

On Behalf of the Group: Exploring Collective versus Individual Quest  
for Significance and its Relation to Violent Extremism

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## Abstract

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While quest for significance theory has established the relation between individual-level significance and violent extremism, the theorised collective level of the construct remains underexplored. The present thesis investigates the differential effect of significance loss on an individual or collective level on dependent variables of violent extremism. The present thesis is an independent research project using pre-existing data in its first study and conducting a novel experiment in its second. Using cross-sectional data from a sample of White US individuals, Study 1 found an association between collective significance threat perception and both radicalism and violent behavioural intentions. Conducting an online survey with an experimental design on a sample of Norwegian students, Study 2 aimed to replicate and expand these findings by manipulating loss of significance on an individual- or collective-level before the participants answered measures of violent extremism. Study 2 did not yield any significant effect of the manipulation on the conditions of individual-level loss, collective-level loss, or the control. Although the initial finding suggests evidence for the potential existence of collective significance as a distinct construct, the subsequent study is unable to provide conclusive results due to the lack of experimental effect. While the lack of experimental effect prevents a clear examination of the distinction between individual and collective significance, the thesis still provides evidence for a potentially distinct collective-level significance. The implications of the findings for significance quest theory are examined, as well as additional findings on group-level factors influencing violent extremism. A conclusive understanding of individual- versus collective-level significance has yet not been reached, however the present thesis furthers the field's work both by providing evidence of collective significance and by highlighting the pitfalls of its research. The thesis concludes with recommendations and calls for future research on this area.

*Keywords:* quest for significance, collective significance, violent extremism, nationalism, political orientation

### **Author's Notes**

Growing up with the presence and aftermath of far-right terrorism in Norway has made the topic of ideological extremism personally important to me and has shaped my academic field of interest. With these experiences, understanding how regular and universal psychological processes and phenomena can allow or lead to such horrendous acts has become an important question to me. I am grateful to be able to study this topic and to be supervised by a researcher with such expert knowledge of the field. This thesis was not without challenges and was unfortunately set back by the loss of a planned third study which may have remedied the limitations of the thesis. Yet I hope to be able to conduct this study in the future and to aid society in combatting violence and extremism.

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## **On Behalf of the Group: Exploring Collective versus Individual Quest for Significance and its Relation to Violent Extremism**

Extremism and violent acts undertaken by people devoted to their in-group or cause have long been the subject of public and academic interest yet has especially come to the forefront in the last two decades (e.g., see works of Ginges et al., 2011; Horgan, 2008; Kruglanski et al., 2009, 2014; Moghaddam, 2005; Sageman, 2008). While espousing devotion to their ethnic or religious national group, the perpetrators of such acts of extremist violence are often spurred on by a deep need for themselves or their group to be significant, to have meaning in the broad society and world. Following such a quest for significance (Kruglanski et al., 2022), these individuals may become highly embedded in groups whose cause and ideology promise meaning. Research on the psychological processes involved in violent extremism has in the last decade been heavily influenced by an important theoretical framework, that of significance quest theory (Kruglanski et al., 2022). In the present thesis I present work that aims to further the understanding of this framework by examining the effect of *individual* and *collective* significance on aspects of violent extremism. These terms refer to the need for significance either based in oneself or based in the group one is a part of. In the present thesis, I predicted that collective-level significance would have an impact on measures of violent extremism, distinct from individual-level significance, but that this impact would be to a lesser degree. In its two studies I aimed to investigate this prediction and to discuss its related findings in light of prior and future research.

### **Introduction and Background**

Central in much intergroup conflict, ethnocentric and religious nationalism has contributed to radical and violent acts for centuries (Scales, 2007; Smith, 1996). Religion has long been a tool for moving people to commit violent acts in its name, from persecution to crusades, while protection or promotion of the in-group has been central in much intergroup conflict (Scales, 2007; Smith, 1996). During the early modern age, the concept of nationalism began to emerge and encompassed both religion and the predominant cultural and ethnic community of the state (Jensen, 2016). Now, many nationalist ideas take form from characteristics of the in-group and the religion traditionally followed by them. In Europe and much of the West, this often takes the form of the supposed “original” ethnic group of the country and a collection of “Christian values” (Brubaker, 2017; Halikiopoulou & Vlandas, 2019). While nationalism may have certain benefits through contributing to a sense of a unified in-group (e.g., see discussions of Malešević, 2011; Reeskens & Wright, 2013), it has also been used to promote or justify intergroup conflict and transgressions (Federico et al.,

2022; Huddy et al., 2021). Alongside nationalism, aspects such as islamophobia, antisemitism, xenophobia, and homophobia remain prevalent in society. For example, a recent report by the Oslo Center for Studies of the Holocaust and Religious Minorities (Moe, 2022) found that 9.3% of the respondents in Norway exhibited a marked prejudice against Jews, with 14% supporting the statement “World Jewry is working behind the scenes to promote Jewish interests”. Meanwhile, 30.7% exhibited marked prejudice against Muslims, with 33% supporting the statement “Muslims pose a threat to Norwegian culture”. Though these percentages are a decrease from reports in 2017, they showcase the continued prevalence of out-group prejudice, even in a relatively socially equal country. Ethnocentric, religious, and traditionalist nationalist ideas permeate through such prejudices and may spur on intergroup hostilities.

Violent extremism in support of an ethnocentric or religious nationalist idea has widely entered both public and academic discussion, spurred on by a multitude of far-right, white nationalist, and Islamist terrorist attacks. Most of the world has in recent years been struck by such terrorist attack, in varying degrees and forms. In Europe, both far-right, white nationalist, and Islamist terrorist attacks have been committed. The Scandinavian countries have been targeted by multiple of such terrorist attacks. In Sweden, three white nationalists with a background in the neo-Nazi Nordic Resistance Movement conducted a bombing of a leftist café and a refugee centre, with the attempted bombing of a second centre, in 2017 (Dickson et al., 2017). In Denmark, a gunman affiliated with ISIS first opened fire on a religion-critical free speech event then a synagogue in 2015 (Ellis et al., 2015). In Norway, two white nationalist and one Islamist terrorist attacks have been committed since the turn of the century. The first attack in 2011 took eight lives through bombing the Government Quarter in Oslo and a further 69 at a political youth camp on Utøya (‘Norway Suspect Anders Behring Breivik “Admits Attacks”’, 2011). The second terrorist attack occurred in 2019 where the perpetrator killed his adopted sister before opening fire on a mosque in Bærum (‘Norway Sentences Oslo Mosque Shooter to 21 Years in Prison’, 2020). Further, an Islamist terrorist attack in 2022 targeted a gay bar in Oslo the night before the Pride Parade, killing two (Yeung et al., 2022). Each state has also seen multiple terror plots which were stopped before they were committed. Meanwhile, in the United States most fatal attacks in the last decade have been committed by far-right and/or White nationalist extremists (Doxsee et al., 2022). In the US many perpetrators of mass shootings have made reference to support of White nationalism, anti-pluralism, homophobia, anti-Semitism, and shown signs of xenophobia (e.g., see Arango et al., 2019; Robertson et al., 2018; Sack & Blinder, 2017). The

perpetrator of the Charleston Church shooting has, for example, written about a hope to incite a race war, support of Nazism, and showing to racist and homophobic prejudices and stereotypes in his justification (Sack & Blinder, 2017). The perpetrator of the Oslo bombing and Utøya attack similarly in a manifesto expressed his motivation in islamophobia, multiculturalism opposition, Christian nationalist ideas, and expressed his intention to save Europe from Islamification (Englund, 2011). As violent extremism motivated by ethnocentric or religious nationalist ideas continues to pose a threat worldwide, it is important to examine the role of narratives and ideologies in the motivation of these attacks.

Though their purported causes differ, many common characteristics exist across terrorist causes and narratives. An ideology may be defined as “a set of beliefs about the proper order of society and how it can be achieved” (Erikson & Tedin, 2016; Webber et al., 2020). Ideology thus incorporates both a set of principles outlining the ideal society and identifies the means of bringing it about (Webber et al., 2020). Ideology may thus be motivating on its own and may be adopted by individuals who support it. The ideology may however also be promoted or spread through the use of narratives. A narrative promotes and communicates the worldview and goals of the group, relates meaning and an understanding of one’s reality to the group members, and may be used to justify their actions (Kruglanski, Jasko, et al., 2018). Ideological narratives may promote a collective cause that promises a sense of significance to the recipient individual. Narratives intended to promote radicalisation tend to be characterised by inciting discontent, justifying the need for the extremist group’s existence for the benefit of the larger in-group, reinforcing pre-existing group identities that permit the extremist group’s actions, and by creating new identities centred on the extremist group (Casebeer & Russel, 2005). Extremist narratives also tend to include some key mechanics: encouraging identification with the victims of the narrative, arousing emotional responses in the audience, and defining the in-group and out-group in a manner that reinforces the narrative (Braddock, 2015). As discussed, narratives play a crucial role in promoting extremist ideologies and justifying their actions.

Throughout all extremist narratives, the main themes and features will concern and revolve around their ideology (Braddock & Horgan, 2016) and relating the meaning of the group and group member, with the specific content differing between groups. For example, European far-right extremists will espouse the supremacy of whites and Christian traditions while purporting the dangers of multiculturalism, and Islamist extremists will espouse the moral supremacy of their version of the Islamic faith while denouncing other forms of living. Despite the differing content, most extremist ideologies utilise narrative persuasion



mechanics that promise to bolster the experience of significance in the individual. A key feature of extremist narratives lies in how they frame the meaning and significance of the individual member and their actions (Kruglanski et al., 2022).

Narratives are a key driver in the quest for significance (Kruglanski et al., 2022), defining worthy goals for the individual to pursue, inducing a sense of significance in them (Kruglanski, Jasko, et al., 2018). Extremist groups thus use narratives to promote collective causes for the individual to attach themselves to. They further define what acts the individual may undertake in order to be deemed as having high significance in the eyes of the group (i.e., respected, honoured due to their behaviour). In such a way, the extremist group will endear the individual to them by offering a pathway to significance.

In addition to posing a cause for the individual to follow, many extremist groups also pose violence as an acceptable means to pursue this goal (Kruglanski et al., 2014, 2022). The narratives of the extremist group will thus be used to promote justification of violence. Individuals that follow such a violence-promoting narrative will be more willing to engage in violence themselves to further the goal of the group. Narratives are thus able to tie the significance of the individual to the significance of the group, as the collective cause becomes a prime source of meaning for the individual.

Various research on the quest for significance has already established the mechanics of how the individual's significance functions (e.g., see works of Dugas et al., 2016; Kruglanski et al., 2022; Molinario et al., 2021; Webber et al., 2018). It has however further been theorised and partly investigated (Bélanger et al., 2022; Jasko et al., 2020; Kruglanski et al., 2014) that another form exists: collective significance. While this dichotomy has been put forward, little work has specifically investigated their different functioning or effects. In the present research I aim to do just this, to investigate the differential effect of individual and collective loss of significance on aspects of violent extremism. Specifically, I expected that an effect of collective significance on violent extremism may be found and that its relationship to extremism and radicalisation is distinct and different from that of individual significance.

## **Theoretical Frameworks and Prior Research**

### **Quest for Significance Theory**

The quest for significance theory is a theoretical framework which may largely function as a nexus of individual- and collective-level processes. The theory has become a central framework for research on violent extremism in the past decade (e.g., see Jasko et al., 2020; Kruglanski et al., 2022; Webber et al., 2018). In their comprehensive work on the state

of the quest for significance theory, Kruglanski et al. (2022) define significance as the need for social worth measured up to the values the individual shares with significant others. The experience of such significance or social worth is largely determined by the individual's perception of how they are evaluated by significant others, by their group, and by individuals whose respect they value (Goldman & Hogg, 2016; Kruglanski et al., 2022). In some instances, the significance may also be determined by the individual's internalised values (i.e., a value or norm that has become intrinsic to the individual and is followed regardless of conformity reinforcement by others or group membership), whether they are concurrent with their group's or not. That is, the need for significance is based in social evaluation or self-evaluation rooted in internalised values, whether those are rooted in the group or not. The quest for significance is universal, but the means for achieving significance are dependent on one's sociocultural context (Kruglanski et al., 2022). Radicalisation is one possible pathway for gaining or restoring a sense of meaning or significance (Kruglanski et al., 2014). While many specific and varied grievances may manifest in an individual's radicalisation, a "fundamental desire to matter, to be someone, to have respect" (Kruglanski et al., 2014, p. 73) may be identified to underlie most grievances.

The quest for significance generally occurs in two steps: first, the need for significance is activated, then means for gaining significance are identified (Kruglanski et al., 2022). *Activation* of the quest for significance occurs through significance deprivation or incentivisation. Deprivation exists when experiencing a lack of significance and may come through failure, humiliation, rejection, or the threat of significance loss (Kruglanski et al., 2022; Webber et al., 2018). Incentivisation exists when seeing the opportunity for gain and is a situational opportunity to increase one's experiences of significance. The individual's activated need for significance may be chronic, representing a stable individual trait, or acute, representing a situational induction. The activation of the quest for significance is anchored in the individual's group values and internalised values. That is, such values impact when and why an individual experiences that they are lacking in the need for significance. Activation may be sparked by personal events or events that have negatively impacted one's group (Jasko et al., 2020; Kruglanski et al., 2018). When the quest for significance is activated by group events, the individual experiences an affront to their social identity and a personal loss of significance as members of affronted group.

The identification (and execution) of means for significance gain often comes in the form of devotion to a cherished or sacred value (see e.g., Ginges & Atran, 2013) with attached actions and attributes that the individual holds in high regard (Kruglanski et al.,

2022). Such actions and attributes are usually regarded as of a high value by the group, network, or their narrative. Achieving the prescribed action or attribute brings with it significance, a sense of meaning, and the promise that the individual merits respect, especially if achieving this value through personal sacrifice. In this way significance travels from the abstract value of the group to the individual that bring them into reality. Further, cultural or group narratives often describe or demonstrate the link between value and action or attribute. That is, the narrative describes the values of the group and prescribes how to achieve them.

When the need for significance is activated and at such a high need that it outmatches all other needs and concerns, its satisfaction becomes a priority (Kruglanski et al., 2022). Such a motivational imbalance (Kruglanski et al., 2021) is followed by the identification of a specific goal and the means to serve it, meant to satisfy the need. Other concerns and alternative considerations are suppressed and the individual becomes more willing to devote extreme effort and sacrifice in pursuit of their identified goal (Kruglanski et al., 2021, 2022). Extreme behaviours also become more attractive as they may more potently sate extreme needs (Kruglanski et al., 2021). A high need in one domain may outmatch other domains, causing an imbalance. During normal functioning (i.e., that which may be expected from any given person in normal circumstances), individuals will try to balance all their needs and not engage in behaviours that satisfy one need while frustrating another (Kruglanski et al., 2018). However, as one need becomes dominant and other need domains become less salient, the behavioural constraints and demands of those needs (e.g., need for personal safety, need for fairness) become attenuated in the individual (Kruglanski et al., 2021). Such demoted constraints and demands will allow the individual to more readily adopt behavioural means that would otherwise be avoided, such as the use of violence.

As a combination of prior works on significance quest theory, the 3N model has identified three main drivers of violent extremism: need, narrative, and network (Kruglanski et al., 2018). In essence the model functions as such: the need for significance is a dominant underlying need, an ideological narrative promises significance through a collective cause and outlines means to pursue it, and the network of others that ascribe to the narrative makes the individual perceive it as cognitively accessible and morally acceptable.

The *need* for significance component constitutes the experienced lack of meaning and significance and the need to increase it. Thus, this would be the starting point of a quest for significance as process. This need may originate situationally, such as following a negative or traumatic event, or be a more general subjective sense of personal purpose (Kruglanski et al.,

2018). When the individual's level of significance is lower than their desired level (which varies between individuals), the individual is motivated to seek means of restoring their significance.

The *narrative* component of the 3N model refers to the worldviews, shared realities, and sociocultural stories available to the individual and will describe a collective cause through which the individual may achieve their desired significance through prescribed means (Kruglanski et al., 2018). Narratives are dependent on the sociocultural context and incorporate values unique to the group. That is, the narrative is shaped by the culture it operates in and by the people who convey it. It thus incorporates values that are important to its target audience. A narrative may be violence-promoting or -justifying in that it poses violence as a necessary, justified, or admirable means against the enemies of the group. Such narratives often revere and place significance on individuals who act for the group, especially when this involves personal sacrifice. An individual that ascribes to a violence-promoting narrative will be more willing and likely to support and engage in violent behaviour because the narrative has justified the violence as a necessary and effective way of attaining significance. Further, when experiencing a high need for significance, individuals are also more prone to adopt a significance-promising narrative (Kruglanski et al., 2014, 2018, 2022).

The *network* refers to the group of people available to the individual in question that subscribe to the narrative (Kruglanski et al., 2018). Networks can range from informal groups of likeminded people, friends, and family to organised organisations devoted to a shared purpose. The network contributes to radicalisation in three ways. Firstly, it makes the narrative cognitively accessible to the individual by providing contact with it through the individuals in the network (Kruglanski et al., 2018). Secondly, the network's support of the narrative validates and reinforces it within the individual. Thirdly, it rewards those who represent or live up to values, actions, and attributes or traits of the group and narrative with status and prestige (Kruglanski et al., 2022) It thus further incentivises the adoption of the narrative's prescribed means. Being connected to a radical social network will make the individual more likely adopt the network's narrative and increase the likelihood of the individual engaging in violent extremism (Kruglanski et al., 2018).

A recent meta-analysis by Da Silva et al. (in press) investigated the relationship between both the quest for significance and 3N model components with violent extremism. The meta-analysis found all four variables to significantly and positively correlate with violent extremism, confirming the usefulness of the model. The analysis found *quest* for significance to have a strong association with violent extremism, *need* for significance to

have a low association, and *network* and *narrative* to have moderate associations. The lower association of the need for significance highlights how it is the *process* of the quest that most impacts the path to radicalisation. The authors also point out that it is the interaction of the significance quest and the 3N model components that leads to violent extremism.

The 3N model emphasises the connection of individual-level factors and group-level factors in the processes of the quest for significance. This connection is central in recent frameworks and models of radicalisation and violent extremism. An avenue of this research that has so far not been fully examined, however, is that of *individual-* versus *collective-*level significance. Prior work has theorised that significance may be lost or gained based both on an individual- and collective-level experience (Kruglanski et al., 2014, 2018; Da Silva et al., in press); this interactive experience incorporating both the self and social identity. Da Silva et al. (in press) point out that the levels of individual and collective significance might be found to be distinct, but that few studies have so far examined them. The examination of such a duality within research on violent extremism may shed light on certain aspects of the radicalisation process. In the following sections, I examine each of these levels of significance as well as their empirical bases.

### ***Individual-Level Significance.***

Most studies on significance quest theory and violent extremism have examined individual-level significance. Most research on the quest for significance has assumed that loss or gain of significance will always exist on the individual-level, even if impacted by group-level factors. Individual-level significance thus functions as has been described above. Plenty of research has been conducted on individual-level significance, some of which is detailed below.

A study by Jasko et al. (2017) sought to examine the relationship between variables of significance and endorsement of extreme ideology in a sample of individuals incarcerated due to violent or non-violent ideologically motivated crimes. The study found a correlational relationship between the antecedent proxy variables of low or loss of significance (e.g., unemployment, failure to achieve their aspirations, relationship troubles, exclusion from social groups and marginalisation) and both endorsement of extreme ideology and the use of violence. Research by Dugas et al. (2016) examined the relation between significance and willingness to self-sacrifice (an aspect closely related to violent extremism) in a series of both correlational and experimental studies. Manipulating experienced significance through social rejection, rumination on unaccomplished goals, and failure feedback on a test of IQ, the studies found effects on willingness to self-sacrifice. Further, in Study 5 they identified the

search for meaning as a mediator of the effect of significance on willingness self-sacrifice, while the following Study 6 showed that the imagined or expected effect of self-sacrifice on behalf of a group or cause increased reported experience of personal significance. When these studies are seen in conjunction, one can see a rendering of the radicalisation process: going from low experience of personal significance (based in plethora sources) to searching for a cause or group which may provide meaning and believing certain means or acts (especially self-sacrifice) to especially gain them significance.

In a series of 4 studies by Webber et al. (2018), personal experience of significance was measured or experimentally manipulated before measures of endorsement of extreme attitudes were taken. In their field studies in the Philippines and Sri Lanka on incarcerated and former members of Islamist extremist organisations, a correlational relationship was found between personal feelings of shame or humiliation and agreement to extreme attitudes, mediated by the need for cognitive closure. The authors then replicated these results in two studies on a general US population sample, experimentally lowering the participants experience of personal significance by asking the participants to recall a time in which they felt ashamed, humiliated, or experienced people laughing at them. The studies found the experimental group (as compared to a control group) to report higher agreement with extreme attitudes, mediated through the need for cognitive closure.

As presented above, individual-level significance has been found to have strong relations to violent extremism. Through correlational and experimental designs, individual significance has been shown to correlate with and have an effect on radicalisation, violent behavioural intentions, and other variables of violent extremism. Across both contexts and sources of significance-loss, individual level of significance has strong theoretical basis and serves as the (unconscious) standard for research on the significance quest. Some work has, however, theorised and examined a different level the significance quest may function at.

### ***Collective-Level Significance.***

Compared to the individual-level, fewer studies have examined the relationship between significance on what may be deemed a collective-level and violent extremism. The differential effect of collective-level significance has been theorised by researchers such as Kruglanski et al. (2014), referring to group-based humiliation and socially based significance loss that cause a considerable loss of experienced significance which is then utilised by extremist groups' recruitment. Collective-level significance also finds basis in research on perceived group threat (Doosje et al., 2013; Obaidi et al., 2023) and collective narcissism (Jasko et al., 2020). Collective-level significance also draws from the collectivistic shift

theorised by Kruglanski et al. (2013). The collectivistic shift states that individuals will orient themselves towards an in-group in an effort to gain or restore significance and will be more willing to act on the group's behalf (Dugas & Kruglanski, 2014).

Collective-level significance is theorised to function differently to the individual-level. When differentiating between the levels, collective-level significance is believed to be affected by the status, power, and social worth of the group. The individual's perception of the group's status, treatment, and events surrounding it is believed to impact their experience of collective-level significance in a different manner than if the status, treatment, and events surrounded the individual themselves. The existence of collective-level significance as a construct distinct from individual-level significance has so far not been established (Da Silva et al., in press). Nor has research so far established to what degree the two levels are independent or interact. Questions surrounding collective-level significance still remain unanswered, such as whether collective-level significance impacts violent behavioural intentions independently or whether it is mediated through individual-level significance. Still, as collective-level significance more distinctly incorporates aspects of the group, which have been shown to be central to significance quest theory, it remains an avenue of research with much potential.

I therefore predict that a differential effect between collective-level and individual-level significance may be found. In the following paragraphs, I examine research linked to collective-level significance to explore its basis. Some empirical studies have investigated this collective-level significance or variables connected to it, yet few have specifically tested the difference between individual- and collective-level significance.

Building partly on the studies by Webber et al. (2018), Obaidi et al. (2023) have in a series of studies examined the effect of cultural threat perception on endorsement of a fundamentalist group, mediated through the need for cognitive closure. In the study, cultural threat perception may be framed as a perception or experience of collective-level significance threat, as the experience of threatened cultural values also threatens the groups significance or integrity. While being theoretically different phenomena, cultural threat perception and collective significance have certain overlaps. A cultural threat perception consists of a threat to the group's cultural values, integrity, or security. Through this, it may thus threaten the significance of the group. Such threats target the group's societal and meta-physical meaning, standing, integrity, reputation, etc. in the individual's perception. In a similar vein, Kruglanski et al. (2009) found that when individuals perceive that their sacred values, which are often tied to their in-group, are threatened they experience lowered significance.

Therefore, the two concepts appear to largely overlap and largely involve the same process or latent factor. Studies 1 through 4 of Obaidi et al. (n.d.) found a relationship between cultural threat perception and extremist outcome variables, mediated by the need for cognitive closure, in samples of both general Muslim population and Afghani Mujahideen. In a 5<sup>th</sup> study on a sample recruited from Muslim university students in Pakistan, cultural threat perception was experimentally manipulated, replicating the previous findings.

The findings may be interpreted as the individual identifying more strongly with the group when it is threatened, and thus becoming polarised towards the extreme of the group and being more accepting of extreme behaviours. This may indicate that the effect of collective significance is in some way reliant on other factors of the group. It is possible that factors such as collective threat or identity fusion with the in-group (Gómez et al., 2011) may impact the effect of collective significance on violent extremism. However, while some research has examined aspects that may be seen as collective-level significance, the impact of the level of the significance has only recently begun to be specifically examined.

#### ***Individual- and Collective-Level Significance.***

Some recent studies have specifically examined the effect of both individual- and collective-level significance. In a series of four correlational studies conducted in different cultural contexts, Jasko et al. (2020) examined the relationship between individual- versus collective-level significance and support for political violence moderated by belonging to a more or less radicalised context. The authors found that when part of a radical social context, the link between collective significance and support for political violence will be stronger. The authors stress that the social context plays a crucial role as it may guide the form of one's significance quest, explaining how the same variables can have both antisocial and prosocial outcomes based on one's social network and identity. The individual- and collective-level as used in Jasko et al. (2020) primarily refers to the level of the grievance, or the cause of the significance-reduction. The study does however highlight the 3N model in action, as the significance quest is impacted by the network and the narratives therein. As individuals in such radical contexts experience significance loss, the available narratives are more likely to direct them towards violent means.

A series of studies by Bélanger et al. (2022) has through both correlational and experimental designs examined how loss (and gain) of individual- versus collective-level significance moderates the relationship between passion for a group and violent activism. The first study examined whether individual-level versus collective-level reported loss of significance would interact with the relationship between passion for the in-group



(harmonious versus obsessive) and support of peaceful and violent activism in a sample of US republicans. The study found an interaction effect between obsessive passion and individual loss of significance on support for violent activism, suggesting that when the group is highly important to the individual and they experience a personal loss of significance they more readily support violent activism. Such an interaction effect was however not found for collective loss of significance. In a second study with a sample of Black Lives Matters supporters, the authors experimentally lowered experienced significance on an individual versus collective level, finding that the effect on support for violent activism was higher with an interaction effect between obsessive passion and individual loss of significance compared to both the control and collective loss of significance groups. The third study theoretically supports the previous studies through experimentally inducing a *gain* of individual- versus collective-level significance in a sample of environmentalists. The studies by Bélanger et al. (2022) suggest that when an individual experiences both a high commitment to and passion for a group as well as a loss of significance on an individual level, they are more likely to support violent non-normative activist acts in service to the group. The studies also suggest, at least in these contexts, that this relationship does not occur if the experienced loss of significance is on a collective level. It may be that collective-level significance does not affect violent extremism distinctly itself but that it somehow interacts with other variables related to the in-group.

While some research into collective- versus individual-level significance has begun, more is needed to understand the construct. To the author's knowledge, the only research to have specifically tested collective- versus individual-level significance is that of Bélanger et al. (2022). These studies found no difference between the two levels on their measures of violent activism. Other works (e.g., see Jasko et al., 2020; Da Silva, in press) have however pointed to the potential of collective-level significance affecting support for violence. It is possible that the levels of significance will interact differently with various aspects and variables of violent extremism. In the present thesis I predicted that both individual-level and collective-level significance impact violent extremism but that they may do so differently. As a relationship has so far not been found between collective-level significance and violent extremism, it may be that collective-level significance is reliant on some interaction with other factors in order to have a significantly different effect than individual-level significance. The present thesis predicted that certain factors of in-group membership may fill this gap. It may be that collective significance only has an identifiable separate effect with higher levels of in-group factors such as nationalism, identity fusion, or in-group identification.

## Factors of the Group

### *Nationalism*

As a factor relating strongly to an individual's adherence to their national in-group, nationalism may be a variable of interest when it comes to collective significance. Nationalism is typically construed as a strong attachment to one's national in-group as well as a sense of national superiority and dominance (Huddy et al., 2021). It can further be defined as a sense of ethno-religious chauvinism directed both at foreign nationals and against internal minorities (Huddy et al., 2021). This chauvinism, or excessive and prejudiced support for one's group and cause ('Chauvinism, n.', n.d.), connects nationalism to experiences of collective significance. Further, it draws on the antagonistic relationship between in- and out-groups (Bonikowski et al., 2019) and makes nationalism more aggressive and exclusionary (Huddy et al., 2021). In this, nationalism may thus be distinguished from the construct of patriotism. While patriotism has been linked to adherence to national norms and positive attitudes towards immigration, nationalism has been linked to xenophobia, derogation of foreigners, racism, anti-immigrant attitudes, antisemitism, social dominance orientation (see Huddy et al., 2021), and a desire to have one's group be recognised as extraordinary (Federico et al., 2022).

Some of these findings are similar to what one might expect of certain violent extremists (e.g., far-right, White supremacist, Islamist). When individuals hold beliefs related to social dominance orientation and perceive their group as exceptional, they may establish a link between these ideas and experience a shared sense of importance. This sense of collective significance could then be tied with and become dependent on national membership. As nationalism is heavily tied to the sociocultural context, an understanding of the especial characteristics of Western nationalism may aid the present thesis.

**Nationalism in the West.** Western societies have in recent years seen an increase in support for far-right and nationalist political parties (e.g., see Halikiopoulou & Vlandas, 2019). The resurgence of nationalist-oriented far-right parties is often posed as a backlash to increased immigration and multiculturalism (Halikiopoulou & Vlandas, 2019). The divide or polarisation between the left or moderate and the far-right has thus been explained as a split between those with universalist values and those who reject multiculturalism and seek to preserve traditional values and ways of life. In their work, Halikiopoulou & Vlandas (2019) find certain similarities in the new wave of nationalism occurring across Europe and the US and note certain characteristics. Namely, contemporary western nationalism exhibits an importance on national sovereignty and national preference, a scepticism of supranational

institutions (e.g., the EU, UN, NATO), anti-elitism (both against supranational institutions, national mainstream politicians, and often academics), a purported alignment with the nation's "people" (though their definition may be narrow) against those that supposedly control them, and a strict anti-immigration position (Halikiopoulou & Vlandas, 2019) that especially opposes Muslim immigration (Brubaker, 2017; Halikiopoulou & Vlandas, 2019).

Far-right parties tend to use rhetoric or narratives linking threats to liberal democratic values with immigration, democracy, and security (Brubaker, 2017; Halikiopoulou & Vlandas, 2019). In so doing they portray certain cultures and religions, particularly Muslims, as intolerant and opposed to the values of the host nation. Brubaker (2017) argues that far-right parties adopt a narrative of "Christianism", equating Christian values with civilization and the West to oppose Muslim culture and religion. They pose this opposition as secularised Christian national tradition versus religious Muslim ways of life. Brubaker (2017) stated it succinctly as: "If "they" are religious (in suspect ways) because they are Muslim, "we" are secular because we are (post-) Christian" (p. 1200). Liberal Christian secularism has thus become the far-right's defence against supposed controlling Muslim religiosity. When experiencing insecurities about the sociocultural context, such narratives of the far-right may be a source of meaning and tie the individual to the national collective significance.

Nationalism appears to be inherently concerned with the collective significance of their national group. Attitudes of national attachment, pride, and hubris have been found to be central to nationalism (Bonikowski, 2013), such attitudes being highly similar to aspects of the need for significance and the 3N model. An individual reporting being highly attached to the nation may for instance have undergone a quest for significance, finding the national in-group as a source for meaning. Similarly, experiencing strong pride in their nation or hubris over other nations likely gains a sense of significance for the individual through collective membership. The connection between nationalism and a preference for social dominance as well as collective narcissism also points to how membership in a perceived strong nation imbues the individual with collective significance. When experiencing a threat to their significance, such individuals are likely to look to their national group for restoration. Nationalism may therefore be a variable that relates to collective-level significance specifically.

### ***Identity Fusion***

Identity fusion may also prove to have an interesting relationship to collective significance. Identity fusion, or a deep and visceral feeling of oneness with (usually) one's in-group (Gómez et al., 2011), has been found to predict willingness to engage in personally

costly extreme behaviours for one's group, such as willingness to fight, kill, or die for the group (Gómez et al., 2020). Though similar, identity fusion differs from in-group identification in a number of ways, such as being characterised as being highly stable across contexts and having a high predictive capacity for extreme behaviour (see Gómez et al., 2020, for overview). Highly fused individuals have been found to be more willing to sacrifice on behalf of the in-group in relation to out-groups and in promotion of other in-group members' personal gains (Fredman et al., 2017; Heger & Gaertner, 2018). Highly fused individuals are also more likely to strive to protect the reputation of the in-group after some public transgression (Ashokkumar et al., 2019). While most often seen in relation to an in-group, it is possible to fuse one's identity with an out-group whose struggle is in line with one's own beliefs (Kunst et al., 2018), another personally-significant individual, a political leader, or a value or conviction such as religion or ideology (Gómez et al., 2020). Identity fusion with a political leader has been found to predict willingness to endorse or engage in political violence, such as persecution of political opponents or immigrants (Kunst et al., 2019), while fusion with one's religion has been found to predict retaliatory action against an opposing out-group (Fredman et al., 2017). Such forms of identity fusion may relate to collective-level significance as fusion with the in-group would likely make the individual tie grievances against the group to their own sense of significance and would be more willing to act on behalf of the group.

Identity fusion has been linked to nationalism and (to a certain degree) collective significance in prior research. Cognitive inflexibility and ideological conviction have been found to predict endorsement of violence to protect the national in-group (and in turn willingness to die for the national group) partly through identity fusion (Zmigrod et al., 2019). Further, it has been suggested (e.g., see Webber et al., 2018, p. 281) that those who identify strongly with the in-group, and who have internalised aspects such as group humiliation and experiences, are likely influenced by collective insignificance. In this way, identity fusion may play a role in the quest for significance and may behave differently in relation to individual- and collective-level significance.

### **The Present Research**

While the relationship between the individual-level need for significance and violent extremism has been firmly established (e.g., see works of Dugas et al., 2016; Kruglanski et al., 2022; Molinario et al., 2021; Webber et al., 2018), the impact of collective-level significance still remains under-researched. In the present research, I aimed to remedy this through a series of two studies, examining how individual- and collective-level loss of

significance differently affect extremism. Specifically, in Study 1 I examined the cross-sectional relationship between collective significance threat perception (using a measure of cultural threat perception) and measures related to violent extremism. Next, in Study 2 I experimentally manipulated loss of significance on an individual- and collective-level to examine its effects on violent extremism. Study 1 was conducted on a White/Caucasian sample in the US while Study 2 was conducted on a sample of Norwegian students.

Certain alterations were made to thesis' pre-registered plan (see Appendix A) as a result of unforeseen issues and practicality. I had intended to include identity fusion as an independent variable in Study 2 in order to examine whether it had an interaction effect on the relationship between the manipulation and dependent variables. However, due to an error that was not discovered until the data collection had begun, the identity fusion measure was presented *after* the manipulation rather than before. Therefore, it could not be included in the analysis as an independent variable to examine the interaction effect and was instead treated as a dependent variable. I had also planned to conduct an experiment in Pakistan in order to compare the relations between the independent and dependent variables across the different contexts and examine whether they differ. This study would have been a replication of Study 2 with the addition of examining the cross-cultural validity of the theoretical model. This study would also have made alterations based on what was learnt in Study 2 and included identity fusion as an individual-level variable. The data collection for this study was planned to be administered by a lab in a Pakistani university. However, since this lab had other projects to complete before this study and circumstances halted the recruitment process, there was not sufficient time to collect and analyse data for this thesis despite my and the thesis supervisor's best efforts. Collecting data among non-WEIRD (see Heinrich et al., 2010) samples is in general more difficult which can lead to such studies failing more often (e.g., see case discussion by Batres et al., 2018). As it became clear that it was uncertain whether the study collecting data in Pakistan could be administered, one additional correlational study (i.e., Study 1) was added to the thesis. In this study I examined the relationship between threat to collective significance (through cultural threat perception) and violent behavioural intentions, based on a pre-existing data set, in order to assess the basis for the following experimental study.

### **Study 1**

In Study 1, I examined the relationship between cultural threat perception and violent behavioural intentions. As part of a larger project with a different focus (i.e. Obaidi et al., 2022), data was collected among a White/Caucasian population in the US. The survey

included measures of cultural threat perception, violent behavioural intentions, activism, and radicalism. Study 1 examined the relationship between threat perception as an independent variable and both violent behavioural intentions and radicalism intentions as dependent variables. The study included two dependent variables related to violent extremism in order to increase its validity. In Study 1, I investigated whether collective significance is related to the dependent variables of violent extremism.

### **Hypotheses**

The study posits the following hypotheses:

H1. Collective significance threat perception will positively predict violent behavioural intentions.

H2. Collective significance threat perceptions will positively predict radicalism intentions.

### **Method**

#### ***Participants and Procedure***

The study collected 308 completed responses from a population of White/Caucasian Americans ( $M_{\text{age}} = 43.38$ ,  $SD_{\text{age}} = 13.24$ , range = 21–76, 49% female). Data was collected Amazon Mechanical Turk in December 2019 and participants were paid the equivalent of 6-7USD/hour. Informed consent was obtained electronically from the participants before participation. Only participants above 18 years of age were eligible to participate. 9% of the sample reported a high school diploma as the highest completed education, 20% reported college experience but no degree, 54% reported an associate or bachelor's degree, 14% reported a master's degree, and 3% reported a doctoral or professional degree. In terms of political orientation, 28% reported being Republican, 43% being Democrat, and 27% being independent. The study was approved by the ethical review board of the University of Oslo, Department of Psychology (see Obaidi et al., 2022; Study 2).

#### ***Measures***

All the measures and items of Study 1 are included in Appendix B.

**Collective Significance Threat Perception.** To measure perceived collective significance threat perception, the study uses the measure of Obaidi, Kunst, et al. (2018). The measure asks the respondents to what extent they believe immigrants to be a threat to US culture, norms, welfare, and citizen security. The measure consists of seven items, such as “Immigrants are a threat to the American culture” and “Because of the presence of immigrants, Americans are unsafe” ( $\alpha = .97$ ). With a Cronbach's alpha of .97, the measure

shows a very high internal reliability. The high alpha indicates that some items of the measure may be redundant.

**Violent Behavioural Intentions.** To measure violent behavioural intentions, the study uses the measure of Obaidi et al. (2018). The measure consists of seven items that ask the respondent's intention to use violence on behalf of their ethnic or national in-group. The items include "If nothing else helps, I'm prepared to use violence to defend my ethnic group" and "I will personally use violence against people harming other ethnic group members that I care about" ( $\alpha = .90$ ). With a Cronbach's alpha of .90 we can assume this measure to be a reliable dependent variable.

**Radicalism Intentions.** To measure radicalism intentions, the study uses the radicalism intention scale of Moskalenko and McCauley (2009). The scale consists of four items that ask the participants willingness to support or engage in radical behaviour on behalf of their ethnic in-group. The items include "I would attack police or security forces if I saw them beating members of my ethnic group" and "I would continue to support a group that fights for my ethnic group's political and legal rights even if the group sometimes breaks the law" ( $\alpha = .88$ ). With a Cronbach's alpha of .88 we can be assumed this to have high reliability.

**Political Orientation.** For exploratory analyses, the study includes a single-item measure of the participants' political orientation, ranging from (1) very liberal to (10) very conservative.

**Demographics.** The study includes measures of the participants' demographics. The measures used by the present study are limited to age and education level (dummy-coded low versus high, having a college degree being the criteria for high).

## Analysis

To examine the relation between threat perception, violent behavioural intentions, and radicalism intentions, three sets of analyses were computed using the means of each measure. R Studio (R Core Team, 2022; *RStudio: Integrated Development for R*, 2023) was used to conduct the analyses. First, the internal reliability of each measure was assessed using Cronbach's  $\alpha$ . Second, a correlational matrix was computed between the means of the measure items. And third, linear regressions from threat perception to violent behavioural intentions and radicalism intentions were computed to test hypotheses 1 and 2. As exploratory analyses, covariates were included in the linear regression models, namely age, education, and political orientation. The full R script used in the analysis can be found in the

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([https://osf.io/4r3jz/?view\\_only=ebc3f5d77b4148ecb2c59b4fc456d4ca](https://osf.io/4r3jz/?view_only=ebc3f5d77b4148ecb2c59b4fc456d4ca)).

**Results**

First, the correlations between the measures were estimated using a correlational matrix (see Table 1). Cultural threat perception was positively correlated with both radicalism intentions and violent behavioural intentions, and radicalism intentions and violent behavioural intentions were positively correlated with each other. Political orientation was also found to correlate with cultural threat perception, though not with the outcome variables.

**Table 1**

*Descriptive Statistics and Correlational Matrix for Study 1 Variables (n = 308)*

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Cultural Threat Perception	2.71	1.74	-					
2. Radicalism Intentions	2.43	1.37	.14*	-				
3. VBI <sup>a</sup>	2.61	1.37	.31***	.58***	-			
4. Age	43.38	13.24	.16**	-.07	-.05	-		
5. Gender <sup>b</sup>	1.51	.50	-.02	-.13*	.24***	.13*	-	
6. Political Orientation	4.64	2.84	.56***	-.11	.06	.21***	-.003	-
7. Education <sup>c</sup>	.70	.46	-.17**	-.08	-.07	-.05	.03	-.08

<sup>a</sup>Violent behavioural intentions. <sup>b</sup>1: female; 2: male. <sup>c</sup>0: low; 1: high \*\*\*Correlation is significant at <.001 level (2-tailed). \*\*Correlation is significant at the .01 level (2-tailed). \*Correlation is significant at the .05 level (2-tailed).

Then, to estimate the contribution of cultural threat perception to violent behavioural intentions and radicalism intentions, linear regression models were estimated, including covariates (see Table 2). Political orientation, education, and age were included as covariates in the models.

**Table 2**

*Linear Regression Models with Covariates Between Cultural Threat Perception and Dependent Variables (n = 308)*

<b>Dependent Variables</b>	<b><i>B</i></b>	<b><i>SE</i></b>	<b><math>\beta</math></b>	<b><i>t</i></b>	<b><i>p</i></b>	<b><i>95% CI</i></b>
<b>CTP -&gt; Radical Intentions</b>						
Intercept	2.82	0.31		9.14	>.001	[2.21, 3.42]
Cultural Threat Perception	0.23	0.05	0.3	4.38	>.001	[0.13, 0.34]
Political Orientation	-0.13	0.03	-0.27	4.0	>.001	[-0.2, -0.07]
Education	-0.17	0.17	-0.06	-1.0	.32	[-0.50, 0.16]
Age	-0.01	0.01	-0.07	-1.15	.25	[-0.02, 0.01]
R <sup>2</sup>	.08					
Adjusted R <sup>2</sup>	.07					



CTP -> Violent behavioural intentions						
Intercept	2.51	0.3		8.35	>.001	[1.92, 3.11]
Cultural Threat Perception	0.32	0.05	0.41	6.16	>.001	[0.22, 0.42]
Political Orientation	-0.07	0.03	-0.15	-2.29	.02	[-0.14, -0.01]
Education	-0.06	0.16	-0.02	-0.35	.73	[-0.38, 0.26]
Age	-0.01	0.01	-0.09	-1.57	.12	[-0.02, 0.002]
R <sup>2</sup>	.12					
Adjusted R <sup>2</sup>	.11					

Cultural threat perception was found to significantly predict higher levels of both radicalism intentions and violent behavioural intentions, the prediction being somewhat stronger for violent behavioural intentions. Having a high versus low education was found to not impact the model for neither radicalism intentions nor violent behavioural intentions. Political orientation was found to have a small significant negative effect in both the model for radicalism intentions and violent behavioural intentions, being higher for radical intentions.

### Discussion

The results of Study 1 indicate an interesting relationship between cultural threat perception, here posited to be a useful measure of threat to collective significance, and the dependent variables of radicalism intentions and violent behavioural intentions. The correlations between cultural threat perception and both radicalism intentions and violent behavioural intentions provide evidence of a significant relationship between these phenomena. Investigating this further with linear regressions, the analysis found that cultural threat perception predicted an increase in both radicalism intentions and violent behavioural intentions. The results indicate that perceiving a threat to the integrity and values of one's group is related to a higher willingness to commit violent or radical actions in support of one's in-group or against an out-group.

Concerning the exploratory analyses, education level does not appear to impact the relationship between cultural threat perception and violent or radicalism intentions. Political orientation does however appear to impact the relationship between cultural threat perception and violent or radicalism intentions. Namely, being more conservative is linked with a higher degree of perceived cultural threat. When controlling for cultural threat perception, it however has a small negative prediction of radicalism and violent behavioural intentions.

This study relies on correlational data and thus cannot infer a causal relationship between the two variables. Further, it relied on cultural threat perception as an approximate measure of collective significance threat. In the next study I however aimed to remedy these shortcomings by examining the relationship between collective- and individual-level significance and violent extremism by experimentally manipulating these levels of significance loss.

## **Study 2**

In Study 2 I aimed to further examine and experimentally test the relationship between collective significance and both radicalism and violent behavioural intentions found in Study 1. Here I experimentally manipulated loss of significance in the participants on an individual- or collective-level and measured its effects on the dependent variables relating to extremism. The main outcome variables of Study 2 were violent behavioural, activism, and radicalism intentions. The study included three main dependent variables in order to increase convergent validity and to examine whether the experimental conditions affected these differently. The study however treats violent behavioural intentions as its main dependent variable. I predicted that the experimental conditions (with lowered level of experienced significance) would be significantly different on measures related to violent extremism. Further, I predicted that individual-level and collective-level loss of significance would interact differently with certain measures. I predicted that individual-level loss of significance would impact violent behavioural intentions, activism, and radicalism more than the collective-level would. However, I predicted that collective-level loss of significance would impact in-group factors of nationalism and in-group identification more. While initially intended to examine the differential interaction effect between the experimental conditions and relevant individual-level variables, the study was unable to do so due to the error described earlier. As a results, I investigated a modified research question. In Study 2, I investigated how individual- and collective-level loss of significance differently affect violent extremism.

### **Hypotheses**

The study examined the following hypotheses:

- H1. Participants in the individual-level manipulation will score significantly higher on violent behavioural intentions than participants in the control condition.
- H2. Participants in the collective-level manipulation will score significantly higher on violent behavioural intentions than participants in the control condition.

- H3. Participants in the individual-level manipulation will score significantly higher on violent behavioural intentions than participants in the collective-level manipulation.

## **Method**

### ***Participants and Procedure***

The study was pre-registered on AsPredicted (see Appendix A). Using G\*Power (Faul et al., 2009) with 0.3 effect size (as per findings in Bélanger et al., 2022 and Webber et al., 2018) and a power level of 0.8, power analysis suggested a minimum total sample size of 90; as this study initially intended to examine moderation effects, it aimed to recruit around 200 valid participants. The recruitment was limited to Norwegian students. The experiment was administered over an online survey (see Appendix C for full survey) recruiting among Norwegian students during December 2022 and January 2023. The participants were recruited through posts on social media groups and pages, through sharing from various university institutions and students' associations, and through in-person recruitment in university lectures. The study collected 275 completed responses. The data set was filtered based on the following pre-registered exclusion criteria. Respondents who did not self-identify as Norwegian (25 of total failed), were not students (54 of total failed), did not succeed at least one of the two attention checks (10 of total failed), who spent less than three minutes on the survey (5 of total failed), or who wrote less than 30 characters in the manipulation text box (42 of total failed) were excluded. After completing all planned exclusions, a total of 190 participants were retained in the data set ( $M_{age} = 24.14$ ,  $SD_{age} = 4.16$ , range = 19–45, 65.3% female). Of these, 82 were in the control condition, 52 in the loss of individual significance condition, and 56 in the loss of collective significance condition. All retained respondents self-identified as Norwegian, of which 90.5% reported being born and raised in Norway, while 5.3% were only born in Norway and 3.7% were only raised.

The study was approved by the Internal Review Board of the Department of Psychology at the University of Oslo (see Appendix D). After giving informed consent, the participants conducted the experiment as an online Qualtrics survey. Each participant was randomly selected into the one of the two manipulation conditions or the control condition. After completing the manipulation, the participants underwent a delay period (as per Webber et al., 2018) in which they completed the loss of significance check measures. Following the delay period, the participants were presented with the dependent variable measures. After completing the survey, the participants were presented a debrief of the study as well as help resources in case they experienced discomfort.

## ***Manipulation***

The loss of significance manipulation used in the study was based on those of Webber et al. (2018) and Bélanger et al. (2022). In the study of Bélanger et al. (2022), the collective condition was not significantly different from the individual condition on the dependent variable of the study. Therefore, this study has altered the manipulation text to improve the effect of the manipulation and includes manipulation effect checks. The individual-level and collective-level loss of significance manipulations used in Study 2 had minimal differences between them. That is, other than targeting either the individual themselves or their national group, the manipulation method and text was the same. The participants were randomly assigned to the control condition, the individual-level loss of significance manipulation (hereby referred to as *ILOS*), or the collective-level loss of significance manipulation (*CLOS*). In the *ILOS* manipulation the participants were presented with a text box and asked to write about an experience in which they themselves felt humiliated. In the *CLOS* manipulation the participants were presented with a text box and asked to write about a time they felt their national group was humiliated. A written response is used in the manipulation to promote rumination on the event and to prod the participant to relive the experience. The actual response text of the participants was not stored; instead, the text entry was counted for number of characters so that only the length of the response was stored. This was done in order to ensure anonymity while still having an approximate measure of the amount of rumination the participant has done. It is assumed that the number of characters written is associated with time spent on the manipulation and effort on the rumination.

**Individual-level Loss of Significance (ILOS).** The participants in the individual-level loss of significance manipulation condition were instructed to recall a time they felt personally humiliated, ashamed, small, unimportant, or experienced being laughed at. The manipulation was phrased as this:

*Please recall a time you felt personally humiliated, ashamed, made to feel small and unimportant, or experienced being laughed at. In the below text box, write about what happened and how the experience made you feel. Please recall this event vividly and include as many details as you can to relive the experience.*

**Collective-level Loss of Significance (CLOS).** The participants in the collective-level loss of significance manipulation condition were instructed to recall a time they felt their national group (i.e., Norwegians) was humiliated, ashamed, made to feel small and unimportant, or experienced being laughed at:

*Please recall a time you felt your national group (that is, Norwegians) was humiliated, ashamed, made to feel small and unimportant, or was laughed at. In the below text box, write about what happened and how the experience made you feel. Please recall this event vividly and include as many details as you can to relive the experience.*

**Control Condition.** The participants in the control condition were instructed to recall the last time they watched TV or a streaming service and to detail what they watched and how it made them feel. This condition is designed to be mundane while having the same steps as the loss of significance manipulations. The control condition text was phrased as this:

*Please recall the last time you watched TV, a streaming service, or something similar. In the below text box, detail what you watched and how it made you feel. Please recall this event vividly and include as many details as you can to relive the experience.*

### **Measures**

**Loss of Significance Check.** As the manipulation method is still fairly novel (i.e., having primarily been used in Webber et al., 2018 and Bélanger et al., 2022), manipulation checks both for loss of individual and collective significance were included, adapted from the loss of significance measure of Bélanger et al. (2022, Study 1). The checks consist of five items as a check for loss of individual significance and five items as a check for loss of collective significance. The loss of individual significance check measure asks the participant to rate how often they experience humiliation, shame, people laughing at them, feeling small, and feeling unimportant on a daily basis ( $\alpha = .80$ ). The loss of collective significance check measure asks the participant to rate the same items but how often they feel that Norwegians experience these feelings in their daily lives ( $\alpha = .86$ ). With a Cronbach's alpha of .80 and .84 we can assume that both of these measures are highly reliable.

**Violent Behavioural Intentions.** The participants' reported violent behavioural intentions was assessed using a measure adapted from Obaidi et al. (2019) and the PIARES scale of Ozer & Bertelsen (2018), consisting of six items. The measure is designed to capture *intention* to engage in violent behaviour, specifically on behalf of or in support of one's in-group or its cause. The measure focuses on intentions as they have been found to be the better predictors of behaviour (Ajzen, 1991; Conner & Norman, 2022). The items ask the respondents to indicate to what extent they agree or disagree with statements concerning actions they would do for their group or cause. These items include "I would be ready to use violence to create proper conditions for those I feel solidarity with" and "I would be ready to

use violence against other people in order to achieve something I consider very important” ( $\alpha = .92$ ). With a Cronbach’s alpha of .92 we can assume this to be a reliable measure.

**Nationalism.** For exploratory analyses, the participants’ experienced nationalism was assessed using the measure of Huddy et al. (2021). The study expected nationalism to be more affected by the CLoS condition than the ILoS condition, and for both of these to have higher scores than the control condition. The measure consists of two parts. The first six items ask the participants how important they consider certain characteristics to be in order to be truly Norwegian, such as “to have been born in Norway” and “to feel Norwegian”. The next five items ask the participants how much they agree or disagree with certain statements pertaining to their nation, such as “the world would be a better place if people from other countries were more like in Norway” and “generally speaking, Norway is a better country than most other countries”. The two parts are combined, weighted by their standardised factor loadings (see Huddy et al., 2021, Table USREG-1), to form a single measure ( $\alpha = .73$ ). With a Cronbach’s alpha of .73 this measure is somewhat less reliable than others of the study but still acceptable.

**Activism and Radicalism Intention.** The participants’ level of radicalism and activism was measured using the Activism and Radicalism Intention Scale of Moskalenko and McCauley (2009), examining the participants’ willingness to partake in non-violent and legal or violent and illegal political action for one’s group. The scale consists of two measures. The activism measure consists of four items, such as “I would join or belong to an organisation that fights for Norwegians’ political and legal rights” and “I would donate money to an organisation that fights for Norwegians’ political and legal rights” ( $\alpha = .90$ ). The radicalism measure consists of four items, such as “I would continue to support an organisation that fights for Norwegians’ political and legal rights even if the organisation sometimes breaks the law” and “I would participate in a public protest against oppression of Norwegians even if I thought the protest might turn violent” ( $\alpha = .77$ ). With a Cronbach’s alpha of .90 the activism measure is highly reliable while the radicalism measure with .77 is somewhat less so but still acceptable.

**Identity Fusion.** The participants’ identity fusion with their national group was assessed using the measure of Gómez et al. (2011). The study intended to examine identity fusion as a potential moderator of the relationship between loss of significance (more specifically, collective significance) and violent behavioural intentions. However, due to an error, the identity fusion measure was presented *after* the manipulation rather than before. Therefore, it will be included as a dependent variable in this study. The study expected that

the CLoS condition would score higher on the measure of identity fusion. The measure includes seven items, such as “I am one with my nation” and “I have a deep emotional bond with my nation” ( $\alpha = .91$ ). With a Cronbach’s alpha of .91 this is a highly reliable measure.

**Ingroup Identification.** For exploratory analyses, the participants’ identification with their in-group was assessed using the measure of Obaidi, Kunst, et al. (2018), altered to pertain to the national group. The study expected that the CLoS condition would score higher on the measure of identity fusion. The measure consists of five items, such as “I feel strongly connected to other members of my nation” and “Being a member of my nation is important to me” ( $\alpha = .91$ ). With a Cronbach’s alpha of .91 this is a highly reliable measure.

**Demographics.** Measures of the participants’ demographics was included in the survey. This consisted of age, gender, whether they consider themselves Norwegian, whether they were born or raised in Norway, and whether they are currently a student. The Norwegian self-identification and student checks were used to exclude respondents that did not fit the recruitment criteria.

### Analysis

After the planned exclusions, the internal reliabilities of the measures were assessed using Cronbach’s  $\alpha$ . A correlation matrix was then computed using the measure means. Following this, hypotheses 1-3 were tested using analyses of between group differences. As some assumptions (detailed in results) for conducting ANOVA tests were not met, Kruskal-Wallis tests were used to assess differences between the conditions in the dependent variables where ANOVA could not be used (McKight & Najab, 2010). This was followed by pairwise t-tests where the between-groups tests were significant. Next, as part of the exploratory analyses, linear regressions were tested to assess whether the experimental conditions would predict the dependent variables. A second set of linear regressions were next tested, including the demographic variables (i.e., age, gender, being born and/or/nor raised in Norway) to control for these. Lastly, some exploratory analyses were run to examine relationships found in the results. The full R script and anonymous data used in the analysis can be found in the Open Science Framework

([https://osf.io/4r3jz/?view\\_only=ebc3f5d77b4148ecb2c59b4fc456d4ca](https://osf.io/4r3jz/?view_only=ebc3f5d77b4148ecb2c59b4fc456d4ca)).

### Results

The descriptives for each condition are detailed in Table 3, namely the means, standard deviations, and ranges of the participants’ age, manipulation text length, and completion time.

**Table 3***Descriptive Table for Each Experimental Group (n = 190)*

Condition, Variables	M	SD	Range
<i>Total</i>			
Age	24.14	4.16	26
Completion Time (minutes)	17.321	17.8	144.32
Manipulation Text Length (characters)	493.17	713.3	7858.0
<i>Control Condition</i>			
<i>n = 82</i>			
Age	23.21	3.13	13
Completion Time (minutes)	16.07	16.75	100.05
Manipulation Text Length (characters)	377.82	298.77	1467
<i>Individual-Loss of Significance Condition</i>			
<i>n = 52</i>			
Age	24.73	4.67	26
Completion Time (minutes)	18.41	10.64	50.2
Manipulation Text Length (characters)	876.27	1196.09	7857
<i>Collective-Loss of Significance Condition</i>			
<i>n = 56</i>			
Age	24.96	4.74	26
Completion Time (minutes)	18.14	23.8	144.32
Manipulation Text Length (characters)	306.36	310.21	1513

A correlational matrix was computed and found certain interesting relations (see Table 4).

**Table 4***Correlational Matrix of Measures in Study 2 (n = 190)*

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
<b>1</b>			-								
<b>2</b>	24.14	4.16	-.07	-							
<b>3</b>	2.62	1.15	.09	-.11	-						
<b>4</b>	2.82	1.03	-.15*	.04	.30***	-					
<b>5</b>	4.55	1.31	.02	-.04	-.29***	-.02	-				
<b>6</b>	1.93	1.14	-.22**	.09	.06	.08	-.11	-			
<b>7</b>	3.31	1.54	-.08	-.16*	.07	.12	.07	.23**	-		
<b>8</b>	2.28	1.10	-.14	-.04	.12	.13	-.17*	.59***	.402***	-	
<b>9</b>	3.43	0.74	-.38***	-.07	-.12	-.01	.36***	.09	.075	-.06	-
<b>10</b>	3.31	1.18	-.09	-.07	-.14*	.09	.66***	.05	.250***	.05	.34***



1: Gender, 2: Age, 3: loss of individual significance check, 4: loss of collective significance check, 5: Ingroup identification, 6: Violent behavioural intentions, 7: Activism, 8: Radicalism, 9: Nationalism, 10: Identity fusion.  
 \*\*\*Correlation is significant at <.001 level (2-tailed). \*\*Correlation is significant at the .01 level (2-tailed).  
 \*Correlation is significant at the .05 level (2-tailed).

The analysis next aimed to test the difference between the conditions on the manipulation check measures, beginning by testing the assumptions for conducting ANOVA analyses on these variables. The analysis examined the outliers, QQ-plots, histograms, normal distribution (through a Shapiro-Wilks test), and homogeneity of variance (Levene's test) for all measures (see Table 5 for summarised assumption checks and Appendix E for QQ-plots and histograms). Most measures were found to break multiple assumptions for ANOVA analyses and so Kruskal-Wallis tests were used instead.

**Table 5**

*Assumption checks for the variables of Study 2 (n = 190).*

Variable	Outliers <sup>a</sup>	Shapiro-Wilks test			Levene's test
		<i>p</i> <sub>control</sub>	<i>p</i> <sub>ILOS</sub>	<i>p</i> <sub>CLOS</sub>	<i>p</i>
CLI <sup>b</sup>	4	.003	.001	.003	.05
CLC <sup>c</sup>	4	.03	.1	.02	.68
VBI <sup>d</sup>	10 (1)	>.001	>.001	>.001	.85
Activism	0	.01	.18	.01	.38
Radicalism	1	>.001	.001	>.001	.94
Ingroup Identification	5	>.001	.01	.34	.99
Nationalism	1	.35	.91	.68	.18
Identity Fusion	0	.17	.04	.3	.77

<sup>a</sup>Extreme in parentheses, defined as above or below three times the interquartile range. <sup>b</sup>loss of individual significance manipulation check measure. <sup>c</sup>loss of collective significance manipulation check measure.

<sup>d</sup>Violent behavioural intentions

For the loss of individual significance check and loss of collective significance check measures, Kruskal-Wallis tests were used as the measures were found to break multiple assumptions. The Kruskal-Wallis tests were found to be significant (see Table 6).

**Table 6**

*Kruskal-Wallis tests for Study 2 Variables (n = 190)*

Measures	Control		ILOS		CLOS		$\chi^2$	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
CLI <sup>a</sup>	2.94	1.23	2.56	1.11	2.23	0.91	11.64	.003
CLC <sup>b</sup>	3.12	1.05	3.02	0.87	2.2	0.87	30.41	>.001
VBI <sup>c</sup>	1.91	1.21	1.94	1.83	1.95	1.19	0.69	.71
Activism	3.45	1.67	3.39	1.47	3.04	1.4	2.05	.36

Radicalism	2.34	1.11	2.28	1.11	2.19	1.1	0.82	.66
Ingroup Identification	4.55	1.32	4.53	1.32	4.58	1.3	0.01	.997

*df = 2. <sup>a</sup>loss of individual significance manipulation check measure. <sup>b</sup>loss of collective significance manipulation check measure. <sup>c</sup>Violent behavioural intentions.*

These tests were followed by pairwise comparison t-tests (see Table 7). For both the loss of individual significance check and loss of collective significance check measures, the CLoS condition was significantly different from the control condition. For the loss of collective significance check measure, the CLoS condition was further significantly different from the ILoS condition. In both instances, the results ran counter to the study's predictions as the collective loss condition had a lower mean score on both check measures.

**Table 7**

*Pairwise comparison t-tests of the CLI and CLC measures (n = 190).*

Condition	CLI <sup>a</sup>						CLC <sup>b</sup>					
	N	M	SD	Pairwise comparisons t-tests			M	SD	Pairwise comparisons t-tests			
				1 2	1 3	2 3			1 2	1 3	2 3	
1. Control	82	2.94	1.23	1.84	3.88***	1.67	3.12	1.05	4.87***	5.59***	0.6	
2. ILoS	52	2.56	1.12				3.02	0.87				
3. CLoS	56	2.23	0.91				2.2	0.87				

*\*\*\*Correlation is significant at <.001 level. <sup>a</sup> loss of individual significance manipulation check measure. <sup>b</sup> loss of collective significance manipulation check measure.*

The analysis next examined the difference between the conditions on the dependent variables. The dependent variables that did not satisfy the assumptions for ANOVA tests were violent behavioural intentions, activism, and radicalism. Nationalism and identity fusion was meanwhile found to adequately meet the assumptions. Neither the Kruskal-Wallis tests (see Table 6) or ANOVA tests (see Table 8) found any significant difference between the conditions on the dependent variables.

**Table 8**

*ANOVA tests for Study 2 (n = 190)*

Measures	Control		ILoS		CLoS		F(2,187)	$\eta^2$	p
	M	SD	M	SD	M	SD			
Nationalism	3.42	0.81	3.54	0.69	3.35	0.69	0.85	.009	.43
Identity Fusion	3.33	1.23	3.34	1.08	3.24	1.21	0.14	.002	.87

A follow-up ANCOVA test including demographics (i.e., age, gender, being born and/or raised in Norway) as covariates was conducted to control for these. The effect of the condition group remained non-significant (see Table 9).

**Table 9***ANCOVA tests for Study 2 (n =190)*

Measures	Nationalism				Identity Fusion			
	<i>SS</i>	<i>df</i>	<i>F</i>	<i>p</i>	<i>SS</i>	<i>df</i>	<i>F</i>	<i>p</i>
Intercept	48.14	1	100.84	>.001	37.58	1	26.34	>.001
Condition	0.78	2	0.82	.44	0.3	2	0.1	.9
Age	0.83	1	1.73	.19	1.07	1	0.75	.39
Gender	14.84	2	15.55	>.001	2.54	2	0.89	.41
Born/Raised	0.7	3	0.49	.69	1.8	3	0.42	.74

As part of the exploratory analyses, these findings were further investigated with linear regression models. None of the linear regression models with the dependent variables (i.e., violent behavioural intentions, activism, radicalism, identity fusion, nationalism) as the targets and condition as predictor yielded significant results (see Table F1). When including age, gender, and whether the participant was born or raised in Norway as covariates some of the linear models had significant predictors (see Table F2). None of the significant predictors were however relevant to the hypotheses (e.g., gender was found to affect violent behavioural intentions, nationalism).

As part of the exploratory analyses, a correlation table was created between the items of the nationalism measure and the dependent variables of the study (see Table 10; see full correlation matrix with all dependent variables in Table F3).

**Table 10***Correlation Matrix between Nationalism Items and Significant Dependent Variables (n = 190)*

	Items	M	SD	1	2	3	4	5
How important do you think each of the following is to be Norwegian?	1. To have been born in Norway.	2.35	1.43	-.05	-.01	.1	.15*	.12
	2. To have Norwegian citizenship.	3.88	1.82	.05	.06	.16*	-.11	.11
	3. To have lived in Norway for most of one's life	3.63	1.69	-.01	.04	.09	.09	.1
	4. To speak Norwegian	5.07	1.56	-.16*	-.06	.12	.09	.06
	5. To be a Christian	1.24	0.7	-.08	-.1	.11	.18*	.12
	6. To have Norwegian ancestry.	2.01	1.32	.04	.18*	.1	.34***	.11

How much do you agree or disagree with the following statements?	7. I would rather be a citizen of Norway than of any other country in the world.	5.47	1.38	-.13	-.05	.35***	-.05	.31***
	8. There are things about Norway that make me feel ashamed of Norway (R).	3.07	1.62	-.23**	-.09	.25**	-.15*	.2**
	9. The world would be a better place if people from other countries were more like in Norway.	4.36	1.49	-.18*	-.05	.25***	-.01	.3***
	10. Generally speaking, Norway is a better country than most other countries.	5.14	1.45	-.05	-.07	.28***	-.02	.19**
	11. People should support their country even if their country is in the wrong.	1.93	1.1	-.08	-.07	.21**	.06	.29***

1: loss of individual significance check, 2: loss of collective significance check, 3: Ingroup identification, 4: Violent behavioural intentions, 5: Identity fusion. (R) = reversed item. \*\*\*Correlation is significant at  $<.001$  level.

\*\*Correlation is significant at the .01 level. \*Correlation is significant at the .05 level

## Discussion

The manipulation used in Study 2 failed to create a significant difference between any of the experimental conditions on the dependent variables. I argue that this may likely be the result of four possible explanations: (1) lacking the sample size required to bring about an effect, (2) the manipulation in itself not working, (3) the manipulation not working with this specific design, or (4) the manipulation or design not working for this population or sample. These possible explanations will be discussed in the general discussion.

The analysis found certain interesting correlational relationships. The loss of individual significance check measure was negatively related to in-group identification and identity fusion. This suggests a relationship between the level of individual significance and these group-membership-related measures. The study finds that a high experience of significance-reducing emotions is related to a low degree of identification and fusion with the in-group. Such a finding may strengthen prior research showing a relationship between not feeling part of one's group and experiencing a low level of significance, which is often a starting point of the quest for significance (e.g., see Kruglanski et al., 2014, 2022).

Meanwhile, the loss of collective significance check measure was found to only correlate with loss of individual significance check. This could simply be due to a fault of the study's design (as mentioned above) or could indicate a lack of relationship, separate to individual-level significance, to the other variables. That is, while individual-level

significance appears to relate to aspects of identification and fusion with the in-group, collective-level significance does not relate to these.

The loss of individual significance check measure was also related to identity fusion, while identity fusion is related to activism. This could suggest a relationship between these aspects. The present study predicted that identity fusion could moderate the relationship between loss of significance and the dependent measures yet was not able to test this. The relationship found between the loss of individual significance check measure, identity fusion, and activism may merit more investigation and could suggest that future studies may find the presence of some interaction effect.

Further, the nationalism measure was only significantly correlated with gender, in-group identification, and identity fusion (see Table 4), however, certain clusters of the items were related to certain dependent variables. The correlations between certain items of the nationalism measure and certain dependent variables (i.e., violent behavioural intentions, in-group identification, and identity fusion) show that the nationalism measure should be revised before being used in future studies. Namely, certain clusters of the items may reveal different aspects of nationalism. The items that were correlated with violent behavioural intentions (see Table 10) can be interpreted as an expression of religious and ethnic nationalism. The items related to violent behavioural intentions stress the importance of being born in Norway, being Christian, and having Norwegian ancestry when setting criteria “to be Norwegian”. Meanwhile, all the items of the second half of the measure were related to in-group identification and identity fusion. These items may be seen to tap into aspects of national pride or hubris (e.g., “I would rather be a citizen of Norway than of any other country in the world”). These results indicate that the measure of (Huddy et al., 2021) may be too broad and would benefit from being sectioned into multiple facets of nationalism. The measure should also be revised with the intended dependent variables of a future study in mind. These findings are discussed further in the general discussion.

### **General Discussion**

In the present thesis I have examined the differential effect of collective- versus individual-level loss of significance on violent extremism. Study 1 found a correlation between collective significance threat perception (through the proxy variable of cultural threat perception) on one side and both radicalism and violent behavioural intentions on the other. In Study 2 I followed these findings by attempting to manipulate loss of significance on a collective- versus individual-level. Study 2 found no significant experimental effect on the dependent variables of violent extremism in any of the conditions.

Although the present thesis found an association between collective significance and variables of violent extremism in Study 1, the following Study 2 failed to experimentally induce a significant effect. As well as not being able to induce a difference between individual- and collective-level loss of significance, the manipulation was also unable to induce a significant difference between either of the experimental conditions and the control condition. Study 2 was therefore unable to examine the differential effect of collective versus individual loss of significance. While not giving conclusive findings concerning individual- and collective-level quest for significance, both Study 1 and 2 do reveal certain interesting findings regarding violent extremism and aspects such as cultural threat perception and nationalism.

In the following sections, I discuss the studies' findings and implications for the fields of violent extremism and quest for significance. I begin by discussing the research question of the thesis: how individual- and collective-level loss of significance differently affect violent extremism. Here, I examine the findings, conclusions, and implications of the studies in regard to this question as well as what it is unable to answer. Next, the impact of group-level factors of sociocultural context, cultural threat, ideology, nationalism, in-group identification, and identity fusion on violent extremism are be discussed. Here, I bring in the studies' findings regarding both the thesis' research question and its exploratory analyses. The general discussion concludes with an examination of the thesis' limitations and suggestions for future research.

### **Individual- versus Collective-Level Loss of Significance**

In Study 1, the thesis found an association between collective-level significance threat perception and aspects of violent extremism using the proxy measure of cultural threat perception. As discussed, the constructs of collective-level significance threat and cultural threat overlap to a large degree. Both constructs deal with a perceived threat to the in-group's integrity and security, to its cultural or sacred values, and to its sociocultural position and meaning. Study 1 found a relationship between perceiving a threat to the national in-group's collective significance by immigrants and a willingness and intent to engage in violence on its behalf. The relationship found between this variable of collective significance, or cultural threat perception, and variables closely related to violent extremism strengthens the potential explanatory power of collective-level significance as its own distinct construct.

This association between collective significance and violent behavioural intentions has implications for society and the understanding of violent extremism. The results of Study 1 indicate that those who perceive a threat to the significance of their national collective

group will be more willing to commit or sanction acts of violence to protect it. Such a relation is likely to be strategically targeted by figures and organisations wishing to gain support for themselves or their goals. The heightened tensions caused by such a relation between collective significance threat and willingness for violence may be used by such agents, posing themselves as the solution to perceived problems and thus gaining support. Such narratives are already used by far-right political parties, strategically using collective significance threat and nationalism to garner support, positioning themselves as the defender against outside forces (Brubaker, 2017; Halikiopoulou & Vlandas, 2019). Violent extremist groups also use such narratives, framing their group and its collective significance as threatened by certain outsiders. Specifically, (e.g.) White supremacists and the far-right use the narrative of invasion and threat from Muslims (Brubaker, 2017; Englund, 2011; Fangen & Nilsen, 2021) while extremist Islamists use the narrative of Western hegemony and repression (Obaidi, Bergh, et al., 2018; Obaidi et al., 2023). Certain figures and organisations may thus use perceptions of collective significance threat to increase hostile intergroup relations and increase their own support. These findings highlight how individuals who experience a threat or affront to their group's collective significance will be more ready to accept or embrace violent extremism. By understanding this relation, researchers and societal agents may take steps to address and manage perceptions of collective significance threat in order to mitigate the potential for intergroup hostility and violent extremism.

However, while collective-level significance threat and cultural threat perception arguably overlap conceptually, the present thesis is not able to state that they are significantly similar enough to be treated as approximate measures. The use of cultural threat perception as a proxy for collective-level significance threat perception in Study 1 was grounded in the availability of the dataset, the argued overlap, and in the potential of finding a relationship to violent extremism. In so doing it would form a basis for the subsequent experimental Study 2. However, to the author's knowledge, no study has included measures for both constructs in the same study. Therefore, it cannot so far be empirically shown that they are not significantly different. It may very well be that a threat to one's cultural values, norms, and standing is different to a threat to one's collective significance. It is also of note that the items used in these measures tap into different topics. The items of cultural threat perception ask respondents their perception of immigrants' threat to American culture, values, and security. Meanwhile, the loss of collective significance check measure used in Study 2 asks the participants to what extent they believe Norwegians experience feelings of humiliation, shame, ridicule, and unimportance in their daily lives. These measures arguably both relate to

the collective significance of the group, but the difference in the measures' topics is notable. It is also worth noting that the topic of collective-level significance is currently lacking in validated measures. Study 2 used the measure of Bélanger et al. (2022, Study 1) as its manipulation check since this measure had correlated with violent activism in their study. The measures of cultural threat perception and collective significance threat perception arguably examine the same latent factor from different angles, yet this cannot be firmly stated at this point. The conceptual difference between the constructs is also especially unclear as the topic of collective significance still remains under-researched and uncertain.

In Study 2, the thesis found no difference between individual- and collective-level loss of significance in their effect on the dependent variables related to violent extremism. Therefore, the findings of the present thesis are unable to give conclusive results regarding the difference between individual- and collective-level loss of significance. It may be that individual- and collective-level loss of significance have either *distinct* or *comparable* effects. Yet the lack of significant difference between either of these conditions and the control condition in Study 2 makes the thesis unable to examine this. For instance, it is possible that the variable measured as collective significance threat in Study 1 in actuality constituted a variable of threat to individual or generalised significance. It is worth noting that prior research has successfully induced an experimental difference between individual-level loss of significance and the control condition (see Bélanger et al., 2022; Webber et al., 2018). However, in a study by Bélanger et al. (2022) no significant difference was found between the collective-level loss of significance and the control condition. Though the present thesis aimed to further the investigation of these levels of significance loss, it is unable to provide evidence thereto due to its lack of differential experimental effect. As such, it still remains uncertain whether a differential effect of collective- versus individual-level loss of significance may be found.

### **Impact of Group-Level Factors on Violent Extremism**

Alongside examining collective and individual significance, the studies of the present thesis reached interesting findings regarding the impact of certain group-level factors on violent extremism and the quest for significance. As well as including samples from two populations which may be expected to systematically differ based on their sociocultural context, the studies included certain measures which found interesting relations regarding cultural threat, ideology, and nationalism. The present thesis will now discuss how the factors of the different groups included in the studies may have affected their findings and how the



findings may shed light on how group-level factors impact violent extremism and the quest for significance.

### ***Sociocultural Context and Population Characteristics***

The different findings of Study 1 and 2 may reflect the difference in their sociocultural contexts. Study 1 consisted of a sample of White/Caucasian individuals in the US, recruited from a general population sample. Study 2 consisted of a sample of Norwegian students. In the US sample of Study 1, a relationship was found between cultural threat perception (i.e., collective significance threat) and violent behavioural intentions. In the Norwegian sample, the analysis found no significant effect of the loss of significance manipulation on violent behavioural intentions. The different findings may reflect a differential effect based in the characteristics of the population. That is, characteristics of the Norwegian sample may have prevented or diminished the effect of the manipulation while a relationship was present in the US sample.

The populations can be seen to differ on two dimensions: being a student vs. not and sociocultural context. These characteristics may work to explain the different findings. In the US sample it was found that political orientation was related to collective significance threat perception. The more conservative the respondent reported being, the higher their perceived collective significance threat. The sample was drawn from a general population of White/Caucasian individuals in the US and so the results likely reflect the sociocultural and political context. For instance, the state of conservative politics in the US may in part explain the collective threat perception (e.g., see Edwards-Levy, 2023), especially regarding immigrants (Oliphant & Cerda, 2022). As the Norwegian sample was limited to students, it may be that the population's political orientation in part masked or lead to diminished effect of the manipulations. Student samples have been found to be more politically left leaning (e.g., see Hastie, 2007) than the general population. That is, these individuals will have lower degrees of nationalism, traditional national values, and preferences to the national in-group over out-groups. This would mean they are generally more likely to perceive less collective significance threat to the national group caused by out-groups. As a result of this, students are likely less affected by perceived collective significance threats to their national group. This may support the lack of experimental effect in the collective-level loss of significance condition in Study 2 as it consisted solely of students. Evidence thus appears to suggest that certain groups may be less susceptible to manipulations intending to alter their level of collective significance (if the targeted in-group is the national group) in part due to effects of their political orientation, degrees of nationalism, and degrees of perceived collective threat.

The contexts and cultures also differ in regard to perceived collective significance threat and to which degree the threat is salient to the individual. In recent years, the US cultural and political climate has been quite polarised, with a divide between the political left and the right on issues such as social justice, immigration, healthcare, identity politics, and rights (e.g., see Abramowitz & McCoy, 2019; Finkel et al., 2020; Narea & Cineas, 2023; Skocpol, 2020). This has led to increased tensions and conflicts between various groups, as well as a decline in civil discourse and a rise in political sectarianism (e.g., see Jasko et al., 2022; King, 2022; Mills et al., 2020). Meanwhile, the Norwegian social and political climate is less polarised, with a higher trend towards tolerance, diversity, and social cohesion (e.g., Zanakis et al., 2016). This means that individuals in Norway (though fringe groups will differ, e.g., see Fangen & Nilsen, 2021; Obaidi et al., 2021) will be likely to experience a lesser degree of collective significance threat. The characteristics of these contexts may have manifested in the present thesis' findings, as in the US context a relationship was found between collective significance threat (by immigrants on the US) and violent extremism while the Norwegian student context lacked this relationship.

### ***Cultural Threat***

The findings of Study 1 link perceived collective significance threat, or cultural threat, and violent extremism. These findings concur with those of other studies that a perceived threat to one's culture heavily impacts radicalisation and willingness to use violence. For instance, in research on Dutch Muslim youth, Doosje et al. (2013) found that perceived group threat and perceived injustice predicted radical belief systems and in turn support of violence. This is similar to the findings of Study 1 that threat to one's collective significance is linked to increased violent behavioural intentions. There is likely a link between perceived collective threat, group threat, and perceived injustices. Injustices would serve as grievances that are a form of threat of the significance of the group. Similarly, Obaidi et al. (2018) have found that symbolic threat (i.e., threat to the values etc. of one's group) increased inter-group hostility in both Western majority against Muslim minority, Muslim minority against the West, and in Afghan Muslims against the West. Symbolic threat is likely highly linked to collective significance, as the threat to the values of one's group (a major facet of symbolic threat) would also be a threat to the group's collective significance. Concerning the role of collective significance in the radicalisation process, Jasko et al. (2020) have in their studies found that radical social contexts moderate the relationship between quest for significance and support for political violence. This moderation was especially strong for collective significance. The studies of Jasko et al. (2020) and the results of Study 1 of the present thesis

concur that collective significance threat perception and social context is important in radicalisation and violence. The research thus indicates that the ideology held by the individual (i.e., radical social context, US conservative political orientation) may increase their willingness to commit violent acts on behalf of the group. The thesis thus provides evidence that perceived cultural threat is highly linked to violent extremism.

### ***Ideology and Political Orientation***

In the present thesis, Study 1 found conservative ideology to be related to higher perceived collective significance threat, which in turn was related to violent and radicalism intentions. These results concur with the study's sociopolitical context. Currently, the US political climate is more polarised than in previous decades and has seen an increase in political violence (e.g., see Jasko et al., 2022; Kleinfeld, 2021). Study 1, using US data, found conservative political orientation to correlate with high perceived collective significance threat which in turn was correlated to radicalism and violent behavioural intentions. The relationship between conservative orientation and collective significance threat (or cultural threat) makes sense given the sociopolitical climate, especially as the out-group in question was immigrants (a more mistrusted outgroup among conservatives). Meanwhile, liberal political orientation was not related to high collective significance threat nor violent behavioural intentions. This may however be due to the out-group in question, and given a relevant opposing out-group (e.g., religious traditionalists) it is possible that a similar relationship could be found among those with liberal political orientation. The relation between conservative political orientation and violent behavioural intentions concurs with research on social dominance orientation and right-wing authoritarianism. While social dominance orientation and right-wing authoritarianism have been found to involve different processes (e.g., see Thomsen et al., 2008), they have both been related to support of violence against outgroups. The constructs of right-wing authoritarianism and social dominance orientation are similarly also closely linked with conservative political orientation. In this, the findings of Study 1 highlight the association between conservative ideology, perceived collective significance threat, and violent behavioural intentions in the US sociocultural and political context.

The results of Study 1 thus highlight the role of ideology for cultural threat perception and in turn willingness to use violence on behalf of the in-group and against particular outgroups. As such, the present research concurs with prior studies that ideology is an important factor in the quest for significance (e.g., see Kruglanski et al., 2014). Kruglanski et al. (2022) have pointed to a violence-permitting ideology as an important factor in the quest

for significance. For instance, the ideology of a group is closely tied to the narratives it uses or endorses, narratives being one of the three main drivers of significance quest (Kruglanski et al., 2018). The present thesis finds that ideology is related to aspects of violent extremism but that perceived threat is more impactful.

While the relationship between political orientation and cultural threat perception is interesting, it must be noted that, when added as a covariate alongside cultural threat perception, political orientation *negatively* predicted radicalism and violent behavioural intentions in Study 1. The negative effect of political orientation was small but significant. This effect is opposite to what might be expected given the positive correlation with the dependent variables. The most suited interpretation of these findings is that while political orientation is correlated with cultural threat perception, it is the latter that actually impacts radicalism and violent behavioural intentions.

### ***Nationalism***

Study 2 found the measure of nationalism to only correlate to in-group identification, however, certain clusters of nationalism items also correlated with violent behavioural intentions, in-group identification, and identity fusion (see Table 10). These clusters can be seen as constituting ethno-religious nationalism and national pride or hubris. The former of these clusters was related to violent behavioural intentions, while the latter related to in-group identification and identity fusion. This finding points to a multifaceted construct of nationalism. The use of such a construct and measure of nationalism could be more useful for research on violent extremism as it could highlight which facets of nationalism impact or relate to radicalisation, fusion, and violence.

These clusters can be seen to relate to the nationalist attitudes of identity criteria, pride, hubris, and attachment as put forward by Bonikowski (2013). *National identity* details what criteria the individual poses for legitimate membership in their national group (i.e., civic, ethnic, religious criteria). *National pride* details how proud an individual is of their nation's achievements. *National hubris* details how an individual believes their nation compares to others. And *national attachment* details how close an individual feels to their nation and geographical location (i.e., region, country, continent). From these, Bonikowski (2013) found clusters in four nationalist profiles: liberal, critical, populist, and ultranationalist (see Bonikowski, 2013, p. 16-22 for the profiles' nationalist attitude compositions). The findings of Study 2 find common ground in Bonikowski's (2013) model of nationalism. Specifically, the clusters of items that differently correlate to the dependent variables of

violent behavioural intentions, in-group identification, and identity fusion find support in the nationalist attitudes used by Bonikowski (2013). These are discussed below.

The correlation between certain items of nationalism and the measure of violent behavioural intentions points to certain facets of nationalism being especially related to violence and extremism. Study 2 finds that this kind of nationalism is characterised by ethnic and religious criteria for national membership. This is similar to having high national identity criteria in Bonikowski's (2013) model. Further, Study 2 found that not feeling ashamed of aspects of Norway (Table 10, item 8) was also related to higher violent behavioural intentions. This is similar to the attitude of national pride. If relating the findings of Study 2 to the nationalistic profiles of Bonikowski (2013), we find that those items that correlate to high violent behavioural intentions are similar to the attitudes found within ultranationalists. That is, having high ethnic and religious identity criteria for national membership and having high national pride and hubris. From this, we may expect that those with ultranationalist profiles will likely also be more willing to use violence against out-groups.

Meanwhile, the correlation between another set of nationalism items to in-group identification and identity fusion points to certain facets of nationalism being especially tied to these factors. All items in the second part of the nationalism measure of Huddy et al. (2021) were positively correlated with identity fusion. This begs the question of whether this is a relic of the measure's design or whether the findings reflect a subfactor of nationalism. While the first part asks respondents how important they deem certain factors to be in order to be identified as Norwegian, the second part asks how much they agree or disagree with certain statements (see Table 10). This difference could be a contributor to the different correlations, but it seems more likely that the difference reflects a different facet of nationalism, especially when comparing this to the model of Bonikowski (2013). Seen in relation to the model of Bonikowski (2013), the items correlated with in-group identification and identity fusion may be interpreted to tap into national hubris and national pride. For instance, the item "The world would be a better place if people from other countries were more like in Norway" may be interpreted as an expression of national hubris. Meanwhile, "People should support their country even if their country is in the wrong" may be interpreted as national pride. From this, it seems to be a relation between in-group identification and identity fusion on one side and the nationalist attitudes of hubris and pride on the other. The ultranationalist profile was found to be high on both national hubris and pride. We may therefore expect that (compared to other profiles of nationalism) ultranationalists are more

likely to identify with the national group to a stronger degree as well as fuse their identity with that of the national group.

As the above relations have been found between the nationalism measure items of Study 2 and the nationalist attitudes of Bonikowski (2013), it seems that the study would have benefitted from a deliberate use of this model in its measure. As shown, the understanding of nationalism should be multifaceted, and measures of nationalism should capture these subfactors. Future studies of nationalism should take this into account. When designing measures of nationalism, these should be based in multiple facets with the expectation that these will relate to different dependent variables. One should also keep the dependent variables of the study in mind when choosing which facets of nationalism to measure; that is, measuring a facet not relevant to the dependent variable and construing it as general nationalism should be avoided. A multifaceted measure will be more able to examine how such facets of nationalism differently relate to dependent variables such as identification, identity fusion, radicalisation, violence, and other aspects of violent extremism.

### ***Ingroup Identification and Identity Fusion***

In Study 2, the manipulation check measure for individual loss of significance (though unaffected by the manipulation) was related to low in-group identification and identity fusion. Though the manipulation was unsuccessful in inducing a difference in the conditions, this correlation is still interesting. The check is a measure of the individual's own experience of significance-reducing emotions. Its correlation to low scores on in-group identification and identity fusion indicate a few possible relations. It may be that a high degree of significance-reducing emotions is lowering the level of in-group identification and fusion. The results could also indicate that a high degree of in-group identification and fusion could lower or prevent the experience of significance-reducing emotions. Alternatively, some confounding variable could be influencing both the measure of individual-level significance, in-group identification, and identity fusion. The results mirror a situation described by much research on the quest for significance (Kruglanski et al., 2014, 2022): the starting point for quest for significance where an individual with low connection to their in-group is experiencing low degree of significance and searching a source of significance gain. The results thus align with research on the quest for significance, highlighting the importance of how one feels connected to one's in-group in the search for sources of significance gain.

### **Lack of Experimental Effect in Study 2**

The manipulation used in Study 2 was unsuccessful in inducing a differential effect on its dependent variables. This lack of experimental effect ran counter to the thesis'

expectations and to the findings of prior studies. This may indicate a fault in the manipulation's theoretical background yet could also be the results of design choices in Study 2. I propose that the design of the study may have brought about its findings in a few potential ways: (1) lacking the sample size required to bring about an effect, (2) the manipulation in itself not working, (3) the manipulation not working with this specific design, or (4) the manipulation or design not working for this population or sample. As the cause of the lack of effect may inform on the nature of collective and individual significance, these possible explanations are discussed in turn.

### ***Sample Size and Effect Size***

The experiment may have lacked a significant effect of its manipulation due to a too small sample size and lack of power. The study exceeded its estimated minimum sample size (i.e., 90, as determined by the power analysis) and was just below its set goal of 200 participants (after exclusions). It may however be that this sample size proved too small for finding a significant effect of the utilised manipulation. The study based its assumed effect size and power level on work by Webber et al. (2018) and Bélanger et al. (2022). It may be that some characteristic of the design, sample, or context of the study (e.g., using a student sample with national group as the targeted in-group) may have attenuated the experimental effect and altered the required levels. It may also be that the assumed effect size and power level used by the referenced studies are incorrect for Study 2. Further, recent work by Da Silva et al. (in press) has shown the *need* for significance to have a low association with violent extremism. This recent meta-analysis could suggest that a high sample size was necessary for this manipulation and design.

### ***Ineffective Manipulation***

It is possible that the manipulation, as it is, does not successfully induce a loss of significance. The results of the study may suggest so, showing no significant differences between any of the conditions on the dependent variables. The only significant difference between the conditions were in the manipulation check measures. These however had results opposite to the predicted effect of the manipulation. Here the collective-level loss of significance condition scored significantly lower than the other conditions on the manipulation check for both individual-level and collective-level loss of significance. That is, the condition which underwent a manipulation designed to induce a loss of collective significance reported higher levels of significance (i.e., lower levels of loss). On the dependent variables related to violent extremism, no significant difference was found between the conditions.

In prior studies, similar manipulations have however successfully induced significant differences between the control condition and individual-loss of significance condition. Specifically, in studies by Webber et al. (2018) and Bélanger et al. (2022) individual loss of significance was successfully induced. As such, it was expected in Study 2 that at least the individual-level loss of significance condition would be significantly different (and higher) than the control condition on both the manipulation check measures and dependent variables. This makes other explanations of the results more likely. The manipulation design has however still not been shown to successfully induce a loss of collective-level significance in any study. The study of Bélanger et al. (2022) was also unable to induce a significant difference between individual and collective loss of significance. As such, it is still unclear whether or not such a difference may exist and may be brought about in this manner. Based on prior research, at least the individual-level manipulation of Study 2 was expected to significantly differ from the control condition, and both the individual- and collective-level conditions were expected to score higher than the control on the dependent measures and manipulation checks. It thus seems likely that other factors contributed to the results of this study.

### ***Ineffective Manipulation with the Study's Design***

The lack of significant differences between the conditions on the dependent variable measures may be due to the design and procedure of the study. The study was conducted as an online survey which was undertaken in uncontrolled conditions. It is therefore open to potential distractions or lack of attention during the manipulation phase. This is especially relevant to this manipulation as it relies on the participant to give their attention and ruminate on the (potentially) significance-loss inducing event. Therefore, distractions and lack of attention is likely to have some degree of impact on its effect. The design also relies on a degree of investment from the participants. If they are not invested, they will not ruminate on the event, nor will it have much of an affective impact on them. It is possible that the design of Study 2 did not yield the required level of cognitive and emotional investment in the participants required for such a manipulation design to work. Research investigating the validity of online survey methods *have* found them to be a suitable alternative to in-person surveys (e.g., see Riva et al., 2003), which strengthens the validity of the design. Study 2 can however not verify (beyond the attention checks, minimum duration, and minimum manipulation text length) that the respondents gave adequate attention and investment to the survey and specifically the manipulation.



Further, I would argue that the manipulations being immediately followed by the manipulation check measures may have attenuated the effect of the manipulation due to the design of the checks. This may explain the results opposite to the predictions on the manipulation checks. The manipulation asks the participants to recall an event that was significance-reducing (i.e., humiliating, shame-inducing, etc.) and to describe it. The manipulation checks ask the participants how often they think such significance-reducing events take place for them and for their national group members. The procedure of asking them to recall an event and then to judge the rate of occurrence may have primed the participants to believe that such events are not actually that common to them or their in-group. Especially if the respondent had struggled to think of an event to write about. As the loss of collective significance condition was significantly lower on the loss of collective-level significance measure than the individual and control condition, this may have especially been the case for the participants asked to recall an event concerning their national group. It was expected that the collective-level loss of significance condition would report a higher degree of collective-level loss but reported lower. The immediate manipulation checks may thus be an explanation of these surprising results. Altogether, certain aspects of the study design could have unintentionally worked against each other to attenuate the experimental effect.

### ***Ineffective Design for the Specific Sample and Population***

The lack of significant differences between loss of individual significance, collective significance, and the control may also be partly due to characteristics of the sample and population. Study 2 recruited Norwegian students and used Norwegians as the in-group for the loss of collective significance manipulation and certain dependent measures. Norwegians as an in-group may not have been a beneficial group-identification to use for this sample or in this design. For the manipulation to function, the in-group must be salient and important to the individual. For a student population, this may not be the case. As discussed above, students have a generally higher degree of left-leaning political orientation and lower levels of nationalism (e.g., see Hastie, 2007). Norwegian collective significance-loss inducing events may therefore not have been salient for the participant, nor experienced as relevant. This may be supported by the fact that the collective-level condition had a much lower mean of manipulation text length than the individual-level condition (see Table 3). That is, many participants seemingly found it more difficult or less engaging to write about an event concerning their national group, thus writing less. Other populations or target in-groups may have had such collective significance-reducing events more salient to them. It appears likely

that characteristics of the sample and/or the utilised in-group, and perhaps especially the two together, worked against the effect of the manipulation.

### **Limitations**

I acknowledge that the studies of the present thesis have certain evident limitations. Some are based in mistakes during the planning process and implementation of the thesis project, others in extraneous circumstances outside their control. Certain limitations of the study are presented and discussed below.

Chiefly, the manipulation used in Study 2 did not work as expected. The loss of individual-level and collective-level significance manipulation used in Study 2 did not create a significant difference between any of the conditions in the dependent variables. As discussed above, the thesis finds the most likely cause of this to lie in the design of the study, either in the characteristics of the population or in the procedure the study used. A lack of difference between individual- and collective-level significance would be interesting in itself, yet as neither of these conditions differed from the control conditions, we must assume that the manipulation lacked effect in this study.

Further, the survey did not store the text the respondents wrote in the manipulation text box and is therefore unable to qualitatively assess it. This was done in an effort to ensure anonymity. It was deemed as necessary since there was a high chance that respondents wrote identifiable information in the manipulation. The individual-level manipulation asked the respondents to recall and write about an event of personal humiliation, shame, and with feelings of ridicule and personal unimportance. Such events would have been both highly personal and likely identifiable, especially in some participants (e.g., one recalling a traumatic event). The deletion of the text does however mean that the thesis is unable to qualitatively assess the content. Therefore, it cannot establish whether participants in the experimental conditions actually wrote about significance-reducing events. Further, it is unable to assess whether the individual-level manipulation and collective-level manipulation had the same quality. For instance, it is possible that a respondent unable to recall a collective event simply wrote this in the text entry, yet it would be counted as a valid response if above the minimum text length. The thesis is also unable to assess any relation between types of events recalled and scores on the manipulation check measures or dependent variables. Future studies should consider including a qualitative assessment of the manipulation content in order to assess the quality of the manipulation.

There is also a lack of validated measures of collective-level significance (as opposed to individual-level). Firstly, this makes it difficult to validate an effect of the experimental

manipulation. And secondly, no empirical examination of the construct similarity to cultural threat perception has been made. This means that both Study 1 and 2 makes certain assumptions concerning the constructs, with a lack of basis in prior studies. Still, this was a necessary assumption for the thesis as it intended to examine a construction of significance quest theory (i.e., the individual- versus collective-level) that had not received much scholarly focus before.

Due to a mistake in the survey, the thesis was unable to test its initial research question: whether identity fusion may moderate the effect of loss of individual and collective significance on violent extremism. The measures of identity fusion and other individual-level variables (i.e., in-group identification, nationalism) were supposed to be presented before the manipulation but were instead presented after. They were therefore treated as dependent variables rather than moderators. The initial research question thus remains unanswered.

The thesis also recognises that the manipulation check measures should have been designed differently. In Study 2, the manipulation check measures for degree of individual- and collective-level significance ask the respondents to rate (respectively) how often they personally experience significance-loss inducing emotions (e.g., humiliation) on a daily basis and how often they think Norwegians experience them. Both check measures were presented to all conditions. The measures were intended to be comparable, but it is possible they measure different concepts. That is, they may have inadvertently measured how often the respondent feels these emotions themselves compared to other people. They may also have primed the respondents and attenuated the experimental effect, as discussed above. A better way to measure the level of significance may be to instead ask the respondent to what degree they personally experience said emotions at that specific time. This would primarily measure individual-level significance but could also be used to examine the effect of the collective-level manipulation on the respondent and would not interfere to the same degree.

Further, I planned to conduct a follow-up study with a Pakistani sample yet was unable due to extraneous circumstances. Recruitment of participants and the administration of the experiment was planned to be handled by a lab at a university in Pakistan which the thesis' supervisor has cooperated with in the past. However, the lab also conducted other studies which were scheduled before the thesis' planned study, and which required many participants. By the time the planned study was next in line, the recruitment pool was exhausted. The administration of the planned study was postponed multiple times before eventually drawing so close to the deadline of the present thesis' that it could not be conducted. This made the thesis unable to follow the findings of Study 2.

Additionally, because of a subsequent study in Pakistan being planned, “Norwegians” was chosen as the targeted in-group in Study 2. This was in order to compare collective significance in regards to the national in-group across contexts. Had this not been planned, a more suitable in-group than the national group may instead have been chosen for Study 2.

Finally, Study 1 was a late addition to the present thesis, being planned and conducted while Study 2 was in the recruitment process and the planned follow-up study was initially being postponed. As Study 1 was based on a pre-existing dataset, its measures were not chosen with the research question of the study in mind. While the variables and items are relevant and applicable, they were not intentionally chosen nor designed for the purpose that Study 1 used them for. Further, as the recruitment for Study 2 had already begun, it could not add variables which were of interest in Study 1 (e.g., political orientation, cultural threat perception). The thesis is therefore not able to compare these variables across the studies.

### **Future Research**

While some evidence points to a lack of significant difference between individual- and collective-level quest for significance, future research should directly compare the two constructs further in order to establish the relationship between them. Follow-up studies should be conducted in order to examine whether a differential effect can be found, which in-groups are salient and relevant for collective-level significance loss, and whether group-factors may moderate its relation to violent extremism.

The planned follow-up study of the present thesis would have partly addressed these concerns and is briefly presented here. The study was planned to be conducted in Pakistan as this sociopolitical context would have made the collective national-level in-group highly salient (Ali et al., 2017; Lall, 2008; Majid & Hussain, 2016). The design of the study would have largely followed that of Study 2, though would have been in-person rather than through an online survey. The study would have included the measures of in-group identification, identity fusion, and nationalism as individual-level variables. As such, they would have been examined for interactive effects. Further, the measure of nationalism would have been modified as discussed in the general discussion (i.e., basing the measure in national attitudes or as a measure of ethno-religious nationalism). This design of the study would hopefully have remedied the limitations of Study 2. Specifically, it would allow for a better examination of a differential effect of individual- and collective-level loss of significance and the interactive effect of the individual-level variables.

Future studies should be deliberate in their choice of the in-group targeted by the experimental manipulation. Part of the cause of the lack of experimental effect in Study 2 is

likely its choice of Norwegian national group as the target group in a sample of university students. Some targeted in-groups are likely more salient and relevant to the loss of collective-level significance manipulation. Follow-up studies could be conducted among (e.g.) republican supporters in the US, Muslim minority in the West, or other groups which feel closely connected to the target in-group in a context of inter-group tension.

It should also be investigated whether the individual- and collective-level affect processes of the significance quest differently. Firstly, it is of interest whether significance loss caused by individual- or collective-level factors and grievances have a differential effect on radicalisation and violent behavioural intentions. Secondly, it is worth investigating whether these act independently and affect these processes independently or whether the individual-level processes will always mediate collective-level causes. It may be that the levels are not different in terms of process, but only as two areas of grievances that may motivate the same quest for significance, (i.e.) both individual-level and collective-level grievances activating the individual-level quest for significance, albeit somewhat differently affected by the context.

Future studies should also examine whether any individual-level variables may interact with the effect of the manipulation on the variables of violent extremism. The present thesis offers identity fusion and nationalism as two candidates which may have a large effect, as discussed above. It is of interest to investigate whether these variables interact differently with individual- and collective-level loss of significance.

### **Conclusions**

The present thesis has investigated the differential effect individual-level and collective-level loss of significance on variables of violent extremism, and whether these levels are conceptually distinct. Though finding initial evidence for the possibility of an affective collective level of significance, the thesis' follow-up study was unable to provide conclusive results due to a lack of experimental effect. Study 1 found a relationship between collective-level significance threat perception (using a proxy of cultural threat perception) and variables of violent extremism. This suggests that collective-level significance may have explanatory power as its own construct. However, to investigate this, it must be examined in relation to individual-level significance. Study 2 attempted to investigate this by experimentally manipulation loss of significance on an individual and collective level. The study however found no relevant significant differences between the experimental conditions nor the control. The lack of a significant experimental effect in the study prevents a clear examination of the distinction between individual- and collective-level loss of significance

and the thesis is unable to provide conclusive results on the difference between these levels of significance loss. Though unable to provide conclusive evidence on its own, the thesis argues that there are still grounds for future research on this topic. Specifically, the relationship between individual- and collective-level significance should be investigated further with a modified study design in order successfully induce an experimental effect. It should further investigate how the target in-group and interactive variables affect the relationship between these levels and violent extremism. A conclusive understanding of individual- versus collective-level significance has so far not been reached; yet, the present thesis furthers the field's work, both by providing evidence of collective significance and by highlighting the pitfalls of its research.

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## Appendix A. Study 2 Pre-Registration

### AsPredicted ref. nr. 115053

**1) Data collection.** Have any data been collected for this study already?

No

**2) Hypothesis** What's the main question being asked or hypothesis being tested in this study?

The study will examine the following research question: How is the relationship between loss of individual-level versus collective-level significance and extremism differently moderated by identity fusion? This will be examined through an online experimental study using a manipulation adapted from Webber et al. (2018) and Bélanger et al. (2022). The manipulations ask the participant to recall and describe a time they were either personally or felt their national group was humiliated, ashamed, made to feel small and unimportant, or were laughed at. The rumination is itself the manipulation and the actual response text is not stored.

Hypotheses:

H1. Participants in the individual-level manipulation will score significantly higher on violent behavioural intentions than participants in the control condition.

H2. Participants in the collective-level manipulation will score significantly higher on violent behavioural intentions than participants in the control condition.

H3. Participants in the individual-level manipulation will score significantly higher on violent behavioural intentions than participants in the collective-level manipulation.

H4. There will be a significant interactive effect between the manipulation (i.e., on individual-level and collective-level) and identity fusion on violent behavioural intentions.

H5. The interactive effect between the collective-level manipulation and identity fusion on violent behavioural intentions will be stronger than with the individual-level.

H6. The relationship between collective loss of significance and violent behavioural intentions will be significantly higher in the Pakistani sample than the Norwegian sample.

H7. The relationship between individual loss of significance and violent behavioural intentions will be significantly higher in the Pakistani sample than the Norwegian sample.

**3) Dependent variable** Describe the key dependent variable(s) specifying how they will be measured.

The key dependent variable for the project is violent behavioural intention, as seen in relation to extremism. The measure used is as follows:

I would be ready to:

1. use violence to create proper conditions for those I am closely connected to



2. use violence to create proper conditions for those I feel solidarity with
3. use violence to create a new and better society
4. use violence to advance a higher cause (ideological, religious)
5. use violence against other people in order to achieve something I consider very important.
6. use violence to change society's treatment of [Norwegians/Pakistanis]

**4) Conditions** How many and which conditions will participants be assigned to?

3 conditions: individual loss of significance, collective loss of significance, and control.

Each participant will be asked to recall, relive, and write about an experience. Individual LoS condition will be asked to recall they felt personally humiliated, ashamed, felt small and unimportant, or were laughed at. Collective LoS condition will be asked the same but when their group was the target. Control condition will be asked to recall the last time they watched TV.

Note that two samples will be collected, one in Norway and one in Pakistan, with the same methodology across samples.

**5) Analyses** Specify exactly which analyses you will conduct to examine the main question/hypothesis.

Regression analyses will be used to examine hypotheses 1-3. Path modelling in Mplus and moderation analyses (with identity fusion as the key moderator) will be used to examine the relations between the experimental conditions and the dependent variables (i.e., to examine hypothesis 4).  $\Delta R^2$  between the moderation models will be used to examine hypotheses 5-7. Post-hoc analyses will be conducted to further examine found differences.

**6) Outliers and Exclusions** Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.

Participants who fail both of the two attention check items will be excluded. The attention check items state: "To show that you are paying attention, please select strongly agree on this question".

Participants are not a student and/or not the target nationality (Norwegian, Pakistani) will be excluded as they are outside the target population.

Participants with an answer time below 3 minutes will be excluded, as this would indicate not having spent sufficient time on the manipulation or reading the questions properly.

Participants who have written 20 characters or less in the manipulation text box will be excluded as the manipulation is based on rumination on an event and this is approximately recorded through writing about the event.

**7) Sample Size** How many observations will be collected or what will determine sample size?

No need to justify decision, but be precise about exactly how the number will be determined. Target of minimum 200 participants for each of the two samples. Sample size was determined by power analysis conducted with G\*Power (linear multiple regression: fixed model, R<sup>2</sup> increase) with an effect size of 0.09, power of 0.8, number of tested predictors being 4, and total number of predictors being 4. The analysis suggested a sample size of 138, however a larger sample was opted for to account for participants that will need to be excluded.

**8) Other** Anything else you would like to pre-register?

(e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)

Secondary analyses will be conducted using the Radicalism and Activism scales of Moskaleiko and McCauley (2009) as dependent variables.

Measures of nationalism, in-group identification, and demographics will be used for exploratory purposes.

**9) Name** Give a title for this AsPredicted pre-registration

Extremism as Affected by Individual and Collective Loss of Significance through Identity Fusion

Extremism as Affected by Individual and Collective LoS through Identity Fusion

**10) Type of study.**

Experiment

**11) Data source**

Qualtrics XM



### Political Orientation

Please indicate your political orientation.

	Very liberal 1	2	3	4	5	6	7	8	9	Very conservative 10
Please indicate your political orientation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### Cultural Threat Perception

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
American norms and values are being threatened because of the presence of immigrants (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Immigrants are a threat to the American culture (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The American identity is being threatened because there are too many immigrants (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Because of the presence of immigrants, Americans have more difficulties in finding a job (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Because of the presence of immigrants, Americans have more difficulties in finding a house (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Because of the presence of immigrants, unemployment in the U.S. will increase (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Because of the presence of immigrants, Americans are physically threatened (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Because of the presence of immigrants, Americans are unsafe (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Because of the presence of immigrants, Americans well-being is under threat (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### Education

What is the highest level of school you have completed or the highest degree you have received?

- Less than high school degree (1)
- High school graduate (high school diploma or equivalent including GED) (2)
- Some college but no degree (3)
- Associate degree in college (2-year) (4)
- Bachelor's degree in college (4-year) (5)
- Master's degree (6)
- Doctoral degree (7)
- Professional degree (JD, MD) (8)

## Appendix C. Study 2 Survey

### Project Information and Consent

**Thank you for taking an interest in this study!**

**DESCRIPTION:** You are invited to take in part in a study on the connections between personal experiences and attitudes about society. As part of the study you will be asked to describe an event and then answer a survey.

**RISKS:** There are no anticipated risks associated with participating in this study. However, some questions may produce temporary psychological discomfort for some participants. It is important to note though that this discomfort should not be greater than what people may experience in their everyday lives when they interact with others. If you choose to participate and find any part troubling for any reason, you are free to skip it or withdraw from the study by closing your browser.

**BENEFITS:** There are no direct benefits to your participation in this study.

**TIME INVOLVEMENT:** The study is expected to take approximately 10 minutes to complete.

**CONFIDENTIALITY:** No information that directly identifies you will be collected in this study and the study does not collect IP addresses.

**PARTICIPATION AND WITHDRAWAL:** If you have read this form and have decided to participate in this project, please understand your participation is voluntary and you have the right to withdraw your consent or discontinue participation at any time without penalty or loss of benefit to which you are otherwise entitled by simply closing your browser. You have the right to skip any questions. Your individual privacy will be maintained in all published and written data resulting from the study.

**DATA STORAGE:** The raw data will be stored encrypted. Non-identified data files are subject to request for non-profit purposes (such as requests from other researchers). The data will be archived after the completion of the project.

**CONTACT:** If you have any questions concerning the study, please contact David S. Eldor (master's student) at [davidsel@sv.uio.no](mailto:davidsel@sv.uio.no) or tlf. +47 48 25 82 61, or Milan Obaidi (supervisor) at [milanob@psykologi.uio.no](mailto:milanob@psykologi.uio.no).

**CONSENT:** If you have read the above information and wish to take part in the study, please indicate your choice below:

- I agree to take part in the study (1)
- I do not agree to take part in the study (2)

**Demographics**

What gender are you?

- Male (1)
- Female (2)
- Non-binary (3)
- Other / Prefer not to say (4)

How old are you?

---

Would you call yourself Norwegian?

- Yes (1)
- No (2)

Were you born or raised in Norway?

- Born (1)
- Raised (2)
- Born and raised (3)
- Neither (4)

Are you currently a student?

- Yes (1)
- No (2)

**Manipulation**

As a start to the study, you will be asked to recall and write about an event on the next page. Please recall this event vividly and include as many details as you can to relive the experience.

**Manipulation Control Group**

Please recall the last time you watched TV, a streaming service, or something similar. In the below text box, detail what you watched and how it made you feel. Please recall this event vividly and include as many details as you can to relive the experience.

---

---













## Identity Fusion

How much so you agree or disagree with the following statements?

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I am one with my nation. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel immersed in my nation. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have a deep emotional bond with my nation. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My nation is me. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I'll do for my nation more than any of the other members would do. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am strong because of my nation. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I make my nation strong. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Debrief

**Thank you for your participation!**

**Please note: We kindly ask you not to disclose this information about the research procedures and hypotheses to anyone who might participate in this study as this could affect the results of the study.**

### What was being studied?

This has been a study on the effect of experience of individual or collective significance on extreme behaviours in interaction with identity fusion. Significance is a sense of meaning in life and in the world and can occur personally in an individual or on behalf of one's group or collective. Individual significance has in previous research been linked to extreme attitudes and behaviours; this study wanted to examine collective significance as well as seeing how these interact with being strongly connected to one's nationality.

### How was this tested?

As part of the study you were assigned to one of three groups: the control group, the personal significance group, or the collective significance group. If you were in one of the two latter groups you were asked to describe a time you felt humiliated, ashamed, small, unimportant, or experienced being laughed at either personally or as part of your nationality. This was done in order to temporarily lower your experience of personal or collective significance in order to be able to see what effect this has on the later questions of attitudes, nationalism, and identity fusion. The experience you wrote about will not be stored and the writing was simply so you would have time to think about the event.

If you feel uncomfortable or upset due the study, please don't hesitate to contact any of these help lines:

Mental Helse Ungdom:

<https://mentalhelseungdom.no/vare-lavterskeltilbud/chat>

### **Why is this important to study?**

Individual loss of significance has been linked to extremism in previous research. When an individual experiences little personal meaning, they can be more attracted to extreme groups that offer a sense of meaning through extreme and often violent acts. This relationship can also be affected by how one experiences their group's significance in society, but this has not been examined as much by research. It is also possible that these two types of significance interact differently with identity fusion, being so connected to one's group that it feels like it is a part of them. Loss of personal and collective significance as well as identity fusion can in some cases do major damage to society and is therefore important to study these topics. Your participation has helped in this study.

### **Contact the researcher:**

If you have any questions concerning the study, please contact David S. Eldor (master's student) at [davidsel@sv.uio.no](mailto:davidsel@sv.uio.no) or tlf. +47 48 25 82 61, or Milan Obaidi (supervisor) at [milanob@psykologi.uio.no](mailto:milanob@psykologi.uio.no)

### **Suggested readings:**

- Bélanger, J. J., Adam-Troian, J., Nisa, C. F., & Schumpe, B. M. (2022). Ideological passion and violent activism: The moderating role of the significance quest. *British Journal of Psychology*, Advance Online Publication. <https://doi.org/10.1111/bjop.12576>
- Gómez, A., Chinchilla, J., Vázquez, A., López-Rodríguez, L., Paredes, B., & Martínez, M. (2020). Recent advances, misconceptions, untested assumptions, and future research agenda for identity fusion theory. *Social and Personality Psychology Compass*, 14(6), e12531. <https://doi.org/10.1111/spc3.12531>
- Kruglanski, A., Gelfand, M. J., Bélanger, J. J., Sheveland, A., Hetiarachchi, M., & Gunaratna, R. (2014). The Psychology of Radicalization and Deradicalization: How Significance Quest Impacts Violent Extremism. *Political Psychology*, 35(1), 69–93. <https://doi.org/10.1111/pops.12163>

**Thank you again for taking part in our study, your contribution is important!**

## Appendix D. Study 2 Internal Review Board Approval

**UiO : University of Oslo**

Faculty of Social Sciences – Departement of Psychology

David Stenerud Eldor  
Milan Obaidi

Ref.number: **23408566**

Date: 9 November 2022

### **Ethical evaluation of research project**

Your project, "Extremism as Affected by Loss of Individual and Collective Significance through Identity Fusion" has been ethically evaluated by the Department of Psychology's internal research ethics committee.

After the evaluation The Department of Psychology's internal research ethics committee recommend the project.

Sincerely yours, on behalf of the Committee,

Professor Silje Endresen Reme, Head of Committee

Members of the Department of Psychology's Research Ethics Committee

<https://www.uio.no/for-ansatte/enhets sider/sv/psi/psi-eng/internal-ethics-committee/index.html>

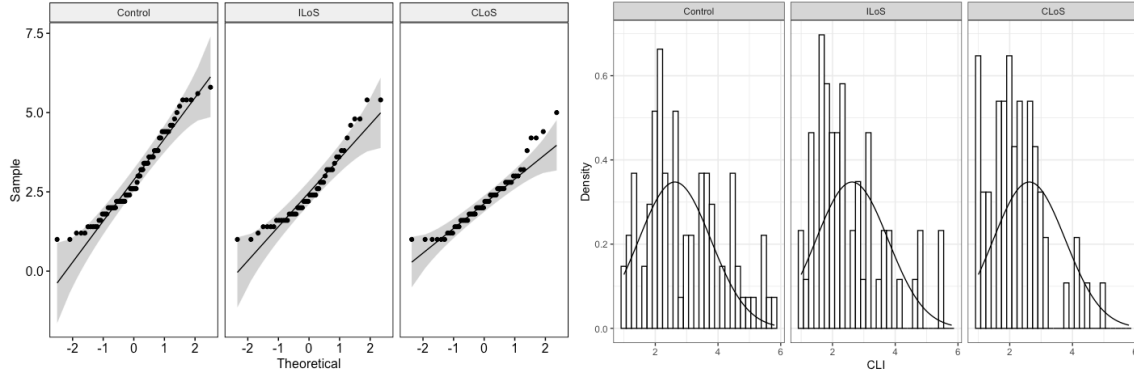


Postal address:  
E-mail:  
[www.uio.no](http://www.uio.no)

## Appendix E. Study 2 QQ-Plots and Histograms

### Figure E1

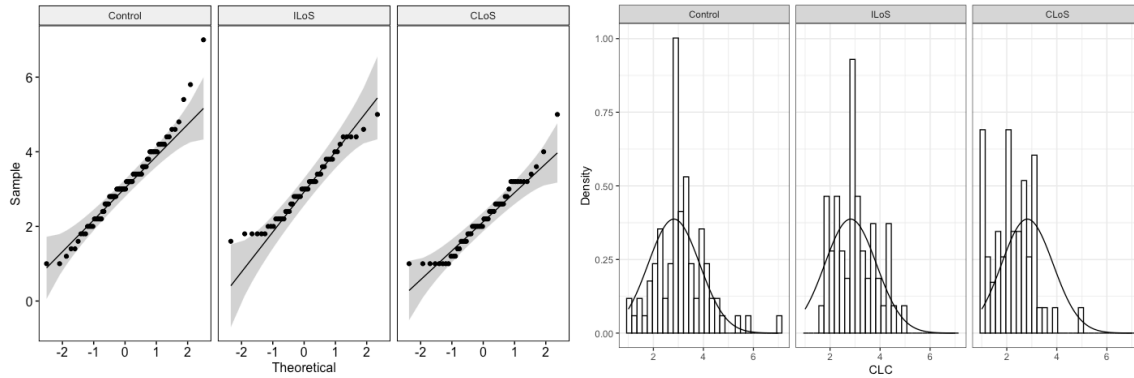
QQ-Plot and Histogram of Loss of Individual Significance Check Measure split by Condition ( $n = 190$ )



$n_{control} = 82$ ,  $n_{ILoS} = 52$ ,  $n_{CLoS} = 56$

### Figure E2

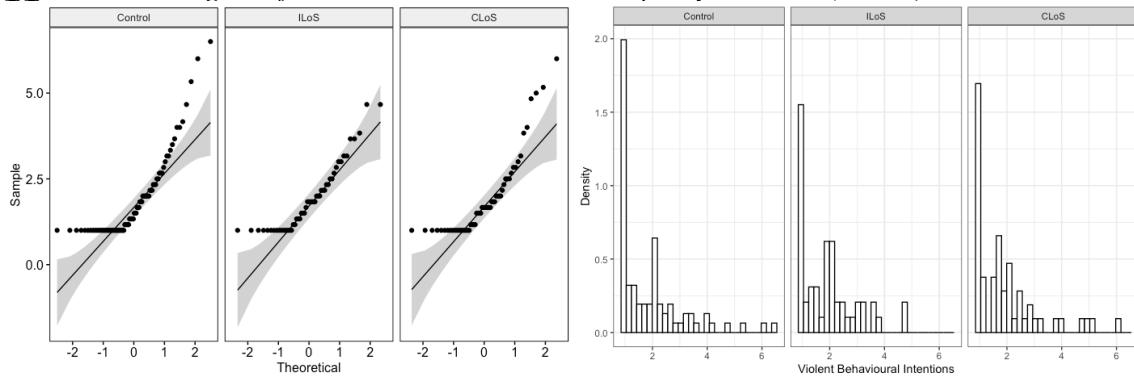
QQ-Plot and Histogram of Loss of Collective Significance Check Measure split by Condition ( $n = 190$ )



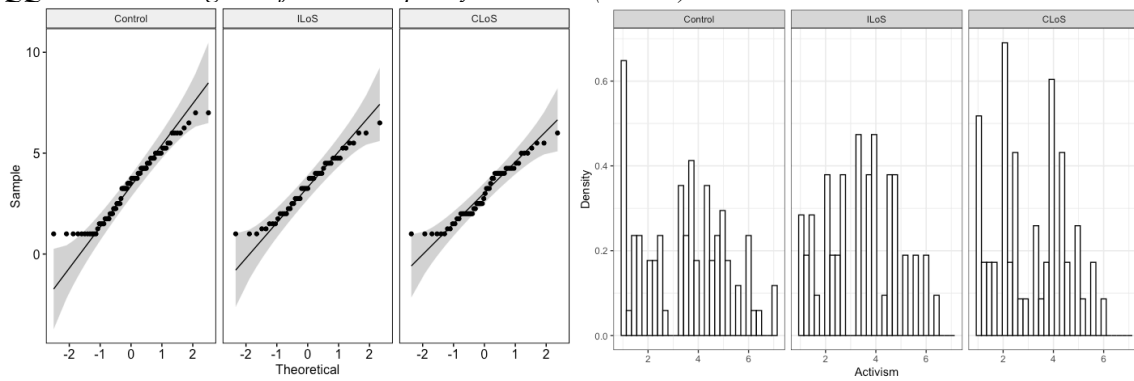
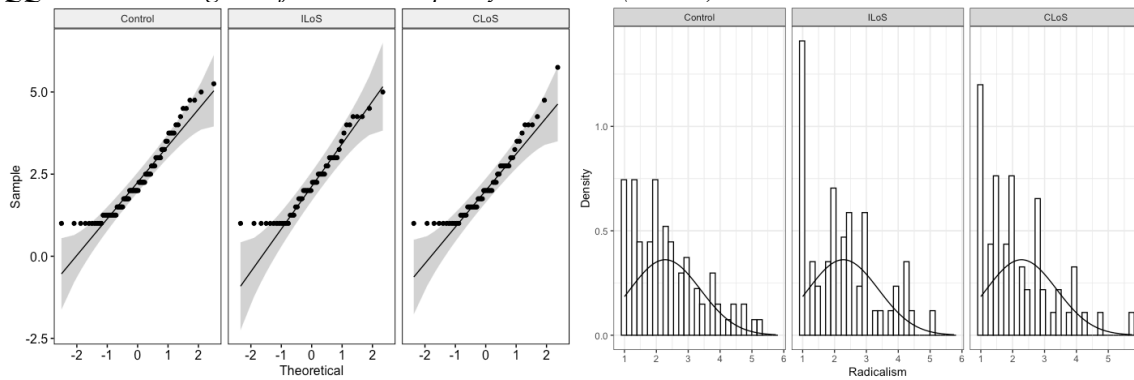
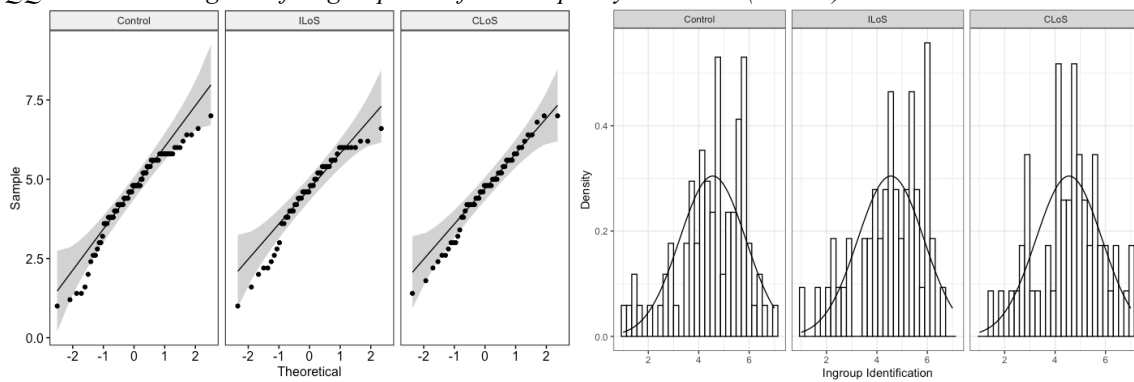
$n_{control} = 82$ ,  $n_{ILoS} = 52$ ,  $n_{CLoS} = 56$

### Figure E3

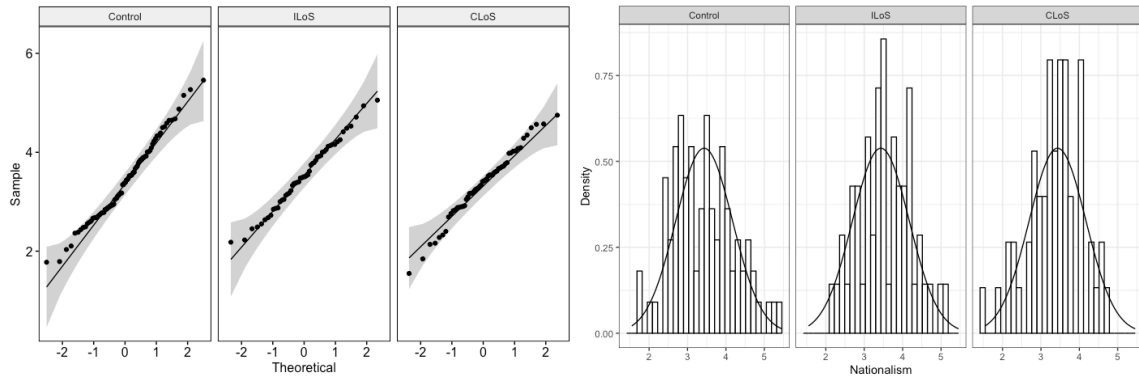
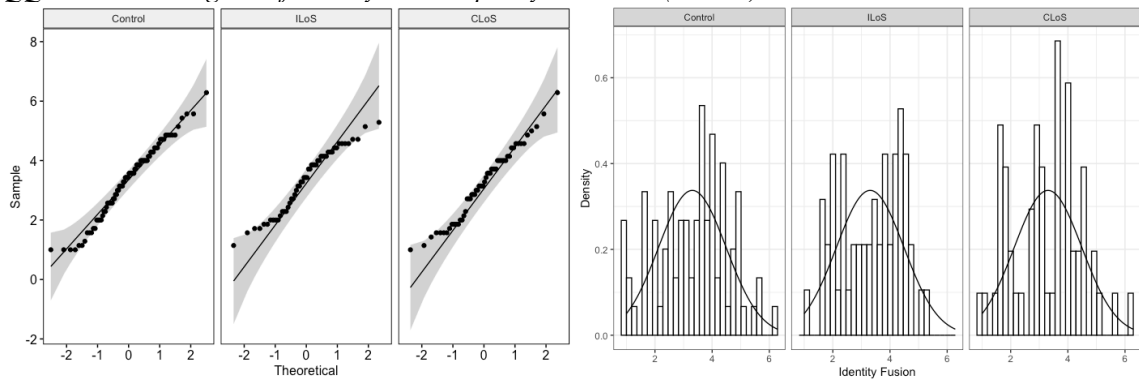
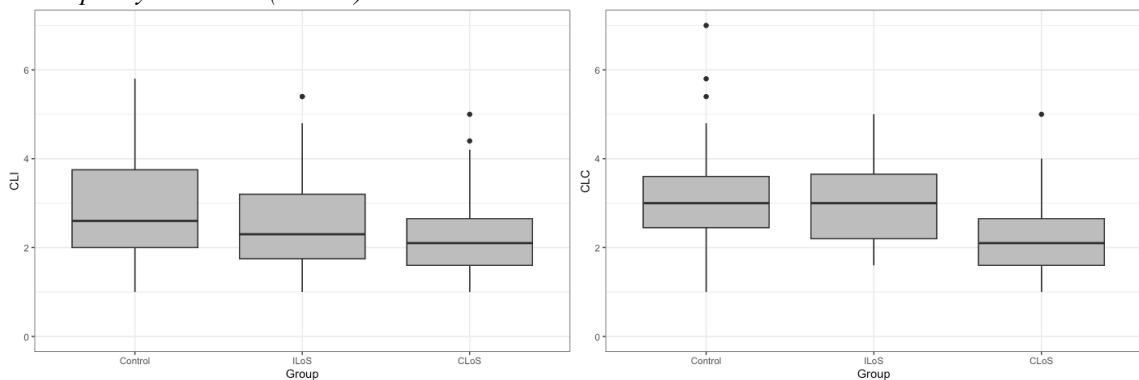
QQ-Plot and Histogram of Violent Behavioural Intentions split by Condition ( $n = 190$ )



$n_{control} = 82$ ,  $n_{ILoS} = 52$ ,  $n_{CLoS} = 56$

**Figure E4***QQ-Plot and Histogram of Activism split by Condition (n = 190)*
 $n_{control} = 82, n_{ILoS} = 52, n_{CLoS} = 56$ 
**Figure E5***QQ-Plot and Histogram of Radicalism split by Condition (n = 190)*
 $n_{control} = 82, n_{ILoS} = 52, n_{CLoS} = 56$ 
**Figure E6***QQ-Plot and Histogram of In-group Identification split by Condition (n = 190)*
 $n_{control} = 82, n_{ILoS} = 52, n_{CLoS} = 56$



**Figure E7***QQ-Plot and Histogram of Nationalism split by Condition (n = 190)*
 $n_{control} = 82, n_{ILoS} = 52, n_{CLoS} = 56$ 
**Figure E8***QQ-Plot and Histogram of Identity Fusion split by Condition (n = 190)*
 $n_{control} = 82, n_{ILoS} = 52, n_{CLoS} = 56$ 
**Figure E9***Boxplots of the Loss of Individual Significance (left) and Loss of Collective Significance (right) manipulation check split by Condition (n = 190)*

*Individual Loss check: CLoS condition significantly different from control condition. Collective Loss check: CLoS significantly different from control and ILoS conditions.*

## Appendix F. Study 2 Additional Tables

**Table F1**

*Linear Regression Models Between Experimental Condition and Dependent Variables (n =190)*

Dependent Variables	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>p</i>	<i>95% CI</i>
<b>Condition -&gt; VBI<sup>a</sup></b>						
Intercept	1.91	0.13		15.07	>.001	[1.66, 2.16]
Control*ILoS	0.04	0.2	0.01	0.17	.87	[-0.37, 0.44]
Control*CLoS	0.04	0.2	0.02	0.22	.83	[-0.35, 0.44]
<i>R</i> <sup>2</sup>	>.001					
<i>Adjusted R</i> <sup>2</sup>	-.01					
<b>Condition -&gt; Activism</b>						
Intercept	3.45	0.17		20.27	>.001	[3.13, 3.79]
Control*ILoS	-0.06	0.28	-0.02	-0.23	.82	[-0.62, 0.48]
Control*CLoS	-0.42	0.27	-0.12	-1.56	.12	[-0.94, 0.11]
<i>R</i> <sup>2</sup>	.01					
<i>Adjusted R</i> <sup>2</sup>	.003					
<b>Condition -&gt; Radicalism</b>						
Intercept	2.34	0.12		19.09	>.001	[2.09, 2.58]
Control*ILoS	-0.05	0.2	-0.02	-0.26	.79	[-0.44, 0.34]
Control*CLoS	-0.15	0.19	-0.06	-0.77	.44	[-0.54, 0.23]
<i>R</i> <sup>2</sup>	.003					
<i>Adjusted R</i> <sup>2</sup>	-.01					
<b>Condition -&gt; In-group Identification</b>						
Intercept	2.34	0.12		19.09	>.001	[2.09, 2.58]
Control*ILoS	-0.05	0.2	-0.02	-0.26	.79	[-0.44, 0.34]
Control*CLoS	-0.15	0.19	-0.06	-0.77	.44	[-0.53, 0.23]
<i>R</i> <sup>2</sup>	.003					
<i>Adjusted R</i> <sup>2</sup>	-.01					
<b>Condition -&gt; Nationalism</b>						
Intercept	3.42	0.08		41.77	>.001	[3.26, 3.58]
Control*ILoS	0.12	0.13	0.07	0.89	.38	[-0.14, 0.38]
Control*CLoS	-0.07	0.13	-0.04	-0.52	.6	[-0.32, 0.19]
<i>R</i> <sup>2</sup>	.01					
<i>Adjusted R</i> <sup>2</sup>	-.002					
<b>Condition -&gt; Identity Fusion</b>						
Intercept	3.34	0.13		25.43	>.001	[3.08, 3.59]
Control*ILoS	0.003	0.21	0.001	0.02	0.99	[-0.41, 0.42]
Control*CLoS	-0.1	0.21	-0.04	-0.47	.64	[-0.5, 0.31]
<i>R</i> <sup>2</sup>	.002					
<i>Adjusted R</i> <sup>2</sup>	-.01					

<sup>a</sup>*Violent Behavioural Intentions*

**Table F2**

*Linear Regression Models Between Experimental Condition and Dependent Variables with Covariates (n = 190)*

<b>Dependent Variables</b>	<b>B</b>	<b>SE B</b>	<b><math>\beta</math></b>	<b>t</b>	<b>p</b>
<b>DV: VBI<sup>a</sup></b>					
Intercept	2.34	0.63	NA	3.73	>.001
Control*ILoS	-0.05	0.2	-0.02	-0.26	.8
Control*CLoS	0.01	0.19	0.004	0.06	.96
Age	0.02	0.02	0.07	0.92	.36
Male*Female	-0.7	0.17	-0.29	-3.99	>.001
Male*Non-Binary	0.4	0.51	0.06	0.77	.44
<i>R</i> <sup>2</sup>	.12				
<i>Adjusted R</i> <sup>2</sup>	.004				
<b>DV: Activism</b>					
Intercept	5.34	0.88	NA	6.07	>.001
Control*ILoS	-0.07	0.28	-0.02	-0.24	.81
Control*CLoS	-0.36	0.27	-0.11	-1.32	.19
Age	-0.06	0.03	-0.15	-2.05	.04
Male*Female	-0.18	0.24	-0.06	-0.74	.46
Male*Non-Binary	-1.13	0.71	-0.12	-1.57	.12
<i>R</i> <sup>2</sup>	.06				
<i>Adjusted R</i> <sup>2</sup>	.02				
<b>DV: Radicalism</b>					
Intercept	2.93	0.63	NA	4.62	>.001
Control*ILoS	-0.07	0.2	-0.03	-0.35	.73
Control*CLoS	-0.14	0.2	-0.06	-0.69	.49
Age	-0.01	0.02	-0.04	-0.51	.61
Male*Female	-0.43	0.17	-0.19	-2.49	.012
Male*Non-Binary	0.06	0.52	0.01	0.12	.91
<i>R</i> <sup>2</sup>	.04				
<i>Adjusted R</i> <sup>2</sup>	-.002				
<b>DV: Ingroup Identification</b>					
Intercept	4.25	0.76	NA	5.57	>.001
Control*ILoS	0.04	0.24	0.01	0.15	.88
Control*CLoS	0.04	0.24	0.02	0.18	.86
Age	-0.01	0.02	-0.03	-0.4	.7
Male*Female	0.05	0.21	0.02	0.25	.81
Male*Non-Binary	-0.18	0.62	-0.02	-0.28	.78
<i>R</i> <sup>2</sup>	.29				
<i>Adjusted R</i> <sup>2</sup>	-.03				
<b>DV: Nationalism</b>					
Intercept	3.98	0.4	NA	10.04	>.001
Control*ILoS	0.12	0.13	0.07	0.92	.36
Control*CLoS	-0.05	0.12	-0.03	-0.43	.67
Age	-0.02	0.01	-0.09	-1.31	.19
Male*Female	-0.57	0.11	-0.37	-5.2	>.001
Male*Non-Binary	-1.03	0.32	-0.22	-3.18	.002
<i>R</i> <sup>2</sup>	.17				
<i>Adjusted R</i> <sup>2</sup>	.13				
<b>DV: Identity Fusion</b>					
Intercept	3.52	0.69	NA	5.13	>.001
Control*ILoS	0.04	0.22	0.02	0.19	.85
Control*CLoS	-0.06	0.21	-0.02	-0.3	.77
Age	-0.02	0.02	-0.07	-0.87	.39
Male*Female	-0.24	0.19	-0.1	-1.27	.21
Male*Non-Binary	-0.39	0.56	-0.05	-0.7	.49
<i>R</i> <sup>2</sup>	.02				
<i>Adjusted R</i> <sup>2</sup>	-.02				

<sup>a</sup>*Violent Behavioural Intentions*

**Table F3***Correlation Matrix between Nationalism Items and Dependent Variables (n = 190)*

Items	M	SD	1	2	3	4	5	6	7	8	9
To have been born in Norway.	2.35	1.43	-.28***	.01	-.05	-.01	.1	.15*	.07	.04	.12
To have Norwegian citizenship.	3.88	1.82	-.18*	-.03	.05	.06	.16*	-.11	-.03	-.17*	.11
To have lived in Norway for most of one's life	3.63	1.69	-.21**	-.1	-.01	.04	.09	.09	.11	-.01	.1
To speak Norwegian	5.07	1.56	-.35***	-.02	-.16*	-.06	.12	.09	-.06	.01	.06
To be a Christian	1.24	0.7	-.23**	.09	-.08	-.1	.11	.18*	.04	.003	.12
To have Norwegian ancestry.	2.01	1.32	-.23**	-.06	.04	.18*	.1	.34***	.05	.12	.11
I would rather be a citizen of Norway than of any other country in the world.	5.47	1.38	-.09	.08	-.13	-.05	.35***	-.05	-.02	-.11	.31***
There are things about Norway that make me feel ashamed of Norway (R).	3.07	1.62	-.15*	-.06	-.23**	-.09	.25**	-.15*	-.04	-.2**	.2**
The world would be a better place if people from other countries were more like in Norway.	4.36	1.49	-.2**	-.01	-.18*	-.05	.25***	-.01	.19*	.03	.3***
Generally speaking, Norway is a better country than most other countries.	5.14	1.45	-.26***	-.14	-.05	-.07	.28***	-.02	.04	-.03	.19**
People should support their country even if their country is in the wrong.	1.93	1.1	-.13	-.05	-.08	-.07	.21**	.06	-.002	-.04	.29***

1: Gender, 2: Age, 3: CLI, 4: CLC, 5: Ingroup identification, 6: Violent behavioural intentions, 7: Activism, 8: Radicalism, 9: Identity fusion (R) = reversed item. \*\*\*Correlation is significant at <.001 level. \*\*Correlation is significant at the .01 level. \*Correlation is significant at the .05 level