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From Exclusion to Extremism

The Role of Significance Loss and Identity in the Radicalization Process

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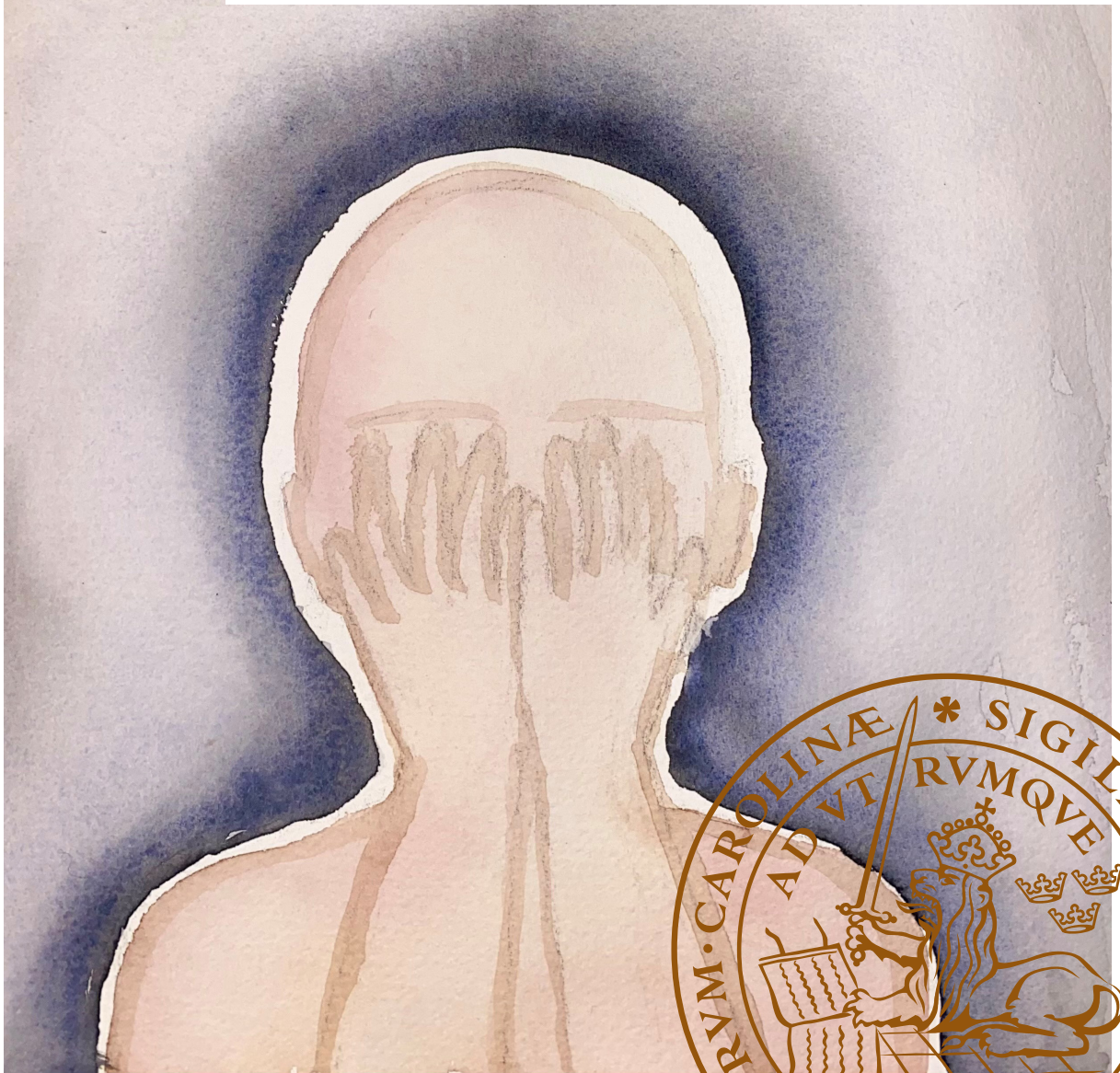
LUND UNIVERSITY

PO Box 117
221 00 Lund
+46 46-222 00 00

From Exclusion to Extremism: The Role of Significance Loss and Identity in the Radicalization Process

HOLLY KNAPTON

DEPARTMENT OF PSYCHOLOGY | FACULTY OF SOCIAL SCIENCES | LUND UNIVERSITY



From Exclusion to Extremism

From Exclusion to Extremism:

The Role of Significance Loss and Identity in the Radicalization Process

Holly Knapton



LUND
UNIVERSITY

DOCTORAL DISSERTATION

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Abstract:

The present thesis aims to examine the causal role of social exclusion within the radicalization process and further to explore moderating and mediating factors. In recent years there has been a move away from trying to understand *who* is at risk of becoming an extremist, to exploring *what* makes someone at risk. Feelings of exclusion, discrimination and marginalization have all been linked to participation in extremist activities. Yet to date there continues to be very little empirical data exploring the pathway of exclusion to extremism. This thesis plans to establish a causal link between exclusion and radicalization and explore the moderating and mediating factors that can impact this mechanism.

Paper I found that social exclusion triggers a desire for recognition and this functions as a pathway to radicalization. Four experiments were conducted and found that exclusion was a driver of radical ideology in individuals sensitive to rejection. Further, the findings of these studies revealed that this effect was consistent across different social and political issues.

Paper II revealed that the pathway of social exclusion on radical activism arises via shifts in ingroup identity. Specifically, the source of exclusion impacted ingroup identity shifts and in turn activism intentions. An online experiment revealed that exclusion by an outgroup (not ingroup) led to increased participation and this effect was fully mediated by ingroup identity. This finding was replicated using an online survey that operationalized exclusion via a measure of perceived discrimination. This demonstrated perceived discrimination by an outgroup, led to increased ingroup identity and in turn increased engagement. As such this study highlighted the impact of group-based exclusion and how this impacts identity levels and activism engagement.

Paper III investigated the link between identity and exclusion one step further by adding need-threat to the mediation pathway. A quasi-experimental study revealed that exclusion led to threatened fundamental needs. This in turn drove individuals to identify with a radical group and be more willing to endorse and participate in extremist actions.

The findings of the thesis highlight the vulnerability of individuals experiencing social exclusion and discrimination in relation to radicalization risk. The explanatory pathways described in the thesis help explain this mechanism and thus provide empirical data that can help shape informed counter-extremism strategies.

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*To My Daughters, Ebba, Eleanora, and Poppy, who grew
alongside this thesis. Thank you for making me who I am today.
There is no me, without you.*

*To My Grandparents, Bill and June, who are not here to see this
moment, but who are an integral part of it.*

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Abstract

The present thesis aims to examine the causal role of social exclusion within the radicalization process and further to explore moderating and mediating factors. In recent years there has been a move away from trying to understand *who* is at risk of becoming an extremist, to exploring *what* makes someone at risk. Feelings of exclusion, discrimination and marginalization have all been linked to participation in extremist activities. Yet to date there continues to be very little empirical data exploring the pathway of exclusion to extremism. This thesis plans to establish a causal link between exclusion and radicalization and explore the moderating and mediating factors that can impact this mechanism.

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The findings of the thesis highlight the vulnerability of individuals experiencing social exclusion and discrimination in relation to radicalization risk. The explanatory pathways described in the thesis help explain this mechanism and thus provide empirical data that can help shape informed counter-extremism strategies.

List of Papers

Paper I

Renström, E. A., Bäck, H., & Knapton, H. M. (2020). Exploring a pathway to radicalization: The effects of social exclusion and rejection sensitivity. *Group Processes & Intergroup Relations*, 23(8), 1204-1229.

Paper II

Knapton, H., Renström, E. A., & Bäck, H. (2022). Outgroup exclusion, identity, and collective action in the Brexit context. *Journal of Applied Social Psychology*, 52(9), 912-927.

Paper III

Knapton, H., Renström, E., & Lindén, M. (2022). The abortion divide: Exploring the role of exclusion, loss of significance and identity in the radicalization process. *Frontiers in Psychology*, 13, 7578.

Introduction

In the past couple of decades there have been several high-profile terrorist and political attacks. In the aftermath of such events, the media depicts perpetrators of these horrific atrocities as “loners”, “socially isolated” and/or “marginalized” (Burke, 2016; Dodd, 2017; Koranyi, 2012; Lassiter, 2022). However, although scholars have suggested the role that ostracism (Back et al. 2013), social isolation (Bhui, Everett & Jones, 2014) and a need for belongingness (Silke, 2008; Borum, 2014) have regarding political violence, little research has explored a causal link between exclusion and radicalization. The present thesis explores the role of exclusion as a driver towards radicalism. Specifically, I investigate how exclusion may drive individuals to seek out, or at least be receptive to radical groups that present an opportunity to restore belonging. In Paper I, a causal link between an episode of exclusion and radical actions is determined, particularly for individuals that were highly rejection sensitive. In Paper II and Paper III, the mediating effect of ingroup identity was explored in relation to exclusion by outgroups, such that these two studies examined how shifts in ingroup identity following group-based exclusion impacted individuals’ willingness to join and participate on behalf of radical groups. Finally Paper III added to the mediation pathway by showing that increased ingroup identity following exclusion was driven by threatened fundamental needs.

The papers used a variety of experimental, quasi-experimental and survey methods and together highlight the causal role of social exclusion as a factor in the radicalization process. Nevertheless, before delving into the details of the empirical studies that form this thesis, an overview of the theoretical framework, scientific underpinnings and core theories in the radicalization and social exclusion literature will be presented.

The Theoretical Framework of Radicalization

Radicalization is defined as the process of increasing extremity of beliefs, feelings and/or actions (McCauley & Moskalkenko, 2008; 2009). Radicalization may be a gradual process from sympathizing with a cause, to participating in activism, and/or radicalism, to potentially engaging in terrorism. Thus, arguably anybody on this spectrum of beliefs and/or actions can be deemed as being part of the radicalization

process. Often the terms radicalization and extremism are used interchangeably, but extremism is the adoption of extreme attitudes that deviate from the norm and radicalization is the process in which these extreme attitudes and/or actions emerge (Beelmann, 2020). Thus, radicalization is the *process* and extremism is the *outcome*. The nuances in the level of extremity in the radicalization process have been discussed in many radicalization models with a possible gradual transition from legal activism to potential violent actions being proposed (Horgan & Horgan, 2005; McCauley & Moskalenko, 2008, 2017; Moghaddam, 2005; Silber & Bhatt, 2007; Wiktorowicz, 2005).

The stairway to terrorism model (Moghaddam, 2005) and the pyramid of radicalization (McCauley & Moskalenko, 2008) are metaphorical models that symbolize the potentially gradual process of radicalization and the varying levels of extremity within the process. For example, the stairway to terrorism model depicts six different stages in which an individual can go from disgruntled citizen (lower levels of staircase) to engaging in terrorism (top of the staircase). Similarly, the pyramid of radicalization illustrates how the many can sympathize with a cause, but far fewer will partake in the atrocious acts such as terrorism. As such, a pyramid structure represents this with the apex of the pyramid representing the few who participate in acts of political violence or terrorism. In contrast, the bottom of the pyramid represents a base of individuals who sympathize with the cause at the apex but do not support or engage in any radical/extreme behaviours or attitudes. Each stage of the pyramid reduces in numbers but increases in radical ideas and extremist actions. Arguably changes in context, or personal events to the individual such as perception of unfairness (Moghaddam, 2005), personal humiliation or shame (Kruglanski et al., 2009; Webber et al., 2018), feelings of discrimination (Sageman, 2004; Wiktorowicz, 2005) or feelings of social exclusion (Bartlett et al., 2010; Knapton, 2014; Knapton et al., 2015) may then drive an individual through these various stages until an individual finds a suitable outlet for their feelings of frustration or discontentment. Though it should be noted that some models state that individuals do not need to progress through every stage but can skip levels or stages in the process (McCauley & Moskalenko, 2008) and that some individuals may only radicalize in opinion but not necessarily action (McCauley & Moskalenko, 2017). Nevertheless, there appears to be a general consensus that sees radicalization as a process in which individuals are attracted to increasing levels of extremity in order to channel discontentment, frustration or a to fulfil a need.

Given that radicalization that results in individuals participating in extreme actions is of societal concern, it is often this radicalization to violence that gains the most attention. However, in recent years much of the literature has begun to explore the full trajectory of how individuals move through the radicalization process (Kruglanski et al., 2014; Kruglanski & Fishman, 2009; McCauley & Moskalenko, 2008, 2017; Moghaddam, 2005; Moskalenko & McCauley, 2009). This has led to the discussion of how “ordinary” or “unremarkable” individuals, such as those without a history of criminality, may transition from normative actions and/or

beliefs in a non-normative direction to more radical or extreme ideas (Silber & Bhatt, 2007.) Specifically, rather than focusing on those who participate in terrorist acts and viewing them as somehow different or suffering from psychopathology, a move has been made to explore how anyone can move through a process of radicalization if the context, or circumstances are right. The “conveyor belt” metaphor of radicalization has thus been formed, exploring how aggrieved individuals may turn to normative activism and then through a pathway of factors may radicalize to participate in non-normative, radical actions and even violence (Moskalenko & McCauley, 2009).

From Activism to Radicalism

A general framework of radicalization has been provided that highlights the escalating stages of radicalization and emphasizes the possible progression from discontentment to activism, from activism to extremist ideas, and from such ideas to a possible extremist act. Thus, it is within this “conveyor belt” approach to radicalization I frame my thesis. Given the varying level of action within this conveyor belt approach, it is appropriate to define different forms of engagement. Activism is an umbrella term that is used to describe any forms of political participation or collective action that is conducted to promote a cause. Activism is not restricted to any cause, but often has a social, political, or economic agenda (Boehnke & Shani, 2017). To understand activism, it is thus important to define the actions it includes.

Political participation is loosely defined as any activity that citizens participate in as a way of influencing politics (Ekman & Amnå, 2012). Traditionally, this field has examined conventional forms of electoral modes of participation, such as voting or joining political parties. However, in recent years there has been a change in the way people are politically active. More institutionalized practices, such as party activity, have slowly become replaced with protest activities such as demonstrations, boycotting, and signing petitions (Dalton, 2008). Such activities are termed collective action. Collective action is defined as any action that is conducted to promote the interests of one’s group or to form political solidarity (Becker, 2012; Becker & Tausch, 2015). It is deemed a form of political protest and can take many forms. Collective action can be conducted individually (e.g. a petition) and it can also be group-based, for example, a demonstration (Becker & Tausch, 2015). Further, some collective acts are deemed more radical than others, for example, sabotage is more radical than a peaceful demonstration. As a result, a distinction has been made between normative collective action and non-normative collective action (Wright et al., 1990). Normative collective action is defined as any action that falls within the norms of an existing social system. Conversely, non-normative action is defined as any action that breaks the social rules and includes hostile actions, violence, or terrorism. Scholars consider non-normative and radical actions synonymous (Becker & Tausch, 2015).

In this thesis I will focus on the non-conventional forms of political participation, that is non-electoral modes of participation such as collective action in both normative and non-normative forms. Given that activism is defined as any act of collective action and that this thesis covers several social issues, for clarity the term activism will be used throughout to describe any participation or collective action.

Both the pyramid and stairway model of radicalization have an escalatory component in that they highlight that many may sympathize with a cause and or participate in activism for that cause on the lower levels of the radicalization trajectory, but few engage in terrorism. Further, both indicate that on the pathway up to extremism, there are nuances and varying degrees of radicalism. Often actions associated with extremism are focused on mainly terrorist actions, whereas definitionally extremism is the adoption of beliefs outside the norm which may or may not result in extreme action (Beelmann, 2020). Some research suggests there is a distinct difference between action and ideology, with two different pyramids to explain radicalization of action and radicalization of beliefs, given that prior research has shown a weak link between attitudes held and behaviour taken (McCauley & Moskalkenko, 2017). In this thesis, both action and attitudes will be explored in the form of action intentions (action radicalization) and endorsement of extremism (attitude radicalization). Further, the lower ends of the pyramids to extremism will be focused on, whereby the thesis explores the shift from normative beliefs and legal activism to radical beliefs and illegal behaviour. The participation in terrorism will not be explored. This is visually represented in Figure 1 in which the levels of extremism that are the focus are shaded in grey.

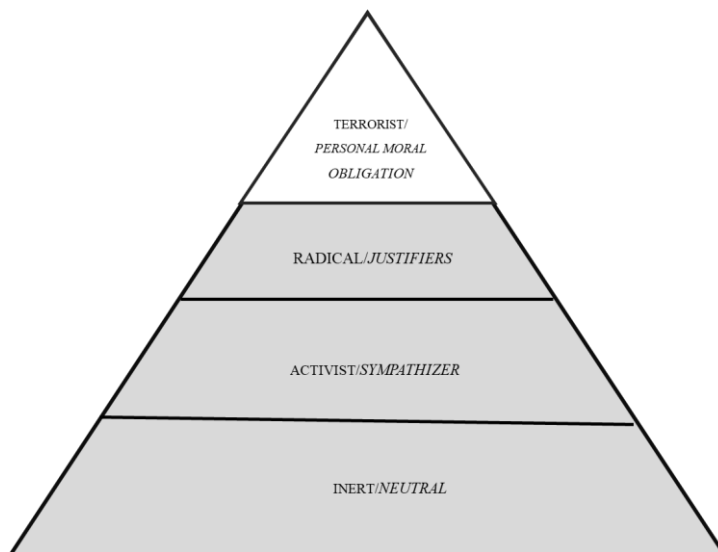


Figure 1
A Figure Of The Action and Opinion (italicized) Radicalization Pyramid By McCauley & Moskalkenko (2017). The Levels Shaded in Grey are the Levels of Radicalization Focused On In This Thesis.

Although the pyramid and staircase models provide a visual representation of the stages of radicalization, they lack firm empirical backing and specificity to how one graduates up the radicalization process (Lygre et al., 2011). Consequently, these models provide a backdrop in representing the way in gradual process that radicalization can occur, but the following section will explore motivational theories that may explain the mechanisms of how an individual may be driven to activism and then radical action are presented. Given the vast literature on the topic of radicalization, and to ensure one does not go beyond the scope of this thesis, the social theoretical foundations of radicalization will be focused on.

The Significance Quest Theory of Radicalization

Kruglanski and colleagues (Kruglanski et al., 2009, 2014; Kruglanski & Fishman, 2009) developed a motivational model of radicalization they termed the significance quest theory. The theory is based on the concept that individuals have a need for recognition and positive self-esteem (Baumeister & Leary, 1995). However, certain events can happen in life that threaten this basic need, such as personal or societal grievances. When these events occur, it results in feelings of meaninglessness or humiliation and in turn results in significance loss. It is this loss of significance that is argued by this model to drive radicalization, such that when an individual experiences a significance loss they are motivated to regain significance and compensate for this loss. These compensatory activities will likely be conducted via their available social outlets, however if this fails, they may be drawn to extreme groups as a way fortifying this basic need. It is argued that adopting an extreme ideology and participating in extreme activities is an effective way to restore significance as these radical beliefs give an individual a feeling of importance, meaningfulness, and control (Knapton et al., 2014; Kruglanski et al., 2022). Empirical research appears to support the quest for significance theory, with loss of social significance being a strong predictor of ideological crimes and evidence that it increases adherence to extremist ideas and participation in violent extremism (Jasko et al., 2017; Schumpe et al., 2020; Webber et al., 2018).

Social exclusion is arguably a strong factor in awakening the quest for significance. An episode of social exclusion has been shown to lead to feelings of meaninglessness and feelings of invisibility which may trigger significance loss (Kruglanski et al., 2009; Williams, 2007; Williams, 2009). In turn, social exclusion via this model is deemed a driver of radicalization via a quest for significance and Kruglanski and colleagues (2014) posited that social exclusion was a driver for terrorism. Further, identity threat has been argued to trigger a loss of significance, and when excluded, an individual's identity to that group is threatened. In line with this, it has been argued that a loss of significance may result increased ingroup identity as increasing one's identity to a group functions as a way of restoring that significance (Milla et al., 2022; Yustisia et al., 2019). As such, there appears to be a link between exclusion, loss of significance and identity and this link needs to be explored further.

The Social Identity Theory

At the core of most social-psychological models explaining activism engagement is the concept of identity. Identity is the understanding of who one is as an individual and the understanding of who other people are (Jenkins, 2014). The social identity theory (SIT) states that individuals have both a personal identity and a social identity (Tajfel & Turner, 2004). A personal identity is how an individual defines themselves in relation to their personal attributes. In contrast, when an individual belongs to a social group and social category, they can develop a social identity which is defined by the attributes of the group. The SIT proposed motivations as to why individuals may engage in activism and/or extremism and states that when an individual belongs to a group they thrive and benefit from the positive identities associated with that group (Tajfel et al., 1979). Thus, if an individual's group status is lower or the identity associated with that group unfavourable, they may be motivated to change social group or in cases where this is not possible, are then motivated to participate in activism to change that status.

The social identity model of collective action (SIMCA), builds on the social identity concept and explains how group identity (social identity one has from belonging to a group), group efficacy (the belief that goals can be achieved through a combined effort of the group) and perceived injustice (perception of unfairness or disadvantage of the group) drive willingness to engage in activism (van Zomeren et al., 2008). These three factors have been shown to individually predict engagement in activism, but this model aimed to show how social identification predicted activism not only directly, but indirectly through efficacy and perceived injustice. The model succeeded and demonstrated that group identity directly predicted activism, but also predicted activism through increasing perception of group efficacy and perceived group injustice (van Zomeren et al., 2008). Further, the findings showed that this effect was stronger if the group identity was politicized and thus confirmed previous research that a politicized identity has larger effects on activism tendencies than non-politicized identities (Drury & Reicher, 1999; Reicher, 1996; Stürmer & Simon, 2004). The role of identity is not limited to normative activism but also seen in the radicalization literature, with high identity levels to an ingroup have also been linked to determining how much an individual will endorse or engage in extreme actions that represent that ingroup (Aghabi et al., 2017; Hogg et al. 2010; 2012; 2014; Milla et al., 2022; Strindberg et al., 2020; Wagoner et al., 2021).

Empirical data has consistently shown social identity to be a core driver in motivating individuals to engage in activism (Klandermans et al., 2002; van Stekelenburg & Klandermans, 2013; van Zomeren et al., 2008) but what drives an individual to identify to activist cause is less understood. The encapsulation model of social identity in collective action (EMSICA) tries to account for this. EMSICA contains the same predictive components as SIMCA, but the order of causality differs between the two. EMSICA argues that when an individual experiences injustice and the emotional reaction that follows such an event (anger, outrage), this

leads the individual to believe that a group of like-minded individuals could come together (group efficacy) to overcome such injustice and in turn a social identity is formed (Thomas et al., 2012). In line with this, empirical data has shown when people perceive that there is an illegitimate difference between the status of their group and another, they in turn identify more with the group and higher identification in turn is linked to activism, thus highlighting the causal role of injustice perception in identity formation (Ellemers, 1993; Turner & Brown, 1978). Further, research has highlighted the transformative role that anger has with identity formation, such that, anger has been argued to precede identification to an activist movement and has a key role in politicizing an identity (Stürmer & Simon, 2009; Thomas et al., 2009).

The EMSICA model can explain how identity may drive radicalization as well as normative activism (Yustisia et al., 2019). As outlined in the staircase and pyramid models of radicalization, perceived societal grievances, and feelings of injustice may drive individuals to enter the radicalization pathway (McCauley & Moskaleiko, 2008; Moghaddam, 2005). The EMSICA model states that feelings of injustice may lead to anger. Anger then leads individuals to seek out or believe that a group of likeminded individuals can drive social change and in turn may begin to identify with a group that drives such change (Thomas et al., 2012). This may be an activist group, however, if individuals do not find an outlet for such change or the anger does not dissipate, the outlet for change could be in the form of an extremist group. As such, the EMSICA model may help account for the pathway between feelings of injustice and radicalization highlighted by both the staircase and pyramid models, by demonstrating that increasing social identity with a group may drive individuals to radicalize (McCauley & Moskaleiko, 2008; Moghaddam, 2005; Yustisia et al., 2019).

Another important factor here is also the idea of perceived identity threat. A link between perceived identity threat and radicalization has been established, and further that this link is mediated by social identity levels to ones ingroup (Schwartz et al., 2009; Wright, 2015; Yustisia et al., 2019). The basis of this argument is rooted in the social identity theory, in that when an individual perceives their identity is under threat, it may also threaten self-esteem and as such it will result in self-serving or group-serving behaviours to restore a positive frame of oneself, or one's group. Such a self-serving bias in turn may lead to intergroup tensions due to group-serving behaviours resulting in an "us vs them" mentality and in turn may result in anti-social behaviours that may be associated with radicalism (Branscombe et al., 1999; Campbell & Sedikides, 1999; Tajfel et al., 1979; Tajfel & Turner, 2004). As such it has been argued that perceived identity threat should also be included in the EMSICA model to provide an identity pathway to explaining radicalization (Yustisia et al., 2019).

Although the SIMCA and EMSICA models appear to be competitive in nature, they both highlight the key role that identity has with promoting engagement with a (radical) activist cause. It appears to be a "which came first: chicken or egg?"

scenario and arguably the process may be cyclical in nature, in which case both models play their part in shaping activist engagement. It may also be dependent on the identities in question with pre-existing category-based identities (gender, ethnicity) being explained more by SIMCA and emergent opinion identities (environmental causes, abortion rights) being accounted for by EMSICA (Bamberg et al., 2018). Nevertheless, both models highlight the importance of the social components that may drive engagement, and specifically account for the extensive empirical data that highlights the key role of identity in activism and radicalization.

Summary

The literature above has presented the theoretical foundations of both the activism literature and radicalization models. Although arguably distinct from one another activism and extremism do have some overlap, given that it may be a transitional process through activism to extremism. This brings about an important assumption of this thesis, which is that as presented in the radicalization models, engagement in violent activities is not a prerequisite of radicalization. Showing increased sympathy or showing increased alignments with a group, is enough to indicate the entrance to the radicalization pyramid or stairway. McCauley and Moskaleiko (2008) argue that “Functionally, political radicalization is increased preparation for and commitment to intergroup conflict. Descriptively, radicalization means change in beliefs, feelings, and behaviours in directions that increasingly justify intergroup violence and demand sacrifice in defence of the ingroup” (p. 416).

Two models highlight a general framework for exploring how individuals escalate from activism to extremism (McCauley & Moskaleiko, 2008; Moghaddam, 2005). Both these models emphasize the importance of exploring how “normal” individuals become vulnerable to the risk of radicalization and exploring the pathway and trajectory of how such individuals become radicalized. Two explanatory pathways, the social identity theory, and the quest for significance, were presented and as such it is these two models that I base the radicalization framework on. Specifically, a focus of this thesis is to explore the relationship between the loss of significance and ingroup identity as drivers of radicalization. Given that social exclusion is deemed a trigger of significance loss, it is thus within this context that the main aim is to examine the causal role of social exclusion within the radicalization process and further to explore moderating and mediating factors. Consequently, the next section will describe the theoretical overview of the social exclusion literature.

Ostracism, Social Exclusion and Rejection

Ostracism is an umbrella term used to describe the process in which an individual or group is deemed unwanted (rejected) and is ignored and excluded by another individual or group (social exclusion). Accordingly, social exclusion is defined as the process in which an individual, or group, is kept apart or ignored by another individual or group. In contrast, rejection is an explicit statement that an individual or group is unwanted. Consequently, all three terms are used to describe a threat to one's inclusionary status and research appears to show the effects of these events to be similar in outcome (Williams, 2007). Leary (2005) suggests that inclusionary status is a better way of explaining a continuum of acceptance and rejection. The concept of being "accepted" or "rejected" suggests a simple dichotomy of states, where in fact there are nuances into the level of feeling inclusion based upon the extent to which individuals go to an effort to include or exclude. Leary (2005) suggests that a continuum of inclusionary status, and for the purpose of this thesis the main term used will be inclusion versus exclusion to encompass a spectrum of episodes of rejection/exclusion that may impact one's inclusionary status.

The Temporal Need-threat Model

Humans have a natural desire to belong to social groups and a feeling of belonging is arguably a fundamental need that promotes survival (Baumeister & Leary, 1995). Thus, acts of exclusion and threats to belonging are extremely powerful but also surprisingly common (Williams, 2007). Exclusion is seen throughout workplaces, informal groups, government institutions, and children in the playground (Gruter & Masters, 1986; Williams, 1997, 2001, 2007). The prevalence of exclusion is arguably due to its suggested innate function, seen in both humans and animals, that ensures social groups are cohesive and members follow the norms of a group that in turn promote the group's survival (Gruter & Masters, 1986; Kurzban & Leary, 2001; Ouwerkerk et al., 2005; Wesselmann et al., 2012).

The extreme, intense, and highly negative reactions to an episode of exclusion are proposed to be adaptive, and it is suggested that exclusion detection has an evolutionary basis (Wesselmann et al., 2012). Humans are group-based animals and although common day living circumstances allow for more successful isolated living, traditional hunter-gatherer humans would have unlikely survived without a social group. Research suggests that detection of exclusion has "piggy-backed" onto the neural basis for physical pain, such that, social pain occurs when an individual perceives exclusion and functions to give instant feedback that inclusionary status is under threat and in turn their survival (Eisenberger, 2013; Eisenberger et al., 2003). This adaptive response then functions as a necessary instant cue that the excluded individual needs to change their behaviour to maintain their belonging and status within the group.

The temporal need-threat model is a conceptual framework that aims to detail the effects of exclusion and in turn how an individual may react to such an encounter (Williams, 2009). The first stage is a universal *reflexive stage* in which all individuals react to an episode of exclusion regardless of the context. The premise of this stage is that given inclusion is key to survival we have adapted ways to readily detect exclusion and when it is detected we react strongly. Extensive empirical studies have highlighted the minimal cues that are needed for individuals to detect a possible exclusion episode, from simply diverted eye contact to more overt explicit statements of rejection (Gaertner et al., 2008; Wirth et al., 2010). Further, research indicates that such detection occurs even when prior contact with the individual, or group, has been minimal and even when the participant does not have anything in common, or even disagrees with the excluder (Williams et al., 2002; Williams & Sommer, 1997). This “exclusion detection system” is quick and adaptive to promote survival, however, it often means that individuals over-detect exclusion and may falsely detect exclusion when it is not occurring (Williams, 2009). Nevertheless, the model suggests that any detection of exclusion, even false detection, will result in social pain and individuals are negatively affected.

In addition to the reflexive social pain response, the temporal need-threat model also states that directly after the detection of exclusion, an individual’s four fundamental needs are threatened: *the need to belong, the need for self-esteem, need for control and the need for a meaningful existence*. Baumeister and Leary (1995) put forward the concept of the *need to belong*. This refers to the innate desire to belong to social groups and form meaningful social connections. The *need for self-esteem* is based on the sociometer theory (Leary, 1999). This theory suggests that self-esteem acts as a motivator for ensuring good social relations, so when excluded it is a threat to our social relations and in turn our self-esteem is impacted. Belonging to a group makes us feel good about ourselves and reviews of the exclusion literature have revealed that in nearly all empirical studies where an episode of exclusion is manipulated there is a significant drop in self-esteem confirming the close link between self-esteem and belonging (Williams & Zadro, 2005). The *need for control* is argued to be threatened in response to exclusion, often due to ones’ inability to impact the situation when ignored. Specifically, when a confrontation occurs, the individual can engage with the instigator. In contrast, when one is ignored or excluded, one is unable to engage. Thus, empirical studies have shown a reduction in feelings of control following an exclusion episode (Zadro et al., 2004). Finally, the *need for meaningful existence* relates to feelings of invisibility. When an individual is ignored, it is like you are invisible. Further, it is argued that exclusion functions as a metaphor of death, in that when excluded, it is like you no longer exist. Several empirical studies have highlighted how the above four fundamental needs are threatened in varying forms of exclusion manipulations (Carter-Sowell et al., 2008; Eisenberger et al., 2003; Knapton et al., 2015; Smith & Williams, 2004; Williams, 2007; Zadro et al., 2005).

When individuals are excluded, and they feel the reflexive, instantaneous social pain and their fundamental social needs are threatened, this impacts their well-being. Research has demonstrated that following exclusion individuals show lower levels of happiness, greater feelings of anger and sadness, increased hurt feelings, and reduced fulfilment of the four fundamental needs (Williams, 2007; Williams et al., 2000; Zadro et al., 2004, 2006). Moreover, when asked to recall painful social events and painful physical events, participants current pain levels were significantly higher on recollection of painful social events compared to painful physical events (Williams & Fitness, 2004; Williams 2007). Finally, the more episodes of exclusion that occur, the more distress that is reported demonstrating a linear link between exclusion and distress (Williams et al., 2000). Examination of the numerous empirical studies exploring the direct impact of an exclusion event demonstrate the same finding, that the reflexive distress to an episode of exclusion is universally painful and is not moderated or impacted by situational or contextual factors (Williams, 2007). Thus, providing overwhelming support for an innate and reflexive exclusion detection system to any cues of exclusion.

The above research highlights the reflexive stage of exclusion detection. The temporal need-threat model says following the reflexive stage there is a second stage, the *reflective stage*. In this reflective stage individuals will appraise the situation at hand and then react to it. Arguably, it is in this reflective stage where there may be individual differences or contextual factors that can moderate the outcome by impacting the attributions and appraisals made about the exclusion. Specifically, the individual can deliberate on the experience and evaluate contextual and external factors leading up to the exclusion and this may moderate the feelings, and recovery, associated with the experience (Williams, 2007; 2009). Further, individual differences such as rejection sensitivity may impact the way in which individuals make appraisals about events, and thus impact how individuals react to them (Downey & Feldman, 1996). Consequently, there is research to suggest that examining moderating factors is important when considering the reactions to an episode of exclusion and possible moderating factors are discussed below.

The Source of Exclusion

There is extensive empirical data that suggests that the source of exclusion will not impact the distress caused in response to exclusion (Abrams et al., 2005; Gonsalkorale & Williams, 2007; Hutchison et al., 2007; Smith & Williams, 2004; Williams et al., 2000). Even when a group is despised, or an individual benefits from exclusion the negative effects have still been documented (Gonsalkorale & Williams, 2007; Van Beest et al., 2011; van Beest & Williams, 2006). However, after some time has passed there are indications that a period of reflection may result in appraisals made about the contextual factors of an exclusion event that will impact one's longer-term reaction. For example, when a follow-up of the study (Gonsalkorale & Williams, 2007) was conducted it was found that after the initial universal pain and a period of reflection, recovery from an exclusion episode was

quicker when the exclusion was conducted by a despised group, than when the source of the exclusion was an individual's ingroup.

Richman and Leary (2009) developed the multimotive model that might help explain how and why the source of exclusion may impact subsequent behaviours due to the construal's made about the scenario. An example of such a construal is the "value of the relationship", such that they predict that if the excluders were not that important to the victim (e.g. an outgroup), they are likely to withdraw from interactions. More importantly, they argue that the source of exclusion will determine the evaluations the individual makes about the cause of the exclusion. Specifically, rejection from an outgroup is often attributed to be caused due to discrimination – that is, the cause is seen as group based, while rejection from an ingroup is rather seen to be directed to the individual (Crocker et al., 1991; Crocker & Major, 1989; Goodwin et al., 2010). Perception of discrimination or exclusion to one's ingroup may impact the individual's reaction, such that perceived prejudice may buffer the effect, or result in individuals showing increased efforts to achieve a feeling of social connectedness within their ingroup, and even strengthening ingroup relations (Richman & Leary, 2009; Stephan et al., 2009). Conversely, rejection by an outgroup may be deemed less hurtful after a period of reflection, given the relationship was not that important to the individual to begin with.

Rejection Sensitivity

Although all individuals have been shown to react to an episode of rejection and the desire to belong is a fundamental human need, there is evidence to suggest that some individuals detect and react to exclusion more strongly. Rejection sensitivity is defined as a disposition to anxiously expect, readily perceive, and intensely react to rejection (Downey, Khouri, & Feldman, 1997; Berenson, Gyurak, Ayduk, Downey, Garner, Mogg et al., 2009). Thus, this makes rejection sensitive individuals very vulnerable to situations where they feel their inclusion may be under threat (Downey & Feldman, 1996). Individuals who are sensitive to rejection have usually experienced past rejection from close others and through such experiences the individual has learnt to expect exclusion, and this motivates them to protect themselves against future exclusion (Downey, Freitas, Michaelis, & Khouri, 1998). Research has shown that individuals high on rejection sensitivity shift attention resources to cues of social threat and are hypervigilant to cues of exclusion and likely over-detect such episodes (Berenson et al., 2009; Downey & Feldman, 1996; Ehrlich et al., 2015). Further, individuals high on this trait may react differently in response to an episode of rejection. Romero-Canyas and colleagues (2010) demonstrated that individuals who are high in rejection sensitivity conformed more to their group members when their identity was threatened. Further, several empirical studies that have linked a hostile reaction to an episode of exclusion, with those high on rejection sensitivity presenting higher hostility and aggression to those who they perceive to exhibit cues of exclusion or committing acts of exclusion (Ayduk et al., 1999; Ayduk et al., 2008; Gao et al., 2021). Thus, it appears that

individuals high on rejection sensitivity not only detect exclusion episodes more frequently and rapidly, but also react to them more strongly.

Need-threat fortification

In the reflective stage, individuals may also try to fortify threatened fundamental needs. The temporal need-threat model suggests that when an individual's need for belonging or self-esteem (inclusionary needs cluster) are most threatened, individuals are more likely to act in a pro-social and ingratulatory manner to promote social connectedness. Specifically, research has shown that when belonging has been threatened individuals are quicker to detect smiling faces and will seek out opportunities of social inclusion to restore belonging (DeWall et al., 2009; Pickett & Gardner, 2005). Further, research has shown that excluded individuals show higher levels of conformity, show increased compliancy and collaboration in a group task, and are more obedient (DeWall et al., 2009; Pickett & Gardner, 2005; Williams et al., 2000; Williams & Sommer, 1997). Consequently, some research studies suggest that a desire to fortify these fundamental needs will make individuals more willing to join an accepting group and that most efforts of reconnection will occur to a new group, rather than the excluding one (Knapton et al., 2015; Maner et al., 2007).

In contrast, when an individual's need for control and meaningful existence (power-provocation cluster) are most threatened it is suggested that this will lead to anti-social behaviour (Williams, 2009). Specifically, it is suggested that acts of aggression are away of regaining control and making oneself seen. Empirical evidence has supported this, demonstrating that excluded individuals who were control-deprived showed higher levels of aggression by allocating more hot sauce to another participant than participants included (Warburton et al., 2006). Moreover, Twenge et al., (2001) showed higher levels of aggression and derogation, regardless of the source or receiver of the aggression, in excluded individuals. Further, a link between exclusion and horrific atrocities such as school shootings and extremism has been suggested (Knapton, 2014; Leary et al., 2003; Twenge, 2000). The need-fortification hypothesis thus suggests that the extent to which an individual's fundamental needs are threatened will in turn mediate the behaviour they respond with, specifically if it is pro-socially or anti-socially. An important factor to consider regarding extreme groups, is that they may provide an outlet to restore both need clusters. An extreme group can restore both the need to belong and self-esteem by providing a feeling of connectedness and belonging, but it also provides an outlet in which an individual can act anti-socially which may fortify their need for control and meaningful existence. Consequently, extreme groups may be unique in the sense of being able to fortify all threatened needs following an episode of exclusion.

Societal Level Exclusion

Although there is extensive research exploring the phenomenon of social exclusion, most of the empirical research has considered the exclusion of single individuals from a group, or at best, the exclusion of one small group by another. However, these are not the only forms of social exclusion. Social exclusion occurs at a societal level, with often minority groups feeling excluded and marginalized within their society. Papers indicate that social exclusion can be perceived as discrimination (Major & Eccleston, 2004; Richman & Leary, 2009) and when discrimination is perceived it can impact multiple health factors, self-esteem, academic performance, and result in feelings of being an “outsider” (Branscombe et al., 1999; Oxman-Martinez et al., 2012; Shaw, Dorling and Davey, 1999; Williams, Neighbours & Jackson, 2003). Even though there is extensive literature linking societal exclusion and marginalization to a host of negative outcomes there is a limited amount of experimental research due to complex methodological problems given that it is hard to operationalize discrimination in a real-life context (Loury, 2000). However, given the overlap in similar negative outcomes in the societal exclusion/discrimination literature and the interpersonal exclusion literature (Branscombe et al., 1999; Oxman-Martinez et al., 2012; Shaw et al., 1999; Williams et al., 2003; Williams, 2007), it is plausible that the effects seen in studies exploring social exclusion in more interpersonal levels are likely to be the same, or at least have similarities, when considered from a societal perspective. As a result, discrimination and societal exclusion are likely to result in similar outcomes that are seen in experimental studies on interpersonal social exclusion. That is, following societal exclusion individuals are likely to try and fortify their thwarted fundamental needs by trying to regain feelings of belonging. This could be via opportunities within the majority group, or most likely due to feelings of exclusion by the majority, via their minority group. Given that societal grievances and feelings of injustice are outlined as a trigger for entering the radicalization pathway by several radicalization models, it is clear that episodes of societal exclusion may count as one of those triggers (Kruglanski et al., 2014; McCauley & Moskalenko, 2008; Moghaddam, 2005; Thomas et al., 2008; van Zomeren et al., 2008).

Exclusion and Identity

When an individual is socially excluded from a group, they do not only lose a sense of belonging, but the identity associated with that group is also under threat. Accordingly, exclusion may lead individuals to not only seek out inclusion, but also a welcoming, secure identity. The social identity theory (Tajfel & Turner, 1986) states that individuals can have multiple social identities, and thus, in times of reduced feelings of acceptance by one identity, individuals may rely more on another, accepting identity. The rejection-identification model helps explain this. Branscombe and colleagues (1999) discuss how ethnic discrimination leads

individuals to rely more on their minority in-group as a way of protecting against the negative outcomes of social exclusion (e.g. reduced self-esteem and well-being). They demonstrated that African American individuals who experienced prejudice had reduced levels of well-being, increased levels of hostility to whites and increased minority in-group identification. However, they noted that those who identified more with their minority in-group had enhanced psychological well-being, thus indicating that ingroup identity was in some way protective to the experience of prejudice. The effect outlined in the rejection-identification model has been replicated in several countries and with several minority groups (Armenta & Hunt, 2009; Barlow et al., 2012; Cronin et al., 2012; Verkuyten & Yildiz, 2007; Wiley et al., 2013). Exclusion of an individual by a group due to a perceived group characteristics often results in the victim attributing the cause to be discrimination (Smart Richman & Leary, 2009). Some researchers argue that exclusion is at the heart of discrimination, prejudice, and stigmatisation, and thus exclusion is a core mechanism in the process (Major & Eccleston, 2004; Smart Richman & Leary, 2009). Consequently, much of the discrimination literature, including the rejection-identification model may be extended to the exclusion literature.

The rejection-identification model was also adapted to explain the effect that perceived discrimination had on levels of national (or majority) identity (Jasinskaja-Lahti et al., 2009). The rejection-disidentification model was developed to explain how feelings of discrimination not only resulted in increased minority identification, but also resulted in decreased national (or majority) identification. A term referred to as dis-identification. Several studies have shown that feelings of discrimination result in dis-identification from the national identity and even feelings of hostility towards the majority group (Badea et al., 2011; Berry et al., 2006; Jasinskaja-Lahti et al., 2009). Identity is a key component when considering activism and radicalism and thus, these shifts in identity might be important when considering radicalization (Hogg et al., 2010; Milla et al., 2022; van Zomeren et al., 2008). The EMSICA model was put forward as an explanatory pathway towards radicalization and showed that feelings of injustice led to increased ingroup identification and radicalization tendencies (Thomas et al., 2012; Yustisia et al., 2019). The EMSICA model aligns with findings presented by the rejection-identification model where discrimination, which arguably would be deemed unjust, leads to increased minority group identification. Given that increased identification levels results in increased engagement on behalf of the minority group and increased radicalization tendencies, there appears to be a causal link between exclusion, identity, and radicalization (Simon & Grabow, 2010; Simon & Ruhs, 2008).

Identity Fusion

Even though social identities are important to all humans, for some individuals, social identities are also key for their personal identity. Identity fusion is the concept that one's personal identity is dependent on one's social identity. Specifically, identity fused individuals see their social identity and personal identity as the same.

This results in a visceral feeling of oneness to the group (Swann et al., 2009). Highly fused individuals have been shown to be more likely to participate in extreme group actions, such as fighting or dying for one's ingroup, compared to individuals who simply show high identification (Gómez et al., 2011; Swann et al., 2009). In line with this, identity fusion has been shown to be a predictor in collective action and even radical tendencies for those who perceive oppression towards their ingroup (Besta et al., 2018; Lobato et al., 2020). Based on identity fusion being a driver in activism in the presence of oppression against one's ingroup, identity fusion is an important factor when considering engagement in a social exclusion context.

Exclusion and Loss of Significance

The studies above highlight that following exclusion individuals feel invisible and meaningless, it is therefore no surprise that an episode of social exclusion may trigger a quest for significance (Kruglanski et al., 2014). The quest for significance model states that when an individual loses status or is socially humiliated, this is deemed a threat to significance, and in turn this may trigger an individual to engage in radical acts to compensate for this loss. Researchers suggest that social exclusion is deemed a driver in terrorism based on motivating an individual to restore their significance (Kruglanski et al., 2009, 2014; Kruglanski & Fishman, 2009). Further, research has shown that marginalized minority communities who feel a loss of significance are more likely to report increased support of fundamentalist groups, and recent experimental studies have linked social exclusion as a source of significance loss and in turn a causal factor in individuals identifying with, and joining, radical groups (Lyons-Padilla et al., 2015; Milla et al., 2022). Much of the research exploring the role of exclusion in radicalism and activism have tested this within the need-fortification hypothesis, however, although, not empirically tested, there appears to be a strong overlap in the need-fortification hypothesis and the quest for significance, such that both are based on the need to restore fundamental human needs (Knapton et al., 2015; Kruglanski et al., 2014; Williams, 2007; 2009). Consequently, there is a need to explore need-fortification within a radicalization framework such as the quest for significance model outlined by Kruglanski and colleagues (2014).

Summary

The role of exclusion, discrimination and marginalization are all factors that have been discussed in relation to the radicalization process, however, their causal role to date has been a little unclear. Extensive empirical evidence has been presented that demonstrate how feelings of exclusion may make individuals at risk of radicalization, via increased desire for social connection, increased vulnerability to social influence, more conformist and more obedient (Carter-Sowell et al., 2008;

Pickett & Gardner, 2005; Riva et al., 2014). These changes in behaviour are accounted for by the temporal need-threat model in which individuals are motivated to restore fundamental needs that are depleted following feelings of exclusion (Williams, 2009). As such the temporal need-threat model is the exclusion framework that this thesis argues is the foundation of the vulnerability to radicalization. However, to my knowledge there is no model that has empirically tested the role of social exclusion within a radicalization framework.

The quest for significance model of radicalization states that individuals are motivated to participate in extremism when feelings of social shame and humiliation trigger a loss of significance (Kruglanski et al., 2014). It is argued that social exclusion can trigger this loss of significance and interestingly there is an extensive overlap between the depletion of fundamental needs as highlighted by the temporal need threat model, and the loss of significance described in the quest for significance radicalization model. Given these similarities, it may be plausible to integrate these models to provide a holistic explanatory pathway to radicalization, where an episode of exclusion depletes both fundamental needs and significance, resulting in compensatory behaviours that not only restore one's belonging but also their significance via the use of extremist ideology.

A further aspect of importance is that of identity. As outlined feelings of exclusion have been shown to cause shifts in minority and majority identity. It is argued that by showing increased identification to one's minority group when experiencing feelings of exclusion, it may buffer the negative effects, such as reduced fundamental needs (Branscombe et al., 1999). In line with this, the EMSICA model, states that in the presence of injustice, which may be in the form of social exclusion and discrimination, individuals will identify with a group that represents that injustice and in turn show increased activism and/or radicalism on behalf of that group (Thomas et al., 2012; Yustisia et al., 2019). Given that group identity is deemed a key factor in engagement in both radicalism and activism, and that there is a link between group identity shifts in the face of exclusion, it is thus plausible to suggest that identity may function as a mediating factor between exclusion and radicalization.

In summary, it appears that exclusion may make individuals at risk of radicalization through a desire to restore fundamental needs and significance. Given the evidence that relying on an accepting identity may restore one's fundamental needs and significance, and that high ingroup identity is linked to endorsement of extremism, it may be that the link between exclusion and extremism is mediated by shifts in ingroup identity. Further given that contextual factors (for example source of exclusion) and individual differences (rejection sensitivity) have been linked to impacting the way an individual may respond to an episode of exclusion, these will be explored as moderating factors. Given this, a conceptual pathway is put forward (see Figure 2) in which the causal link between exclusion and extremism, is mediated by shifts in fundamental needs and ingroup identity, and that moderating factors, such as the source of exclusion may moderate this effect. As presented in

Figure 2, each study in the thesis will explore a different part of this proposed process in an effort to provide an integrated and comprehensive explanation for each proposed step in the pathway.

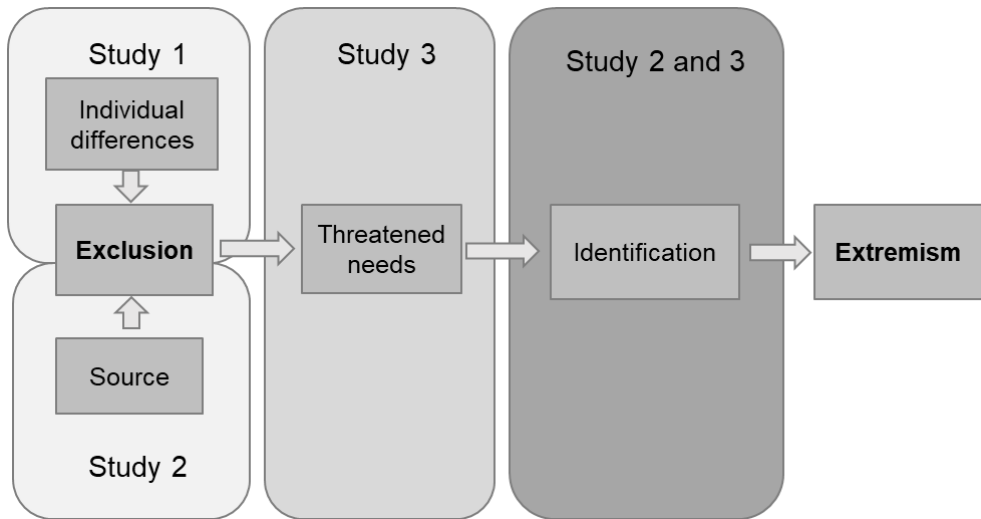


Figure 2
A Conceptual Model Of The Proposed Pathway To Extremism Detailing Which Papers In The Thesis Examine Which Stage Of The Process

Summary of the Papers

Methodological Overview

The papers presented in this thesis use a variety of methodological approaches to explore the research question. Specifically, several experimental paradigms were used to control episodes of exclusion but also both survey and quasi-experimental designs were utilized too. In addition, a variety of social and political issues were used to explore the phenomenon of radicalization and the research was conducted in several countries. Thus, given the mixed nature of variables manipulated, variables measured and countries the studies were conducted in, a summary of these details are presented in Table 1.

Experimental Paradigms and Inclusion as A Control Group

In this thesis three experimental paradigms are used to manipulate feelings of exclusion. Two of these paradigms were tested and validated (Williams et al., 2000; Wolf et al., 2015). The *Online Ostracism Paradigm* uses a fake social media set up to manipulate feelings of exclusion using likes. Participants are asked to present some information about themselves and are informed this will be presented to other participants taking part in the research. Individuals in the excluded category then receive 1 like whereas those in the included receive around 5 likes, which is similar to the number of likes received by all other profiles (Wolf et al., 2015). The other participants are not real. Similarly, *Cyberball* is a computer-based ball-tossing game in which the participant is told they are playing with other individuals, in the included condition participants receive the ball an equal amount of the time whereas in the excluded condition they receive the ball at the beginning of the task and then fail to be thrown the ball again (Williams et al., 2000). Finally, an in-lab exclusion paradigm was created in which individuals wrote an opinion about a social issue (introduction of tuition fees) and were either included or excluded by a representative of a (fictional) group based on this opinion.

A core component of these experimental paradigms is that inclusion is seen as a control group given that most people expect to be included in social situations and thus inclusion is seen as the status quo. In contrast, being excluded is the experimental condition given that this is something that has been demonstrated to impact individuals needs and mood (Williams, 2007). Research has demonstrated that when there is a neutral condition that does not involve inclusion/exclusion of

Table 1
Summary of Key Variables Contained Within Each of the Papers

Paper	Study Design	Independent/ Predictor Variable	Moderator	Mediator(s)	Control Variables	Dependent variable	Country of study	Issue/Ideology explored
Paper 1	Experiment 1	Inclusion/Exclusion	Rejection sensitivity		Age	Identification with activist group	UK	Right-wing
					Education level			
	Experiment 2	Inclusion/Exclusion	Rejection sensitivity		Age	Identification with activist group	UK	Left-wing
					Education level			
Experiment 3	Inclusion/Exclusion	Rejection sensitivity		Age	Identification with radical group	UK	Right and left-wing	
					Education level			
Experiment 4	Inclusion/Exclusion	Rejection sensitivity				Engagement with radical group		
						Endorsement of extremism	Sweden	Tuition fee introduction
Paper 2	Survey	Perceived discrimination		Ingroup identity	Age	Willingness to join activist group	UK	Brexit
					Gender			
					Political affiliation	Collective action intentions		
	Experiment	Inclusion/Exclusion	Source of exclusion	Ingroup identity	Age	Willingness to join activist group	UK	Brexit
					Gender			
					Political affiliation	Collective action intentions		
Paper 3	Quasi-experimental Survey	Minority/majority group status		Need- threat		Radical action	USA	Abortion Issue
				Activist ingroup identity		Endorsement of radical actions		

the individual there is no significant difference between the need-threat and mood between the included and neutral participants. However, there is a significant negative difference between the excluded participants and the neutral and included participants. Hence confirming the assumption that inclusion is expected and should be viewed as a form of control group in comparison to exclusion (Dvir et al., 2018). Consequently, the view in this thesis is in line with the above, whereby inclusion is deemed the control group and exclusion the experimental condition.

Measures of Radical Activism and Extremism

The process of adopting extreme beliefs and behaviours is determined as radicalization and the outcome of this process is extremism. However, as discussed earlier in this thesis extremism is definitionally broad, including both radical, illegal actions and terrorism in its scope. Previously, it was noted terrorism would not be explored in this thesis, but the lower levels of extremism and the radicalization process would be. Given that the lower levels are focused on and that is of activism and radical activism, these are the terms used to describe many outcomes studied in this thesis. In Table 1 the outcome variables used in this thesis are provided, however many of these were presented in relation to a radical group norm, so refer to the Appendices where the group descriptions are presented to gain better understanding of the context in which they were used. An important factor to consider when reading the results of the studies is that the measures have specific names that refer to those measures, for example, *identification with an activist group*, but when spoken about in a general sense the umbrella term activism, or radical activism, will be used to cover the various measures.

Moderators and Mediators

The thesis presents a conceptual model that may explain why an individual may become more at risk of radicalization following an episode, or feelings of exclusion. This model aims to explain the proposed causal link between exclusion and extremism. Each study within this thesis aims to explore a part of this pathway, which then read in unity can be used holistically to account for the full pathway. As two factors were expected to change the strength and/or direction of the effect of exclusion, the conceptual model presented two moderating factors: Rejection sensitivity and the source of exclusion. Rejection sensitivity arguably will impact the way in which an individual responds to an episode of exclusion, with the effect of exclusion being stronger in those higher in rejection sensitivity given the evidence to suggest that may conform more, or react more aggressively to cues of exclusion (Ayduk et al., 1999; Ayduk et al., 2008; Gao et al., 2021; Romero-Canyas et al., 2010). This moderation relationship is explored in Paper I. The source of exclusion may also impact the way in which individuals respond to the exclusion given that

who excludes you may impact the attributions you make about the cause of the exclusion. Specifically, exclusion by an ingroup is likely to be attributed to a personal failing, such as breaking a group norm, whereas exclusion by an outgroup may be attributed to discrimination and prejudice (Richman & Leary, 2009). Consequently, whether the excluders are one's ingroup or outgroup is likely to moderate the way in which individuals respond to the exclusion. Specifically, outgroup exclusion may cause individuals to identify more with their ingroup to buffer from the negative effects of the outgroup exclusion, whereas ingroup exclusion may result in reduced identification with that group. The moderating role of source of exclusion is explored in Paper II.

Two factors were presented as mediators between the effect of exclusion on the radicalization process. Firstly, ingroup identity is proposed to drive the extent to which an excluded individual will engage in radical activism. Identity shifts following exclusion have been documented and ingroup identity has been well established as both a driver in activism and radical actions (Branscombe et al., 1999; Hogg et al., 2010; Milla et al., 2022; van Zomeren et al., 2008). Thus, this thesis proposes such shifts in identity following exclusion will mediate changes in willingness to engage and endorse in radical actions. This process is studied in Paper II and Paper III. Arguably, it could be suggested that ingroup identity may also moderate the impact of exclusion, with those more identified to their group being more impacted by an episode of exclusion against their group. However, the view taken in this thesis is that of the rejection identification model which suggests that exclusion leads to shifts towards an increased ingroup identity to buffer against the negative outcomes of exclusion by an outgroup (Branscombe et al., 1999). Further given that much of the ingroup identification measured is that of a willingness to identify with a new ingroup, there is no basis in which identity to that group could impact the effect of exclusion prior to the presentation of the new group. In line with this, the second mediating factor explored is that of need-threat. When excluded individuals' fundamental social needs are threatened and individuals are motivated to restore them and one way to restore threatened needs may be to identify more strongly with an accepting ingroup. Thus, the conceptual model suggested that the extent to which an individual's fundamental needs are threatened following exclusion will impact the extent to which they identify with an accepting ingroup. Thus, a serial mediation model of the proposed pathway between exclusion, need-threat, identity, and radical actions is explored in Paper III.

Ethical considerations

At the start of all studies participants were made aware of the general aim of all the studies. The full extent of the purpose was unable to be explained because this would likely have an impact on the dependent variables. However, a general explanation regarding that it was a survey exploring a specific political issue (e.g. Brexit) was presented. Further, for the online experimental studies they were told there would

be an online social media task (Online Ostracism Paradigm) or a visualisation task (Cyberball). Prior to starting the survey participants were made aware that their responses would be in no way identifiable to them and that they were able to stop the study at any point without giving a reason if they so wished. On completion of the study participants were fully debriefed and told the focus of the study was feelings of exclusion and its impact on activism measures. Further, if participants were in one of the experimental conditions, they were told that their inclusion or exclusion was totally randomised. No personal data was collected; however, some sensitive data was collected (e.g. abortion opinion) and due to the negative psychological effects documented from episodes of exclusion, an ethics approval was sought for the experiments using the Online Ostracism and Cyberball paradigms, and approved by Lund Ethics Board

Paper I: The Effects of Social Exclusion and Rejection Sensitivity as a Factor in the Pathway to Radicalization

Background

Some scholars have argued that personality traits are not relevant when exploring who becomes an extremist and early models that tried to explore individual-level clinical differences between may be misguided (Gill & Corner, 2017; Ginges et al., 2011). However, recent research has suggested that non-clinical personality traits can provide some insight into which individuals are more likely to engage in activism, radicalism and violence, and the authors highlight the need to consider interactive effects of these personality traits within a social context (Obaidi et al., 2020). As such, interactive models may explain why some individuals can move from a normative member of society in a non-normative direction to sympathize with extremist ideas, participate in non-normative political actions and possibly even participate in terrorist acts (Kruglanski et al., 2014; McCauley & Moskalenko, 2008, 2017; Moghaddam, 2005; Obaidi et al., 2020). Specifically, an interplay between individual differences and contextual factors over time may lead to an individual adopting or participating in extremist ideas (Becker & Tausch, 2015) and such interactive models can help explain why some individuals in a specific context may be drawn to extreme ideology, whilst others are not. Thus, this study aimed to explore the interplay between individual differences and social context to explore why some individuals may be more at risk of radicalization. In particular, the interactive effect of exclusion (context) and rejection sensitivity (individual difference) on radicalization measures is explored.

The quest for significance model argues that individuals who experience feelings of significance loss through events that can result in feelings of shame or humiliation, will be motivated to sympathize, and maybe even act with extreme group ideology to restore feelings of significance (Jasko et al., 2017; Kruglanski et al., 2009, 2014; Kruglanski & Fishman, 2009). One such cause of significance loss is social exclusion. Social exclusion has been shown to threaten four fundamental social needs (Williams, 2007; Williams, 2009), and arguably to restore these individuals will show increased susceptibility to opportunities of social inclusion, will be more obedient, more compliant and even more aggressive, all factors that might increase engagement with extremist groups (Carter-Sowell et al., 2008; Riva et al., 2014; Warburton et al., 2006; Williams et al., 2000; Zadro et al., 2011). Further, the disposition rejection sensitivity has been shown to moderate the effects of social exclusion, for example, those high on rejection sensitivity have been shown to detect rejection more rapidly and respond more aggressively (Ayduk et al., 1999; Ayduk et al., 2008; Berenson et al., 2009; Ehrlich et al., 2015; Gao et al., 2021). Thus, within the quest for significance framework, in these experiments I aimed to explore if social exclusion can constitute a pathway to radicalization and further, if

individual level of rejection sensitivity may moderate this effect. Finally, I aimed to show this pathway worked across various ideological topics and even non-ideological issues and thus that the pathway of social exclusion functioned independently of the ideological cause at hand.

Experiment 1

Participants and Procedures

104 participants were recruited on the online recruitment platform *Prolific Academic*. Participants were recruited to be of right-wing political affiliation through Prolific's pre-selection criteria, such that when asked "Where do you sit on the political spectrum?", they had responded Right from the options Right, Left, Centre, N/A. Of these participants 49% were men, 50% women, 1% other, and the mean age was 39 ($SD = 12$). They were invited to take part in a survey on their political opinions and were advised they would take part in a social media task. The survey began by first collecting demographic information and then the variable rejection sensitivity (Downey & Feldman, 1996). Following this they participated in the Online Ostracism Paradigm (Wolf et al., 2015). Of the 104 participants, 55 were randomly allocated to the exclusion condition and 49 to the inclusion condition. On completion of this task, participants received the notification "You've received a message!" and all participants were invited via a personalized message by one of the fictional profiles to participate in a questionnaire. On clicking the link participants received a personalized message explaining that there was a new political group and that they would like feedback from possible new members. This was followed by some information about the group and the cause it represents (e.g., decrease immigration), providing a relatively extreme group norm (see Appendix A) by explaining that previous events hosted by the group had culminated in violence, and that such outcomes highlight the passion of the group members. In this study it was presented as a right-wing group. Following this, participants were asked to indicate how much they felt they could identify with right-wing activists. Finally, a manipulation check assessing how excluded individuals felt during the task was presented. Thus, the independent variables in this study were whether the participant was in the inclusion or exclusion condition and their level of rejection sensitivity. The dependent variable was the extent to which they identified with right-wing activists.

Measures

Rejection sensitivity (RS) was measured using the short version of the rejection sensitivity scale (Downey & Feldman, 1996). Participants were asked to imagine themselves in different situations that describe things that people sometimes ask of others, for example: "You ask your parents or another family member for a loan to

help you through a difficult financial time.” For each situation, participants rate a) how concerned or anxious they would be over the others’ reactions, for example, “How concerned or anxious would you be over whether or not your family would want to help you” ($1 = \text{very unconcerned}$ to $6 = \text{very concerned}$), and b) to what extent they expect the others to help them in this situation, for example, “I would expect that they would agree to help as much as they can” ($1 = \text{very unlikely}$ to $6 = \text{very likely}$). A total of 8 similar scenarios were presented. To calculate a score of sensitivity for each situation, the level of rejection concern (response to question a) is multiplied by the reverse of the level of acceptance expectancy (response to question b). An index of overall rejection sensitivity was calculated by the mean of all situation scores.

Identification with activists was measured with three items: “I have a lot in common with right-wing activists,” “Generally, I would be glad to be a right-wing activist,” and “I would feel proud if I saw myself as a right-wing activist.” Answers ranged from $1 = \text{Strongly disagree}$ to $7 = \text{Strongly agree}$. The items were combined to a mean index of identification.

Manipulation check. Three items from the Wolf et al (2015) Online Ostracism Paradigm were used as a manipulation check. Participants rated on a scale from 1 to 5 what their thoughts during the game were: “I was ignored,” “I was excluded,” and “the others liked my profile” (reversed). The three items were combined and a mean index created.

Results and Discussion

Firstly a t-test was conducted on the manipulation check which revealed a significant difference, $t(102) = -5.75, p = .001$, with those in the excluded condition ($M = 2.76, SD = 1.03$) rating higher feelings of exclusion than those in the inclusion condition ($M = 1.80, SD = 0.67$). The Cohen’s $d = 1.07$ indicated a large effect. Following this, a hierarchical linear regression analysis was conducted with experimental condition dummy-coded in Step 1 ($0 = \text{included}, 1 = \text{excluded}$) and an interaction term between condition and rejection sensitivity in Step 2. The results are presented in Table 2. The findings did not reveal a significant main effect of exclusion on identification with right-wing activists. However, there was a significant interaction between exclusion and rejection sensitivity.

Simple slope analyses analysing the effect of RS within each condition (excluded/included) was conducted and the slope in the exclusion condition was significant, $B = 0.11 (SE = 0.05), t = 1.94, p = 0.05$, while the slope for the included was not, $B = -0.03 (SE = 0.05), t = -0.78, p = 0.44$. Thus, it was excluded individuals who were high on rejection sensitivity that showed higher levels of willingness to identify with the right-wing activists. The findings did not support the expectation that social exclusion would have a main effect on identification of right-wing activists, however, it revealed that social exclusion did increase identification in those with high belongingness concerns (e.g. those high on rejection sensitivity) and arguably those who would be most affected by exclusion and thus experience greater

significance loss. Given the small sample, effect size and need to replicate these findings in different ideological context this study was repeated using a left-wing sample.

Table 2

Regression Analyses on Identification with Right/Left-wing Activists, for Experiment 1 (Right-wing) and 2 (Left-wing) Separately

		Experiment 1: Right-wing (<i>n</i> =104)	Experiment 2: Left-wing (<i>n</i> =308)
		<i>B</i> (SE)	<i>B</i> (SE)
Step 1	Intercept	3.32** (1.03)	5.50** (0.63)
	Age	-0.03* (0.01)	-0.03*** (0.01)
	Education	-0.04 (0.22)	-0.07 (0.14)
		<i>R</i> ² = 0.05 <i>F</i> =2.72	<i>R</i> ² = 0.06 <i>F</i> =10.93***
Step 2	Intercept	2.95 (1.16)	5.44 (0.72)
	Age	-0.03* (0.01)	-0.03 (0.01)***
	Education	-0.02 (0.23)	-0.07 (0.14)
	RS	0.02 (0.04)	0.01 (0.02)
	Condition	0.18 (0.29)	0.09 (0.19)
		<i>R</i> ² = 0.06 $\Delta R^2=0.01$ <i>F</i> =1.52	<i>R</i> ² = 0.06 $\Delta R^2=0.00$ <i>F</i> =4.03**
Step 3	Intercept	2.93 (1.15)*	6.70*** (0.78)
	Age	-0.02 (0.01)	-0.04*** (0.01)
	Education	0.07 (0.23)	-0.07 (0.13)
	Condition	-0.75 (0.55)	-1.81*** (0.52)
	RS	-0.04 (0.05)	-0.11* (0.04)
	Condition x RS	0.14 (0.07)*	0.19*** (0.05)
		<i>R</i> ² = 0.10 $\Delta R^2=0.04$ <i>F</i> =2.03	<i>R</i> ² = 0.11 $\Delta R^2=0.06$ <i>F</i> =6.62***

Note. Condition is coded 0 = Included, 1 = Excluded. Gender is coded 0 = women, 1 = men. RS=Rejection sensitivity.*** *p* < .001, ** *p* < .01, * *p* < .05

Experiment 2

The first study showed that right-wing orientated, excluded individuals who were highly rejection sensitive were more likely to identify with a somewhat radical right-wing group compared to those included or low on rejection sensitivity. However,

the sample was quite small, and to be able to conclude that the mechanism of social exclusion is the same for different ideological content, a second experiment was conducted. The main purpose was to firstly, increase sample size, and secondly, to test a left-wing context.

Participants and Procedure

308 participants were again recruited from *Prolific Academic*, of which 38% were men, 61% were women, and 1% other. The mean age was 35 ($SD = 11$). The procedure mimicked that of Experiment 1, except that the participants recruited were that of left-wing affiliation as indicated by Prolific's pre-screening criteria and thus the group presented was also a relatively radical left-wing group. All measures were the same except the identification items were adapted to measure left-wing activists. The group manifest and inviting statement presented to participants was made to match in tone as much as possible that of Experiment 1 and only differed on the ideological content (see Appendix B). In the exclusion condition $n = 165$ (54%) and in the inclusion $n = 143$ (46%).

Results and Discussion

As in Experiment 1, a t-test on the manipulation check revealed a significant difference, $t(266) = -13.53, p < .001$ between the included ($M = 1.67, SD = 0.59$) and excluded conditions ($M = 3.08, SD = 1.02$). A hierarchical regression analysis was conducted (see Table 2). The findings revealed no significant main effect of social exclusion on left-wing activist identity. Moreover, the results again revealed a significant interaction between social exclusion and rejection sensitivity. A simple slopes analysis revealed that individuals high on rejection sensitivity and socially excluded were more likely to identify with left-wing activists, $B = 0.08 (SE = 0.03), t = 2.37, p = .02$, and further, that individuals included and low on RS were less likely to identify $B = -0.11 (SE = 0.03), t = -3.51, p < .001$, Cohen's $d = 1.70$. Consequently, the finds of Experiment 2 mirrored that of Experiment 1 and were in fact stronger. The results support the interactive effect of social exclusion and rejection sensitivity functions regardless of ideological content. However, again the expected main effect of social exclusion was not found, even with a larger sample size. One possibility is that the paradigm of Ostracism Online is not strong enough to affect those who are less rejection sensitive, thus a decision was made to use a more established exclusion paradigm and see if this would impact the findings.

Experiment 3

At the time of data collection, the Online Ostracism Paradigm (Wolf et al., 2015) was a relatively new experimental set up and although provided some promising results, given the lack of main effect found in the two previous experiments, the decision was made to also evaluate the hypotheses using a more validated and well-

tested exclusion paradigm called Cyberball (Williams et al., 2000). In addition to the change in experimental paradigm, some other changes regarding the set-up and dependent variables were made. Specifically, the main differences between Experiments 1–2 and Experiment 3 were that, 1) a single design for both left- and right-wing participants was used, allowing the analysis left- and right-wing radicalization using a single data set, 2) there was an extension on the previous design with other dependent variables, analysing both identification and engagement with a radical group, and finally, 3) a considerably larger sample was used in Experiment 3 than in Experiments 1 and 2.

Participants and Procedures

Using the recruitment website *Prolific Academic* once more, 1041 participants from the UK were recruited to participate in an online survey and visualisation task (this is the backstory given for the Cyberball paradigm). There were 42% men, 57% women, 1% other, and the mean age was 37 ($SD = 13$). Participants who had indicated that they were “Right” or “Left” on the political spectrum via Prolific’s pre-screening criteria were recruited. The set-up was formatted to mimic Experiments 1 and 2 as much as possible given the changes. Consequently, the study began by asking participants questions a variety of demographic questions and then the measure of rejection sensitivity. Included in these items was a left-right political orientation measure to confirm what they had indicated on Prolific’s prescreening political spectrum item and this measure was used to match the final group survey (as described in Experiments 1 and 2) to the participants political orientation. There were 528 participants who identified to the left and 513 to the right.

Following the demographic items and rejection sensitivity measures, the participants participated in a “visualisation task”. This task was the Cyberball paradigm and functioned as the inclusion/exclusion manipulation. The game is set up so that participants are led to believe that they are to play an online game with other participants where they are to throw a ball to each other for a few minutes. Excluded participants receive the ball once (out of 50 throws), but are then left out of the game, whereas included participants regularly receive the ball. Participants were randomly assigned to one of the two experimental conditions. On completion of this task, participants were automatically redirected to the radical group survey. As with Experiments 1 and 2, these were personalized invitations asking for feedback. The content of the radical groups was the same as used in Experiments 1 and 2, with the addition of some political engagement items. Participants who identified as left received the radical left-wing group and the participants who identified as right, received the radical right-wing group. Consequently, the design was a 2 x 2 between measures design with the factors: included/excluded and left/right. The number of participants in each cell was as follows: Left/excluded: 259 (25%); left/included: 269 (26%); right/excluded: 258 (25%); right/included: 255 (24%). After the survey participants were thanked and debriefed.

Measures

The measures of rejection sensitivity were identical as those used in Experiments 1 and 2. However, in this study identification to the group was measured rather than activists in general, thus *identification to a radical group* was measured with three items in which the participant indicated the extent to which they agreed with the following statements: “I feel I could identify with the British National Alliance/British Solidarity Alliance”; “I feel I could connect with the British National Alliance/British Solidarity Alliance”; and “I identify with the aims of British National Alliance/British Solidarity Alliance.” Answers ranged from 1 = *Strongly disagree* to 5 = *Strongly agree* and the three items were combined to make an identity index. Cronbach’s alpha was high, .94. In addition, this study included a measure of *Engagement with the group*. This was measured with three items. The question read: “Below are some questions about what you would be willing to do on behalf of the [British National Alliance/British Solidarity Alliance] in an effort to help [reduce immigration/promote their cause].” Then three forms of political engagement were listed; participate in a demonstration; donate money; and protest on social media (e.g., posting material on opposing political groups). Answers ranged from 1 = *Not at all willing* to 5 = *Very willing* and the three items were combined to make an index of group engagement intentions. Further, the manipulation check was near identical to that of Experiment 1 and 2, with participants being asked to rate on a scale of 1 = *Do not agree at all* to 5 = *Completely agree* what their thoughts during the game were; “I was ignored,” “I was excluded,” and “the others players kept me involved in the game” (reversed). The three items were combined and averaged to form a manipulation check index.

Results and Discussion

A t-test on the manipulation check confirmed a significant difference, $t(985) = -42.75$, $p < .001$, between the excluded ($M = 4.74$, $SD = 0.52$) and included ($M = 2.41$, $SD = 1.08$) conditions, Cohen’s $d = 2.75$. Further, two hierarchical linear regression analyses were conducted, one on each of the dependent variables, *identification* and *engagement with the group*. As in Experiments 1 and 2, condition was added in Step 1 (inclusion/exclusion), however, additionally in this case so was the group political affiliation (left/right). In Step 2, all two-way interaction terms were added and in Step 3, the three-way interaction term with condition, group political affiliation and rejection sensitivity. All results are presented in Table 3. As in the previous experiments, there was no main effect of exclusion, however, there was a significant interaction between exclusion and rejection sensitivity for both identification and engagement with the group. The simple slopes analysis mirrored the previous experiments, such that, individuals excluded and high on rejection sensitivity were more likely to identify with the group $B = 0.08$, $SE = 0.03$, $t = 2.39$, $p = .02$, and show higher engagement, $B = 0.08$, $SE = 0.03$, $t = 2.28$, $p = .02$. Hence, there was a positive effect of rejection sensitivity for excluded participants.

Table 3

Regression Analyses Of Identification With The Right/Left-Wing Group, And Willingness To Engage On Behalf Of Group

		Identification <i>B</i> (SE)	Engagement <i>B</i> (SE)
Step 1	Intercept	4.87*** (0.47)	3.20*** (0.40)
	Age	-0.02** (0.01)	-0.02*** (0.01)
	Education	-0.12 (0.11)	0.08 (0.09)
		$R^2= 0.01$ $F=4.83^{**}$	$R^2= 0.02$ $F=10.46^{***}$
Step 2	Intercept	4.80*** (0.51)	3.15*** (0.45)
	Age	-0.01 (0.01)	-0.01** (0.01)
	Education	-0.18 (0.10)	0.04 (0.09)
	Condition	0.02 (0.14)	-0.05 (0.12)
	RS	0.06*** (0.02)	0.04 (0.02)
	Group	1.19*** (0.14)	-0.80*** (0.12)
		$R^2= 0.09$ $\Delta R^2=0.09$ $F=20.20^{***}$	$R^2= 0.08$ $\Delta R^2=0.04$ $F=15.71^{***}$
Step 3	Intercept	5.47*** (0.56)	3.69*** (0.48)
	Age	-0.01 (0.01)	-0.01** (0.01)
	Education	-0.17 (0.10)	0.05*** (0.09)
	Condition	-0.91 (0.37)	-1.00** (0.32)
	RS	-0.01 (0.03)	-0.01 (0.03)
	Group	1.84*** (0.36)	-1.12*** (0.31)
	Condition x RS	0.08* (0.03)	0.09*** (0.03)
	Condition x Group	0.31 (0.28)	0.24 (0.24)
	RS x Group	0.05 (0.03)	0.02 (0.03)
		$R^2= 0.10$ $\Delta R^2=0.01$ $F=13.93^{***}$	$R^2= 0.09$ $\Delta R^2=0.010$ $F=11.27^{***}$
Step4	Intercept	5.56*** (0.60)	3.86*** (0.50)
	Age	-0.01 (0.01)	-0.01 (0.01)
	Education	-0.17 (0.10)	0.05 (0.09)
	Condition	-1.17* (0.48)	-1.32*** (0.41)
	RS	-0.02 (0.03)	-0.03 (0.03)
	Group	-2.12*** (0.49)	-1.47*** (0.42)
	Condition x RS	0.11* (0.05)	0.12** (0.04)
	Condition x Group	0.85 (0.67)	0.90 (0.58)
	RS x Group	0.09 (0.05)	0.06 (0.04)
	Condition x RS x Group	-0.06 (0.07)	-0.07 (0.06)
	$R^2= 0.10$ $\Delta R^2=0.001$ $F=12.47^{***}$	$R^2=0.09$ $\Delta R^2=0.001$ $F=10.20^{***}$	

Note. Group is coded as 0 for right and 1 for left, and condition is coded 0 for included and 1 for excluded.

Importantly to note, was that there was no significant two-way interaction for any of the group political affiliation variable on any of the outcome variables. As such, the group the individual was assigned to (e.g. left or right) and thus the information they received did not impact their willingness to engage or identify with a group that is in line with their pre-existing ideology. This result demonstrates that there are no ideological differences between the appeal shown toward a radical group following an exclusion experience. This is in line with Kruglanski et al.'s (2002) idea that the mechanisms of radicalization may be similar regardless of the content.

The results did not reveal a main effect of social exclusion on identification or engagement with the group as expected. One possible explanation is that the use of Cyberball online is relatively new, and thus, in the comfort of their own homes' individuals were less impacted by the paradigm compared to when conducted in the lab. Thus, a fourth, in laboratory study was conducted to examine this effect and further to examine if an issue independent of ideological content would also be impacted by social exclusion and/or rejection sensitivity.

Experiment 4

The main aim with this final study was to complement and fill the gaps of the previous 3 experiments. Firstly, given the failure to find the expected main effect of social exclusion, a real-life, in lab study was attempted given that the effects may be stronger. Secondly, I wanted to replicate the findings found in Experiments 1-3 using content that could be considered more politically neutral and thus extend the findings to more activist groups. Finally, I wanted to see if the findings would hold for an even more radical group and thus presented a greater violence norm and in turn added more dependent variables related to engagement.

Participants and Procedures

40 participants recruited on Lund University Campus to participate in a study investigating opinions on the introduction of tuition fees. 21 participants were women, 19 were men and the average age was 24 ($SD = 3.28$). Participants were invited to attend the lab in pairs. Upon arrival, participants were asked to answer some demographic questions and then the rejection sensitivity questionnaire. Following this they were presented with a neutral (fictive) newspaper article to introduce them to the issue of tuition fees. It was neutral in the sense that it presented both arguments in favour of and against the proposal to implement tuition fees. They were asked once they read this article, if they could write down their thoughts and feelings regarding the issue and this would be presented to a representative of a (fictive) group called the International Students Union, who were going to act against the proposal to implement tuition fees. They were told this group had a questionnaire for them to answer but before they answered this, this statement would be checked over by the representative to ensure they were compatible with the

groups standards. When both participants had completed writing the statement, the experimenter left the room for a while, ostensibly checking the participant's compatibility with an ISU representative who supposedly was in another room. In fact, this was completely fictional and the experimenter simply waited outside for five minutes. On returning to the room, the experimenter told one participant that the representative felt they were compatible with the group and that they would like them to answer a questionnaire for them. This participant was therefore in the included condition. To the other participant, the experimenter told them the representative did not feel they were compatible with the group and this participant was therefore excluded. The experimenter however told this participant that there was in fact another group (European Students Union) that was willing to accept them if they would be willing to complete a survey for them instead. The two surveys the participants received were in fact identical, only differing in group name. Both questionnaires featured a (fake) newspaper article describing the group's previous extreme actions of vandalizing and rioting along with a picture supposedly from a previous event in London where a masked person was seen smashing a window in the backdrop of a crowd and fire (see Appendix C). They were then asked a variety of questions that assessed endorsement of extremism. They were thanked and debriefed on the true nature of the study.

Measures

Rejection sensitivity was measured in the same way as Experiments 1-3. *Endorsement of extremism* was measured with six items. The question read: "Below are some questions about how you perceive the organization's actions. Please rate each from 1 = *Not at all acceptable* to 7 = *Definitely acceptable*." The items were: "How acceptable do you think the organization's actions were earlier this year?" and "Do you think more extreme actions (e.g., violent actions) are acceptable?". A second question read: "Now follows some questions about whether you think the organization's actions were justified". Answers ranged from 1 = *Not at all justified* to 7 = *Completely justified*. The items read: "Do you think the action earlier this year was justified?", and "Do you think more extreme actions are justified?". Finally, willingness to participate with the organization was assessed by asking: "Below are some questions about what you would consider yourself doing to stop the implementation of tuition fees". Answers ranged from 1 = *Not at all likely* to 7 = *Very likely*. The questions read: "If you had the opportunity to participate, would you have considered participating in the vandalizing of universities that the group organized earlier this year?" and "Would you consider participating in more extreme actions than vandalization?" The six items were combined and averaged to form an index.

Results and Discussion

A hierarchical linear regression analysis was conducted on the outcome variable endorsement of extremism. In Step 1 condition was added (included/excluded) and

in Step 2 the interaction term between condition and rejection sensitivity. Results are presented in Table 4. The findings revealed a significant main effect of condition, such that, those excluded were significantly more willing to endorse extremism compared to those included. In addition, there was a significant interaction between condition and rejection sensitivity.

Table 4
Regression Analysis Of Endorsement Of Extremism

		<i>B (SE)</i>
Step 1	Intercept	1.47 (0.76)
	Age	0.05 (0.03)
	Gender	-0.57* (0.22)
	Condition	0.44* (0.22)
	RS	0.06 (0.04)
		$R^2 = 0.40$ $F = 5.69^{**}$
Step 2	Intercept	2.14* (0.79)
	Age	0.04 (0.03)
	Gender	-0.56* (0.21)
	Condition	-0.21 (0.38)
	RS	-0.04 (0.06)
	Condition x RS	0.17* (0.08)
	$R^2 = 0.47$ $F = 5.93^{**}$	

Note. Group is coded as 0 for right and 1 for left, and condition is coded 0 for included and 1 for excluded. *** $p < .001$, ** $p < .01$, * $p < .05$

As in the previous experiments, a single slopes analysis revealed that there was a positive effect of rejection sensitivity in excluded participants on endorsement of extremism, $B = 0.13$, $SE = 0.05$, $t = 2.93$, $p = .006$, but not for included participants, $B = -0.06$, $SE = 0.07$, $t = -0.81$, $p = .43$. Thus, the higher an excluded individual was on rejection sensitivity the more willing they were to endorse extremism. Although this experiment had an extremely small sample size, the main effect of exclusion on willingness to endorse extremism reveals the powerful effects of real-life exclusion. The findings also not only supported the interactive effect of rejection sensitivity and exclusion on activist tendencies seen in Experiments 1-3, but also replicated them with a clear extreme norm, extending the findings to include more radical measures.

Conclusions and Contributions

The four experiments presented explored the effects of social exclusion on a variety of engagement measures, from willingness to identify with activists to endorsing extremism. The first 3 experiments were conducted online and did not reveal the expected main effect of exclusion on the engagement measures. It is suggested that there are two reasons for this: 1) that the effects of these online studies were not powerful enough to trigger a strong enough exclusion response and in turn trigger a quest for significance; or 2) that individual differences are moderating this effect.

Previous research has demonstrated the causal effect social exclusion has on activism measures and thus, a main effect was expected (Knapton et al., 2015). However, in line with previous suggestions it may be that individual differences in combination with social factors may be more beneficial in understanding the factors that drive radicalization (Obaidi et al., 2020). In line with this, across all 4 studies a consistent interaction between rejection sensitivity and exclusion was found, with those higher on rejection sensitivity showing increased willingness to engage following an exclusion episode. Rejection sensitivity is a disposition that results in individuals being highly attentive to and react strongly to cues of exclusion (Berenson et al., 2009; Downey & Feldman, 1996; Ehrlich et al., 2015). Thus, it is plausible to suggest, in this case, that it may have been only those individuals high on rejection sensitivity who detected the exclusion cues and/or that they were those individuals were the only ones to react strongly. Previous research has shown increased aggression in highly rejection sensitive individuals and thus acts of radical activism may have been seen as an outlet for this aggression (Ayduk et al., 1999; Ayduk et al., 2008; Gao et al., 2021).

Given the above, the findings of this study complement previous suggestions of the role of social exclusion in the radicalization process. However, I do suggest based on the findings that the quest for significance model consider including the moderative effects of individual differences surrounding belonging and other social needs, such as rejection sensitivity. The findings support the idea of exclusion triggering a significance loss and in turn leading to tendencies towards engaging with radical groups. Further, it supports previous findings in the exclusion literature that show that four fundamental social needs are threatened following an episode of exclusion (Williams, 2001, 2007, 2009; Williams & Zadro, 2005). Future research may want to consider how these four needs as highlighted in the temporal need-threat model complement or contrast the need for significance as outlined by (Kruglanski et al., 2014; Kruglanski & Fishman, 2009).

Although the findings provide an important contribution to the field a little caution must be taken given the small effect size of exclusion detected on the outcome variables. Specifically, although the online studies had a large effect size on the manipulation check, indicating that they were successful in inducing feelings of exclusion, that had a small effect on the activism measures in those high on rejection sensitivity. However, the laboratory study revealed larger effects,

indicating that real-life exclusion may be more powerful. This is confirmed by research that suggests online research is successful in providing accurate support for the direction of variable relationships but may risk underestimating the size of the effects (Thompson & Pickett, 2020). Thus, the findings of the online studies provide invaluable information in indicating the direction of the significant effect but possibly do not capture the magnitude of how real-life exclusion may impact these measures.

Nevertheless, an important contribution of this research was that it showed the effect of social exclusion as a mechanism in increasing radical tendencies across a variety of ideological content and issues. This is in line with Kruglanski & Webber (2014) that suggest that entering the radicalization process should be independent of ideological or religious content, but a general mechanism. I also note that I do not suggest a radical group has to be a way to restore significance or belongingness needs, but if in fact a less radical group had presented itself the results may have been the same. Thus, the effects of exclusion are independent of the group content but rather the group itself presents social fulfilment.

In summary, the results of this study support previous suggestions of the role of social exclusion within the radicalization process. Throughout these 4 studies a varying degree of adaption to radical tendencies to various issues is shown, and highlights the need to examine how social factors may nudge individuals at the bottom of the radicalization staircase to move in a non-normative direction and further in line with (Moghaddam, 2005) highlights the importance of examining radicalization from the ground floor and not just focus on those who are already at the top of the staircase and engaging in extremist acts.

Paper II: The Mediating Role of Identity between Outgroup Exclusion, Activism and Radicalization

Background

Paper I highlighted the causal role that social exclusion have with regard to being a cause in the radicalization process. It highlighted the need to explore topics within a real-life setting. In this paper I aim to build on these findings exploring social exclusion within a real-life context and examine possible moderating and mediating factors. Specifically, the source of the exclusion may impact the evaluations on the cause of exclusion. Outgroup exclusion would be deemed as exclusion by a group that one is not a member of, for example, a Black individual being excluded by a group of White individuals. In contrast, ingroup exclusion is being excluded by a member of the same group, for example, a White individual being excluded by other White people. Exclusion by the ingroup may be deemed the result of a personal

failing that led the group to exclude them. Specifically, the exclusion may be attributed to breaking a social norm in the group or another social faux pas that led to the group to exclude them. In contrast, exclusion by an outgroup, for example, a Black individual being excluded by a group of White individuals may be seen as being group-based and attributed to discrimination given that the exclusion may be occurring not due to an action by the individual but solely due to their race (Richman & Leary, 2009).

Such differences in evaluations regarding the basis of the cause of exclusion may impact the way in which individuals react and thus may moderate the effect of exclusion. For instance, research has shown that minority members of society show shifts in identity when they perceive to be discriminated against or experience injustice by the majority (Branscombe, Schmitt & Harvey, 1999; Thomas et al., 2012). Exclusion is argued to be at the core of discrimination and thus outgroup exclusion may also result in similar identity shifts, especially as exclusion by an outgroup is likely to be attributed to discrimination. As a result, this article aimed to explore how feelings of exclusion, specifically exclusion from an outgroup, impacts ingroup identification and in turn (radical) activism with the ingroup. In line with this, I suggest that exclusion by the outgroup (compared to an ingroup) will result in increased identification with the ingroup. Given that identity may be used to buffer the effects of exclusion and fortify threatened needs, it will be explored as a mediator. Specifically, identity is a strong predictor of both activism and radicalism, and identity shifts following such exclusion may impact engagement with the ingroup and thus may explain the link between exclusion and extremism (Klandermans et al., 2002; Thomas et al., 2012; Yustisia et al., 2019).

To explore the link between social exclusion by the outgroup, identity shifts and (radical) activism, I made use of the Brexit situation. On the 23rd of June 2016, the UK voted to leave the EU with a 52% majority. In the three years following the Brexit referendum a picture of a country in turmoil was presented. The media rhetoric suggested a deeply divided country in which individuals from opposing camps (leave/remain) were strongly bitter towards one another and conflicts arising from interactions between members of opposing camps (Corbett, 2016; SurrIDGE, 2019). Thus, the setting of the studies was built upon the intergroup tensions between the Leave and Remain camps in the UK to target ingroup/outgroup feelings and give it a real-world context. Remain participants were recruited for this survey and experiment and by measuring, and manipulating, exclusion by Leave participants I was able to measure and control for ingroup/outgroup exclusion. Given only Remain participants were recruited, the ingroup in this context were Remain supporters and the outgroup were Leave supporters. Finally in this study, both a survey and experiment were used. The argument that outgroup exclusion would be attributed to discrimination has been discussed but yet not empirically tested, thus by conducting both a survey measuring perceived discrimination by an outgroup (Leave supporters) and also a controlled experiment in which the source

of exclusion was controlled (ingroup or outgroup), it allowed the comparison of shifts in identity were similar when outgroup exclusion was experimentally manipulated to when individuals perception of discrimination by an outgroup occurs in daily life.

Survey

In this survey I wanted to explore how social exclusion by an outgroup would impact an individual's identification and willingness to engage with an ingroup. As described above this was conducted in the context of Brexit, and thus examined how feelings of discrimination by Leave supporters impacted Remain supporters' identification with the EU and willingness to engage with a pro-EU group. Discrimination was used as a measure of social exclusion given that some researchers argue that exclusion is at the heart of discrimination, prejudice, and stigmatisation, and thus exclusion is a core mechanism in the process (Major & Eccleston, 2004; Richman & Leary, 2009). Further the items were taken from studies exploring the rejection identification model and given this is the basis of the research it seemed this was the correct measure of social exclusion in the survey context (Jasinskaja-Lahti et al., 2018).

Participants and Procedures

211 participants were recruited from *Prolific academic*. Participants had to be British citizens and were selected because they had voted Remain in the 2016 referendum using the websites selection criteria. Out of the original sample, 208 provided complete data and were included in the analyses. The average age was 36.6 years old ($SD = 11.28$), and there were 143 were women and 65 men. Participants were told the study was investigating their thoughts and feelings on Brexit. The survey began with a variety of demographic questions, including age, gender, and political affiliation. Then followed various questions on participants' thoughts and feelings on Brexit, including measures of perceived discrimination by the outgroup (Leave supporters) and identification with the ingroup via identification with the Remain cause and EU identity fusion. Once the participants completed the identity measures, they were informed that the next section would include questions from a third-party group who was supporting the research. This group was fictional but presented as a real group to the participants. Once the participant clicked the continue button, they were presented with a brief presentation of the group called "Future Remains in the EU". The group was described as a Pro-EU, anti-Brexit group that was fighting the outcome of the referendum and would try to stop Brexit by all means necessary. Further, it explained that the group was interested in recruiting new members and wanted to know what actions appealed to possible new members. The group description is presented in Appendix D. After this statement several activism engagement items followed, including both

normative and non-normative (radical) participation. Finally, participants were debriefed on the research purpose of this study and thanked for their time.

Measures

The predictor variable was *perceived discrimination* and this was measured using a scale by Berry, Phinney, Sam, and Vedder (2006) was adapted for this study and included 3 items: "In my opinion Leavers have treated Remainers unfairly or otherwise negatively"; "I think that Leavers do not accept Remainers" and "Leavers have something against me because I am a Remainer." Responses were made on a 5-point scale with 1 = *strongly disagree* to 5 = *strongly agree*. and the items were combined and averaged to form an index.

Two identity measures were used as mediator variables. *Identification with the Remain cause* was measured using 4 items: "I feel I am a Remainer"; "I am proud to see myself as a Remainer"; "It is important for me to be a Remainer"; "Generally, I am glad to be a Remainer". Participants responded on a 9-point scale from 1 = *strongly disagree* to 9 = *strongly agree* and the four items were combined to create an index, $\alpha = 0.94$.

Identity fusion with the EU. This was measured with 7 items (Gómez et al., 2011): "I feel immersed in the EU"; "I am one with the EU"; "I have a deep emotional bond with the EU"; "the EU is me"; "I will do more for the EU than most"; "I am strong because of the EU"; "I make the EU strong". Again, participants responded and a 7-point scale from 1 = *strongly disagree* to 7 = *strongly agree* and the items were combined to make an index.

Finally, there were two outcome variables, willingness to join and willingness to engage in activism. *Willingness to join* was assessed by 1 question: "Would you be interested in joining Future Remains in the EU?" Participants responded and a 7-point scale from 1 = *not at all interested* to 7 = *very interested*. *Collective action intentions* were assessed by asking participants how willing they would be to: Sign a petition, participate in demonstration, donate money, and share information on social media take part in an occupation, vandalize buildings, and protest on social media (e.g. posting offensive messages on opposing groups). Responses were made on a 5-point scale with 1 = *not at all willing* to 5 = *very willing* and the items combined and averaged to make a collective action intentions index. In addition, the items were split to examine normative (petition, demonstration, donate money and share information) and non-normative (radical) actions (occupation, vandalize buildings and protest on social media) to explore if there were differences.

Results and Discussion

Several hierarchical regression analyses were conducted to test the hypotheses. In the first, the control variables, age, gender (coded men = 0 and women = 1), political orientation were added in step 1. In step 2, the predictor variable perceived discrimination was added. This model was then regressed on to willingness to join and collective action intentions. These results are presented in Table 5.

Table 5

Regression Analyses With Predictor Variable Perceived Discrimination On Outcome Variables: Willingness To Join, Collective Action Intentions, Remain Identity And EU Identity Fusion

	Willingness to Join	Collective Action Intentions	Remain Identity	EU Identity Fusion
	<i>B (SE)</i>	<i>B (SE)</i>	<i>B (SE)</i>	<i>B (SE)</i>
Step 1				
Intercept	5.19 (.83)***	5.10 (.70)***	8.33 (.63)***	4.30 (.46)***
Age	-.01 (.01)	-.01 (.01)	.01 (.01)	-.01 (.01)
Gender	-.03 (.29)	-.32 (.33)	.32 (.29)	.06 (.21)
Political Orientation	-.26 (.09)***	-.25 (.10)**	-.28 (.09)**	-.12 (.06)
	<i>Adj. R² = 0.03</i> <i>F=2.29</i>	<i>Adj. R² = 0.02</i> <i>F=2.46</i>	<i>Adj. R² = 0.06**</i> <i>F=3.92**</i>	<i>Adj. R² = 0.05</i> <i>F=1.35</i>
Step 2				
Intercept	3.11 (.86)***	2.56 (.97)**	5.45 (.85)***	2.94 (.64)***
Age	-.01 (.01)	-.01 (.01)	-.01 (.01)	-.01 (.01)
Gender	.08 (.28)	-.19 (.32)	.48 (.28)	.14 (.21)
Political Orientation	-.18 (.09)*	-.15 (.10)	-.15 (.09)	-.07 (.07)
Discrimination	.50 (.15)**	.61 (.17)***	.70 (.15)***	.33 (.11)**
	<i>Adj. R² = 0.08**</i> <i>ΔR²=0.05**</i> <i>F=4.48**</i>	<i>Adj. R² = 0.08**</i> <i>ΔR²=0.06***</i> <i>F=5.37***</i>	<i>Adj. R² = 0.14***</i> <i>ΔR²=0.10***</i> <i>F=9.02***</i>	<i>Adj. R² = 0.07*</i> <i>ΔR²=0.05**</i> <i>F=3.39*</i>

The findings revealed that perceived discrimination was a significant predictor of both outcomes, such that higher levels of perceived discrimination predicted higher levels of willingness to join and participate in the combined collective action index but also the separate normative and radical activism items. The analysis was then re-run on the outcome variables identification to the Remain cause and EU identity fusion (see Table 5). The results again revealed that perceived discrimination was a significant predictor for both outcome variables such that the more an individual perceived that they were discriminated against, the more they identified with the ingroup both on Remain identity and EU identity fusion.

Finally, parallel mediation analyses were conducted by using Model 4 in the SPSS macro PROCESS (Hayes, 2013) to explore if there was an indirect effect of perceived discrimination on willingness to join and participate through Remain Identity and EU identity fusion. Perceived discrimination was placed as the predictor variable, willingness to join and participate as the outcome variables (these were run independently) and both identity measures as mediators (see Table 6). The analyses revealed that there was a significant indirect pathway between perceived discrimination on willingness to join and willingness to participate both through Remain identity and EU identity fusion. Specifically, perceived

discrimination increased both Remain identity and EU identity fusion, which in turn increased willingness to join and participate on behalf of the group. There was no significant direct effect when the indirect pathway was accounted for. The findings from this survey revealed the predictive effect social exclusion (as operationalized through perceived discrimination) had on willingness to engage in a radical activist ingroup through a pathway of increased identification. Nevertheless, given that this study was a correlational survey, conclusions cannot be drawn from this finding. Thus, an experimental study was conducted in the next step to disentangle the causal direction of effects.

Table 6

Parallel Mediation Models For Willingness To Join And Collective Action Intentions, With Identity As Mediators And Perceived Discrimination As Independent Variable

	Remain ID (M1)	EU Fusion (M2)	Willingness to Join (Y)	Collective Action (Y)
Antecedent				
Constant	5.48 (.86)***	2.95 (.64)***	.62 (.87)	-.13 (.99)
Discrimination	.70 (.15)***	.33 (.11)**	.20 (.14)	.29 (.16)
Remain ID (M1)	-	-	.29 (.07)***	.23 (.08)**
EU Fusion (M2)	-	-	.33 (.09)***	.49 (.10)***
Age(C1)	-.00 (.01)	-.01 (.01)	-.01 (.01)	-.01 (.01)
Gender (C2)	.44 (.29)	.13 (.21)	-.12 (.26)	-.37 (.29)
Political Orientation (C3)	-.15 (.13)	-.07 (.07)	-.11 (.08)	-.08 (.09)
	$R^2 = .15$	$R^2 = .06$	$R^2 = .27$	$R^2 = .26$
	$F = 8.82$ ***	$F = 3.35$ *	$F = 11.55$ ***	$F = 11.39$ ***

Gender is dummy coded with men = 0, women = 1. *** $p < .001$, ** $p < .01$, * $p < .05$

Experiment 1

The results from the survey highlight the impact feelings of exclusion have on both identification and willingness to engage. However, given that the research design was that of a correlational survey it was felt necessary to further establish this link using experimental methods. Thus, in this experiment a similar format was used (Online Ostracism Paradigm) to one of those outlined in Paper 1. An online experimental study was therefore conducted in the backdrop of Brexit. Given that it was speculated that the lack of main effect of social exclusion seen in Paper 1 was the result of it being an online study and not a real-life episode of exclusion, it was hoped that given the real-life context and on-going intergroup tensions surrounding Brexit, it may make the online manipulation stronger.

Participants and Procedures

400 participants were recruited from the online study platform Prolific Academic. To be eligible to participate, individuals had to be British citizens and had to have voted Remain in the EU referendum. Of the 400 participants, 384 provided complete data and passed the manipulation check and were included in the analyses. The average age was 34.48 ($SD = 11.41$) and there were 266 women, 110 men and 8 other. The study was a 2×2 between-measures factorial design, where the first factor is source (ingroup/outgroup), and the second factor is manipulated social exclusion (excluded/included). As a result, participants were randomly allocated to one of the four experimental conditions. In the Included-Ingroup condition there was a total of 93 participants ($M_{age} = 34.0$, $SD = 9.37$; men = 26; women = 65; other = 2), in the Included-Outgroup condition there was a total of 107 participants ($M_{age} = 33.93$, $SD = 10.97$; men = 23; women = 81; other = 3), in the Excluded-Ingroup condition there was a total of 91 participants ($M_{age} = 35.82$, $SD = 13.49$; men = 28; women = 62; other = 1) and finally, the Excluded-Outgroup condition had a total of 93 participants ($M_{age} = 34.26$, $SD = 11.62$; men = 33; women = 58; other = 2).

Participants were invited to take part on a survey on Brexit. The survey began with a variety of demographic variables. Following this, as in Paper 1 (Experiments 1 and 2) participants then completed a social media task which was an adapted version of the Online Ostracism Paradigm (Wolf et al., 2015). For this experiment, it was slightly different in that participants wrote about their thoughts and feeling on Brexit, however, just like Paper I inclusion and exclusion was manipulated using the number of likes. Another addition was the manipulation of the source of exclusion. To manipulate source of exclusion, a set-up where most of the profiles (10 out of 11 profiles) were either Leave-sympathizers or Remain-sympathizers. Since the sample consisted of only Remain-sympathizers, this set-up implies that when the majority of the profiles were Leave-sympathizers, this essentially was an outgroup condition and when the majority of the profiles were Remain-sympathizers, this constituted an ingroup condition. Consequently, participants were randomly allocated to one of the four conditions: included-ingroup; included-outgroup; excluded-ingroup; and excluded-outgroup.

Following the social media task, the participants were asked questions on their thoughts and feelings on Brexit. Included in this section were the questions of interest regarding their identity to the Remain cause and their EU Identity fusion (these measures were the same as Survey 1). Once they completed the identity measures, participants were informed that the next section would include questions from a (fictional) third-party group who was supporting the research. The group description and the questions were identical to that in the survey, thus all measures of willingness to join and participate in activism were the same.

Results and Discussion

Two two-way ANOVAS were conducted to explore the effect of social exclusion or inclusion and the source of exclusion (ingroup vs outgroup) on the dependent variables *willingness to join* and *collective action intentions*. The results revealed there was no main effect of either variable, however, there was a significant interaction between exclusion and the source on both willingness to join, $F(1,380) = 4.104, p = .04, \eta^2 = 0.01$, and collective action intentions 3, $F(1,378) = 6.15, p = .01, \eta^2 = .02$. The cell means are presented in Table 7.

Table 7

Means And Standard Deviations For Excluded And Included Participants Split Across Ingroup And Outgroup

	Condition	Source	Mean	SD
Willingness to Join	Included	Ingroup	5.12	2.71
		Outgroup	4.66	2.67
	Excluded	Ingroup	4.73	2.83
		Outgroup	5.41	2.79
Collective Action	Included	Ingroup	2.81	0.89
		Outgroup	2.67	0.91
	Excluded	Ingroup	2.65	0.96
		Outgroup	2.98	0.97
Remain Identity	Included	Ingroup	7.66	1.94
		Outgroup	7.83	1.93
	Excluded	Ingroup	7.55	2.24
		Outgroup	7.95	1.71
EU Identity Fusion	Included	Ingroup	4.23	1.47
		Outgroup	3.84	1.47
	Excluded	Ingroup	3.94	1.67
		Outgroup	4.38	1.40

A simple effects analysis revealed individuals excluded by the outgroup were significantly more likely to show higher collective actions intentions, $F(1, 376) = 6.41, p = .01$ but that this effect was not seen in those excluded by the ingroup $F(1, 376) = 1.68, p = .20$. The simple effect analysis on willingness to join did not reach traditional significance levels but tended strongly in that direction, such that the

effect of exclusion only impacted the willingness to join measure when the exclusion occurred by the outgroup.

A second set of ANOVAS were run on the identification variables, identification to the Remain cause and EU identity fusion. Again, there was no main effect of either independent variable. However, as expected there was a significant interaction between exclusion and the source of exclusion on EU identity fusion $F(1, 376) = 7.24, p = .01, \eta^2 = .02$. A simple effects analysis revealed that the effect of exclusion was only significant for those excluded by the outgroup $F(1, 376) = 6.41, p = .01$, and not significant for those excluded by the ingroup $F(1, 376) = 1.68, p = .20$. Those excluded by the outgroup condition showed significantly higher levels of EU identity fusion compared to those included by the ingroup. Contrary to the hypothesis, the results were not significant for the Remain identification.

Finally, a moderated-mediation analysis was conducted by using Model 8 in the SPSS macro PROCESS (Hayes, 2013) to explore the indirect effect of exclusion on willingness to join and collective action intention through EU identity fusion. Source (ingroup/outgroup) was entered as a moderator of the pathways between exclusion and EU identity fusion and between exclusion and willingness to join and activism intention. The results are presented Table 8.

Table 8

Moderated Mediation Analysis For Willingness To Join And Collective Action Intentions, With Inclusion/Exclusion As Independent Variable, Source Of Exclusion (Ingroup/Outgroup) As Moderator And EU Identity Fusion As Mediator

	EU ID Fusion (M1)	Willingness to Join (Y)	Collective Action (Y)
Antecedent			
Constant	4.59 (.33)***	3.12 (.47)***	2.14 (.22)***
EU Fusion (M1)		.61 (.06)***	.29 (.03)***
Inclusion/Exclusion (X)	-.30 (.22)	-.10 (.26)	-.04 (.12)
Ingroup/Outgroup (W)	-.33 (.22)	-.08 (.25)	.04 (.12)
Exclusion × Source (X × W)	.78 (.31)*	.07 (.36)	.17 (.17)
Age(C1)	.01 (.01)	-.02 (.01)	-.01 (.00)
Gender (C2)	.04 (.17)	-.11 (.20)	-.06 (.09)
Political Orientation (C3)	-.17 (.05)***	-.17 (.05)**	-.09 (.03)**
	$R^2 = .05$	$R^2 = .28$	$R^2 = .30$
	$F(6,362) = 3.40^{**}$	$F(8,360) = 17.32^{***}$	$F(7,359) = 22.12^{***}$

Gender is coded with men = 0, women = 1; Condition is coded with inclusion=0, exclusion=1. Source is coded ingroup=0, outgroup=1.

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

The findings revealed there was a significant indirect pathway from the interaction of the source and exclusion condition on willingness to join through EU identity fusion, Effect = 0.46, BootSE = 0.19, LLCI = 0.08, ULCI = 0.86. Specifically the

mediational pathway as only seen among those excluded by the outgroup Effect = 0.28, BootSE = 0.13, LLCI = 0.02, ULCI = 0.54, but not those excluded by the ingroup, Effect = -0.18, BootSE = 0.14, LLCI = -0.46, ULCI = 0.09, indicating significant moderated mediation.

Similarly, the same significant indirect pathway from the interaction of the source to collective action intentions through EU identity fusion was found, with an indirect pathway between exclusion and collective action intentions being mediated by EU identity fusion only in those excluded by the outgroup, Effect = 0.27, BootSE = 0.06, LLCI = 0.02, ULCI = 0.27, but not among those excluded by the ingroup, Effect = -0.09, BootSE = 0.07, LLCI = -0.23, ULCI = 0.05. No significant direct pathway was found for either dependent variable when the indirect pathway was accounted for. Thus, following exclusion by the outgroup participants show increased in ingroup identity and this mediates the increased willingness to join and participate in activism on behalf of a group consisting of ingroup members. As a result, these findings highlight the role that identity has in relation to both exclusion by an outgroup and its role in activism, although, no effects were found with the Remain ID.

An important factor to note was that these analyses were re-run with the collective action intentions scale split on normative and non-normative (radical) actions. The findings were the same as the overall collective action index for both normative and non-normative items, such that exclusion by the outgroup increased willingness to engage in both normative $F(1,380) = 5.35, p = .02, \eta^2 = 0.02$, and non-normative actions $F(1,378) = 4.162, p = .02, \eta^2 = 0.01$. Further, a moderation-mediation analysis confirmed that EU identity fusion mediated this interaction effect on both normative and non-normative items.

Conclusions and Contributions

The aim of Paper II was to expand on the understanding of what drives willingness to join a political group and engage in activism. Paper I, established the role that social exclusion might have as a fuel for activism and radicalism and I aimed to elaborate on the specific mechanisms involved. Specifically, it was argued that exclusion by an outgroup will increase ingroup identification, which in turn will increase willingness to join a political group and intentions to engage in normative and radical activism with that group. In one survey and one experiment, support for this proposed mechanism was found. Specifically, the survey established that perceived discrimination by an outgroup increased activism with an ingroup and in turn this was mediated by ingroup identity. This mechanism was then supported experimentally by demonstrating that exclusion by an outgroup led to increased engagement in activism, but not exclusion by an ingroup. Further, as with the survey this effect was mediated by ingroup identity. As a result, these findings support previous research that has shown increased identification to one's ingroup when faced with feelings of discrimination or exclusion by an outgroup (Branscombe et

al., 1999; Cronin et al., 2012). Further, it provides an explanatory pathway of how exclusion functions as a driver of engagement via identity and further highlights the vital role identity has with pushing people to engage. Consequently, these findings build upon the rejection-identification model and use it in a context where a brief episode of social exclusion can cause identity shifts, not just long-term exclusion that it has previously explored. It may also add to the EMSICA model of activism and radicalization by explaining how perceived injustice, in the form of exclusion, may drive a politicized social identity(Thomas et al., 2012; Yustisia et al., 2019). Finally, these findings also add to the social exclusion literature by again highlighting the need of exploring the moderating factors, such as the source of exclusion, that may impact behavioural changes in the reflective stage, rather than focusing on the reflexive stage where little appears to impact the universal pain response(Williams, 2009).

The findings of this study add to those presented in Paper I in multiple ways. Firstly, it supports the role that social exclusion has within the radicalization process, by demonstrating increased willingness to engage in both normative and radical actions. Secondly, these findings highlight again the role of looking at moderating factors. In this case the source of the exclusion may impact the possible attributions the individual makes about the cause of the exclusion, such as whether it is group-based (discrimination) or due to a personal failing (Richman & Leary, 2009). These findings reveal that in the context of radicalization it is the group-based nature of exclusion that is likely to drive increased engagement through identity shifts. This is not surprising given how perception of minority/majority, societal grievances and intergroup tensions and dynamics are frequently mentioned in multiple radicalization models (McCauley & Moskalkenko, 2008, 2017; Moghaddam, 2005; Webber et al., 2018; Yustisia et al., 2019). Finally, these findings, along with those presented in Paper I highlight the importance of conducting experiments within a real-life context. Paper I (Experiments 1 and 2) did not find a significant main effect using an online exclusion paradigm, but when an experiment was conducted in the lab (Experiment 4) a significant main effect was found. In line with this, both the survey and the experiment conducted in the present study were conducted in the backdrop of Brexit and using a real-life context. The experiment even used a similar set-up as those in Paper I by using the Online Ostracism Paradigm but simply embedding it in the backdrop of a current and highly tension-filled context was enough to magnify the exclusion effects and result in a significant main effect on activism.

Although the findings provide strong support for the role of exclusion and identity on willingness to engage in activism, there were a few limitations and issues that may be resolved in future research. Specifically, the experimental set up found inconsistent findings with the identity measures. One possible reason is that given the long-term nature of discrimination assessed in the survey, compared to the short episode of exclusion in the experiment, may have been more powerful to cause shifts in the Remain identity. Further, it may have been those who were already tending

towards identity fusion to the EU who reacted in the short episode of exclusion in the experimental study. Given this future research may want to explore more into the mechanism of social exclusion and identity fusion to see if there is a distinct difference of the effect of social exclusion between the identity and identity fusion. Further, given that the Brexit discussion had been going on for a while, individuals may have already experienced high levels of discrimination and in turn were already highly identified regardless of the experimental manipulation, but thoughts regarding identity fusion to the EU may have been less salient. Thus, future studies may want to examine willingness to identify with the political group presented, not just the ingroup identity it may represent. Finally, similarly to the experiments in Paper I, the effect sizes on the dependent variables were small in the experiment. However, the effects of discrimination which was used as a measure of exclusion in the survey revealed larger effects, highlighting the need to explore this phenomenon in a real-life context.

In summary, the findings of this study highlight the key role that exclusion and identity have regarding making people more willing to engage and in combination with Paper I highlight the importance of exploring these factors as mechanisms within radicalization frameworks. Future research may want to further delve into the link between feelings of identity in relation to belongingness needs and further possibly explore it with in relation to the significance loss model to bring together the findings of Paper I and II.

Paper III: Exploring The Role of Exclusion, Loss of Significance and Identity in the Radicalization Process

Background

The findings from Paper I and Paper II highlight the role of both social exclusion and identity as a pathway in radicalization via both experimental and survey methods. Given the success of the real-life based studies and larger effect sizes, the purpose of this paper was to take this one step further and explore this mechanism using a quasi-experimental set up. Specifically, the aim was to explore if individuals in the numerical minority due to their ideological stance would feel excluded and in turn would be more willing engage and endorse radical actions on behalf of a cause compared to those in the numerical majority. Further, a serial mediation model was presented whereby the extent to which threatened fundamental needs and in turn identity, mediated the effect of exclusion on participation and endorsement of extreme actions was explored.

The temporal-need-threat model of social exclusion states that when an individual is socially excluded it thwarts their four fundamental needs: the need to belong, the

need for self-esteem, the need for control and the need for meaningful existence (Williams, 2007; Williams, 2009). It also states that when these needs are threatened it will motivate an individual to fortify them and this results in reactionary behaviours that are conducted to restore one's needs, and radical groups may be an opportunity for such need fulfilment. In line with this, the quest for significance is model explains motivations for entering the radicalisation process via significance loss (Jasko et al., 2017; Kruglanski et al., 2014). Although not empirically tested, there appears to be some crossover with the fundamental need for significance and the four fundamental needs, especially a need for a meaningful existence (Kruglanski & Fishman, 2009; Kruglanski et al., 2022; Williams, 2012). When an individual is socially excluded arguably this results in a loss of significance, which in turn may drive the individual to engage in acts to restore their worth. The quest for significance radicalization model argues that this core motivation to maintain significance is a driver in the radicalization process (Kruglanski et al., 2009, 2014; Kruglanski & Fishman, 2009). Belonging to a group can restore significance, and consequently, recent research has shown that loss of significance can increase subsequent extreme group identification and experimental studies have demonstrated a mediation process between an episode of exclusion, increased ingroup identification and endorsement of extremism (Milla et al., 2022).

Much of the empirical research exploring the effects of exclusion has examined interpersonal exclusion (exclusion perceived due to a personal failing). However, recent research has demonstrated the importance of exploring exclusion from a group-level perspective (exclusion due to group membership), and this is particularly pertinent considering much of the radicalization literature deem it a societal, group-based issue (Doosje et al., 2016; Knapton et al., 2022; McCauley & Moskalenko, 2008). Consequently, this paper aims to bring together traditional interpersonal exclusion models and explore them at a societal level within a radicalization framework to provide an explanatory pathway of how minority group status, feelings of exclusion and threatened fundamental needs may drive individuals to identify with a radical ingroup and in turn be willing to participate and endorse radical actions.

Again, given the success of the real-life experiments outlined so far, this study was conducted in the backdrop of the current US abortion debate. At the time of data collection (December 2021), Texas had introduced the "heartbeat bill" which practically made abortion illegal and reignited the abortion debate and threatened the future of women's reproductive choices. The unique geographic separation of predominately "Pro-life" and "Pro-choice" states meant that both Pro-life and Pro-choice participants could be recruited from these states. Participants who lived in a state that matched their own opinion (e.g., Pro-life supporter living in a majority Pro-life state) were deemed in the numerical majority and participants living in a state that did not match their opinion (e.g., Pro-choice supporter living in a Pro-choice State) were deemed in the numerical minority. Given that numerical representation of a group within a space can impact feelings of belonging (Glasford,

2021), it is likely that perceptions of numerical majority opinion surrounding an individual will impact feelings of exclusion or inclusion. Consequently, this provided a unique opportunity, and a quasi-experiment was conducted to explore if majority/minority opinion status (e.g. the numerical division of majority/minority opinion in a state) led to feelings of inclusion/exclusion based on threatened needs (Williams, 2007; 2009) and if this in turn impacted ingroup identity and willingness to engage and endorse radical actions.

Participants and Procedures

512 participants were recruited from the online study platform *Prolific Academic*. To be eligible to participate individuals had to be American citizens and currently live in the USA. Further, participants were recruited from both Pro-life and Pro-choice states using the prescreening criteria available on *Prolific Academic*. The participants were selected from the top 6 most Pro-life states and Pro-choice states (Diamant & Sandstrom, 2020). The Pro-life states were: Arkansas, Mississippi, Alabama, West Virginia, Louisiana and Kentucky. The Pro-choice states were: Massachusetts, Vermont, Connecticut, New Hampshire, Rhode Island and New York. Further, an attempt was made to recruit equal number of Pro-life supporters and Pro-choice from the Pro-life and Pro-choice states. Consequently, participants were naturally based in one of the 2 conditions. In the *majority* condition there was a total of 264 participants of which there were 119 males, 142 females and 3 other. The average age was 37.57 ($SD=13.88$). In the *minority* there was a total of 248 participants of which there were 121 males, 125 females and 2 other. The average age was 37.01 ($SD=14.00$).

Participants were invited to complete an online survey on their thoughts and feelings on abortion, reproductive rights, and abortion legislation. Further, they were told that the final section of the questionnaire would contain questions from a third-party group. This group was fictitious (although real to the participant) and part of the experimental survey. The survey began by collecting data on a variety of demographic variables (age, gender, education, political affiliation etc.). Following this the participants were asked several questions on their thoughts and feelings regarding abortion and perception of abortion opinion in their state.

In the next section participants were asked their thoughts regarding the majority opinion in their state. Specifically they were asked questions related to their belonging in the form of an adapted need-threat index (Williams, 2009). In the next section participants were advised that the following section was a survey by a third party group and they were presented with a brief description of the group. The group differed based on whether the participants identified as Pro-life or Pro-choice, with the group presented designed to be congruent with the participants opinion on abortion. Specifically, if the participant had identified as Pro-life they were presented with the group “Pro-life for America” and if they identified with the Pro-choice cause they were presented with the group “Pro-choice for America”. All efforts were made to make group descriptions as similar as possible in the tone used,

using similar phrasing throughout and only differing in the content to match the cause supported (e.g., anti-abortion sentiments for the Pro-life group and freedom of choice in reproductive decisions in the Pro-choice group). Both group descriptions are presented in Appendix E. At the end of the group descriptions both groups explained that they were interested in recruiting new members and wanted to know what actions appealed to possible new members. After this statement several identity and participation items followed. Participants were then asked about their identification with the activist group and asked about their willingness to engage in radical actions and endorsement of extremism. Finally, they were thanked for their participation and debriefed on the true nature of the study.

Measures

Need-threat was measured by an adapted version of the need-threat index (Williams, 2009). Participants were prompted with the phrase “Given that a majority in your state are [Pro-Life/Pro-Choice] please describe how this makes you feel” and this was adjusted given whether the participant lived in a state that was majority Pro-life or Pro-choice. Participants were then presented with an adapted form of the need-threat index and it was formed of 20 items. Examples of items include: “I feel disconnected”; “I feel like an outsider”; “I feel insecure”; “I feel meaningless”; “I feel others decide everything”. Participants responded on a 5-point scale with 1 indicating *not at all* and 5 indicating *extremely*. The 20 items were combined and averaged to give a total need-threat score.

Identification with the activist group consisted of 3 items: “I feel I could identify with [Pro-life/Pro-choice] for America”; “I feel I could connect with other members of [Pro-life/Pro-choice] for America” and “I identify with the aims of [Pro-life/Pro-choice] for America”. Participants responded on a 7-point scale with 1 indicating *strongly disagree* and 7 indicating *strongly agree* and the items were combined and averaged to form an activist group identification index.

Willingness to engage in radical action was measured using three items. Participants were asked how willing they would be to participate in the 3 following forms of non-normative collective action on behalf of the group: take part in an occupation, vandalize buildings, and protest on social media (e.g. post offensive material on opposing groups’ social media). Participants responded on a 5-point scale with 1 indicating *not at all willing* and 5 indicating *very willing*. The 3 items were combined and a willingness to engage in radical action index formed.

Endorsement of radical actions was measured using two items: “I think even extreme methods are justified and acceptable to reach the goal of a greater American society. That is, a combination of traditional methods like petitions, but also direct actions that may extend beyond the borders of the law” and “I think most [Pro-life/Pro-choice] supporters in society agree that extreme methods are justified and acceptable to reach the goal of a [Pro-life/Pro-choice] for America for a better American society.” Participants responded on a 7-point scale with 1 indicating

strongly disagree and 7 indicating *strongly agree*. The items were combined to create an index.

Results and Discussion

Multiple t-tests were conducted with the independent variable of majority/ minority group status on the various dependent variables: need-threat index, group identification, willingness to engage in and endorsement of radical actions. The findings revealed a significant positive effect of minority group status on the dependent variables need threat scale, $t(521) = -2.82, p = .005$, Cohen's $d = .23$ such that those in the minority had significantly higher threatened fundamental needs ($M = 2.62, SD = 0.43$), than those who were in the majority ($M = 2.51, SD = 0.44$). In addition, there was a significant difference between the minority and majority groups on their willingness to engage in radical actions, $t(531) = -2.21, p = .027$, Cohen's $d = .19$, with those in the minority ($M = 2.15, SD = 0.92$) significantly more willing to participate in radical actions than those in the majority ($M = 1.97, SD = 0.90$). A tendency was found for activist group identification, but it did not reach traditional significance levels. No significant difference was found for the endorsement of radical actions. Nevertheless, the findings indicated that those in the minority had higher need-threat, higher identification with the activist group, and were more willing to participate radical action compared to those in the majority.

A serial mediation analysis was conducted using Model 6 in the SPSS macro PROCESS (Hayes, 2013) to examine the indirect effect of minority group status on willingness to participate and endorsement of radical actions through need-threat and the activist group identity. As a result, need-threat and activist group identity were added as mediators between the pathway of the predictor variable of majority/ minority group status and the outcome variables: willingness to participate in radical actions and endorsement of radical actions. The pathways are presented in Figures 3 and 4 and the results are presented in Table 9.

The findings mimicked themselves for both outcome variables, such that there was a significant indirect pathway via need-threat and identity between minority group status and radical action intention and endorsement of radical actions. Specifically, those in the minority had higher need-threat and in turn showed higher identification to the activist group and this led to increased radical action intentions and endorsement of radical action. There were no significant direct effects when the indirect pathway was considered.

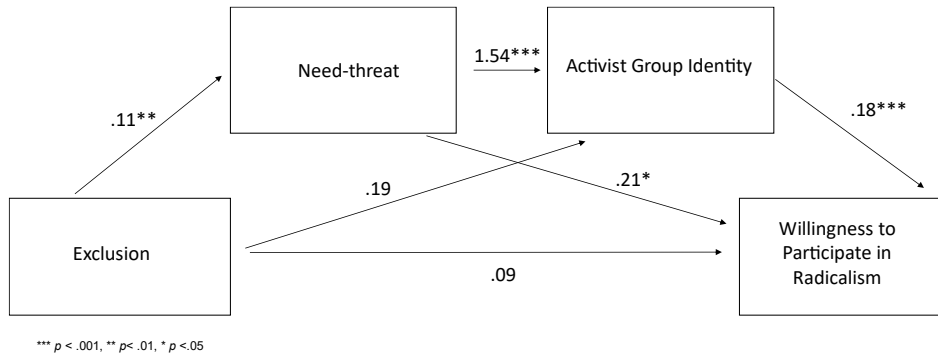


Figure 3
Serial Mediation Model With Coefficients For Pathway Between Exclusion And Willingness To Participate In Radical Actions With Mediators Need-Threats And Activist Group Identity

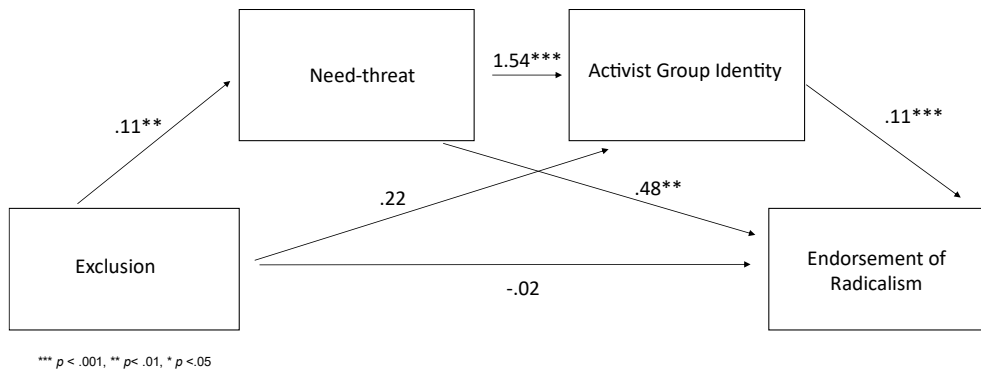


Figure 4
Serial Mediation Model With Coefficients For Pathway Between Exclusion And Endorsement Of Radical Actions With Mediators Need-Threats And Activist Group Identity

Table 9
Direct And Indirect Effects Of Exclusion On Willingness To Participate In Radical Actions And Endorsement Of Radicalism From Bootstrapping With Confidence Intervals In Parenthesis

	Radical Actions	Endorsement of Radical Actions
Direct effects	.08 (-.05; .22)	-.02 (-.30; .26)
Indirect effects		
Exclusion – Need-threats– Radicalism	.02 (.00; .05)	(.01; .11)
Exclusion – Group Identity–Radicalism	.03 (-.04; .11)	(-.02;.08)
Exclusion – Need-threats– Group Identity–Radicalism	.03 (.01; .06)	(.01; .04)

Note: Level of confidence for all confidence intervals is 95%. Results are based on 5000 bootstrap samples.

Conclusions and Contributions

The aim of Paper III was to add onto the findings of Paper I and II to further establish the exact mechanism of social exclusion as a factor in the radicalization process. Paper I established a causal link between social exclusion and extremism, particularly in individuals high on rejection sensitivity and Paper II expanded on this further by demonstrating that this link may be driven by identity shifts. This final Paper examined this link one step further by exploring how need-threats may be the driver of the identity shifts and further how this impacts engagement. The findings of the paper support a serial mediation pathway such that those in the numerical minority had higher threatened needs and this in turn led them to identify more strongly with a radical group. This higher identification then led to increased willingness to engage in radical action and further increased endorsement of radical actions. Consequently, this paper builds on the findings of Paper II by demonstrating that the identity shifts seen are driven by need-threat fortification.

The results of the study add to the understanding of the radicalization literature and further highlight the role of social exclusion as a driving factor as outlined in the quest for significance model (Kruglanski et al., 2009). In addition, it highlights the need to explore the role of need-threats further as a driving mechanism. It has been speculated that the need to fortify threatened fundamental needs would drive individuals to being receptive to extremist groups, yet there is very little empirical evidence supporting this (Knapton, 2014; Williams, 2007). This study is one of two to my knowledge that have empirically studied this link (Knapton et al., 2015). Further, it draws into question how the four fundamental needs are conceptually linked to the quest for significance given an overlap into many of their foundations (Williams, 2012). Thus, future research may want to explore this link. Given these findings, it would seem plausible to argue that the need-threat measure could be tapping into significance loss, and thus may bring together the need-fortification model and the quest for significance model to form one explanatory pathway for radicalization.

A fundamental feature of the study was that given previous research that has demonstrated being in the numerical minority impacted feelings of belonging, it assumed that being in the numerical minority would also threaten the fundamental needs as theorized by the temporal need-threat model (Glasford, 2021; Williams, 2005). The findings supported this, with individuals in the numerical minority (e.g. Pro-life supporter living in Pro-choice state) having significantly higher threatened needs than individuals in the majority (Pro-life supporter living in Pro-life state). As such, it can be determined that minority group membership triggers feelings of exclusion, at least in a context where the cause of exclusion is currently salient. Specifically in this case, the increased focus on abortion rights may makes one's membership to the group (Pro-life/Pro-choice) more pertinent and thus the effect of minority/majority membership on feelings of exclusion (threatened needs) more prominent.

In line with this, another important contribution of this paper is its examination of societal level exclusion. Although extensive correlative surveys exploring the role of perceived discrimination on ingroup identity and participation intentions, to my knowledge this is the first study to explore societal exclusion as a driver in radicalization in a quasi-experimental manner (Branscombe et al., 1999; Cronin et al., 2012; Simon & Grabow, 2010; Simon & Ruhs, 2008). The findings supported the correlative studies, showing that feelings of exclusion can lead to increased identification, at least in those individuals who showed high need-threat. There was no main effect of minority group status on activist group identity. Nevertheless, this is an interesting finding, indicating that it is likely need-fortification that drives willingness to identify, given it was those with high need-threat that showed increased willingness to identify. Consequently, these findings add to the rejection-identification hypothesis model by possibly explaining the driver of the shifts of identity and further demonstrate that such effects can be extended to other contexts other than ethnic discrimination which have been the focus of the model to date.

In summary, this paper brings together the temporal need-threat model and the rejection identification model in the context of extremism and uses them as an explanatory pathway for the effect of social exclusion in radicalization. This paper adds to the social exclusion literature by exploring exclusion from a societal perspective in an experimental way and it helps pave the way for future research to consider exploring naturally occurring minority and excluded groups. The findings highlight the importance of continuing to explore the nuances in social exclusion from varying intergroup levels and highlights the need to continue to explore the driving role of identity in radicalization.

Extended discussion

The aim of this thesis was to explore the causal role of social exclusion in the radicalization process. Additionally, the factors that affect and/or drive this link were also of interest and thus moderating (e.g., the source of exclusion) and mediating factors (e.g. identity) were also explored. Papers I and II supported the causal role social exclusion has on both activist and radical tendencies, indicating that those excluded were more willing to join and participate on behalf of activist groups. Paper I also demonstrated the moderating role that rejection sensitivity has on this effect, such that, excluded individuals high on rejection sensitivity were more likely to engage. Paper II and Paper III revealed the mediating role that identity has in driving the effect between social exclusion and engagement, such that individuals excluded by an outgroup showed increased identification with an accepting group/identity and in turn were more willing to engage on behalf of it. In Paper II this effect was not found when excluded by an ingroup. In Paper III the link between exclusion, identity and extremism was established one step further. The findings demonstrated that need-threat following exclusion led to increased identity and in turn radical engagement. The findings of these studies add to both the social exclusion as well as the radicalization literature. In the following section a detailed discussion of the contributions in the given field will be provided as well as commentary on potential limitations and future research directions.

Theoretical contributions

Interest in what drives individuals to become radical has become a focus in recent years, with high profile terror attacks leading scholars to seek out what drives individuals to commit such atrocities with the aim to prevent them. With this upsurge in interest there has been a move away from trying to understand the individual factors that make a terrorist a terrorist, but to understand radicalization as a pathway in which nearly any individual under the same circumstances may be driven to extremism (McCauley & Moskalkenko, 2017; Moghaddam, 2005). Consequently, in this thesis I explored how exclusion may be one such factor that can drive an individual to sympathize, endorse and maybe even act on behalf of a radical group.

Humans have an innate desire to connect and bond with other individuals. When excluded fundamental needs are thwarted, and individuals attempt to restore them by seeking reconnection and/or acting aggressively (Williams, 2009). Thus, it has been suggested that this need to fortify threatened needs would make individuals more receptive to extremist groups (Knapton, 2014; Williams, 2007). The literature suggests that following exclusion individuals are more receptive to opportunities of social inclusion and are more likely to conform to group norms and thus individuals may not only be more willing to join extremist groups, but then readily conform once a member (Carter-Sowell et al., 2008; Pickett & Gardner, 2005; Williams et al., 2000). The findings of this thesis appear to support this concept. Specifically, Papers I-III demonstrated that excluded individuals were not only more willing to join a group when the opportunity was presented but also appeared to conform to the radical group norm described. Thus, the overarching aim of the thesis in which I wanted to explore the causal role of social exclusion in the radicalization process has been successful. Consequently, the findings will be presented in detail in relation to the theoretical framework and previous findings to highlight how the results contribute to the field.

Radicalization Models

In the introduction a variety of radicalization models were presented to give a theoretical underpinning to explain why individuals engage in activism and radical actions. Individuals may enter the radicalization process participating in activism and may graduate up to more radical tendencies (McCauley & Moskalenko, 2008, 2017; Moghaddam, 2005). All radicalization models presented suggested a possible gradual approach to radicalization, where driving factors cause an individual's actions to shift from normative actions and beliefs to more extremist ideas and radical behaviours (Kruglanski et al., 2014; McCauley & Moskalenko, 2008; Moghaddam, 2005). This thesis aimed to explore the lower levels of the radicalization process and thus both normative actions and non-normative (radical) actions were considered and as such any shift in increase in either mode was deemed as a potential nudge or a driver to radicalization.

The radicalization models presented all had distinct factors that made them unique from one another, however, at the core all models had social factors as a key component. It was within these social factors that this thesis was built. Two general frameworks of the radicalization process were presented, in which varying factors such as social or personal grievances were outlined that can push an individual up the stairway or pyramid of radicalization (McCauley & Moskalenko, 2017; Moghaddam, 2005). Although these models provided a general outline of the escalatory nature of radicalization, the specific motivations that drive individuals though the pathway are not clearly established. Given this, two mechanisms of how individuals may be vulnerable to radicalization were summarized: the social identity models of radicalization and the significance quest theory of radicalization. The

social identity models presented (SIMCA and EMSICA) were based on the concept that individuals will engage in activism and radicalism to maintain, or establish, a positive identity for their social group (Tajfel et al., 1979; Thomas et al., 2012; van Zomeren et al., 2008; Yustisia et al., 2019). Both SIMCA and EMSICA highlighted how feelings of injustice towards an ingroup may result in individuals finding social groups that promote social change (group efficacy) and that feelings of injustice and group efficacy are shaped by, or develop, strong ingroup identity which in turn may lead to engagement in activism and/or radicalism (Thomas et al., 2012; van Zomeren et al., 2008; Yustisia et al., 2019).

The significance quest theory of radicalization focused on the quest for significance that can be triggered from a social event in which one feels shame or humiliation that will then drive the individual to seek out belonging or an identity to restore their significance (Kruglanski et al., 2014). Thus, although all models are unique and each has their own nuances, all models had several overlapping features and that is belonging, significance, social grievances, and identity. The thesis was developed around these key social factors and specifically how social exclusion has a causal role in the radicalization process. All models provide important theoretical contributions for understanding how social exclusion and radicalization may be associated. Nevertheless, it is within the quest of significance model that this link is most associated, given that social exclusion is closely related to feelings of humiliation and invisibility. This does not mean that the models cannot be used in unison, in fact it is proposed that the quest for significance may explain why an individual escalates up the radicalization pathways outlined in the pyramid or stairway models and may be driving ingroup identity as outlined in the SIMCA and EMSICA models.

The concept of social exclusion in radicalization is not new. In fact, the concepts of discrimination, marginalization and social isolation have been discussed as mechanisms in radicalization frequently (Bhui et al., 2014; Borum, 2011; Frounfelker et al., 2019; Silke, 2008). However, an important contribution that this thesis has within this field is to explore the topic in a multi-method and causal manner. The survey contents of the thesis replicate previous findings establishing feelings of discrimination as a driver in radical activism (Cronin et al., 2012; Tropp & Brown, 2004; van Zomeren et al., 2008), but what is unique is that these findings are supported by experimental and causal data and add to the explanatory pathways by examining moderating and mediating factors. The findings of all studies mimic one another, indicating that social exclusion increases willingness to engage and participate in both normative and radical tendencies. The findings of these studies highlight the role of exclusion in extremism, however, each study had specific nuances that contributed to varying fields in the literature and as a result the following section will delve into each of these areas.

The Significance Quest Model of Radicalization and the Role of Individual Differences

Paper I explored the significance quest model directly, using it as a framework for the idea that social exclusion triggers a quest for significance and this in turn leads to radical tendencies (Kruglanski & Fishman, 2009). In this paper, the effect of exclusion was explored but also the individual difference of rejection sensitivity. Even though exclusion is universally painful, there are some traits that can make individuals detect and respond to exclusion more intensely than others (Downey & Feldman, 1996; Williams, 2009). Rejection sensitivity is a disposition that makes individuals readily detect and respond to a cue of exclusion. As such, individuals high on rejection sensitivity notice even the slightest cues of exclusion and then respond much more powerfully than an individual low on this trait (Downey & Feldman, 1996). Consequently, numerous empirical studies have revealed differences in behavioural outcomes in individuals high on rejection sensitivity in response to exclusion, such as increased conformity and higher levels of aggression (Ayduk et al., 1999; Ayduk et al., 2008; Berenson et al., 2009; Downey & Feldman, 1996; Romero-Canyas et al., 2010). As a result, it could be suggested that this may be a factor that impacts the role of exclusion in radicalization. The findings from Paper I appear to support this notion demonstrating in 3 out of the 4 experiments that social exclusion only had an impact in those individuals who were high in rejection sensitivity. One suggestion for this finding is that it may have only been those who were high on rejection sensitivity who detected the exclusion when using a weaker online manipulation. However, all excluded individuals passed the manipulation check and thus it was more likely that it was only those individuals high on rejection sensitivity that reacted to the exclusion via the activism engagement questions rather than the individuals lower on the trait. This is further supported in the fourth and final real-life experiment where although there was a main effect of social exclusion, there was also a moderating interactive effect of rejection sensitivity, where high rejection sensitivity magnified the effects of exclusion. Thus, these experimental set-ups suggest that rejection sensitivity does not affect the outcome by increased detection of exclusion, but rather highly rejection sensitive individuals react more strongly to the event and in turn are likely to show more engagement and radical tendencies. Thus, the findings of Paper I contribute to the field by providing support for the quest for significance model as a driver in radicalization via a function of social exclusion.

Given that in three out of the four experiments in Paper I, exclusion only drove engagement in those high on rejection sensitivity it may be beneficial for the significance quest model of radicalization to consider individual differences, such as differences in personality traits, as a moderating factor. Although recent papers on the topic of significance discuss how individual traits may result in differences in the extent to which individuals strive for significance, there is no discussion on how these differences may impact behavioural outcomes in the face of significance

loss (Kruglanski et al., 2022). Recent research exploring non-clinical personality traits (e.g., extraversion, openness, agreeableness), in both violent and non-violent behaviour, has suggested that such interactional effects exploring both individual differences and situational contexts may help explain why some individuals in the same context are drawn to radicalization and others are not (Obaidi et al., 2020). Thus, even though there appears to be a move away from “terror profiles” and the personality factors that drive radicalism, it does not mean that individual differences may function in an interactional model. Specifically, models that considers how individuals, and their differences, may interact with contextual situations such as exclusion may provide important insights into *who*, and *what circumstances*, may constitute risk factors in radicalization. Consequently, more research in this area to explore the socio-psychological dynamics of radicalization may be beneficial.

Temporal Need-Threat Model and Need-fortification

The temporal need-threat model states following exclusion individuals will have threatened fundamental needs and as a result will act in a way to try to fortify them (Williams, 2009). The model states this will occur in two ways either via ingratulatory actions to restore connection or via anti-social actions to restore control. Uniquely radical groups provide the opportunity to restore both by providing connection with the group members but also the opportunity to act anti-socially, thus suggesting following social exclusion individuals may not only be more open to joining radical groups but also acting anti-socially with them. All three studies provide some support for this model, such that, following social exclusion individuals were more receptive to identifying with, joining, and participating in radical activism. However, the findings of Paper III provided more conclusive support for the temporal need-threat model and need-fortification hypothesis by revealing the mediating role that need-threat has in the link between exclusion and radicalization. The findings of this study revealed that an individual’s level of need-threat following exclusion significantly predicted willingness to identify with the accepting radical group and in turn willingness to engage and endorse radical actions on behalf of that group. Consequently, this suggests it is the motivation of restoring these threatened needs that drive individuals to engage with a radical group. It has been speculated that the need to fortify threatened fundamental needs would drive individuals to being receptive to extremist groups, yet there is very little empirical evidence supporting this (Knapton, 2014; Williams, 2007). This study is one of two to my knowledge that have empirically studied this link (Knapton et al., 2015).

An important factor to consider is that the effect of need-threat on engagement in Paper III was examined on radical actions. Previous research has established a link between threatened power-provocation needs and aggression acts (Twenge et al., 2001; Warburton et al., 2006). It could therefore be suggested that radical groups may provide not only an opportunity to restore need threat via connection but also via aggressive acts. Consequently, suggesting it is a need for belonging AND

status/control that may drive the radicalism link. As such desire to restore both connection and control may increase the attractiveness of radical groups over normative activist groups. Given this, this study should be repeated using normative groups as well to explore if the same mediatory effect of need-threat is found.

Source of Social Exclusion

There appeared to be a near-consensus that moderating factors, such as the source of exclusion, did not impact the negative consequences of social exclusion. Papers revealed that being excluded by despised groups, and/or being rewarded or even benefiting from exclusion all still resulted in negative outcomes (Gonsalkorale & Williams, 2007; Van Beest et al., 2011; van Beest & Williams, 2006). However, most of the research has focused on the direct aftermath of exclusion in which the individual is likely to be in the reflexive stage in which a universal, pain response occurs. Given time to recover individuals may begin to make attributions about the contextual factors regarding the cause of their exclusion (Richman & Leary, 2009). In this reflective stage moderating factors may impact outcomes, such as speed of recovery or subsequent reactions (Williams, 2009).

Paper II wanted to explore how the source of exclusion may moderate the impact of exclusion on willingness to engage in radical actions via a pathway of ingroup identity. The findings revealed that outgroup exclusion resulted in increased willingness to engage in radical activism and this effect was mediated by identity shifts with the ingroup. Such effects were not found with ingroup exclusion. It is likely that exclusion by an outgroup is attributed to be group-based and as the result of discrimination, which is quite different than ingroup exclusion in which it is likely to be attributed to a personal failing by the individual (Crocker et al., 1991; Crocker & Major, 1989; Goodwin et al., 2010). The group-based nature of exclusion vs interpersonal exclusion studied in this experiment, therefore reveals unique differences not only in how contextual differences in exclusion impact group identification, but also the reactionary behaviours individuals have in response to the exclusion. Consequently, this research highlights the importance of considering the source of exclusion, the possible attributions made regarding the cause and how contextual differences moderate individuals' outcomes in the longer-term not just the reflexive, short-term universal response. Further it lines up with qualitative and survey studies that reveal that feelings of marginalization and discrimination result in individuals relying on their minority identity and that these feelings of social isolation can fuel the radicalization process (Abbas, 2005; Branscombe et al., 1999; Frounfelker et al., 2019; Hayes, 2017; Twenge, 2000). Thus, although exclusion in general has been established as a driver, this effect may be magnified when the cause is deemed group-based and the result of discrimination. One possible reason for group-based discrimination magnifying the effects of exclusion may be due to the impact it has on feelings of control. Although not empirically tested, it could be speculated that exclusion due to one's group membership may impact an individuals

need for control more than individual-level exclusion. Specifically, if an individual is excluded due to a personal failing, the individual may feel they can control and change their actions in order to adjust their inclusion status. However, when an individual is excluded due to being a member of, or at least on surface level perceived to be (e.g. ethnicity), a member of a social group there is very little the individual can do to change this cause of exclusion (Knapton, 2014). Given control needs are associated to increased aggression and hostility this is particularly important in relation to radicalization (Wesselmann et al., 2010).

In line with the above, Paper II was comprised of both a survey and an experiment. In the survey set-up, discrimination was measured as an indirect measure of social exclusion. Scholars argue that social exclusion is at the heart of discrimination and examination of the negative effects of discrimination are similar to the negative effects of social exclusion (Knapton et al., 2015; Major & Eccleston, 2004; Oxman-Martinez et al., 2012; Shaw et al., 1999; Richman & Leary, 2009; Williams et al., 2003; Williams, 2007). As such, studies examining exclusion in a rejection- (dis)identification context measure this via perceived discrimination (Jasinskaja-Lahti et al., 2009). The experimental study in which individuals were excluded by an outgroup mirrored the effects found on identity and activism engagement in the survey when perceived discrimination was the predictor variable. Given the near-identical effects of manipulated exclusion in the experiment and the effect of perceived discrimination in the survey, these findings combined provide empirical support to indicate that group-based exclusion is perceived as a form of discrimination. Thus, this study highlights the importance of continuing to explore the conceptual similarities, differences and overlaps of discrimination and exclusion. Further, it highlights a need to find the nuances within social exclusion that result in feelings of discrimination and how this impacts behavioural outcomes. Interestingly, when social exclusion was arguably group-based, and in turn linked to feelings of potential discrimination, the effects of the same exclusion paradigm (Online Ostracism Paradigm) were enough to trigger a main effect of exclusion, compared to in Paper I where the exclusion was more interpersonal and such main effect was lacking. It highlights that group-based exclusion may be more powerful in this context, given the associations to discrimination. Often exclusion and discrimination are discussed independently in the radicalization literature and these findings highlight the need to examine them as similar concepts with potentially similar outcomes.

Moreover, the findings of Paper II and Paper III highlight the importance of examining societal level exclusion. Much of the experimental research has explored interpersonal exclusion using one-on-one or at best, small-group based exclusion. Given the qualitative research linking societal level exclusion and discrimination to radicalization (Bhui et al., 2014; Borum, 2011; Frounfelker et al., 2019; Silke, 2008), it is important to establish such a link causally too, and this is the first study, to my knowledge, to attempt this. These findings are particularly important in relation to the radicalization models, given that both the staircase to terrorism model

and the pyramid model note unfair group status, injustice and perception of being the victim of societal grievance as a “springboard” for escalating through the radicalization ranks (McCauley & Moskalenko, 2008; Moghaddam, 2005). Thus, these findings add to the literature by experimentally demonstrating the causal link between exclusion of an outgroup as a potential driving factor of radicalization via identity shifts and consequently linking societal level issues (group discrimination) to more group-based experimental research findings. Consequently, this research paves the way for future studies wanting to experimentally and quasi-experimentally examine the causal link between societal exclusion and reactionary behaviours, such as activism and radicalization. (Hogg et al., 2010; Milla et al., 2022)

Identity and Exclusion

Identity is a key component when considering activism and strong identity levels are a consistent predictor in willingness to engage in various forms of activism engagement (Klandermans et al., 2002). In fact, the findings are so strong that identity has been argued to be a core motivator for individuals engaging (van Zomeren et al., 2008). Although much of the research has focused on normative actions, identity is also a strong motivating factor in the radicalization process (Borum, 2011; Hogg et al., 2010; Milla et al., 2022). The social identity model states that individuals can have multiple identities and thus when one is deemed under threat, individuals may turn to an alternative accepting identity (Tajfel & Turner, 2004). As a result, this multiple identity model may have implications for episodes of exclusion, and where an identity is deemed no longer welcoming. In line with this, the rejection-identification model states that when an individual feels excluded and/ or discriminated against they will identify more with an accepting (often minority) identity to buffer from the negative effects of exclusion (Branscombe et al., 1999). Thus, these shifts in identity might be important when considering activism and radicalization as increased identification levels result in increased engagement on behalf of the minority group (Simon & Grabow, 2010; Simon & Ruhs, 2008). In line with this, the EMSICA model highlights how feelings of injustice towards an ingroup, may drive individuals to have a strong politicized identity and drive radicalization processes (Yustisia et al., 2019). It is likely that discrimination and feelings of exclusion are deemed unjust and thus exclusion may account for identity shifts via the EMSICA model too (Thomas et al., 2012).

Given the above, it could be suggested that the mechanism of social exclusion on engagement may function via a pathway of identity shifts and it was important to test this suggestion empirically. Paper II explored this within the context of the Brexit issue and it consisted of both a survey and experimental study. The findings revealed that exclusion by an outgroup (either manipulated in the experiment or operationalized via perceived discrimination in the survey) resulted in increased identification with the ingroup and this fully mediated the relationship between

exclusion and engagement in both normative and radical actions. This effect was not present when one was excluded by their ingroup in the experimental set up, or when they perceived low discrimination in the survey. It therefore suggests that a desire to identify with an accepting group following exclusion may be driving the link between exclusion and radicalization.

Paper III aimed to add further to the findings of Paper II by bringing in the concept of need-threat and linking this to identity. Based on the concept that individuals seek connection following exclusion to fortify threatened fundamental needs (Williams, 2009), it was thus plausible the identity shifts seen in Paper II would be driven by this fortification motivation. The findings from this quasi-experimental study support this, showing a serial mediation link between exclusion and radicalization via need-threats and identity. The findings from both Paper II and Paper III therefore confirm the importance of identity as outlined by activism and radicalization models (McCauley & Moskaleiko, 2008; Moghaddam, 2005; van Zomeren et al., 2008). It brings together the literature of social exclusion and the rejection-identification model as a pathway to radicalization and supports the social identity models of engagement such that, higher identification leads to higher participation intentions (Branscombe et al., 1999; van Zomeren et al., 2008). The findings support previous research that highlight the fundamental role that identity has with driving engagement in activist groups and brings together overlapping features in both normative and non-normative (radical) actions (Klandermans et al., 2002; van Zomeren et al., 2008). What is unique in these findings is that for the first time shifts in identity were experimentally triggered. Previous studies have established this link through surveys whereas using multiple methods in the form of a survey, experiment and quasi-experimental design, I show the impact exclusion has on identity and how this increased identity can lead to radicalization.

Ideology, Normative and Non-Normative Actions

When the three studies are looked at as one complete unit, the mechanism of social exclusion functioned the same regardless of the ideology or cause presented. Specifically, a variety of issues or causes were presented (left, right, Brexit, abortion, tuition fees) and the mechanism of social exclusion as a causal factor in radicalization functioned the same regardless of the cause. Even though when you examine this across the three studies it provides compelling evidence that ideology plays no role in determining the radicalization process, it was only a factor controlled for in Paper I. Thus, Paper I confirmed the limited role of ideology as a driver in radicalization under controlled conditions. This finding provides causal evidence that social exclusion functions as a mechanism for increasing radical tendencies across a variety of ideological and social issues. This supports previous literature that suggests that entering the radicalization process should be independent of ideological or religious content, but a general mechanism (Kruglanski & Webber, 2014). An important factor to note here is that given the

literature, the exclusion mechanism could potentially work for any group, it does not need to be an activist or radical group, but it is within this context that it is explored in this thesis. Potentially this mechanism could be used to explain the joining of the scouts, or more worrisomely, a cult. Nevertheless, the findings provide important understanding for the radicalization process and its potential uses for other contexts may be explored in future research.

In line with the above, the studies presented varying extremity norms. The findings of all the studies revealed that exclusion functioned the same regardless of the level of radicalism. Specifically, the experiments in Paper I demonstrated that feelings of exclusion resulted in action that reflected the group norm such that, the more radical group led to extremism endorsement, but a more normative political group resulted in increased endorsement/engagement in normative actions. This highlights that any step towards increased engagement or sympathy towards a cause, normative or non-normative, may help explain how individuals may slowly move in a non-normative direction when presented with a radical group norm. Throughout these studies a varying degree of adaption to radical tendencies to various issues is shown, and thus highlight the need to examine how social factors may nudge individuals at the bottom of the radicalization staircase to move in a non-normative direction. Consequently, in line with Moghaddam (2005) the findings highlight the importance of examining radicalization from the ground floor and not just focus on those who are already at the top of the staircase and engaging in extremist acts.

Even though the findings of the Papers I and II reveal that social exclusion triggers both increased willingness to participate in both normative and non-normative action, it is important to remind oneself that activism and radicalism are two distinct concepts. Research has demonstrated that although correlated they do have distinct components. Further, the popular “conveyor belt” approach to radicalization whereby individuals may transition from activism to radicalization has been shown not to occur in all situations (Moskalenko & McCauley, 2009). As such, given that participants in Papers I and II were measured on their willingness to engage in both radical and normative actions, future studies may want to examine what the results reveal when given a choice of which actions to partake in. Many radicalization models state that individuals will turn to existing social outlets when drivers of radicalization (e.g. social grievances, loss of significance) are experienced and thus may only turn to alternative social groups, such as radical groups, when their needs are not met (Kruglanski et al., 2009, 2014; Kruglanski & Fishman, 2009; Moghaddam, 2005). As such, exploring whether individuals will choose radical groups over normative groups following social exclusion may be beneficial to establish if need fortification differs between normative and radical groups. Nevertheless, the findings fall in line with the popular conveyor belt theories of radicalization, and thus showing increased willingness to engage in both activism and radical actions still provides important insights into the radicalization process.

Summary of Contributions to Radicalization Models

Many of the radicalization models propose the need to focus on “ordinary” individuals rather than those just at the peak of the radicalization process, for example, terrorists (Kruglanski & Fishman, 2009; McCauley & Moskalenko, 2008; Moghaddam, 2005; Moskalenko & McCauley, 2009). A main component of this thesis was just that, to explore the lower ends of the radicalization process, and explore how the average person can become at risk of escalating up the radicalization pyramid or staircase to become engaged in activism and potentially, radical activism. The findings of the thesis support the notion of exploring “ordinary” individuals, as it demonstrated that social exclusion is a risk factor for a broad population of people. Specifically, social exclusion functioned as a causal factor across ideologies, countries and other demographics. As such the term “ordinary” is possibly not the best description to explain this, but rather that “anyone” can be set on a path to radicalization given the right social and contextual components. The terms “ordinary” and “normal” are often used as terms to describe exploring radicalization in a general and broad population, not just individuals with a history of criminality or psychopathology. However, these terms can be misleading and possibly using the term “unremarkable” may be better as used by Silber & Bhatt (2007). Nevertheless, the findings support both the pyramid and staircase model of radicalization given the numerous factors can cause an individual to gradually, or rapidly, escalate from a politically or socially inert individual to becoming engaged in radical activism, and endorsing extreme actions (McCauley & Moskalenko, 2008; Moghaddam, 2005).

As stated in the introduction, although helpful to provide a general framework for depicting radicalization as a process, the pyramid and staircase models provide very little concrete and testable factors that explain exactly how an individual radicalizes. As such, the thesis proposed a conceptual pathway to explain *how* this escalation occurs. Specifically, it built on both the quest for significance model and identity models (EMSICA, SIMCA, Rejection Identification) to explain how social exclusion may lead to loss of significance which in turn leads to identity shifts and then engagement. Given this, the findings of this thesis provide support for the casual role of loss of significance as a driver in radicalization as set out by the quest for significance model, and also confirms how feelings of unfairness towards ones group via exclusion by an outgroup and/or discrimination, may cause identity shifts that drive activism as outlined by EMSICA (Kruglanski et al., 2014; Thomas et al., 2012). Thus, this thesis adds and provides support to both these radicalization models. In addition, the findings of the thesis highlight the need for these models to explore moderating factors, with individual differences and/or the source of exclusion impacting the way individuals react to exclusion and the resulting significance loss and identity shifts. This is in line with a recent systematic review of the radicalization research which highlights the need to explore multiple factors and models in unison when determining who may be at risk of radicalization

(Wolfowicz et al., 2019). Consequently, by rooting the thesis in multiple radicalization models and combining these with social psychological theory it provides a novel and holistic understanding how social exclusion functions as a driver of extremism through loss of significance and identity.

Practical implications

The results presented above highlight the contribution that this thesis has with regard to understanding possible motivating and driving factors for radicalization. Arguably, the increased attention of radicalization in recent years is due to a desire to prevent future atrocities occurring and by understanding the motivating factors that lead to an individual to engage, this can help us prevent individuals engaging with extremist groups in the future. Thus, the main practical implication of this thesis is two-fold and that is *prevention* and *de-radicalization*.

Prevention strategies aim to stop individuals from entering the extremism pathway. The findings of the studies demonstrate the impact social exclusion has regarding making individuals more at risk of radicalization strategies. Importantly, it also highlights the similarities in the findings of experimental exclusion and discrimination, and given individuals in socially isolated, marginalized, and discriminated communities have long been deemed at risk of radicalization, these findings provide further insight into exactly how discrimination and exclusion make minority communities more vulnerable (Bhui et al., 2014; Borum, 2011; Frounfelker et al., 2019; Silke, 2008). By understanding the pathway between exclusion, discrimination and radicalization, preventative strategies can be implemented based on the empirical evidence as a way of buffering the effects of exclusion or redirecting individual's reactions into a more pro-social alternative within these communities. Specifically, the findings of Paper III highlight how individuals threatened fundamental needs drive individuals to identify more with their ingroup and in turn are more likely to engage with a radical group that represents this ingroup. As a result, preventative strategies will need to provide alternative opportunities as a way of fortifying threatened needs in response to feelings of exclusion and marginalization. Thus, groups that represent the ingroup and have pro-social intentions may be such a way. Specifically, the negative impact of exclusion and the desire to feel inclusion must be channelled somewhere and potentially a lack of pro-social opportunities may lead individuals to seek out alternatives and begin entry to the radicalization pathway. This concept appears to be supported by some literature in the counter-radicalization field. In particular, the "More than a Game" initiative is a way in which sport and sports clubs are used to provide Muslim youth with strategies to develop resilience against extremism. The mentoring program provides an outlet for individuals to develop a feeling of identity and belonging within a positive context and allows individuals to explore feelings

of cultural isolation with fellow members of their community (Johns et al., 2014). Given that the findings reveal how outgroup discrimination can result in increased identification with ones ingroup and how such increases in identity have been linked to outgroup hostility (Branscombe et al., 1999), any counter-radicalization measure should be conducted from within the trusted community. The increased feelings of hostility towards an outgroup and increased desire to engage with an ingroup following exclusion, indicate that attempts from someone from outside the marginalized community may not result in the desired counter-radicalization effects. Such negative outcomes from outsider counter-radicalization attempts have been seen in the PREVENT scheme in the UK, which counterproductively increased intergroup tensions and heightened feelings of marginalization (Alam & Husband, 2013). Further, by empowering communities to tackle the issues of extremism themselves, this will promote social inclusion within policies and this in turn creates empowerment within a community and fosters the development of positive and pro-social views of the social group and in turn creates a social norm of community resilience against extremism (Johns et al., 2014).

In line with the above, de-radicalization programs should approach de-radicalization using knowledge of the motivations that may have driven an individual to engage in extremism in the first place. Given the evidence presented in these studies that extremist groups provide an individual with a place to fulfil their belongingness needs and a sense of identity, the process of de-radicalization in which an individual exits a group essentially strips the individual of these benefits. These needs are regarded as fundamental to individuals and thus simply removing individuals from a radical group is unlikely to be successful, as the need to belong is still present. Consequently, it is likely the void created from exiting the group needs to be filled with a positive outlet for belonging. This may be challenging given the nature of the actions the individual may have participated in and such actions may result in them being criminally convicted and the participation of illegal crimes puts them at risk of future marginalization (Liem & Weggemans, 2018.). As such, policies and procedures need to consider how societal structures can promote inclusion for individuals exiting or recently exited from extremism. Such guidance on de-radicalization comes in the form of the Aarhus model and this emphasises the importance of inclusion as a guiding principle for all strategies to consider how to inclusively support and not further marginalize ex-extremists (Bertelsen, 2015). An additional way to promote de-radicalization is to provide them with an alternative group or community to fulfil their belongingness needs. A successful approach has been seen in mentoring programs whereby ex-extremists help radicalized individuals exit and reintegrate back into society. This provides the mentor with a sense of purpose, a sense of significance and allows themselves to develop a positive identity of themselves and restore their belonging (Pereira, 2019; Wildan, 2022). As well as that benefit, it also helps another individual exit an extremist group with the guidance of someone who likely is a member of their culture or community and can in turn help them feel connected and reintegrated with society.

In summary, by understanding how social exclusion functions through mechanisms of identity and need-threat fortification it allows for the informed and empirically based formation of prevention and de-radicalization strategies. It is important for all counter-radicalization measures to consider the causal factors that drive individuals to join extremist groups in order to form effective strategies to ideally prevent individuals from ever joining but also to guide policies for de-radicalization and reintegration when they do.

Limitations and Future Research

Although the findings of this thesis provide valuable contributions to both the social exclusion and radicalization fields, there were some limitations to the research conducted and these will be described further.

In all the studies self-report measures were used and this presents the issue of social desirability bias. Given the potential negative nature of the questions asked and the questionable legality of the actions presented, it may be that some social desirability occurred in relation to the questions. Although respondents were advised that their answer could not be linked to them and their answers would be kept completely confidential and anonymous, it is likely that individuals may have been reluctant to answer honestly, or more likely, have subtle differences in the answers they gave compared to their true response. Specifically, given the extreme nature of some of the items presented, individuals may have been reluctant to indicate willingness to participate in such actions. Given this future research may want to consider novel ways to measure the dependent variables, independent of self-report. Nevertheless, the findings still revealed significant differences across variables and potentially real-life reactions to exclusion may be stronger.

In line with the above, activism intentions were measures of participation in both normative and non-normative forms. By its very nature “intentions” indicates an individuals’ intention to participate but not their actual participation. Thus, it brings into question the extent to which the intention of an individual in a questionnaire, reflects the extent of real-life behaviour. Nevertheless, it is common practice for research in the field and has provided promising results in the past (van Zomeren et al., 2008; van Zomeren & Iyer, 2009), but future research into exclusion may want to consider trying to measure actual participation or more real-to-life measures of intention such as providing the option to donate money to one of the presented groups as used in other research studies (Obaidi et al., 2020).

Paper II explored how the source of exclusion, specifically whether it was the ingroup or outgroup, impacted ingroup identity and in turn willingness to participate on behalf of the group. A foundation of this study was that attributions about the cause of exclusion would impact the reactionary behaviours. Based on the literature it was assumed that exclusion by the outgroup would be deemed group-based and

the result of discrimination, whereas ingroup exclusion deemed interpersonal and the result of personal failings. The findings suggested that these differences in attributions were the case, given that the experimental manipulation of outgroup exclusion mirrored the findings of the survey study in which perceived discrimination was the predictor. Ingroup exclusion had no such effect. Although the results are promising in providing indications into how ingroup/outgroup exclusion impact attributions on the cause of exclusion, no actual measures of the attributions participants made about the exclusion in the experimental study were taken. Future research may want to consider asking respondents to indicate what they attributed the cause of exclusion to be and seeing if this differs between ingroup and outgroup exclusion to further strengthen the assumption that outgroup exclusion is attributed to be due to discrimination.

Paper II and Paper III both explored how feelings of discrimination by an outgroup resulted in increased ingroup identity and radical activism engagement. For these two studies the topic of Brexit (Paper II) and abortion (Paper III) were used. Although in both cases there is a perception of a minority and majority based on numerical support (Leave voters were a majority in the experiment and in the quasi-experimental abortion study, the majority shifted given the state you were in), the groups are arguably equal on perception of status. Specifically, with these two groups there is no strongly ingrained notion of a “superior group” that can be seen in other intergroup contexts, such as the well documented long-standing ethnic discrimination of African Americans by the White population (Branscombe et al., 1999). Research has shown when a “high status” outgroup excludes a member of a “low status” ingroup it is more likely to be perceived as discrimination and in such cases, lower status groups may increase ingroup bias to try and bring about social change for the ingroup (Scheepers et al., 2006; Spears et al., 2001). Thus, future experimental research may want to consider using the same set up and experimental design as in these studies, however using groups with a more historical power and status imbalance. By including these power and status imbalances, the findings between outgroup exclusion, identity and group engagement may be even stronger than those seen in these studies.

A radical group may be more attractive given its ability to restore not only belonging and self-esteem, but also control and meaningfulness. Thwarted control needs have been repeatedly associated with anti-social and hostile behaviours (Warburton et al., 2006; Williams, 2007; 2009; Zadro et al., 2011). Arguably, group-based discrimination could impact control needs more, given that the exclusion is based off of a factor the individual cannot control, for example their race. Thus, group-based discrimination may be more powerful than interpersonal exclusion in a radicalization context. Given this, future research may want to consider two things. Firstly, to examine if group-based exclusion triggers depletion of control needs more than individual level exclusion, and secondly, that in the face of such group-based exclusion if individuals will choose radical actions over normative as a way of not only fulfilling their belongingness needs, but also

fortifying their control needs. In the studies presented in this thesis exclusion increased both activism and radicalism, but it would be interesting if future studies examined if excluded individuals would actively choose radical groups over normative when given a choice to participate in one or another. Given that research suggests that there may be differences in the way individuals become activists or radicalized, it is important to distinguish when given the choice if excluded individuals actively choose radicalism over normative activism (Moskalenko & McCauley, 2009).

Radicalization is often defined as a change in beliefs and behaviours in a non-normative direction (McCauley & Moskalenko, 2008). This raises the question of whether I measure *change*, given I use a between-measures design. Specifically, I do not measure the change in the individual but the change within a group of individuals. Unfortunately, a within-measures design was not deemed feasible for this thesis given that measures of belonging prior to the manipulation may have led individuals to become suspicious. However, the mixed-method approach and how the effect of exclusion on the dependent variables was the same across multiple studies, I believe provides strong support for the role of exclusion in radicalization. Nevertheless, future research may want to examine the pathway empirically tested in this thesis using a within-measures design.

Validity

The question of whether these findings can be extrapolated into other populations and the real world is of importance. Consequently, it is important to consider both the external and ecological validity of the research. There are two major points to consider. Firstly, the research was conducted on an online recruitment platform. Individuals participated in their own, uncontrolled space. This means there is little known about the environment they are conducting the study in, for example, whether they are alone or with others. Consequently, factors in their environment may impact the results. Further, individuals who seek out this platform to participate may result in selection bias, given that there may be a certain “type” of individual who seeks out these studies and this may impact the findings (Andrade, 2020; Grewenig et al., 2018). Thus, it brings into question whether the findings from online platforms can be generalized to other populations. However, research does indicate that findings from online recruitment websites are comparable to more traditional research methods, though the magnitude of effects discovered may be smaller (Buhrmester et al., 2011; Thompson & Pickett, 2020).

Secondly, the experimental manipulations may not match the real-life experience of exclusion. For example, Cyberball has been criticised for its lack of ecological validity, and whilst the Online Ostracism Paradigm represents a more ecological valid manipulation given it is developed to be based on a more real-life context, individuals do not have any way to actively impact the exclusion that is occurring. Specifically, it is a pre-programmed experience in which the participant cannot

impact, which, is distinct compared to the real-life world where individuals are often quick to adjust their behaviour in the presence of an exclusion cue to prevent exclusion occurring (Ouwkerk et al., 2005). Although these factors may impact the validity of these studies when considered individually, this research does not sit within a vacuum. The findings of these studies support research conducted on individuals who have participated in extremism, confirming interview data that highlights how feelings of rejection and or a loss of significance were deemed motivating factors (Kruglanski et al., 2009). Further, the studies outlined in this thesis use a variety of experimental and non-experimental methods to explore the same research question, and all find a similar effect of exclusion on the dependent variables. Thus, when you look at the individual studies as a unified thesis, and then position it within previous research, the questions regarding validity are negligible.

Concluding Remarks

Radicalization is a very current and important issue. The findings here highlight the importance of continuing to explore the issue and particularly focusing on the nuances, such as moderating and mediating factors, in radicalization pathways. The conclusions of this thesis highlight communities that may be at risk through marginalization and explain how a mechanism of social exclusion, threatened needs and identity may drive them down a radicalization pathway. Often societal structures and issues are looked at independently of group-based individual level research mechanisms. This thesis highlights the importance of doing both. Here, I link specific experimental mechanisms and relate them to societal issues, providing empirical support for often qualitatively explored societal problems. Such explorations of phenomenon do not need to occur in dichotomy of one another, and the mixed-method approach taken here highlights the benefits of multiple methods researching the same phenomenon. Thus, future research should aim to explore a mechanism at every structural level and in unison with one another. Hopefully such an approach can provide a holistic understanding of radicalization and as such impact counter-extremism strategies in the most effective way.

References

- Abbas, T. (2005). Recent developments to British multicultural theory, policy and practice: The case of British Muslims. *Citizenship Studies*, 9(2), 153-166.
- Abrams, D., Randsley de Moura, G., Hutchison, P., & Viki, G. T. (2005). When Bad Becomes Good (and Vice Versa): Why Social Exclusion Is Not Based on Difference. In *The social psychology of inclusion and exclusion*. (pp. 161–189). Psychology Press.
- Alam, Y., & Husband, C. (2013). Islamophobia, community cohesion and counter-terrorism policies in Britain. *Patterns of Prejudice*, 47(3), 235-252. <https://doi.org/10.1080/0031322X.2013.797779>
- Andrade, C. (2020). The Limitations of Online Surveys. *Indian Journal of Psychological Medicine*, 42(6), 575. <https://doi.org/10.1177/0253717620957496>
- Armenta, B. E., & Hunt, J. S. (2009). Responding to societal devaluation: Effects of perceived personal and group discrimination on the ethnic group identification and personal self-esteem of Latino/Latina adolescents. *Group Processes & Intergroup Relations*, 12(1), 23–39.
- Ayduk, O., Downey, G., Testa, A., Yen, Y., & Shoda, Y. (1999). Does rejection elicit hostility in rejection sensitive women? *Social Cognition*, 17(2), 245–271.
- Ayduk, Ö., Gyurak, A., & Luerssen, A. (2008). Individual differences in the rejection–aggression link in the hot sauce paradigm: The case of rejection sensitivity. *Journal of Experimental Social Psychology*, 44(3), 775–782.
- Badea, C., Jetten, J., Iyer, A., & Er-Rafiy, A. (2011). Negotiating dual identities: The impact of group-based rejection on identification and acculturation. *European Journal of Social Psychology*, 41(5), 586–595.
- Bamberg, S., Rees, J. H., & Schulte, M. (2018). Environmental protection through societal change. *Psychology and Climate Change: Human Perceptions, Impacts, and Responses*, 185–213. <https://doi.org/10.1016/B978-0-12-813130-5.00008-4>
- Barlow, F. K., Sibley, C. G., & Hornsey, M. J. (2012). Rejection as a call to arms: Inter-racial hostility and support for political action as outcomes of race-based rejection in majority and minority groups. *British Journal of Social Psychology*, 51(1), 167–177.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117 (3), 497–529. <https://doi.org/10.1037/0033-2909.117.3.497>
- Becker, J. C., & Tausch, N. (2015). A dynamic model of engagement in normative and non-normative collective action: Psychological antecedents, consequences, and barriers. *European Review of Social Psychology*, 26(1), 43–92. <https://doi.org/10.1080/10463283.2015.1094265>

- Berenson, K. R., Gyurak, A., Ayduk, Ö., Downey, G., Garner, M. J., Mogg, K., Bradley, B. P., & Pine, D. S. (2009). Rejection sensitivity and disruption of attention by social threat cues. *Journal of Research in Personality, 43*(6), 1064–1072.
- Berry, J. W., Phinney, J. S., Sam, D. L., & Vedder, P. (2006). Immigrant youth: Acculturation, identity, and adaptation. *Applied Psychology, 55*(3), 303–332.
- Bertelsen, P. (2015). The Aarhus Model: Principles and Organization. *Panorama, 241–253*.
- Besta, T., Jaśkiewicz, M., Kosakowska-Berezecka, N., Lawendowski, R., & Zawadzka, A. M. (2018). What do I gain from joining crowds? Does self-expansion help to explain the relationship between identity fusion, group efficacy and collective action? *European Journal of Social Psychology, 48*(2), O152–O167.
- Bhui, K., Everitt, B., & Jones, E. (2014). Might depression, psychosocial adversity, and limited social assets explain vulnerability to and resistance against violent radicalisation? *PloS One, 9*(9), e105918.
- Borum, R. (2011). Radicalization into violent extremism I: A review of social science theories. *Journal of Strategic Security, 4*(4), 7–36.
- Branscombe, N. R., Schmitt, M. T., & Harvey, R. D. (1999). Perceiving pervasive discrimination among African Americans: Implications for group identification and well-being. *Journal of Personality and Social Psychology, 77*(1), 135–149. <https://doi.org/10.1037/0022-3514.77.1.135>
- Burke, J. (2016). Why does France keep getting attacked? *The Guardian*.
- Campbell, W. K., & Sedikides, C. (1999). Self-Threat Magnifies the Self-Serving Bias: A Meta-Analytic Integration. *Review of General Psychology, 3*(1), 23–43.
- Carter-Sowell, A. R., Chen, Z., & Williams, K. D. (2008). Ostracism increases social susceptibility. *Social Influence, 3*(3), 143–153. <https://doi.org/10.1080/15534510802204868>
- Crocker, J., & Major, B. (1989). Social stigma and self-esteem: The self-protective properties of stigma. *Psychological Review, 96*(4), 608–630. <https://doi.org/10.1037/0033-295X.96.4.608>
- Crocker, J., Voelkl, K., Testa, M., & Major, B. (1991). Social stigma: The affective consequences of attributional ambiguity. *Journal of Personality and Social Psychology, 60*(2), 218–228. <https://doi.org/10.1037/0022-3514.60.2.218>
- Cronin, T. J., Levin, S., Branscombe, N. R., van Laar, C., & Tropp, L. R. (2012). Ethnic identification in response to perceived discrimination protects well-being and promotes activism: A longitudinal study of Latino college students. *Group Processes & Intergroup Relations, 15*(3), 393–407.
- DeWall, C. N., Maner, J. K., & Rouby, D. A. (2009). Social exclusion and early-stage interpersonal perception: selective attention to signs of acceptance. *Journal of Personality and Social Psychology, 96*(4), 729.
- Dodd, V. (2017). *Social isolation behind extremism and terrorism, police told | UK security and counter-terrorism | The Guardian*. Retrieved May 20, 2022, from <https://www.theguardian.com/uk-news/2017/nov/02/social-isolation-behind-extremism-and-terrorism-police-told>
- Downey, G., & Feldman, S. I. (1996). Implications of rejection sensitivity for intimate relationships. *Journal of Personality and Social Psychology, 70* (6), 1327–1343. <https://doi.org/10.1037/0022-3514.70.6.1327>

- Drury, J., & Reicher, S. (1999). The intergroup dynamics of collective empowerment: Substantiating the social identity model of crowd behavior. *Group Processes & Intergroup Relations*, 2(4), 381–402.
- Dvir, M., Kelly, J. R., & Williams, K. D. (2019). Is inclusion a valid control for ostracism?. *The Journal of Social Psychology*, 159(1), 106–111. <https://doi.org/10.1080/00224545.2018.1460301>
- Ehrlich, K. B., Gerson, S. A., Vanderwert, R. E., Cannon, E. N., & Fox, N. A. (2015). Hypervigilance to rejecting stimuli in rejection sensitive individuals: behavioral and neurocognitive evidence. *Personality and Individual Differences*, 85, 7–12.
- Eisenberger, N. I. (2013). Why rejection hurts: The neuroscience of social pain. In C. N. DeWall (Ed.), *The Oxford handbook of social exclusion* (pp. 152–162). Oxford University Press.
- Eisenberger, N. I., Lieberman, M. D., & Williams, K. D. (2003). Does rejection hurt? An fMRI study of social exclusion. *Science*, 302(5643), 290–292. <https://doi.org/10.1126/science.1089134>
- Ellemers, N. (1993). The influence of socio-structural variables on identity management strategies. *European Review of Social Psychology*, 4(1), 27–57.
- Frounfelker, R. L., Frissen, T., Vanorio, I., Rousseau, C., & d’Haenens, L. (2019). Exploring the discrimination–radicalization nexus: empirical evidence from youth and young adults in Belgium. *International Journal of Public Health*, 64(6), 897–908. <https://doi.org/10.1007/s00038-019-01226-z>
- Gaertner, L., Iuzzini, J., & O’Mara, E. M. (2008). When rejection by one fosters aggression against many: Multiple-victim aggression as a consequence of social rejection and perceived groupness. *Journal of Experimental Social Psychology*, 44(4), 958–970. <https://doi.org/10.1016/j.jesp.2008.02.004>
- Gao, S., Assink, M., Liu, T., Chan, K. L., & Ip, P. (2021). Associations between rejection sensitivity, aggression, and victimization: A meta-analytic review. *Trauma, Violence, & Abuse*, 22(1), 125–135.
- Gill, P., & Corner, E. (2017). There and back again: The study of mental disorder and terrorist involvement. *American Psychologist*, 72(3), 231–241. <https://doi.org/10.1037/AMP0000090>
- Ginges, J., Atran, S., Sachdeva, S., & Medin, D. (2011). Psychology out of the laboratory: the challenge of violent extremism. *The American Psychologist*, 66(6), 507–519. <https://doi.org/10.1037/A0024715>
- Gómez, Á., Morales, J. F., Hart, S., Vázquez, A., & Swann Jr, W. B. (2011). Rejected and excluded forevermore, but even more devoted: Irrevocable ostracism intensifies loyalty to the group among identity-fused persons. *Personality and Social Psychology Bulletin*, 37(12), 1574–1586.
- Gonsalkorale, K., & Williams, K. D. (2007). The KKK won’t let me play: Ostracism even by a despised outgroup hurts. *European Journal of Social Psychology*, 37(6), 1176–1186. <https://doi.org/10.1002/ejsp.392>
- Goodwin, S. A., Williams, K. D., & Carter-Sowell, A. R. (2010). The psychological sting of stigma: The costs of attributing ostracism to racism. *Journal of Experimental Social Psychology*, 46(4), 612–618. <https://doi.org/10.1016/j.jesp.2010.02.002>
- Grewenig, E., Lergetporer, P., Simon, L., Werner, K., & Woessmann, L. (2018). *Can Online Surveys Represent the Entire Population?* www.iza.org

- Gruter, M., & Masters, R. D. (1986). Ostracism as a social and biological phenomenon: An introduction. *Ethology & Sociobiology*, 7(3–4), 149–158. [https://doi.org/10.1016/0162-3095\(86\)90043-9](https://doi.org/10.1016/0162-3095(86)90043-9)
- Hayes, S. W. (2017). Changing Radicalization to Resilience by Understanding Marginalization. *Peace Review*, 29(2), 153–159. <https://doi.org/10.1080/10402659.2017.1308190>
- Hogg, M. A., Meehan, C., & Farquharson, J. (2010). The solace of radicalism: Self-uncertainty and group identification in the face of threat. *Journal of Experimental Social Psychology*, 46(6), 1061–1066. <https://doi.org/10.1016/J.JESP.2010.05.005>
- Hutchison, P., Abrams, D., & Christian, J. (2007). The social psychology of exclusion. *Multidisciplinary Handbook of Social Exclusion Research*, 29–57.
- Jasinskaja-Lahti, I., Liebkind, K., & Solheim, E. (2009). To identify or not to identify? National disidentification as an alternative reaction to perceived ethnic discrimination. *Applied Psychology: An International Review*, 58(1), 105–128. <https://doi.org/10.1111/j.1464-0597.2008.00384.x>
- Jasko, K., LaFree, G., & Kruglanski, A. (2017). Quest for Significance and Violent Extremism: The Case of Domestic Radicalization. *Political Psychology*, 38(5), 815–831. <https://doi.org/https://doi.org/10.1111/pops.12376>
- Jenkins, R. (2014). *Social identity*. Routledge.
- Johns, A., Grossman, M., & McDonald, K. (2014). “More than a game”: The impact of sport-based youth mentoring schemes on developing resilience toward violent extremism. *Social Inclusion*, 2(2), 57–70. <https://doi.org/10.17645/si.v2i2.167>
- Klandermans, B., Sabucedo, J. M., Rodriguez, M., & De Weerd, M. (2002). Identity processes in collective action participation: Farmers’ identity and farmers’ protest in the Netherlands and Spain. *Political Psychology*, 23(2), 235–251.
- Knapton, H. (2014). The recruitment and radicalisation of western citizens: does ostracism have a role in homegrown terrorism?. *Journal of European Psychology Students*, 5(1).
- Knapton, H. M., Bäck, H., & Bäck, E. A. (2015). The social activist: conformity to the ingroup following rejection as a predictor of political participation. *Social Influence*, 10(2), 97–108. <https://doi.org/10.1080/15534510.2014.966856>
- Koranyi, B. (2012). *Breivik turned from kind son to crazy loner: mother* | Reuters. Retrieved May 20, 2022, from <https://www.reuters.com/article/us-breivik-trial-mother-idUSBRE85D1DL20120614>
- Kruglanski, A. W., Chen, X., Dechesne, M., Fishman, S., & Orehek, E. (2009). Fully committed: Suicide bombers’ motivation and the quest for personal significance. *Political Psychology*, 30(3), 331–357. <https://doi.org/10.1111/j.1467-9221.2009.00698.x>
- Kruglanski, A. W., & Fishman, S. (2009). Psychological factors in terrorism and counterterrorism: Individual, group, and organizational levels of analysis. *Social Issues and Policy Review*, 3(1), 1–44. <https://doi.org/10.1111/j.1751-2409.2009.01009.x>
- Kruglanski, A. W., 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, 69–93. <http://www.jstor.org/stable/43783789>

- Kurzban, R., & Leary, M. R. (2001). Evolutionary origins of stigmatization: The functions of social exclusion. *Psychological Bulletin*, *127*(2), pp. 187–208.
<https://doi.org/10.1037/0033-2909.127.2.187>
- Lassiter, C. D. (2022). *Buffalo shooting a reminder of what happens when white men get radicalized*. Retrieved May 20, 2022, from
<https://www.inquirer.com/opinion/commentary/buffalo-shooting-violence-prevention-20220516.html>
- Leary, M. R. (1999). Making sense of self-esteem. *Current Directions in Psychological Science*, *8*(1), 32–35. <https://doi.org/10.1111/1467-8721.00008>
- Leary, M. R., Kowalski, R. M., Smith, L., & Phillips, S. (2003). Teasing, rejection, and violence: Case studies of the school shootings. *Aggressive Behavior: Official Journal of the International Society for Research on Aggression*, *29*(3), 202–214.
- Liem, M., & Weggemans, D. (2018) Reintegration Among High-Profile Ex-Offenders. *Journal of Developmental and Life Course Criminology* *4*, 473–490.
<https://doi.org/10.1007/s40865-018-0093-x>
- Lobato, R. M., Moya, M., & Trujillo, H. M. (2020). Minority-versus majority-status group intentions to transgress the law when oppression is perceived. *Analyses of Social Issues and Public Policy*, *20*(1), 397–416.
- Loury, G. C. (2000). *Social exclusion and ethnic groups: The challenge to economics*. Boston University, Institute for Economic Development.
- Lygre, R. B., Eid, J., Larsson, G., & Ranstorp, M. (2011). Terrorism as a process: A critical review of Moghaddam's "Staircase to Terrorism." *Scandinavian Journal of Psychology*, *52*(6), 609–616. <https://doi.org/https://doi.org/10.1111/j.1467-9450.2011.00918.x>
- Major, B., & Eccleston, C. P. (2004). Stigma and social exclusion. In D. Abrams, M. A. Hogg, & J. M. Marques (Eds.) *Social psychology of inclusion and exclusion* (pp. 81–106). Psychology Press.
- Maner, J. K., DeWall, C. N., Baumeister, R. F., & Schaller, M. (2007). Does social exclusion motivate interpersonal reconnection? Resolving the "porcupine problem." *Journal of Personality and Social Psychology*, *92*(1), 42.
- McCauley, C., & Moskaleiko, S. (2008). Mechanisms of political radicalization: Pathways toward terrorism. *Terrorism and Political Violence*, *20*(3), 415–433.
<https://doi.org/10.1080/09546550802073367>
- McCauley, C., & Moskaleiko, S. (2017). Understanding political radicalization: The two-pyramids model. *American Psychologist*, *72*(3), 205–216.
<https://doi.org/10.1037/amp0000062>
- Milla, M. N., Yustisia, W., Shadiqi, M. A., & Arifin, H. H. (2022). Mechanisms of 3N model on radicalization: testing the mediation by group identity and ideology of the relationship between need for significance and violent extremism. *Studies in Conflict & Terrorism*, 1-15.
- Moghaddam, F. M. (2005). The staircase to terrorism: A psychological exploration. *American Psychologist*, *60*(2), 161.
- Moskaleiko, S., & McCauley, C. (2009). Measuring political mobilization: The distinction between activism and radicalism. *Terrorism and political violence*, *21*(2), 239-260.
- Obaidi, M., Bergh, R., Akrami, N., & Dovidio, J. (2020). *The Personality of Extremists: Examining Violent and Non-Violent Defense of Muslims*.
<https://doi.org/10.31234/OSF.IO/KRY38>

- Ouwerkerk, J. W., Kerr, N. L., Gallucci, M., & Van Lange, P. A. M. (2005). Avoiding the Social Death Penalty: Ostracism and Cooperation in Social Dilemmas. In K. D. Williams, J. P. Forgas, & W. von Hippel (Eds.) *The social outcast: Ostracism, social exclusion, rejection, and bullying* (pp. 321–332). Psychology Press.
- Oxman-Martinez, J., Rummens, A. J., Moreau, J., Choi, Y. R., Beiser, M., Ogilvie, L., & Armstrong, R. (2012). Perceived ethnic discrimination and social exclusion: newcomer immigrant children in Canada. *American Journal of Orthopsychiatry*, 82(3), 376.
- Pereira, A. (2019). The restorative power of wounded healers in the (de) radicalisation context. *International Institute for Restorative Practices Europe Conference “Community Wellbeing and Resilience”*.
- Pickett, C. L., & Gardner, W. L. (2005). The Social Monitoring System: Enhanced Sensitivity to Social Cues as an Adaptive Response to Social Exclusion. In K. D. Williams, J. P. Forgas, & W. von Hippel (Eds.) *The social outcast: Ostracism, social exclusion, rejection, and bullying* (pp. 213–226). Psychology Press.
- Reicher, S. (1996). Social identity and social change: Rethinking the context of social psychology. In W. P. Robinson (Ed.), *Social groups and identities: Developing the legacy of Henri Tajfel* (pp. 317–336). Oxford: Butterworth-Heinemann.
- Riva, P., Williams, K. D., Torstrick, A. M., & Montali, L. (2014). Orders to Shoot (a Camera): Effects of Ostracism on Obedience. *The Journal of Social Psychology*, 154(3), 208–216. <https://doi.org/10.1080/00224545.2014.883354>
- Romero-Canyas, R., Downey, G., Berenson, K., Ayduk, O., & Kang, N. J. (2010). Rejection sensitivity and the rejection–hostility link in romantic relationships. *Journal of Personality*, 78(1), 119–148.
- Scheepers, D., Spears, R., Doosje, B., & Manstead, A. S. R. (2006). Diversity in in-group bias: Structural factors, situational features, and social functions. *Journal of Personality and Social Psychology*, 90(6), 944–960. <https://doi.org/10.1037/0022-3514.90.6.944>
- Schumpe, B. M., Bélanger, J. J., Moyano, M., & Nisa, C. F. (2020). The role of sensation seeking in political violence: An extension of the Significance Quest Theory. *Journal of Personality and Social Psychology*, 118(4), 743–761. <https://doi.org/10.1037/pspp0000223>
- Schwartz, S. J., Dunkel, C. S., & Waterman, A. S. (2009). Terrorism: An Identity Theory Perspective. *Studies in Conflict & Terrorism*, 32(6), 537–559. <https://doi.org/10.1080/10576100902888453>
- Shaw, M., Dorling, D., & Smith, G. D. (1999). Poverty, social exclusion, and minorities. *Social Determinants of Health*, 2, 196–223.
- Silke, A. (2008). Holy warriors: Exploring the psychological processes of jihadi radicalization. *European Journal of Criminology*, 5(1), 99–123.
- Simon, B., & Grabow, O. (2010). The politicization of migrants: Further evidence that politicized collective identity is a dual identity. *Political Psychology*, 31(5), 717–738.
- Simon, B., & Ruhs, D. (2008). Identity and politicization among Turkish migrants in Germany: The role of dual identification. *Journal of Personality and Social Psychology*, 95(6), 1354.

- Smart Richman, L., & Leary, M. R. (2009). Reactions to discrimination, stigmatization, ostracism, and other forms of interpersonal rejection: A multimotive model. In *Psychological Review*, 116 (2), 365–383. <https://doi.org/10.1037/a0015250>
- Smith, A., & Williams, K. D. (2004). R U There? Ostracism by Cell Phone Text Messages. *Group Dynamics: Theory, Research, and Practice*, 8(4), 291–301. <https://doi.org/10.1037/1089-2699.8.4.291>
- Spears, R., Jetten, J., & Doosje, B. (2001). The (il)legitimacy of ingroup bias: From social reality to social resistance. In J. T. Jost & B. Major (Eds.), *The psychology of legitimacy: Emerging perspectives on ideology, justice, and intergroup relations* (pp. 332–362). Cambridge University Press.
- Stephan, W. G., Ybarra, O., & Morrison, K. R. (2009). Intergroup threat theory. In T. D. Nelson (Ed.), *Handbook of prejudice, stereotyping, and discrimination* (pp. 43–59). Psychology Press.
- Stürmer, S., & Simon, B. (2004). The role of collective identification in social movement participation: A panel study in the context of the German gay movement. *Personality and Social Psychology Bulletin*, 30(3), 263–277.
- Stürmer, S., & Simon, B. (2009). Pathways to Collective Protest: Calculation, Identification, or Emotion? A Critical Analysis of the Role of Group-Based Anger in Social Movement Participation. *Journal of Social Issues*, 65(4), 681–705. <https://doi.org/10.1111/J.1540-4560.2009.01620.X>
- Swann Jr, W. B., Gómez, A., Seyle, D. C., Morales, J., & Huici, C. (2009). Identity fusion: the interplay of personal and social identities in extreme group behavior. *Journal of Personality and Social Psychology*, 96(5), 995.
- Tajfel, H., & Turner, J. C. (2004). The Social Identity Theory of Intergroup Behavior. In J. T. Jost & J. Sidanius (Eds.), *Political psychology: Key readings* (pp. 276–293). Psychology Press. <https://doi.org/10.4324/9780203505984-16>
- Tajfel, H., & Turner, J. C. (1979). An Integrative Theory of Intergroup Conflict. In W. G. Austin, & S. Worchel (Eds.), *The Social Psychology of Intergroup Relations* (pp. 33–47). Monterey, CA: Brooks/Cole.
- Thomas, E. F., Mavor, K. I., & McGarty, C. (2012). Social identities facilitate and encapsulate action-relevant constructs: A test of the social identity model of collective action. *Group Processes and Intergroup Relations*, 15(1), 75–88. <https://doi.org/10.1177/1368430211413619>
- Thomas, E. F., McGarty, C., & Mavor, K. I. (2009). Aligning identities, emotions, and beliefs to create commitment to sustainable social and political action. *Personality and Social Psychology Review*, 13(3), 194–218.
- Thompson, A. J., & Pickett, J. T. (2020). Are Relational Inferences from Crowdsourced and Opt-in Samples Generalizable? Comparing Criminal Justice Attitudes in the GSS and Five Online Samples. *Journal of Quantitative Criminology*, 36(4), 907–932. <https://doi.org/10.1007/S10940-019-09436-7/METRICS>
- Tropp, L. R., & Brown, A. C. (2004). What benefits the group can also benefit the individual: Group-enhancing and individual-enhancing motives for collective action. *Group Processes & Intergroup Relations*, 7(3), 267–282.
- Turner, J. C. & Brown, R. (1978). Social status, cognitive alternatives, and intergroup relations. In H. Tajfel (Ed.), *Differentiation between social groups: Studies in the social psychology of intergroup relations* (pp. 202–234). New York, NY: Academic Press.

- Twenge, J. M. (2000). The age of anxiety? The birth cohort change in anxiety and neuroticism, 1952–1993. *Journal of Personality and Social Psychology*, 79(6), 1007.
- Twenge, J. M., Baumeister, R. F., Tice, D. M., & Stucke, T. S. (2001). If you can't join them, beat them: Effects of social exclusion on aggressive behavior. *Journal of Personality and Social Psychology*, 81 (6), 1058–1069. <https://doi.org/10.1037/0022-3514.81.6.1058>
- van Beest, I., & Williams, K. D. (2006). When inclusion costs and ostracism pays, ostracism still hurts. *Journal of Personality and Social Psychology*, 91 (5), 918–928. <https://doi.org/10.1037/0022-3514.91.5.918>
- Van Beest, I., Williams, K. D., & Van Dijk, E. (2011). Cyberbomb: Effects of being ostracized from a death game. *Group Processes & Intergroup Relations*, 14(4), 581–596.
- van Stekelenburg, J., & Klandermans, B. (2013). The social psychology of protest. *Current Sociology*, 61(5–6), 886–905. <https://doi.org/10.1177/0011392113479314>
- van Zomeren, M., Postmes, T., & Spears, R. (2008). Toward an integrative social identity model of collective action: a quantitative research synthesis of three socio-psychological perspectives. *Psychological Bulletin*, 134(4), 504.
- Verkuyten, M., & Yildiz, A. A. (2007). National (dis) identification and ethnic and religious identity: A study among Turkish-Dutch Muslims. *Personality and Social Psychology Bulletin*, 33(10), 1448–1462.
- Warburton, W. A., Williams, K. D., & Cairns, D. R. (2006). When ostracism leads to aggression: The moderating effects of control deprivation. *Journal of Experimental Social Psychology*, 42(2), 213–220. <https://doi.org/https://doi.org/10.1016/j.jesp.2005.03.005>
- Webber, D., Babush, M., Schori-Eyal, N., Vazeou-Nieuwenhuis, A., Hettiarachchi, M., Bélanger, J. J., Moyano, M., Trujillo, H. M., Gunaratna, R., & Kruglanski, A. W. (2018). The road to extremism: Field and experimental evidence that significance loss-induced need for closure fosters radicalization. *Journal of Personality and Social Psychology*, 114(2), 270.
- Wesselmann, E. D., Butler, F. A., Williams, K. D., & Pickett, C. L. (2010). Adding injury to insult: Unexpected rejection leads to more aggressive responses. *Aggressive Behavior*, 36(4), 232–237.
- Wesselmann, E. D., Nairne, J. S., & Williams, K. D. (2012). An evolutionary social psychological approach to studying the effects of ostracism. *Journal of Social, Evolutionary, and Cultural Psychology*, 6(3), 309–328. <https://doi.org/10.1037/h0099249>
- Wildan, M. (2022). Countering Violent Extremism in Indonesia: The Role of Former Terrorists and Civil Society Organisations. In G. Barton, M. Vergani, & Y. Wahid (Eds) *Countering Violent and Hateful Extremism in Indonesia: Islam, Gender and Civil Society* (pp. 195–214). Springer Singapore. https://doi.org/10.1007/978-981-16-2032-4_9
- Wiley, S., Lawrence, D., Figueroa, J., & Percontino, R. (2013). Rejection-(dis) identification and ethnic political engagement among first-generation Latino immigrants to the United States. *Cultural Diversity and Ethnic Minority Psychology*, 19(3), 310.

- Williams, D. R., Neighbors, H. W., & Jackson, J. S. (2003). Racial/ethnic discrimination and health: Findings from community studies. *American Journal of Public Health, 93*(2), 200–208.
- Williams, K. D. (1997). Social ostracism. In R. M. Kowalski (Ed.), *Aversive interpersonal behaviors* (pp. 133–170). Plenum Press. https://doi.org/10.1007/978-1-4757-9354-3_7
- Williams, K. D. (2001). *Ostracism: The Power of Silence*. Guilford Press.
- Williams, K. D. (2007). Ostracism. *Annual Review of Psychology, 58*, 425–452. <https://doi.org/10.1146/annurev.psych.58.110405.085641>
- Williams, K. D. (2012). Ostracism: The impact of being rendered meaningless. In P. R. Shaver & M. Mikulincer (Eds.), *Meaning, mortality, and choice: The social psychology of existential concerns* (pp. 309–323). American Psychological Association. <https://doi.org/10.1037/13748-017>
- Williams, K. D. (2009). Ostracism: A temporal need-threat model. In M. P. Zanna (Ed.), *Advances in experimental social psychology*, Vol. 41 (pp. 275–314). Elsevier Academic Press. [https://doi.org/https://doi.org/10.1016/S0065-2601\(08\)00406-1](https://doi.org/https://doi.org/10.1016/S0065-2601(08)00406-1)
- Williams, K. D., Cheung, C. K. T., & Choi, W. (2000). Cyberostracism: Effects of being ignored over the Internet. *Journal of Personality and Social Psychology, 79* (5), 748–762. <https://doi.org/10.1037/0022-3514.79.5.748>
- Williams, K. D., Govan, C. L., Croker, V., Tynan, D., Cruickshank, M., & Lam, A. (2002). Investigations into differences between social- and cyberostracism. *Group Dynamics: Theory, Research, and Practice, 6*(1), 65–77. <https://doi.org/10.1037/1089-2699.6.1.65>
- Williams, K. D., & Sommer, K. L. (1997). Social ostracism by coworkers: Does rejection lead to loafing or compensation? *Personality and Social Psychology Bulletin, 23*(7), 693–706. <https://doi.org/10.1177/0146167297237003>
- Williams, K. D., & Zadro, L. (2005). Ostracism: The indiscriminate early detection system. In K. D. Williams, J. P. Forgas, & W. von Hippel (Eds.), *The social outcast: Ostracism, social exclusion, rejection, and bullying* (pp. 19–34). Psychology Press.
- Wirth, J. H., Sacco, D. F., Hugenberg, K., & Williams, K. D. (2010). Eye gaze as relational evaluation: Averted eye gaze leads to feelings of ostracism and relational devaluation. *Personality and Social Psychology Bulletin, 36*(7), 869–882. <https://doi.org/10.1177/0146167210370032>
- Wolf, W., Levordashka, A., Ruff, J. R., Kraaijeveld, S., Lueckmann, J.-M., & Williams, K. D. (2015). Ostracism Online: A social media ostracism paradigm. *Behavior Research Methods, 47*(2), 361–373. <https://doi.org/10.3758/s13428-014-0475-x>
- Wolfowicz, M., Litmanovitz, Y., Weisburd, D., & Hasisi, B. (2019). A Field-Wide Systematic Review and Meta-analysis of Putative Risk and Protective Factors for Radicalization Outcomes. *Journal of Quantitative Criminology, 36*(3), 407–447. <https://doi.org/10.1007/S10940-019-09439-4>
- Wright, J. D. (2015). A Social Identity and Social Power Perspective on Terrorism. *Contemporary Voices: St Andrews Journal of International Relations, 6*(3), 76. <https://doi.org/10.15664/JTR.1184>
- Yustisia, W., Shadiqi, M.A., Milla, M.N. and Muluk, H. (2020), An investigation of an Expanded Encapsulate Model of Social Identity in Collective Action (EMSICA) including perception of threat and intergroup contact to understand support for

- Islamist terrorism in Indonesia. *Asian Journal of Social Psychology*, 23, 29-41. <https://doi.org/10.1111/ajsp.12372>
- Zadro, L., Boland, C., & Richardson, R. (2006). How long does it last? The persistence of the effects of ostracism in the socially anxious. *Journal of Experimental Social Psychology*, 42(5), 692–697. <https://doi.org/10.1016/j.jesp.2005.10.007>
- Zadro, L., Forgas, J. P., Kruglanski, A., & Williams, K. D. (2011). Silent rage: When being excluded and ignored leads to acts of aggression, vengeance, and/or self-harm. *Social Conflict and Aggression*, 201–216.
- Zadro, L., Williams, K. D., & Richardson, R. (2004). How low can you go? Ostracism by a computer is sufficient to lower self-reported levels of belonging, control, self-esteem, and meaningful existence. *Journal of Experimental Social Psychology*, 40(4), 560–567. <https://doi.org/https://doi.org/10.1016/j.jesp.2003.11.006>
- Zadro, L., Williams, K. D., & Richardson, R. (2005). Riding the ‘O’ Train: Comparing the Effects of Ostracism and Verbal Dispute on Targets and Sources. *Group Processes & Intergroup Relations*, 8(2), 125–143. <https://doi.org/10.1177/1368430205051062>

Appendices

Appendix A



We are the British National Alliance! (BNA)

We are a group who put the future of the British people first. Immigrants are a massive threat to the future of the UK, but yet little seems to be done to protect us from this threat. Immigrants cost us money and pose a serious threat to our national security. They take our jobs, our children's places in school, and threaten the future of our great country.

We at the Great British Alliance have decided that enough is enough. We propose the immediate stop of immigrants and refugees arriving from abroad. They threaten our culture and weaken our national security towards terrorism and other extremist threats. We believe any immigrants found in the UK illegally should also be deported immediately. We want to ensure the immediate closure of our borders, and put in place border patrols to proactively prevent the entrance of any immigrants. With these controls put into place, we can make Britain a stronger, safer nation once again.

We will take a similar stance as our counterparts across the globe, who arrange protests, demonstrations and occupations in response to the ongoing immigration crisis. Several of these events may have made the headlines recently due to the vandalism and violence that occurred. However, we believe that this does nothing to diminish the value of these movements, but rather highlights the passion that the members have with regard to their cause. A passion we at the Great British Alliance share!

Since we are a relatively new group, we are trying to get new members and get an understanding of how people think about this subject, and what kind of actions appeal to new members. Please take a few minutes to answer these questions and help us to make Britain strong once more.

Appendix B



We are the British Solidarity Movement! (BSM)

In recent years, right-wing rhetoric and hostility has created an atmosphere of fear and alienation in the UK. Hatred towards immigrants has become common place. We feel an integral responsibility to help and support immigrants and refugees arriving in the UK and feel they only benefit the future of our nation, not hinder it. We are committed to changing the narrative on immigration - immigrants are exactly what once made the UK so great. We should not turn them away.

We at the British Solidarity Movement have decided that enough is enough. We want to ensure the immediate movement towards a society where we move away from hate and xenophobia and focus instead on making the UK a haven for all to prosper. We want to make it possible for all those in need to get help from the state when they need it, including those arriving from overseas. We are focused on solidarity and care and want to promote a society where all feel welcome. Without this, our great country will not progress.

We will take a similar stance as our counterparts across the globe, who arrange protests, demonstrations and occupations in response to calling for countries to do more to combat inequality and also proactively help with the ongoing refugee crisis. Several of these events may have made the headlines recently due to the vandalism and violence that occurred. However, we believe that this does nothing to diminish the value of these movements, but rather highlights the passion that the members have with regard to their cause. A passion we at the British Solidarity Movement share!

Since we are a relatively new group, we are trying to get new members and get an understanding of how people think on this subject and what kind of actions appeal to new members. So, please take a few minutes to answer our questions and help us make the future of the UK brighter for everyone!

Appendix C

Student protest against tuition fees leads to violence

Protesters smashed windows and climbed onto the roof of the Conservative Party headquarters, while an estimated 50,000 people took part in the protests.

[Paul Lewis](#), Jeevan Vasagar, Rachel Williams and Matthew Taylor

Protesters smashed windows and waved anarchist flags from the roof of the building that houses the Conservative party (Tories) headquarters when parts of the large demonstration against cuts to university culminated in violence.



The scale on the London demonstration defied all expectations, with an estimated 50,000 people who showed up to take out their aggression on the government's plans to raise tuition fees while cutting down on state subsidies for university education.

The demonstrators who separated from the main demonstration group occupied the lobby of the building at 30 Millbank, in central London, where police wielding batons clashed with a crowd that threw parts of placards, eggs and bottles.

Activists who had masked their faces with scarves exchanged punches with police to the cries of "Tory scum". The corporate news helicopter cameras and protesters' mobile phones recorded the exchange.

Police reported that at least eight people, "a mix of police officers and demonstrators," had been injured, while several had been arrested. Riot police are

believed to have been inside the Millbank tower and tried to restore order.

Today's big demonstration was organized by the [European Student Union/International Student Union] (EUS/IUS)¹. [EUS/IUS] in response to the government's plans to raise tuition fees as high as 9000 pounds while simultaneously facing 40% cuts to university teaching budgets.

The higher fees will be introduced for students on undergraduate courses from 2012 if the proposal is accepted in the English parliament with a vote to be held before Christmas. [EUS / IUS] chairman has said that the demonstration was the biggest student demonstration for generations, and have told protesters that "We are in a fight for our lives ... we are facing an unprecedented attack on our future before it has even begun. "

"They advocate barbaric cuts that would brutalise our colleges and universities. This "miserable vision will be fought" he said, and appealed to the students to continue their demonstration and added:" This is just the beginning the resistance starts here ". This demonstration paves the way for other reactions of [EUS/IUS] to combat the introduction or increase of tuition fees in other EU member states.

A representative of [EUS/IUS] in Sweden has ruled on the matter, "The fact that our education is currently free in Sweden represents everything we stand for; we want equal opportunities for all in Sweden. The introduction of tuition fees restricts access to equal education and will have an adverse influence on our education. We will oppose the introduction of tuition fees. "

The same thing happens all over Europe with [EUS/IUS] currently planning protests in Spain, Germany and the Czech Republic.

The rise in tuition fees and the introduction of fees in countries that were previously exempt from them is a sign of the tough economic climate that the euro zone is currently going through. A widespread increase in unemployment, and higher inflation results in the countries must take massive action. The question is what the cost of these measures will be for the youth of today?

^{1 1} This was changed depending on the group: International for included or European for excluded

Appendix D

We are Future Remains in the EU!

We are a grassroots movement that is coming together to fight the UK leaving the EU. As a group we feel that leaving the EU is solely negative and feel that we should do our utmost to prevent this devastating decision from being carried out. We feel that the vote was not democratic and a second referendum should be carried out without the lies and false information presented to the public. For us stopping Brexit is the ultimate goal and we will use all means necessary.

Since we are a relatively new group, we are trying to get new members and get an understanding of how people think on this subject and what kind of actions appeal to new members. So, please take a few minutes to answer our questions and help us make the future of the UK brighter as for us the Future Remains in the EU!

Appendix E



Pro-Life for America

We are Pro-Life for America!

We are a grassroots movement that is coming together to fight against increasing abortion rights! As a group we feel that increasing access to abortions is solely negative and feel that we should do our utmost to fight such devastating decisions from being carried out. For us taking control in protecting the lives of the unborn is the ultimate goal and we will use all means necessary.

Since we are a relatively new group, we are trying to get new members and get an understanding of how people think on this subject and what kind of actions appeal to new members. So, please take a few minutes to answer our questions and help us find the right way to ensure the lives of the unborn!



Pro-Choice for America

We are Pro-Choice for America!

We are a grassroots movement that is coming together to fight the increasing restrictions on women's abortion rights! As a group we feel that leaving the restricting access to abortions is solely negative and feel that we should do our utmost to prevent this devastating decision from being carried out. For us taking control of reproductive rights and the Women's choice is the ultimate goal and we will use all means necessary.

Since we are a relatively new group, we are trying to get new members and get an understanding of how people think on this subject and what kind of actions appeal to new members. So, please take a few minutes to answer our questions and help us find the right way to ensure women's rights to reproductive choices!



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