche, I., & Backer, A. (2015). Striving for group agency: Threat to personal control increases the attractiveness of agentic groups. *Frontiers in Psychology*, *6*, Article 649. https://doi.org/10.3389/fpsyg.2015.00649

Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston: Pearson/ Allyn & Bacon.

Tafarodi, R. W., & Swann, W. B. Jr. (1995). Self-liking and self-competence as dimensions of global self-esteem: Initial validation of a measure. *Journal of Personality Assessment*, *65*(2), 322–342. https://doi.org/10.1207/s15327752jpa6502_8

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict In W. G Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33-47). Monterey CA: Brooks/Cole.

Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behaviour. In S. Worchel, & W. G. Austin (Eds.), *Psychology of intergroup relation* (pp. 7-24). Chicago, IL: Hall Publishers.

Tajfel, H., Billig, M. G., Bundy, R. P., & Flament, C. (1971). Social categorization and intergroup behaviour. *European Journal of Social Psychology*, *1*(2), 149-178. https://doi.org/10.1002/ejsp.2420010202

Tajfel, T. (1981). *Human groups and social categories: Studies in social psychology.* New York: Cambridge University Press.

Talwar, D. (2016, May 23). UK attitudes towards Islam 'concerning' after survey of 2,000 people. *BBC.* Retrieved from https://www.bbc.co.uk/news/newsbeat-36346886

Tausch, N., Becker, J. C., Spears, R., Christ, O., Saab, R., Singh, P., & Siddiqui, R. N. (2011). Explaining radical group behavior: Developing emotion and efficacy routes to normative and non-normative collective action. *Journal of Personality and Social Psychology*, *101*(1), 129–148. https://doi.org/10.1037/a0022728

Taylor, A. (2020, July, 2). The statues brought down since the George Floyd protests began. *The Atlantic*. Retrieved from https://www.theatlantic.com/photo/2020/07/photos-statues-removed-george-floyd-protests-began/613774/

Thogersen-Ntoumani, C., & Ntoumanis, N. (2007). A self-determination theory approach to the study of body image concerns, self-presentation and self-perceptions in a sample of aerobic instructors. *Journal of Health Psychology*, *12*(2), 301–315 https://doi.org/10.1177/1359105307074267

Thomas, W. E., Brown, R., Easterbrook, M. J., Vignoles, V. L., Manzi, C., D'angelo, C., & Holt, J. J. (2017). Social identification in sports teams: The role of personal, social, and collective identity motives. *Personality and Social Psychology Bulletin*, *43*(4), 508-523. https://doi.org/10.1177/0146167216689051

Tian, L., Zhang, X., & Huebner, E. S. (2018). The effects of satisfaction of basic psychological needs at schol on children's prosocial behaviour and antisocial behaviour: The mediating role of school satisfaction. *Frontiers in Psychology, 9*, Article 548. https://doi.org/10.3389/fpsyg.2018.00548

Tiessen, M., Taylor, D. M., & Kirmayer, L. J. (2009). A key individual-to-community link: The impact of perceived collective control on Aboriginal youth well-being.

Pimatisiwin: A Journal of Aboriginal and Indigenous Community Health, *7*(2), 241-267.

Tippet, B. (2020). *Split: Class divides uncovered*. London: Pluto Press.

Turner, J. C. (1982). Toward a cognitive definition of the group. In H. Tajfel (Ed.), *Social identity and intergroup relations* (pp. 15-40). New York: Cambridge University Press.

Turner, J. C., & Reynolds, K. J. (2012). Self-categorization theory. In P. A. M., Van Lange, A. W. Kruglanski, E. T. Higgins (Eds.), *Handbook of theories of social psychology* (Vol. 2, pp. 399-417). Sage Publications.

Twenge, J. M., Baumeister, R. F., DeWall, C. N., Ciarocco, N. J., & Bartels, J. M. (2007). Social exclusion decreases prosocial behaviour. *Journal of Personality and Social Psychology*, *92*(1), 56-66. https://doi.org/10.1037/0022-3514.92.1.56

Twenge, J. M., Baumeister, R. F., Tice, D. M., & Stucke, T. S. (2001). If you can't join them, beat them: Effects of social exclusion on aggressive behaviour. *Journal of Personality and Social Psychology*, *81*(6), 1058-1069. https://doi.org/10.1037/0022-3514.81.6.1058

Tyler, T. R., & Blader, S. L. (2002). Autonomous vs. Comparative status: Must we be better than others to feel good about ourselves? *Organizational Behaviour and Human Decision Processes*, *89*(1), 813-838. https://doi.org/10.1016/S0749-5978(02)00031-6

Vahlstein, T. J., Mutter, E. R., Oettingen, G., & Gollwitzer, P. M. (2020). Relatedness needs and negative fantasies as the origins of obsessive thinking in romantic relationships. *Motivation and Emotion*, *44*, 226-243. https://doi.org/10.1007/s11031-019-09802-9

Valcke, B., Van Hiel, A., Van Assche J., Van Roey, T., Onraet, E., & Roets, A. (2020). The need for inclusion: The relationships between relational and collective inclusion needs

and psychological well- and ill-being. *European Journal of Social Psychology*, *50*, 579-596. https://doi.org/10.1002/ejsp.2641

Vallerand, R. J. (2012). From motivation to passion: In search of the motivational processes involved in a meaningful life. *Canadian Psychology*, *53*, 42-52. https://doi.org/10.1037/a0026377

Vallerand, R. J., Blanchard, C. M., Mageau, G. A., Koestner, R., Ratelle, C. F., Leonard, M., . . . Marsolais, J. (2003). Les Passions de l'âme: On obsessive and harmonious passion. *Journal of Personality and Social Psychology*, *85*(4), 756-767. https://doi.org/10.1037/0022-3514.85.4.756

Vallerand, R. J., Fortier, M. S., & Guay, F. (1997). Self-determination and persistence in a real-life setting: Toward a motivational model of high school dropout. *Journal of Personality and Social Psychology*, *72*, 1161-1176. https://doi.org/10.1037/0022-3514.72.5.1161

Van Bavel, J., Baicker, K., Boggio, P. S., Capraro, V., Cichocka, A., Cikara, M., . . . Willer, R. (2020). Using social and behavioral science to support COVID-19 pandemic response. *Nature Human Behaviour*, *4*, 460-471. https://doi.org/10.1038/s41562-020-0884-z

Van den Broeck, A., Vansteenkiste, M., De Witte, H., Soenens, B., & Lens, W. (2010). Capturing autonomy, competence, and relatedness at work: Construction and initial validation of the work-related basic need satisfaction scale. *Journal of Occupational and Organizational Psychology*, *83(4)*, 981-1002. https://doi.org/10.1348/096317909X481382

Van Zomeren, M., Leach, C. W., & Spears, R. (2010). Does group efficacy increase group identification? Resolving their paradoxical relationship. *Journal of Experimental Social Psychology*, *46*(6), 1055-1060. https://doi.org/10.1016/j.jesp.2010.05.006

Van Zomeren, M., Spears, R., Fischer, A. H., & Leach, C. W. (2004). Put your money where your mouth is! Explaining collective action tendencies through group-based anger and group efficacy. *Journal of Personality and Social Psychology*, *87*(5), 649-664. https://doi.org/10.1037/0022-3514.87.5.649

Vansteenkiste, M., & Ryan, R. M. (2013). On psychological growth and vulnerability: Basic psychological need satisfaction and need frustration as an unifying principle. *Journal of Psychotherapy Integration, 23*(3), 263–280. https://doi.org/10.1037/a0032359

Vansteenkiste, M., Ryan, R. M., & Soenens, B. (2020). Basic psychological need theory: Advancements, critical themes, and future directions. *Motivation and Emotion*, *44*, 1-31. https://doi.org/10.1007/s11031-019-09818-1

Vazire, S. (2016). Editorial. *Social Psychological and Personality Science, 7*(1), 3–7. https://doi.org/10.1177/1948550615603955

Verhagen, M., Lodder, G. M. A., & Baumeister, R. F. (2018). Unmet belongingness needs but not high belongingness needs predict adverse well-being: A response surface modelling approach. *Journal of Personality*, *86*(3), 498-507. https://doi.org/10.1111/jopy.12331

Verkuyten, M. (2005). Ethnic group identification and group evaluation among minority and majority groups: Testing the multiculturalism hypothesis. *Journal of Personality and Social Psychology*, *88*, 121-138. https://doi.org/10.1037/0022-3514.88.1.121

Verkuyten, M. (2006). Multicultural recognition and ethnic minority rights: A social identity perspective. *European Review of Social Psychology*, *17*, 148-184. https://doi.org/10.1080/10463280600937418

Verkuyten, M., & Yildiz, A. A. (2007). National (dis)identification and ethnic and religious identity: A study among Turkish-Dutch Muslims. *Personality and Social Psychology Bulletin*, *33*, 1448-1462. https://doi.org/10.1177/0146167207304276

Vignoles, V. L. (2011). Identity motives. In S. J. Schwartz, K. Luyckx, V. L. Vignoles (Eds.), *Handbook of identity theory and research* (pp. 403-432). New York, NY: Springer.

Vignoles, V. L., & Moncaster, N. J. (2007). Identity motives and in-group favouritism: A new approach to individual differences in intergroup discrimination. *British Journal of Social Psychology*, *46*(1), 91-113. https://doi.org/10.1348/014466605X85951

Vignoles, V. L., Chryssochoou, X., & Breakwell, G. M. (2002). Evaluating models of identity motivation: Self-esteem is not the whole story. *Self and Identity, 1*(3), 201-218. https://doi.org/10.1080/152988602760124847

Vignoles, V., Regalia, C., Manzi, C., Golledge, J., & Scabini, E. (2006). Beyond self-esteem: Influence of multiple motives on identity construction. *Journal of Personality and Social Psychology*, *90*, 308-333. https://doi.org/10.1037/0022-3514.90.2.308

Von Tunzelmann, A. (2019, August 12). The imperial myth driving Brexit. *The Atlantic.* Retrieved from https://www.theatlantic.com/international/archive/2019/08/imperial-myths-behind-brexit/595813/

Warburton, V. E., Wang, J. C. K., Bartholomew, K. J., Tuff, R. L., & Bishop, K. C. M. (2020). Need satisfaction and need frustration as distinct and potentially co-occurring constructs: Need profiles examined in physical education and sport. *Motivation and Emotion*, 44, 54-66. https://doi.org/10.1007/s11031-019-09798-2

Warburton, W. A., Williams, K. D., & Cairns, D. R. (2006). When ostracism leads to aggression: The moderating effects of control deprivation. *Journal of Experimental Social Psychology*, *42*, 213-220. https://doi.org/10.1016/j.jesp.2005.03.005

Weller, C. E., & Hanks, A. (2018). The widening racial wealth gap in the United States after the Great Recession. *Forum for Social Economics*, *47*(2), 237-252. https://doi.org/10.1080/07360932.2018.1451769

Wesselmann, E. D., Grzybowski, M. R., Steakley-Freeman, D. M., DeSouza, E. R., Nezlek, J. B., & Williams, K. (2016). Social exclusion in everyday life. In P. Riva, & J. Eck (Eds.), *Social exclusion: Psychological approaches to understanding and reducing its impact (pp. 3-23).* Springer International Publishing.

Wilkins, C. L., Wellman, J. D., & Kaiser, C. R. (2013). Status legitimizing beliefs predict positivity toward Whites who claim anti-White bias. *Journal of Experimental Social Psychology*, *49*, 1114-1119. https://doi.org/10.1016/j.jesp.2013.05.017

Williams, K. D. (2001). *Ostracism: The power of the silence.* New York, NY: Guilford Press.

Williams, K. D. (2007). Ostracism. *Annual Review of Psychology*, *58*, 425-452. https://doi.org/10.1146/annurev.psych.58.110405.085641

Williams, K. D. (2009). Ostracism: A temporal need-threat model. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 41, pp. 275-314). San Diego Academic Press. https://doi.org/10.1016/S0065-2601(08)00406-1

Williams, K. D. Cheung, C. K. T., & Choi, W. (2000). Cyberostracism: Effects of being ignored over the Internet. *Journal of Personality and Social Psychology*, *79*(5), 743-762. https://doi.org/10.1037/0022-3514.79.5.748

Williams, K. D., & Jarvis, B. (2006). Cyberball: A program for use in research on interpersonal ostracism and acceptance. *Behaviour Research Methods*, *38*, 174-180. https://doi.org/10.3758/BF03192765

Williams, K. D., & Sommer, K. L. (1997). Social ostracism by coworkers: Does rejection lead to loafing or compensation? *Personality and Social psychology Bulletin*, *23*(7), 693-706. https://doi.org/10.1177/0146167297237003

Williams, P., Armitage, R., & Stein, L. (2020, Jun 11). As America grapples with its history of racism, relics of the past are being toppled by a new generation. *ABC News*.

Retrieved from https://www.abc.net.au/news/2020-06-11/why-people-are-pulling-down-statues-in-the-us-in-protest/12343766

Wirth, J. H. (2016). Methods for investigating social exclusion. In P. Riva, & J. Eck (Eds.), *Social exclusion: Psychological approaches to understanding and reducing its impact (pp. 25-47).* Springer International Publishing.

Wolsko, C., Park, B., & Judd, C. M. (2006). Considering the tower of Babel: Correlates of assimilation and multiculturalism among ethnic minority and majority groups in the United States. *Social Justice Research, 19*, 277-306. https://doi.org/10.1007/s11211-006-0014-8

Wright, M. (2016). The decline of American unions is a threat to public health. *American Journal of Public Health, 106*, 968-969. https://doi.org/10.2105/AJPH.2016.303217

Wuttke, A. (2020). Political engagement's non-political roots: Examining the role of need-supportive parenting in the political domain. *Motivation and Emotion, 44*, 135-150. https://doi.org/10.1007/s11031-019-09801-w

Yampolsky, M. A., & Amiot, C. E. (2013). Priming self-determined and non-self-determined group identification: Effects on well-being and ingroup bias. *Group Dynamics, Theory, Research, and Practice*, *17*(3), 137-149. https://doi.org/10.1037/a0032825

Ysseldyk, R., Matheson, K., & Anisman, H. (2010). Religiosity as identity: Toward an understading of religion from a social identity perspective. *Personality and Social Psychology Review*, *14*(1), 60-71. https://doi.org/10.1177/1088868309349693

Yustisia, W., Putra, I. E., Kavanagh, C., Whitehouse, H., & Rufaedah, A. (2020). The role of religious fundamentalism and tightness-looseness in promoting collective narcissism and extreme group behaviour. *Psychology of Religion and Spirituality, 12*, 231-240. http://dx.doi.org/10.1037/rel0000269

Zadro, L., Williams, K. D., & Richardson, R. (2004). How long can you go? Ostracism by a computer is sufficient to lower self-reported levels of belonging, control, self-esteem, and meaningful existence. *Journal of Experimental Social Psychology*, *40*(4), 560-567. https://doi.org/10.1016/j.jesp.2003.11.006

Zagefka, H., & Brown, R. (2005). Comparisons and perceived deprivation in ethnic minority settings. *Personality and Social Psychology Bulletin*, *31*(4) 467-482. https://doi.org/10.1177/0146167204271711

Zaromb, F. M., Liu, J. H., Paez, D., Hanke, K., Putnam, A. L., & Roediger, H. L. (2018). We made history: citizens of 35 countries overestimate their nation's role in world history. *Journal of Applied Research in Memory and Cognition*, *7*, 521-528. https://doi.org/10.1016/j.jarmac.2018.05.006

APPENDIX A: CHAPTER 3

Study 5

Here, I report the zero-order correlations between the main variables separately for Study 5. While Table A1 refers to Time 1, Table A2 refers to Time 2. At Time 1, collective narcissism was only related to relatedness frustration. Whereas, in-group identification was positively associated with all satisfied needs, but negatively related to frustrated needs. These correlations were similar at Time 2 as well.

Table A1

Zero-order correlations across the main variables (Time 1)

Variable	1	2	3	4	5	6	7
1. Individual autonomy satisfaction	-						
2. Individual competence satisfaction	.49***						
3. Individual relatedness satisfaction	.41***	.39***	-				
4. Individual autonomy frustration	-.50***	-.31***	-.31***	-			
5. Individual competence frustration	-.43***	-.65***	-.33***	.42***	-		
6. Individual relatedness frustration	-.37***	-.39***	-.55***	.44***	.46***	-	
7. Collective narcissism	.09	.09	.01	.01	-.08	.14**	-
8. In-group identification	.26***	.33***	.25***	-.22***	-.39***	-.19***	.46***

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

Table A2

Zero-order correlations across the main variables (Time 2)

Variable	1	2	3	4	5	6	7
1. Individual autonomy satisfaction	-						
2. Individual competence satisfaction	.57***	-					
3. Individual relatedness satisfaction	.50***	.46***	-				
4. Individual autonomy frustration	-.57***	-.37***	-.39***	-			
5. Individual competence frustration	-.52***	-.73***	-.43***	.49***	-		
6. Individual relatedness frustration	-.45***	-.45***	-.66***	.51***	.61***	-	
7. Collective narcissism	.04	.08	-.10	.05	.04	.11*	-
8. In-group identification	.27***	.39***	.23***	-.17***	-.38***	-.24***	.44***

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

Study 6

Following the past work (Parker et al., 2019), I performed two CFAs to validate the six-factor structure of the Group Needs Scale with maximum likelihood estimation using Mplus 8 (Muthen & Muthen, 1998-2017). In line with the previous work, I loaded each item on their respective factor. In each group (Black and White Americans), items loaded onto their expected factor.

In my first attempt, fit indices were good for Black Americans, $X^2(237) = 471.60$, $p = .001$, CFI = .92, SRMR = .07, RMSEA = .07. Inspecting the modification indices, I allowed two items measuring relatedness satisfaction to correlate with each other, and two items measuring relatedness frustration to correlate with each other. Doing so, the model reached the following fit indices, $X^2(235) = 413.45$, $p < .001$, CFI = .95, SRMR = .07, RMSEA = .06.

For White Americans, the model showed good fit indices in my first attempt as well, $X^2(237) = 503.72$, $p < .001$, CFI = .92, SRMR = .07, RMSEA = .07. Based on the modification indices, I allowed two items measuring competence frustration to correlate with each other, and two items assessing autonomy frustration to correlate with each other. Doing so, the model reached the following fit indices, $X^2(237) = 476.29$, $p < .001$, CFI = .93, SRMR = .07, RMSEA = .06.

I also performed the analyses when not controlling for the overlap between collective narcissism and in-group identification. Here, I report these results in Table A3.

Table A3

Group needs predicting collective narcissism and in-group identification (Study 6)

	Model 1 DV = Collective narcissism				Model 2 DV = In-group identification			
	Black Americans		White Americans		Black Americans		White Americans	
Predictors	β	*p*	β	*p*	β	*p*	β	*p*
Autonomy satisfaction	-.01	.87	-.01	.90	.04	.59	**-.17**	.05
Competence satisfaction	.03	.64	.10	.07	.04	.62	.04	.64
Relatedness satisfaction	-.00	.97	.05	.43	-.04	.60	.12	.19
Autonomy frustration	**.46**	< .001	**.31**	.001	**.35**	< .001	**.34**	.001
Competence frustration	**.14**	.02	.05	.38	-.12	.09	**-.38**	< .001
Relatedness frustration	**.22**	.01	**.39**	< .001	.08	.44	-.04	.70
Subjective social status	.16	.01	.07	.16	**.20**	.002	.05	.39
Age	-.06	.27	-.02	.73	-.02	.78	-.00	.99
Gender	-.07	.21	-.01	.77	-.07	.28	-.04	.57
Political ideology	.05	.36	**.27**	< .001	-.04	.55	**.24**	.001
R^2	**.43**	< .001	**.61**	< .001	**.21**	< .001	**.24**	< .001

Note. Gender was coded as 0 = Female, 1 = Male.

Significant β values are in bold.

APPENDIX B: CHAPTER 4

Past research showed that 18-items motivations to identify scale presents a six-factor structure, each including three items (Amiot & Sansfacon, 2011). Following this past work, I CFAs to validate the previously established six factor model with maximum likelihood estimation using Mplus 8 (Muthen & Muthen, 1998-2017) for Studies 7, 8, and 10.

For all studies, I re-tested the links when not controlling for the overlap between collective narcissism, and when not controlling for covariates (such as, age, gender and religious affiliation).

In-group identification has components of ties, centrality, and affect (Cameron, 2004; Leach et al., 2008). I tested how individual motivations to identify from SDT are related to separate components of in-group identification in Studies 7, 8, and 10.

I tested how individual motivations to identify from SDT are related to separate components of in-group identification in Studies 7, 8, and 10.

For Study 9, I included all the religious orientations in the dataset to examine how they are associated with two forms of in-group identity. Here, I report the results of these additional analyses.

Study 7

For the CFA, I loaded each item to their respective factor following the previous work (Amiot & Sansfacon, 2011). Every item loaded onto their expected factors. However, the fit indices were poor, $X^2(153) = 2307.74$, $p < .001$, CFI = .88, SRMR = .10, RMSEA = .10. Based on the modification indices, I allowed two items measuring identified regulation to correlate with each other, and two items measuring intrinsic motivation to correlate with each other. Overall, this model showed acceptable fit indices $X^2(153) = 2307.742$, $p < .001$, CFI = .91, SRMR = .09, RMSEA = .08.

In Table B1, I report the analyses when not controlling for the overlap between collective narcissism and in-group identification. In Table B2, I present the analyses when not controlling for age and gender.

In Table B3, I present the relationships between SDT motivations and three components of in-group identification. Intrinsic motivation (B = 0.26, SE = 0.08, p = .003) and integrated regulation (B = 0.20, SE = 0.09, p = .002) were positively associated with in-group ties. Integrated (B = 0.20, SE = 0.06, p = .001) regulation was positively related to centrality component. Intrinsic motivation (B = 0.29, SE = 0.06, p < .001) and identified regulation (B = 0.11, SE = 0.05, p = .03) were associated with affect component. Amotivation had a negative relationship with ties and affect (B = -0.25, SE = 0.06, p < .001; B = -0.33, SE = 0.04, p < .001 respectively).

Table B1

Individual motivations predicting collective narcissism versus in-group identification (Study 7)

	Model 1 DV= Collective narcissism						Model 2 DV= In-group identification					
	Step 1			Step 2			Step 1			Step 2		
Predictors	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*
Age	0.01(0.04)	.02	.77	0.01(0.03)	.03	.67	-0.10(0.03)	**-.21****	.002	-0.00(0.02)	-.01	.85
Gender[1]	-0.32(0.23)	-.10	.17	-0.23(0.20)	-.07	.25	-0.01(0.19)	-.00	.98	0.03(0.12)	.01	.81
Intrinsic motivation				-0.24(0.08)	**-.25****	.004				0.20(0.05)	**.25*****	< .001
Integrated regulation				0.35(0.08)	**.44*****	< .001				0.19(0.05)	**.27*****	< .001
Identified regulation				0.01(0.07)	.01	.92				0.05(0.04)	.06	.29
Introjected regulation				-0.06(0.06)	-.07	.38				0.03(0.04)	.04	.44
External regulation				0.32(0.06)	**.39*****	< .001				0.00(0.04)	.00	.96
Amotivation				0.18(0.05)	**.25****	.001				-0.24(0.03)	**-.38*****	< .001
F		0.98			43.21***			5.00**			43.21***	
R^2		.01			.31			.05			.63	
ΔR^2					.30***						.59***	

Note. Gender[1] was coded as Male = 0, Female = 1.

Significant β values are in bold.

Table B2

Individual motivations predicting two forms of in-group identity without demographics (Study 7)

	Model 1						Model 2					
	Collective narcissism						In-group identification					
	Step 1			Step 2			Step 1			Step 2		
Predictors	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*
In-group identification	0.12(0.08)	.11	.12	0.17(0.11)	.14	.14		—			—	
Collective narcissism		—			—		0.10(0.06)	.11	.13	0.06(0.04)	.08	.14
Intrinsic motivation				-0.27(0.08)	**-.28****	.002				0.21(0.05)	**.27*****	< .001
Integrated regulation				0.33(0.08)	**.40*****	< .001				0.17(0.05)	**.25****	.001
Identified regulation				0.01(0.07)	.01	.89				0.04(0.04)	.05	.37
Introjected regulation				-0.06(0.06)	-.07	.34				0.04(0.04)	.05	.37
External regulation				0.31(0.06)	**.38*****	< .001				-0.02(0.04)	-.02	.69
Amotivation				0.23(0.06)	**.31*****	< .001				-0.25(0.03)	**-.39*****	< .001
F		2.34			12.89***			2.35			49.67***	
R^2		.01			.31			.01			.63	
ΔR^2					.30***						.62***	

Note. Significant β values are in bold

Table B3

Individual motivations predicting components of in-group identification (Study 7)

	DV= Ties		DV= Centrality		DV =Affect	
	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2
Predictors	β	β	β	β	β	β
Age	-.11	.05	-.12	-.01	-.24**	-.04
Gender[1]	.11	.12*	-.11*	-.09	.01	.01
Collective narcissism	.02	.05	.28***	.13	.04	.10*
Intrinsic motivation		.25**		.15		.32***
Integrated regulation		.23**		.34**		.07
Identified regulation		.00		-.00		.13*
Introjected regulation		-.09		.06		-.03
External regulation		-.06		.11		-.10
Amotivation		-.31***		.04		-.48***
F	1.53	14.47***	8.76***	12.39***	4.16**	35.08***
R^2	.02	.39	.11	.36	.06	.61
ΔR^2		.37***		.25***		.59***

Note. Gender[1] was coded as Male = 0, Female = 1.

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

Study 8

Again, in line with the previous work (Amiot & Sansfacorn, 2011), I ran a CFA for motivations to identify scale. At the first attempt, the model had a warning for identification problem positing latent external regulation factor. Inspecting the output, I did not find any negative residuals or correlations greater than one between the latent factors. However, I found that one item from identified regulation ("Because considering myself an American allows me to feel a part of a social group") had cross-loadings with multiple latent factors. In the final model, I dropped this item and achieved the following satisfactory fit indices, X^2 (103) = 258.067, $p < .001$, CFI = .94, SRMR = .05, RMSEA = .08.

In Table B4, I report the analyses when not controlling for the overlap between collective narcissism and in-group identification. In Table B5, I report the analyses when not controlling for age and gender. These results remained similar to the reported ones in the manuscript.

In table B6, I report the associations between relationships SDT motivations and three components of in-group identification. Intrinsic motivation (B = 0.24, SE = 0.09, p = .007) had a positive relationship with ties. Integrated (B = 0.41, SE = 0.09, $p < .001$) was positively associated with centrality. Intrinsic motivation (B = 0.44, SE = 0.09, $p < .001$) and identified regulation (B = 0.42, SE = 0.07, $p < .001$) were positively related to affect but this relationship was inverse for introjected (B = -0.29, SE = 0.08, p = .05) and external regulations (B = -0.14, SE = 0.07, p = .05). Amotivation was negatively related to ties (B = -0.23, SE = 0.07, p = .001), centrality, (B = -0.14, SE = 0.07, p = .05), and affect (B = -0.13, SE = 0.07, p = .05).

Table B4

Individual motivations predicting collective narcissism versus in-group identification (Study 8)

	Model 1 DV= Collective narcissism						Model 2 DV= In-group identification					
	Step 1			Step 2			Step 1			Step 2		
Predictors	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*
Age	0.02(0.01)	**.22****	.002	0.02(0.01)	**.14***	.01	0.03(0.01)	.25**	.001	0.00(0.00)	.01	.88
Gender[1]	0.28(0.17)	.11	.10	0.18(0.13)	.08	.16	0.14(0.16)	.06	.36	-0.02(0.08)	-.01	.83
Intrinsic motivation				0.08(0.09)	.11	.34				0.23(0.05)	**.33*****	< .001
Integrated regulation				0.28(0.09)	**.41****	.002				0.19(0.05)	**.31*****	< .001
Identified regulation				-0.11(0.07)	-.15	.13				0.13(0.04)	**.18****	.004
Introjected regulation				0.16(0.08)	**.15***	.04				-0.06(0.05)	-.07	.52
External regulation				0.23(0.07)	**.29****	.001				-0.01(0.04)	-.01	.86
Amotivation				0.10(0.07)	.12	.15				-0.16(0.04)	**.22*****	< .001
F		5.73**			22.37***			6.31**			85.78***	
R^2		.06			.49			.06			.78	
ΔR^2					.44***						.72***	

Note. Gender[1] was coded as Male = 0, Female = 1.

Significant β values are in bold.

Table B5

Individual motivations predicting two forms of in-group identity without demographics (Study 8)

	Model 1 DV = Collective narcissism						Model 2 DV = In-group identification					
	Step 1			Step 2			Step 1			Step 2		
Predictors	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*
In-group identification	0.59(0.07)	**.54*****	< .001	0.12(0.13)	.11	.33		—			—	
Collective narcissism		—			—		0.49(0.06)	**.54*****	< .001	0.04(0.04)	.05	.33
Intrinsic motivation				0.08(0.09)	.11	.36				0.23(0.05)	**.32*****	< .001
Integrated regulation				0.26(0.09)	**.39****	.005				0.18(0.05)	**.29****	.001
Identified regulation				-0.13(0.08)	-.18	.08				0.12(0.04)	**.18****	.005
Introjected regulation				0.16(0.08)	**.15****	.04				0.07(0.05)	-.07	.13
External regulation				0.21(0.07)	**.26****	.003				-0.02(0.04)	-.02	.71
Amotivation				0.09(0.07)	.11	.22				-0.17(0.04)	**-.23*****	< .001
F		78.54***			25.36***			78.54***			103.23***	
R^2		.29			.49			.29			.79	
ΔR^2					.20***						.50***	

Note. Significant β values are in bold

Table B6

Individual motivations predicting components of in-group identification (Study 8)

	DV= Ties		DV= Centrality		DV =Affect	
	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2
Predictors	β	β	β	β	β	β
Age	.12	-.01	.12	.05	.10	-.04
Gender[1]	-.08	-.10	.07	.07	.01	-.02
Collective narcissism	.30***	-.06	.46***	-.02	.46***	.16**
Intrinsic motivation		.32**		.01		.45***
Integrated regulation		.17		.54***		.01
Identified regulation		.06		-.08		.45*
Introjected regulation		-.02		.08		-.22**
External regulation		-.06		.14		-.14*
Amotivation		-.29**		-.15*		-.09*
F	8.63***	16.76***	.37**	28.68***	19.69***	45.49***
R^2	.12	.45	.25	.59	.24	.69
ΔR^2		.33***		.33***		.45***

Note. Gender[1] was coded as Male = 0, Female = 1.

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

Study 9

Self-reported religious affiliations included mostly Christian denominations: Anglican (14.9%), Catholic (19%), Presbyterian (6.6%), Christian not further defined (31.6%) and Christian other (14.7%). Non-Christian denominations (e.g., Hinduism, Buddhism) comprised the 9.8% of the data and the other 3.6% of the participants did not indicate their religious affiliation.

In Table B7, I report the analyses when not controlling for the overlap between collective narcissism and in-group identification. In Table B8, I display the analyses in the manuscript when not controlling for age, gender, and Christian affiliation. These results remained similar to the reported ones in the manuscript.

The analysis in Table B9 includes fundamentalism and quest orientations that were also measured in the data set along with the other variables tested in the manuscript. In this analysis, similar to intrinsic motivation, fundamentalism is associated with both religious identification and religious collective narcissism. Altemeyer and Hunsberger (1992) propose that fundamentalism is a rigid way of understanding religion which usually predicts negative consequences (Hall et al., 2010). However, Ghorpade et al. (2010) argue that the principles of religious fundamentalism are compatible with intrinsic orientation. People with intrinsic orientation are expected to perceive God as omniscient and to have strong attachment to religious teachings to guide their lives (Mora, Stavrinides, & Mcdermut, 2014). Quest orientation reflects an open-minded, questioning approach to religion and being comfortable with existential conflicts (Batson & Ventis, 1982). Quest had a small negative relationship with religious identification which seems to be in line with the argument that this orientation possibly measures religious conflict (Kojetin, McIntosh, Bridges, & Spilka, 1987). Apart from these additional links, the main results reported in the manuscript held similar to the ones in here.

Table B7

Religious orientations predicting collective narcissism versus in-group identification (Study 9)

	Model 1						Model 2					
	DV= Collective narcissism						DV= In-group identification					
	Step 1			Step 2			Step 1			Step 2		
Predictors	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*
Age	-0.01(0.00)	**-.12****	.001	-0.01(0.00)	**-.15*****	< .001	-0.01(0.00)	**-.07****	.007	-0.02(0.00)	**-.13*****	< .001
Gender[1]	0.24(0.08)	**.08****	.004	0.33(0.07)	**.11*****	< .001	-0.07(0.11)	-.02	.52	0.12(0.08)	.03	.12
Christianity[2]	-0.47(0.12)	**-.10*****	< .001	-0.46(0.11)	**-.10*****	< .001	-0.14(0.17)	-.02	.41	0.09(0.12)	.01	.47
Intrinsic religiosity				0.41(0.02)	**.41*****	< .001				0.91(0.03)	**.69*****	< .001
EP religiosity				0.13(0.02)	**.13*****	< .001				0.02(0.03)	.01	.58
ES religiosity				0.19(0.03)	**.17*****	< .001				0.04(0.03)	.03	.20
F		12.47***			90.29***			3.36*			219.72***	
R^2		.03			.28			.01			.49	
ΔR^2					.25***						.48***	

Note. Gender[1] was coded as Female = 0, Male = 1. Christian affiliation[2] was coded as 0 = Non-Christian, 1= Christian. EP = Extrinsic personal, ES = Extrinsic social.

Significant β values are in bold.

Table B8

Religious orientations predicting two forms of in-group identity (Study 9)

	Model 1 DV= Collective narcissism						Model 2 DV= In-group identification					
	Step 1			Step 2			Step 1			Step 2		
Predictors	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*
In-group identification	0.38(0.02)	**.50*****	.001	0.27(0.02)	**.36*****	< .001		—			—	
Collective narcissism		—			—		0.67(0.03)	**.50*****	< .001	0.34(0.03)	**.25*****	< .001
Intrinsic religiosity				0.16(0.03)	**.16*****	< .001				0.76(0.03)	**.58*****	< .001
EP religiosity				0.11(0.02)	**.11*****	< .001				-0.03(0.03)	-.02	.23
ES religiosity				0.18(0.03)	**.15*****	< .001				-0.01(0.03)	-.01	.65
F		487.30***			163.32***			487.30***			388.32***	
R^2		.25			.31			.25			.52	
ΔR^2					.06***						.27***	

Note. EP = Extrinsic personal, ES = Extrinsic social.

Significant β values are in bold.

Table B9

All religious orientations predicting two forms of in-group identity (Study 9)

	Model 1 DV = Collective narcissism						Model 2 DV = In-group identification					
	Step 1			Step 2			Step 1			Step 2		
Predictors	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*
Age	-0.01(0.00)	**-.08****	.001	-0.01(0.00)	**-.09*****	< .001	-0.00(0.00)	-.01	.47	-0.01(0.00)	**-.08*****	< .001
Gender[1]	0.26(0.07)	**.09*****	< .001	0.21(0.07)	**.07****	.002	-0.23(0.09)	**-.06***	.02	-0.09(0.07)	-.02	.24
Christianity[2]	-0.42(0.11)	**.50*****	< .001	-0.71(0.10)	**-.15*****	.001	0.17(0.14)	.03	.22	-0.07(0.12)	-.01	.54
In-group identification	0.37(0.01)	**.50*****	< .001	0.20(0.02)	**.25*****	.001		—			—	
Collective narcissism		—			—		0.67(0.03)	**.51*****	< .001	0.23(0.03)	**.18*****	< .001
Intrinsic religiosity				0.14(0.03)	**.25*****	< .001				0.71(0.03)	**.54*****	< .001
EP religiosity				0.11(0.02)	**.11*****	< .001				-0.03(0.03)	-.02	.26
ES religiosity				0.17(0.03)	**.15*****	< .001				0.00(0.03)	.00	.99
Fundamentalism				0.21(0.03)	**.23*****	< .001				0.23(0.03)	**.19*****	< .001
Quest				0.01(0.02)	.02	.50				-0.07(0.03)	**-.06****	.005
F		129.60***			91.81***			120.48*			199.28***	
R^2		.27			.10			.26			.56	
ΔR^2					.25***						.30***	

Note. Gender[1] was coded as Female = 0, Male = 1. Christian affiliation[2] was coded as 0 = Non-Christian, 1= Christian. EP = Extrinsic personal, ES = Extrinsic social. Significant β values are in bold.

Study 10

In Study 10, self-reported religious denominations included Catholic (34.1%), no particular denomination and other (18%), Protestant (12.8%), Baptist (10%), Pentecostal (8%), Methodist (4.5%), Lutheran (3.8%), Day Saints (3.8%), Anglican (2.3%), Presbyterian (1.5%), Orthodox (1%), Jehovah's Witnesses (0.3%).

In the first CFA, the model was not identified and the warning posited a problem for the latent factor of identified regulation. Inspecting the output, I found that identified regulation factor had high correlations with integrated regulation (r = .95) and intrinsic motivation (r = .99) factors. In the final model, I dropped this latent factor from the final model. Also, based on the modification indices, I allowed two items assessing introjected regulation to correlate with each other, and two items measuring intrinsic motivation to correlate with each other. Doing so, the model reached the following satisfactory fit indices, X^2 (78) = 286.110, p < .001, CFI = .93, SRMR = .08, RMSEA = .08.

In table B10, I report the relationships between SDT motives and Allport's religious orientations, when not controlling for age and gender.

In Tables B11 and B13, I report the results of SDT motives and religious orientations (respectively) predicting collective narcissism and in-group identification when not controlling for each form of identity. Not controlling for collective narcissism, external regulation had a positive relationship with in-group identification (Table B11). Not controlling for in-group identification, I found that amotivation negatively predicted collective narcissism (Table B11).

In Tables B12 and B14, I report the main analyses in the manuscript when not controlling for age and gender. When I did not control for age and gender, the reported negative relationship between introjected regulation and in-group identification became insignificant.

In Table B15, I present the relationships between SDT motivations and each components of in-group identification. Integrated (B = 0.26, SE = 0.06, p < .001), identified (B = 0.18, SE = 0.07, p = .02) and external regulations (B = 0.16, SE = 0.05, p = .007) were positively associated with ties component. Integrated regulation (B = 0.40, SE = 0.06, p < .001) had a positive relationship with centrality. Identified (B = 0.14, SE = 0.05, p = .004) and integrated regulations (B = 0.28, SE = 0.04, p < .001) were positively related to affect, but this relationship was small and inverse for introjected regulation (B = -0.08, SE = 0.3, p = .03). Amotivation had a negative relationship with ties, centrality, and affect (B = -0.26, SE = 0.05, p < .001; B = -0.25, SE = 0.05, p < .001; B = -0.28, SE = 0.03, p < .00.

Table B10

Motivations from SDT predicting religious orientations from Allport excluding age and gender (Study 10)

	DV = Intrinsic religiosity			DV = EP religiosity			DV = ES religiosity		
Predictors	*B(SE)*	β	*p*	*B(SE)*	β	*p*	*B(SE)*	β	*p*
Intrinsic motivation	-0.01(0.04)	-.01	.81	0.13(0.05)	**.16***	.01	0.18(0.07)	**.16***	.02
Integrated regulation	0.54(0.04)	**.59*****	< .001	0.15(0.05)	**.16****	.007	-0.26(0.08)	**-.21****	.001
Identified regulation	0.05(0.05)	.05	.40	0.18(0.07)	**.19****	.008	0.48(0.10)	**.38*****	< .001
Introjected regulation	-0.03(0.03)	-.04	.43	0.11(0.04)	**.15****	.008	-0.07(0.06)	-.07	.27
External regulation	0.11(0.04)	**.16****	.004	0.08(0.05)	.10	.11	-0.05(0.07)	-.05	.45
Amotivation	-0.15(0.04)	**-.17*****	< .001	0.04(0.05)	.05	.35	0.22(0.07)	**.19****	.001
F		77.45***			31.85***			14.92***	
R^2		.54			.33			.19	

Note. EP = Extrinsic personal, ES = Extrinsic social.

Significant β values are in bold.

Table B11

SDT individual motivations predicting collective narcissism versus in-group identification (Study 10)

	Model 1 DV= Collective narcissism						Model 2 DV= In-group identification					
	Step 1			Step 2			Step 1			Step 2		
Predictors	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*
Age	0.01(0.01)	**.10***	.04	0.01(0.00)	.06	.13	0.02(0.00)	**.25*****	< .001	0.01(0.00)	**.11*****	< .001
Gender[1]	-0.27(0.15)	-.09	.07	-0.13(0.11)	-.04	.27	0.16(0.10)	.08	.11	0.04(0.07)	.02	.57
Intrinsic motivation				-0.04(0.06)	-.04	.53				0.03(0.03)	.04	.37
Integrated regulation				0.44(0.07)	**.36*****	.001				0.38(0.04)	**.44*****	< .001
Identified regulation				-0.08(0.08)	.07	.28				0.13(0.04)	**.15****	.003
Introjected regulation				0.15(0.05)	**.15****	.003				-0.04(0.03)	-.05	.16
External regulation				0.44(0.06)	**.47*****	< .001				0.08(0.03)	**.12***	.02
Amotivation				-0.13(0.05)	**-.12***	.02				-0.28(0.03)	**-.35*****	< .001
F		3.48*			39.67***			14.76***			95.86***	
R^2		.02			.45			.07			.66	
ΔR^2					.43***						.59***	

Note. Gender[1] was coded as Male = 0, Female = 1.

Significant β values are in bold.

Table B12

SDT individual motivations predicting two forms of in-group identity without demographics (Study 10)

	Model 1 DV= Collective narcissism						Model 2 DV= In-group identification					
	Step 1			Step 2			Step 1			Step 2		
Predictors	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*
In-group identification	0.72(0.06)	**.51*****	.001	0.48(0.09)	**.34*****	.13		—			—	
Collective narcissism		—			—		0.36(0.03)	**.51*****	< .001	0.15(0.03)	**.21*****	< .001
Intrinsic motivation				-0.05(0.06)	-.05	.53				0.05(0.03)	.08	.06
Integrated regulation				0.23(0.07)	**.19****	.001				0.32(0.04)	**.37*****	< .001
Identified regulation				-0.14(0.08)	.11	.07				0.13(0.04)	**.16****	.001
Introjected regulation				0.17(0.05)	**.17****	.001				-0.06(0.03)	-.09	.02
External regulation				0.41(0.05)	**.44*****	< .001				-0.00(0.03)	-.00	.96
Amotivation				-0.00(0.06)	-.00	.97				-0.28(0.03)	**.34*****	< .001
F		137.65***			51.53***			137.64***			117.67***	
R^2		.25			.48			.26			.66	
ΔR^2					.22***						.42***	

Note. Significant β values are in bold.

Table B13

Allport's religious orientations predicting collective narcissism versus in-group identification (Study 10)

	Model 1 DV= Collective narcissism						Model 2 DV= In-group identification					
	Step 1			Step 2			Step 1			Step 2		
Predictors	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*
Age	0.01(0.01)	**.10***	.04	0.00(0.01)	.04	.38	0.02(0.00)	**.25*****	.001	0.01(0.00)	**.12****	.001
Gender[1]	-0.27(0.15)	-.09	.07	-0.34(0.13)	**-.11****	.009	0.16(0.10)	.08	.11	0.08(0.07)	.04	.28
INT religious orientation				0.56(0.06)	**.42*****	< .001				0.65(0.04)	**.69*****	< .001
EP religious orientation				0.23(0.06)	**.18*****	< .001				0.01(0.04)	.01	.89
ES religious orientation				0.05(0.04)	.05	.29				-0.02(0.03)	-.02	.51
F		3.48*			31.58***			4.76***			89.80***	
R^2		.02			.29			.07			.53	
ΔR^2					.27***						.46***	

Note. Gender[1] was coded as Male = 0, Female = 1. INT= Intrinsic, EP = Extrinsic personal, ES = Extrinsic social.

Significant β values are in bold.

Table B14

Allport's religious orientations predicting two forms of in-group identity without age and gender (Study 10)

	Model 1 DV= Collective narcissism						Model 2 DV= In-group identification					
	Step 1			Step 2			Step 1			Step 2		
Predictors	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*	*B (SE)*	β	*p*
In-group identification	0.72(0.06)	**.51*****	< .001	0.48(0.08)	**.34*****	< .001		—			—	
Collective narcissism		—			—		0.36(0.03)	**.51*****	< .001	0.16(0.03)	**.22*****	.001
Intrinsic religiosity				0.24(0.08)	**.18*****	< .001				0.59(0.04)	**.63*****	< .001
EP religiosity				0.22(0.06)	**.17*****	< .001				-0.04(0.03)	-.05	.20
ES religiosity				0.08(0.04)	.08	.06				-0.03(0.02)	-.05	.16
F		137.64***			47.40***			137.64***			60.33***	
R^2		.26			.33			.26			.55	
ΔR^2					.07***						.29***	

Note. EP = Extrinsic personal, ES = Extrinsic social.

Significant β values are in bold.

Table B15

Individual motivations predicting components of in-group identification (Study 10)

	DV= Ties		DV= Centrality		DV =Affect	
	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2
Predictors	β	β	β	β	β	β
Age	.17***	.12**	.14**	.06	.17***	.05
Gender[1]	.04	.00	.14**	.04	.15**	.03
Collective narcissism	.47***	.16**	.41***	.22	.36***	.12**
Intrinsic motivation		.08		-.04		.09
Integrated regulation		.23***		.37***		.33***
Identified regulation		.15*		.10		.16**
Introjected regulation		-.07		-.04		-.11*
External regulation		.17**		-.08		-.08
Amotivation		-.24***		-.25***		-.36***
F	46.88***	37.95***	35.93**	40.83***	29.78**	57.48***
R^2	.26	.47	.21	.49	.19	.57
ΔR^2		.21***		.27***		.39***

Note. Gender[1] was coded as Male = 0, Female = 1.

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

APPENDIX C: MATERIALS AND MEASURES

Need to Belong (Nichols & Webster, 2013), Pilot Study

1. I have a strong need to belong

1= *strongly disagree*, 7 = *strongly agree*

Collective Narcissism (Golec de Zavala et al., 2009), all studies*

1. I wish other groups would more quickly recognize authority of my group.
2. My group deserves special treatment.
3. I will never be satisfied until my group gets all it deserves.
4. I insist upon my group getting the respect that is due to it.
5. It really makes me angry when others criticize my group.
6. If my group had a major say in the world, the world would be a much better place.
7. I do not get upset when people do not notice achievements of my group. (Reversed)
8. Not many people seem to fully understand the importance of my group.
9. The true worth of my group is often misunderstood.

1= *strongly disagree*, 7 = *strongly agree*

* The wording for "my group" was either changed according to the context of the study, or participants were asked to respond to the items thinking the groups that were investigated in the studies. 5 items short-form of the scale was used in Studies 6, 8, and 10 (Items: 2, 3, 5, 6 8, Golec de Zavala, Cichocka, & Bilewicz, 2013). Study 9 used three items (Items 4, 6, 9).

Three-Factor In-group Identification Scale (Cameron, 2004), Studies 1, 2, 3, 4, 5, 6, 7, 8.

1. I have a lot in common with other (ingroup members).
2. I feel strong ties to other (ingroup members).
3. I find it difficult to form a bond with other with other (ingroup members). (reversed)

4. I don’t feel a sense of being ‘‘connected’’ with other (ingroup members). (reversed)
5. I often think about the fact that I am a(n) (ingroup member)
6. Overall, being a(n) (ingroup member) has very little to do with how I feel about myself. (reversed)
7. In general, being a(n) (ingroup member) is an important part of my self-image. (reversed)
8. The fact that I am a(n) (ingroup member) rarely enters my mind. (reversed)
9. In general, I’m glad to be a(n) (ingroup member).
10. I often regret that I am a(n) (ingroup member). (reversed)
11. I don’t feel good about being a(n) (ingroup member). (reversed)
12. Generally, I feel good when I think about myself as a(n) (ingroup member)

Ties: 1-4, Centrality: 5-8, Affect: 9-12

1= *strongly disagree*, 7 = *strongly agree*

*The wording of “ingroup member” was changed according to the context of the studies.

<u>Need to Belong Scale (Leary et al., 2013). Study 1</u>

1. If other people don’t seem to accept me, I don’t let it bother me. (Reversed)
2. I try hard not to do things that will make other people avoid or reject me.
3. I seldom worry about whether other people care about me. (Reversed)
4. I need to feel that there are people I can turn to in times of need.
5. I want other people to accept me.
6. I do not like being alone.
7. Being apart from my friends for long periods of time does not bother me. (Reversed)
8. I have a strong “need to belong.”
9. It bothers me a great deal when I am not included in other people’s plans.
10. My feelings are easily hurt when I feel that others do not accept me.

1= *not at all*, 5 = *extremely*

Video links to experimental conditions (Chotpitayasunondh & Douglas, 2018), Study 2:

Exclusion: **https://www.youtube.com/embed/OU_EMgArQKM?rel=0**

Inclusion: **https://www.youtube.com/embed/pcrLNMjVamw?rel=0**

Manipulation checks, Study 2

What was the colour of the conversation partner's shirt? (White)

Which object did you see on the table? (Bottle)

Recall Tasks (Knowles & Gardner, 2008) Study 3.

Rejection:

Write about a time in which you felt intensely rejected in some way, a time that you felt as if you did not belong. This rejection can be interpersonal in nature (e.g., a time in which someone broke up with you, or no longer wanted to be your friend) or can be a rejection from a group (e.g., a time in which you were chosen last for a team or excluded from a clique). If you have several instances in mind, try to choose the one that is either especially memorable and/or especially recent, so the experience will be fresh in your mind and your thoughts and feelings easy to recall. Please tell the whole story. Please describe the circumstances, how you felt.

Inclusion:

Write about a time in which you felt very accepted in some way, a time that you felt as if you belonged. This acceptance can be interpersonal in nature (e.g., a time in which someone wished to date you or wanted to be your friend) or can be an acceptance by a group (e.g., a time in which you were chosen for a team or included in a clique). If you have several instances in mind, try to choose the one that is either especially memorable and/or especially recent, so the experience will be fresh in your mind and your thoughts and feelings easy to recall. Please tell the whole story. Please describe the circumstances, how you felt.

Control:

We would like you to write about a time in which you felt intense physical pain or distress. This physical distress can pertain to an injury (e.g., a time in which you broke a bone) or can pertain to a physical illness (e.g., a time in which you contracted mono or suffered through the flu). If you have several instances in mind, please try to choose the one that is either especially memorable and/or recent, so the experience will be fresh in your mind and your thoughts and feelings easy to recall. Please tell the whole story. Please describe the circumstances, how you felt.

Manipulation check, Study 4

To what extent were you included or excluded by the other participants during the game?

1= *Excluded,* 5 = *Included*

Need Threat (Zadro, Williams, & Richardson, 2004) Study 4.

1. I felt poorly accepted by the other participants.
2. I felt as though I had made a ‘‘connection’’ or bonded with one or more of the participants during the game. (Reversed)
3. I felt like an outsider during the game.
4. I felt that I was able to throw the ball as often as I wanted during the game. (Reversed)
5. I felt somewhat frustrated during the game
6. I felt in control during the game. (Reversed)
7. During the game, I felt good about myself. (Reversed)
8. I felt that the other participants failed to perceive me as a worthy and likeable person.
9. I felt somewhat inadequate during the game.
10. I felt that my performance had some effect on the direction of the game. (Reversed)
11. I felt non-existent during the game.

12. I felt as though my existence was meaningless during the game.

1 = *does not describe my feelings,* 5 = *clearly describes my feelings*

Belonging: 1-3, Control: 4-6, Self-esteem: 7-9, Existence: 10-12.

Basic Psychological Need Satisfaction and Frustration Scale (Chen et al., 2015), Study 5

1. I feel a sense of choice and freedom in the things I undertake.
2. I feel that my decisions reflect what I really want.
3. I feel my choices express who I really am.
4. I feel I have been doing what really interests me.
5. Most of the things I do feel like ‘‘I have to’’
6. I feel forced to do many things I wouldn’t choose to do.
7. I feel pressured to do too many things.
8. My daily activities feel like a chain of obligations.
9. I feel that the people I care about also care about me.
10. I feel connected with people who care for me, and for whom I care.
11. I feel close and connected with other people who are important to me.
12. I experience a warm feeling with the people I spend time with.
13. I feel excluded from the group I want to belong to.
14. I feel that people who are important to me are cold and distant towards me.
15. I have the impression that people I spend time with dislike me.
16. I feel the relationships I have are just superficial.
17. I feel confident that I can do things well.
18. I feel capable at what I do.
19. I feel competent to achieve my goals.
20. I feel I can successfully complete difficult tasks.
21. I have serious doubts about whether I can do things well.

22. I feel disappointed with many of my performance.
23. I feel insecure about my abilities.
24. I feel like a failure because of the mistakes I make.

1= Completely untrue, 5 = Completely true

Autonomy satisfaction: 1-4, Autonomy frustration: 5-8, Relatedness satisfaction: 9-12, Relatedness frustration: 13-16, Competence satisfaction: 17-20, Competence frustration: 21-24

Group Needs Scale (Parker et al., 2019), Study 6

1. My group is free to live in accordance with our beliefs.
2. My group is able to determine our identity for ourselves.
3. My group can express our core values.
4. My group is able to pursue what matters most to us.
5. My group remains oppressed in many ways.
6. My group's opinions and concerns are often ignored.
7. My group is held back by other forces in society.
8. My group often suffers from external pressures and controls.
9. My group is effective in protecting our values and practices.
10. My group is able to accomplish our aims.
11. My group is successful in pursuing what is important to us
12. My group can make things happen when we need to
13. My group has little power or influence
14. My group is not very effective in achieving our goals
15. My group is often incapable of acting as a whole
16. My group can't make any real change happen
17. My group is included in the larger culture

18. My group has gained a sense of belonging within country and society
19. My group is valued and respected.
20. My group is positively recognized by other groups and organizations.
21. My group has been isolated and often rejected by other groups.
22. My group faces ongoing prejudice and stigma.
23. My group is disconnected from society
24. My group is not cared about in our society.

1=*strongly disagree*, 7 =*strongly agree*

Autonomy satisfaction: 1-4, Autonomy frustration: 5-8, Competence satisfaction: 9-12, Competence frustration: 13-16, Relatedness satisfaction: 17-20, Relatedness frustration: 21-24.

Motivation to Identify Scale (Amiot & Sansfacon, 2011), Study 8

When answering the following questions, please refer to the reasons for why you are a member of the group you just named. Indicate to what extent you agree or disagree with the following reasons for being a member of this group. Why do you consider yourself to be a member of this group?

1. Because I experience pleasure and satisfaction from being a member of this group.
2. For the positive emotions, I experience from being a member of this group.
3. For the pleasure I experience from thinking of myself as a member of this group.
4. Because being a member of this group is really part of who I am.
5. Because being a member of this group is very meaningful to me.
6. Because being a member of this group is something that I deeply value.
7. Because it's important for me to be a member of this group.
8. Because being a member of this group allows me to achieve important goals.
9. Because it represents a means through which I am becoming the person I aim to be.

10. I have to be a member of this group to feel good about myself.
11. Because being a member of this group makes me feel like I'm a valuable person.
12. Because I would feel guilty if I wasn't recognized as part of this group.
13. Because this group is one of the best.
14. Because this group will allow me to become part of the elite.
15. Because being a member of this group allows me to compare positively to other groups of people in society.
16. Honestly I don't know; I truly have the impression of not fitting in as a member of this group.
17. I don't know; I can't understand why I'm trying to see myself as a member of this group.
18. I wonder why I'm even trying to consider myself as a member of this group: actually, being a member or not is of no importance to me.

1 (*strongly disagree*) to 7 (*strongly agree*)

Intrinsic motivation: 1-3, Integrated regulation: 4-6, Identified regulation: 7-9, Introjected regulation: 10-12, External regulation: 13-15, Amotivation: 16-18.

<u>Motivations to Identify (Amiot & Aubin, 2013), Studies 8 and 10*</u>

Not everyone is attached to America in the same way. For some, being an American is an important part of their identity. For others, being an American is not important for how they see themselves. What are the reasons that you feel attached to America?

1. Because I feel satisfied being an American.
2. Because being perceived as an American provides me with social recognition.
3. Because being American allows me to have the quality of life I want.
4. I wonder why I consider myself American; in fact, it doesn't matter to me at all.
5. For the pleasure of feeling American.

6. Because being American is really a part of who I am.

7. Because being American is a valuable thing for me.

8. Because being American allows me to compare myself favourably with people from other countries.

9. Because considering myself an American allows me to feel a part of a social group.

10. Because my self-worth depends on it.

11. I don't know; I don't understand why I'm a part of this group.

12. Because being American is prestigious.

13. Because I would feel guilty if I don't feel any attachment to America.

14. Personally, I need to feel an attachment to America to feel good.

15. Because being American is meaningful to me.

16. Because it is in my deep values to be American.

17. For the pleasure that I feel in considering myself an American.

18. I don't know what difference it makes for me whether I identify as an American or not.

1 = (*strongly disagree*), 7 = (*strongly agree*)

Intrinsic motivation: 1, 5, 17; Integrated regulation: 6, 15, 16; Identified regulation: 3, 7, 9; Introjected regulation: 10, 13, 14; External regulation: 2, 8, 12; Amotivation: 4, 11, 18.

*This measure was translated and back translated from French. In Study 10, I changed the words America and American to Christianity and Christian according to the sample.

<u>Age Universal I-E Scale (Maltby, 1999), Study 10</u>

1. I try hard to live all my life according to my religious beliefs.

2. I have often had a strong sense of God’s presence.

3. My whole approach to life is based on my religion.

4. My religion is important because it answers many questions about the meaning of life.

5. I enjoy reading about my religion.

6. It is important to me to spend time in private thought and prayer.

7. What religion offers me most is comfort in times of trouble and sorrow.

8. Prayer is for peace and happiness.

9. I pray mainly to gain relief and protection

10. I go to church because it helps me make friends.

11. I go to church mainly because I enjoy seeing people I know there.

12. I go to church mostly to spend time with my friends.

1 = (*strongly disagree*), 7 = (*strongly agree*)

Intrinsic religiosity: 1-6, Extrinsic personal religiosity: 7-9, Extrinsic social religiosity: 10-12.