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How social exclusion makes radicalism flourish: A review of empirical evidence

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Abstract

In recent years, researchers of various disciplines have developed many theories to understand the radicalization process. One key factor that may promote radicalization is social exclusion, the state of being kept apart from others. Indeed, experimental studies have provided initial evidence for a relation between exclusion and radicalism. The current review outlines and builds upon these research programs, arguing that social exclusion has been shown (a) to increase the willingness to fight-and-die, (b) to promote the approval for extreme, even violent, political parties and actions, and (c) to push the willingness to engage in illegal and violent action for a political cause. We close with an agenda for future research and critically discuss implications of this work for social policy.

INTRODUCTION

The storming of the U.S. Capitol on January 6, 2021, led to the evacuation of the building, extensive property damage, and five deaths. Security experts and politicians assessed this incident as a terrorist attack. This is the first time in US history that the peaceful transfer of presidential power, a cornerstone of democracy, was disrupted. As the global community reacted to this event, many questioned what factors brought about this violent insurrection. Interestingly, court records indicated that the majority of the rioters were not part of an extremist group. However, several riot-

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ers' testimony suggested that the traumatic and financial stressors of a global pandemic, which resulted in record numbers of unemployment and several hundreds of thousands of people dead, increased their feelings of social and economic isolation and motivated their extreme behavior (see also Graupmann & Pfundmair, 2022; Hales et al., 2021). The current review focuses on this perspective. We first consider the phenomenon of radicalism broadly, and then review research documenting its connection to social exclusion. Finally, we map priorities for future research and outline a set of policy considerations in light of the existing research.

Radicalization and radicalism

Terrorism, the term used to describe acts of violence that aim to achieve behavioral change and political objectives by creating fear in larger populations (Doosje et al., 2016), has existed throughout much of modern history. Modern terrorism evolved from the anarchists in the late 19th century, into anti-colonial and then leftist terror, and became particularly visible with the 9/11 attacks committed by religious fundamentalists (Rapoport, 2004). Many people who become terrorists, particularly those in the Western world, undergo a radicalization process that involves the gradual adoption of an extremist worldview that legitimizes the use of violence to reach their goals (Porter & Kebell, 2011). Although related, the concept of radicalization is distinct from that of radicalism: Whereas radicalization is a process, radicalism is a structure (Edgell & Duke, 1986) that involves a readiness to engage in illegal and violent political action (Moskalenko & McCauley, 2009). Importantly, radical beliefs can inspire radical action but there is no “conveyor belt” that inevitably leads people from radical beliefs to radical actions (McCauley & Moskalenko, 2017); it is quite possible—and indeed common—for people to hold radical beliefs without engaging in radical actions.

Because an important part of radicalization is the desire to reach a specific goal, radical groups can be differentiated according to their main concerns: Extreme right-wing groups (e.g., the Ku Klux Klan) want to safe-guard the high status position of the “White race”; extreme left-wing groups (e.g., the Red Army Faction) want a more equal distribution of wealth; religiously motivated groups (e.g., the Islamic State) want to impose a strict interpretation of their religion; nationalistic groups (e.g., the Irish Republican Army) want to secure a territory; and single issue groups (e.g., the Animal Liberation Front) want one particular goal (e.g., animal protection) to be achieved (Doosje et al., 2016). Members of these radical groups differ in some ways. For example, women are more involved in left-wing groups than in right-wing and religiously motivated groups, whereas the latter show more signs of mental illness (Chermak & Gruenewald, 2015). Despite these differences, radical groups share common elements, from perceiving serious problems in society to embracing an ideology that legitimizes violence to address their concerns (Doosje et al., 2016). Furthermore, to understand the process of radicalization, it may be more informative to know *how* radicalization happens rather than *who* radicalizes (Horgan, 2008).

Researchers have developed a large number of theories and models to understand the psychological dynamics of the radicalization process (e.g., Doosje et al., 2016; Hafez & Mullins, 2015; Silber & Bhatt, 2007). A first milestone in this regard was the Staircase to Terrorism Model (Moghaddam, 2005). This theoretical model conceived the radicalization process as a staircase of six floors. These include perceptions of injustice and feelings of frustration, perceived options to fight unfair treatments, displacement of aggression to the perpetrators of injustice, moral engagement that justifies terrorism, a solidification of categorial thinking, and, finally, the terrorist act in which inhibitory mechanisms are sidestepped. A second important theory, which integrated

empirical findings, centered on the quest for significance (Kruglanski et al., 2014). It suggested three major ingredients for the radicalization process to unfold: the activation of the significance quest (e.g., by a loss of significance or humiliation), a belief system identifying the means to this goal (i.e., a terrorism-justifying ideology), and social processes (i.e., networks in which group dynamics take place) as vehicles to terrorism. One recent study combined previous findings on radicalization into a new model and tested it using a case study method in an Islamist sample (Pfundmair et al., 2022). This model suggested that individual preconditions lay the groundwork for a gradual increase of individual processes (e.g., the psychological needs for significance and control), group processes (e.g., polarization and perceived group threat), and cognitive processes (e.g., desensitization and dehumanization) that result in violent attitudes, intentions, and ultimately, actions. The individual preconditions that promoted such processes included different biographical breaking points. Interestingly, one of those was social exclusion—being kept apart from others physically or emotionally (Riva & Eck, 2016).

This is consistent with the conclusions of experts on terrorism from other disciplines, such as political scientists, who argue that exclusion, or at least perceptions of exclusion, might be one condition that allows terrorism to flourish (e.g., Weight-Neville & Halafoff, 2010). Indeed, social exclusion is an event that has often been identified in the life of terrorists. For example, Anders Breivik, a right-wing terrorist who killed 77 people in Norway in 2011, was described as chronically excluded: “Whatever he tried in his life, he got rejected, rejected, rejected” (Graf, 2016, p. 1). For Foued Mohamed-Aggad—an Islamist terrorist who, together with two others, killed 90 people in Paris in 2015—rejection by the army and police was an important event in his life (Hughes, 2015). Based on these observations, the question arises what impact such exclusion experiences have on those who experience it.

Ostracism: A special type of social exclusion

Social exclusion can be split into two broad categories: rejection (social exclusion that involves negative attention) and ostracism (social exclusion that involves a lack of attention; Wesselmann et al., 2016).¹ Both forms, but especially ostracism, are accompanied by tremendous psychological stress. According to the temporal need-threat model (Williams, 2009), ostracism is first reflexively felt both as pain and experiences of threat to four fundamental needs: belonging, self-esteem, control, and meaningful existence. In a subsequent reflective stage, ostracized individuals try to understand the meaning and relevance of this experience, and consider ways to fortify the threatened needs. If people are exposed to ostracism chronically, they may even experience alienation, depression, helplessness, and unworthiness (Riva et al., 2017; Williams, 2009).

The need-threat model has been supported by a plethora of empirical work. For example, in response to ostracism, people exhibit neural responses similar to those of physical pain (Eisenberger et al., 2003). Further, people experience need threat from ostracism even in situations that seem counterintuitive. For example, participants felt deprived in their needs for belonging, self-esteem, control, and meaningful existence even when they were ostracized by a despised out-group (Fayant et al., 2014; Gonsalkorale & Williams, 2007) or a computer program (Zadro et al., 2004). People can even experience the adverse effects of ostracism simply by watching it happen to someone else (Poon et al., 2020; Wesselmann et al., 2009). Various forms of social exclusion also have been shown to decrease some forms of cognitive performance such as effortful logic and

¹ In the present text, we are using the terms exclusion, ostracism and rejection in accordance with these definitions.

reasoning (Baumeister et al., 2002), and lead to distorted time perception (Twenge et al., 2003), and an increase in vulnerability to persuasive messages regardless of argument quality (Pfundmair et al., 2017). Moreover, research has shown that, on a behavioral level, ostracized individuals are motivated to engage both in prosocial behaviors like compliance, conformity, and obedience (Carter-Sowell et al., 2008; DeWall, 2010; Riva et al., 2014) and antisocial ones (e.g., targeting others with aversive noise or allocating unpleasant hot sauce to them; Twenge et al., 2001; Warburton et al., 2006). Data suggest that chronic ostracism and other forms of exclusion may even play a role in extreme antisocial behaviors such as mass shootings (Kowalski et al., 2021; Leary et al., 2003).

Why should people become vulnerable to radicalism in the face of social exclusion and specifically ostracism? Ostracized individuals are motivated to fortify their needs; in this context, they are more prone to social influence tactics targeted towards satisfying these needs (Knapton, 2014). On the other hand, both personal deprivation in the form of threatened needs and receptiveness to social influence are known as driving forces of radicalism (e.g., Doosje et al., 2016). Thus, consequences of ostracism overlap with motivations for radicalism, supporting why a link appears plausible. Indeed, experimental studies have provided initial evidence for this phenomenon.

The relation between exclusion and the willingness to fight-and-die

Research from multiple laboratories demonstrated that experimentally induced exclusion elicited extreme reactions that resemble a component of radicalism: a willingness to fight-and-die for a group or ideology. Specifically, one study examined the connection between exclusion and such willingness by informing participants that they would have the opportunity to be included in an online chat session with other students (Gómez et al., 2011). To induce feelings of exclusion, participants were informed that all the other students had rejected them as a future chat partner. Different experiments varied the reason for this act of rejection: it was either due to the participants' nationality or personal preferences, or participants were rejected because they outperformed the others. The rejecters were either members of the outgroup or of the ingroup. In people who were fused with a group identity (i.e., their personal self was merged with a social self), rejection, irrespective of its reason, increased the endorsement of extreme, pro-group actions including fight-and-die behaviors.

A similar pattern emerged in another set of studies (Pfundmair & Wetherell, 2019): Participants engaged in the Cyberball task (Williams & Jarvis, 2006) in which they were asked to play a virtual ball tossing game between themselves and two other players who were said to be other participants but were actually computerized. To manipulate ostracism, participants received the ball twice at the beginning of this game but then never again. When ostracized, participants who were high in need to belong had an increased impression that their own group is particularly high in moral values. Importantly, this moralization translated into endorsement of fight-and-die behaviors.

In another study (Pretus et al., 2018), researchers investigated a sample that is particularly vulnerable to recruitment into violent extremist groups: young men from a European Muslim community who expressed willingness to engage in violence associated with Jihadist causes. This sample was experimentally ostracized by the Cyberball paradigm while brain activity was measured using fMRI. Before and after Cyberball, participants assessed values specific to the Muslim community (e.g., "strict Sharia should be applied to all Muslim lands"). Ostracism increased the meaning of initially non-sacred values—values that people are willing (as opposed to non-willing in the case of sacred values) to give up in exchange for instrumental benefits, such as better

economic conditions for their community. This was reflected in a heightened left inferior frontal activity, a region usually associated with sacred values. Moreover, ostracism made participants report to be more willing to fight and die to defend such values. Overall, the study revealed an ostracism-induced sacralization of values that was associated with a willingness to fight and die for them.

Thus, preliminary work showed that social exclusion can influence specific people to the point that they increase their willingness to engage in violent behaviors on behalf of important others or important causes. Goal-oriented violence is a major part of radicalism. These studies, however, did not provide answers to the question of whether these extreme responses extend to specific political actions.

The relation between exclusion and approval of extreme political actions

Another set of studies provided evidence for a link between exclusion and increased susceptibility to social influence on behalf of extreme political actions. In one study (Knapton et al., 2015), student participants were asked to provide a statement about their beliefs on tuition fees. On the basis of that statement, they were rejected by an organization advocating the implementation of tuition fees. Specifically, the experimenter told them that they could not be a part of the organization because they were incompatible with it. At the same time, they were included by another organization that had carried out acts of vandalism and riots against tuition fees. Rejected participants were especially willing to be politically active against the rejecting organization. This was particularly true for those high in rejection sensitivity—a tendency to anxiously expect, readily perceive, and overreact to rejection (Downey & Feldman, 1996). Interestingly, this effect was driven by inclusionary needs for belonging to the including organization.

Another study (Bäck et al., 2018) showed that this politicization in the aftermath of ostracism was unrelated to the outgroup. In this study, participants played two rounds of Cyberball. While they were ostracized in the first round, they were included by one specific player in the second round. After the game, the inclusive player contacted the participants and asked them to respond to a questionnaire about his group, a radical left-wing organization. Ostracized participants who were high in rejection sensitivity adapted their attitude to the political group's attitude (which emphasized a positive view of immigration) more strongly than those who were low in rejection sensitivity.

In a more recent line of work (Renström et al., 2020), this pattern replicated in a new context. Participants were ostracized using different paradigms. In one set of studies, the Ostracism Online task (Wolf et al., 2015) was used: Participants were made to believe they interacted with other users (who were actually computer-controlled) in a social media environment. They were instructed to create a personal profile to which they only received one “like.” In another study, participants were ostracized using the Cyberball paradigm. After being ostracized, participants got a personalized message. To induce a sense of re-inclusion in the study using the Ostracism Online task, the person who provided the message was that participant who had given them the “like” beforehand; in the study using Cyberball, a sense of re-inclusion was induced in that the person who provided the message signaled a willingness to accept new members for a political group. The person asked participants to take part in a survey about his political group that had a relatively extreme group norm and hosted events that had culminated in violence. Notably, the ideology of the political group was either right-wing or left-wing; only participants who had corresponding attitudes (this was checked in a pre-screening measure) were part of these studies. After

participants were experimentally ostracized, those who were high in rejection sensitivity were prone to identify with the political group and willing to be involved in the form of participating in demonstrations, donating money, and protesting on social media. Interestingly, there was no difference depending on ideology. In a replication of Knapp et al.'s (2015) tuition fees design, results further showed that rejected participants, particularly those high in rejection sensitivity, indicated greater acceptance of the extreme means the tuition-fighting organization had carried out.

These studies showed that exclusion can increase the approval for extreme, even violent, political parties and actions, particularly among those high in rejection sensitivity. This taps into the radicalism concept more directly. However, unanswered to this point is whether people not only support illegal and violent political action but whether they are ready to engage in such actions themselves. Further, in all these studies, participants were given the opportunity for re-inclusion by the available political groups. In the radicalization process, joining a radical group is often identified as a slippery slope into radicalism (McCauley & Moskaleiko, 2008), which is why including this intermediate step (an accepting extremist group showing up after exclusion) appears suitable. Nevertheless, the re-inclusion factor blurs the answer to the question of whether social exclusion increases radicalism or not.

The relation between exclusion and radicalism

Other studies have found more direct support for exclusion to induce a willingness to engage in illegal and violent action. In one study (Hales & Williams, 2018), participants were ostracized in the Cyberball task. After that, they expressed greater willingness to attend a meeting of an activist campus organization that fought for reducing tuition fees using legal, but extreme, means of protest. Moreover, ostracized individuals indicated greater openness toward membership in a gang that engaged in delinquent acts.

Another study (Pfundmair, 2019) observed the relation between ostracism and radicalism, or more specifically, the willingness to engage in illegal and violent action for a political cause. To induce a sense of ostracism, participants completed the Cyberball or the O-Cam paradigm (Goodacre & Zadro, 2010). In the latter, participants were informed that they would take part in a web conference supposedly with two other participants whose actions were in fact pre-recorded. While participants gave a presentation about themselves, these pseudo participants briefly listened to them, but then turned to each other, began having a conversation, and ignored the participants. After ostracism, participants favored extreme options to support a pro-democracy organization, which increased from non-violent means to property damage. Furthermore, ostracized individuals expressed greater willingness to destroy property on behalf of the terrorist organization Animal Liberation Front. Interestingly, this effect was mediated by a deprived need for control. This connection between the thwarted need for control and radicalism is important because researchers have not only theorized that one reason why ostracized people aggress is to re-establish a sense of control (Ren et al., 2018; Warburton et al., 2006) but also one reason why people radicalize is to re-establish a sense of certainty, a type of predictive control (Hogg, 2014).

A final study (Hales & Williams, 2020) used a different approach to identify the reciprocal causal process, asking whether belonging to an extreme group makes one particularly likely to be ostracized. Participants read descriptions of 40 different targets who varied in their personalities and

interests; importantly, each of these targets belonged to a group that employed either moderate or extreme means to pursue an anti- or prosocial cause. Then, they reported how likely it was that they would ignore or exclude the described person. Participants were especially willing to exclude individuals who belonged to a group that engaged in extreme actions (e.g., rising against state and local government to promote a cause). This was the case for groups whose extreme actions were in the service of antisocial causes, and even more so the case for groups whose extreme actions promoted prosocial causes (apparently because promoting an antisocial cause is sufficient to elicit some exclusion, regardless of the means that are used). This suggests the possibility of a negative feedback loop wherein people become more dependent on radical organizations as they are socially excluded by others outside of that group.

The meaning of exclusion in terrorist radicalization

Thus far, the empirical research shows a consistent pattern of exclusion promoting extreme responding that ranges across a spectrum from a violent willingness to fight-and-die, to approval for extreme political actions, and even radicalism. This was found across different operationalizations of exclusion and ideology. Because all of this work is based on experimental approaches, it supports causal conclusions. This is particularly important, because quantitative research on radicalism seems relatively underdeveloped: A recent review has found only 0.6% of articles investigating terrorism uses experimental designs (Schuurman, 2020). It should be noted, however, that the findings reviewed here are laboratory-based and mostly rely on student samples, which allow for controlled settings and meaningful sample sizes but might be somewhat distant from real-world phenomena. Real cases of radicalization are likely to be more complex. To gain a comprehensive picture of such, additional aspects have to be considered.

One may wonder what kinds of social exclusion are experienced most prevalently among radicals. Preliminary studies indicate a highly diverse pattern, with instances of both individual-level ostracism and rejection as well as group marginalization taking place (Pfundmair et al., 2022). Previous research indicates that these different kinds of social exclusion induce different responses. Whereas ostracism leads to promotion-focused responses, including reengagement in social contacts and thoughts about actions one should have taken, rejection rather induces a prevention focus, including withdrawal from social contact and thoughts about actions one should not have taken (Molden et al., 2009). Thus, it might be ostracism rather than rejection that especially motivates individuals to be included in radical groups and take radical action. Group marginalization, in turn, might drive these radical developments even further. This is because group marginalization not only threatens fundamental needs but promotes identification with the marginalized group in which hostile attitudes and behaviors may be more likely (Betts & Hinsz, 2013).

Another important question is what exact role social exclusion might play in the radicalization process. A recent case study (e.g., Pfundmair et al., 2022) showed that instances of social exclusion accumulated more in the beginning of the radicalization process rather than in advanced stages. This indicates that exclusion might provide a cognitive opening to radicals. Notably, however, in the vast majority of cases, radicalization is a product of mutual interrelationships. That is, a number of different factors push and pull people into becoming radicalized (Horgan, 2014). Thus, it appears unlikely that it is social exclusion alone that is driving terrorist radicalization. Instead, it

most likely interacts with other factors. For example, feeling left out might promote the radicalizing effect of other grievances like unemployment or poverty, or set the stage for radical networks (Hafez & Mullins, 2015).

Future research

Past research clearly shows that experimental manipulations of social exclusion can cause an openness to radicalism. In this section, we outline additional proposed avenues of research to better understand the link between social exclusion and radicalism.

Personality and individual differences

One such avenue may investigate individual differences as moderators that can enhance (or diminish) the effect of experiencing exclusion. These individual motivations can play a key role in making extremism seem like an attractive means to achieve psychological goals. As mentioned, research has already identified some characteristics—such as feeling fused to a group, being generally sensitive to rejection, or being high in the need to belong—as important in understanding when exclusion can lead to extremism. More generally, commentators have long been fixated on outlining personality factors that are associated with an affinity for radicalism (Horgan, 2008). A recent systematic review found that dark tetrad traits (particularly psychopathy but also narcissism, Machiavellianism, and sadism) are associated with radicalism (Corner et al., 2021). Authoritarianism and social dominance orientation seem to be linked to intergroup violence (Henry et al., 2005), and a few studies found associations between conscientiousness and extremism (e.g., Bélanger et al., 2014). However, studies examining the link between personality traits and extremism are notably missing in the literature (Corner et al., 2021). It seems likely that certain personality/individual difference predispositions are necessary—but not sufficient—to produce radicalism (in the same way that acute aggressive behaviors are theorized to occur only when a constellation of individual and situational factors converge; Finkel, 2014).

Thus, a key priority for future research is to investigate the trait (personality) by state (exclusion) interaction on radicalism. Key traits may be distally related to ostracism and radicalism (i.e., demographic or broad-personality factors), or conceptually proximal factors, such as general sensitivity to rejection. As mentioned, the latter trait has been linked not only to aggressive responses to rejection (Ayduk et al., 2008; Romero-Canyas et al., 2010) but also ostracism-induced radicalism (Bäck et al., 2018; Knapton et al., 2015; Renström et al., 2020). A further factor that may prepare one to be more susceptible to exclusion-induced extremism is the need for uniqueness (Snyder & Fromkin, 1980). Because extreme groups are—by definition—uncommon, they offer especially high levels of distinctiveness that may be particularly attractive to people who are highly motivated to be unique, distinct, or unusual—especially following moments when they have been overlooked or treated as if they are invisible (i.e., ostracized). Indeed, social identity perspectives outline ways in which groups do not merely threaten the need for distinctiveness (by encompassing the individual), but actually offer distinctiveness (e.g., by being different from other groups, or by allowing individuals to be more normative than other group members; Hornsey & Jetten, 2004). Relatedly, another factor that may enhance susceptibility to extremism following

exclusion are individual differences in sensation and risk seeking. Because extreme behavior can be a thrilling adventure, people high in sensation seeking may be particularly susceptible to the allure of radicalism (Schumpe et al., 2020). Thus, they may see it as an especially appealing way to satisfy their thwarted needs following social exclusion.

Group attributes and dynamics

In addressing the exclusion to radicalism link, research to date has yet to consider the potential role of a *group*—as opposed to individual pursuit of extreme ideology. While we know that experiencing ostracism can lead to greater openness to joining an extreme group (Hales & Williams, 2018) and to commit extreme action on behalf of a group (Pfundmair, 2019), is there something specific about joining an extreme group that helps fortify threatened needs or is simply individually adhering to an extreme ideology enough? Past research suggests that lone actor terrorists are often socially isolated and may have experienced exclusion (Gill et al., 2014). Thus, radicalism might be an extreme form of antisocial behavior, which exclusion can produce, both in individuals (Twenge et al., 2001) and in groups (Van Beest et al., 2012), especially after triggering uncertainty (Williams et al., 2019), loss of control (Warburton et al., 2006), or insignificance (Jasko et al., 2017). On the other hand, there may be general group dynamics that someone seeks after they have been excluded to help satisfy their threatened needs (Williams, 2009). Indeed, extreme groups are especially well equipped to fulfil threatened needs because they are able to provide a sense of self-certainty, inter alia, by a strong homogeneity, clear ideological belief systems, and a hierarchical structure (Hogg & Adelman, 2013). Thus, the individual may also radicalize in order to be accepted. At which point, group processes, instead of individual factors, may then contribute to radicalization, such as identity fusion (Whitehouse et al., 2014). This fits well with observations that radical ideas develop due to intense ingroup love rather than to outgroup hate (Sageman, 2004). Nevertheless, both possibilities (anti- and prosocial motivations) appear plausible in the context of social exclusion, and have been discussed in previous work (Knapton, 2014).

Reason for exclusion

After reviewing the link between exclusion and radicalization, one may also question if the *reason* for exclusion influences the development of extreme beliefs and openness to violent action. Thus, another avenue for future research is to explore if perceptions of the source's motives for excluding the target are relevant. Often, research in this area uses a basic inclusion/exclusion design whereby participants in the exclusion condition are excluded from an activity (e.g., a ball tossing game in Cyberball), but an explanation of why the participant was excluded is usually not provided (e.g., for being Christian, Black, or a woman). On the one hand, this is a conservative test of the hypothesis, suggesting that even an ambiguous experience of exclusion can result in greater radicalism. However, it is important to understand if being excluded as a result of certain specific reasons can enhance this effect. This direction would strengthen the ecological validity of the present literature, as ostracism-based exclusion outside the laboratory is often accompanied by an underlying motivation (e.g., Nezlek et al., 2015). Additionally, being excluded for a specific reason may bond people who have had similar experiences together. If a group or identity appears

to be the basis of exclusion, this experience may provide a commonality for people to commiserate about and in turn polarize the group (e.g., Schaafsma & Williams, 2012).

Desire for revenge

Similarly, desire for revenge after experiencing exclusion may serve straightforwardly as a mechanism to radicalism. Thus, another avenue of research is to investigate if the specificity of the excluder matters. Individuals can feel excluded by society in general or by specific people. These experiences may in turn shape their ideology. For example, subscribers to the involuntary celibate (Incel) movement believe they have been rejected by women and strive to achieve revenge for their perceived victimhood by committing violence against any/all women (Baele et al., 2021), and a linguistic analysis of their online posts suggests they frequently discuss enacting this desired revenge (Jaki et al., 2019). This is exemplified in the case of Elliot Rodger who in 2014 killed six people and injured fourteen because “[he] wanted to make everyone else suffer just as they made [him] suffer. [He] wanted revenge” (Rodger, n.d.).

Related constructs

A final future direction is to explore the effect of constructs that are similar to exclusion, but may differ in important ways. For example, radicalization theories suggest that alienation—the complete absence of social interaction, which appears to be one consequence of chronic ostracism (Riva et al., 2017)—plays a role in violent extremism (e.g., Horgan, 2014). Thus, experiencing both interpersonal exclusion and isolation may be a twofold risk factor and lead to an increase in radicalism, greater than that of isolation or interpersonal exclusion alone. On the other hand, if the two constructs have a joint effect on radicalism and only one is experienced, the other may serve as a protective factor from the negative effects of the other. For example, if someone is excluded by some of their social contacts, yet they continue to spend time with others, they may not radicalize because the time spent with other people protects them from some of the negative consequences of exclusion. Indeed, social support can be highly protective against feelings of resignation, as indicated in a recent study with prisoners (Aureli et al., 2020). This relationship may be further parsed out by differentiating between actual isolation (i.e., a small social network and spending a lot of time alone) and perceived isolation (i.e., loneliness or the subjective feeling of being disconnected from others). Scholars suggest that actual isolation and perceived isolation should be treated as separate constructs (Coyle & Dugan, 2012), and debate which is more imperative to study. After experiencing exclusion, is it one’s perception of alienation or actual experience of it that may exacerbate the need threat that follows exclusion and the resulting extremism in order to curb this threat?

Implications for social policy

The theoretical and empirical research reviewed here suggests three possible points of intervention to help curb radicalism and, subsequently, its negative effects.

Reducing exclusion

First, given that exclusion can lead to radicalism, efforts could be aimed at reducing ostracism in the first place. This may be difficult, because exclusion itself is quite common. A majority of Americans reported having used or experienced the “silent treatment” (a colloquial term for ostracism) with a loved one (Faulkner et al., 1997), and ostracism has been documented across cultures and even across species (Gruter & Masters, 1986; Lancaster, 1986). Further, daily diary research indicates that it is typical for some people to feel ostracized on a near-daily basis (Nezlek et al., 2015). It is unlikely that ostracism would be so ubiquitous if it did not serve some function. According to Hales et al. (2017), ostracism can be understood as serving three broad purposes: 1) to protect groups from dangerous or exploitative individuals, 2) to motivate targets to correct behavior that is seen as problematic to the group, and 3) to ultimately eject individuals who prove resistant to correcting their behavior. Indeed, studies show that people do not apply ostracism randomly. Instead, ostracism is more likely directed towards others who present difficulties such as being burdensome to a group (Wesselmann, Ren, et al., 2013), careless at work (Rudert et al., 2021), or disagreeable in social contexts (Hales, Kassner, et al., 2016). Further, people who forgo interacting with difficult others may avoid exhausting limited psychological resources (Sommer & Yoon, 2013).

Of course, the observation that ostracism or other forms of social exclusion are sometimes functional does not mean that they are *always* functional, and people do seem to systematically underestimate the toll these experiences take on targets (Nordgren et al., 2011). So, it is important to understand factors that reduce people's use of social exclusion. One such factor appears to be mindfulness. For example, studies demonstrate that individuals who tend to be aware and accepting of their experiences engage in less ostracism (Jones et al., 2019), and experimentally-induced mindfulness can decrease the use of ostracism (Ramsey & Jones, 2015). Because mindfulness appears to operate by making people more attentive of others (Jones et al., 2019), it is likely best suited for addressing instances of ostracism that are motivated by obliviousness (Williams, 1997). A priority for future research should be identifying and developing interventions aimed at reducing the use of social exclusion motivated either by a desire to punish others or a desire to protect oneself or fit in with others who are excluding.

However, mindfulness is not the only way to reduce individuals' tendency to treat others negatively, and systematic literature reviews have highlighted areas for needed improvement which should give researchers pause in assuming mindfulness is a cure-all for interpersonal conflict (Fix & Fix, 2013; Gillions et al., 2019). Further, mindfulness-relevant research is most relevant at the interpersonal level. However, there are various ways that individuals may feel excluded, especially if they are members of marginalized social groups. For example, politicians have engineered national policies that excluded, either implicitly or explicitly, specific social groups (e.g., blanket bans on migration from predominately Muslim countries). Data suggest these policies likely contribute to members of targeted groups experiencing negative psychological outcomes similar to ostracism (Rudert et al., 2017).

Further, simply avoiding exclusionary policies is not sufficient. It behooves groups to actively set an organizational culture of inclusion by making clear statements condemning discrimination and other forms of social exclusion. Research in workplace organizations has found that employees who perceive support from their organization regarding anti-mistreatment policies report better psychological outcomes than employees who do not receive such explicit support (Yang et al., 2014). As such, it is likely that perceived support works on broader levels as well, such as

when the US legislative branch passed legislation condemning hate crimes against the US-based Asian and Pacific Islander community in 2021 (in response to a steady increase in crimes against that community during 2020). Indeed, this connects to historian Ibram X. Kendi's (2019) argument that one has to be actively engaged in combating discriminatory systems (e.g., racism), especially at the policy level (i.e., being *anti-racist* rather than just passively being *non-racist* simply by refusing to be discriminatory).

Disrupting the link between exclusion and radicalism

Second, given the frequency of various forms of exclusion in daily life, policy efforts should also be aimed at disrupting the link between exclusion and radicalism. Here again, mindfulness could be a promising strategy, with research showing that it can help people more quickly recover their basic needs following ostracism (Molet et al., 2013). Similar improvements have been documented for behaviors such as self-affirmation or prayer—particularly for those who are highly religious/committed to God (Hales, Wesselmann, et al., 2016). Also, simple distraction appears beneficial, as it disrupts the harmful rumination that typically follows ostracism (Wesselmann, Wirth, et al., 2013). Even social surrogates such as photos of loved ones (Gardner et al., 2005), comfort food (Troisi & Gabriel, 2011), and small social gadgets (Pfundmair et al., 2015) can help to cope with social pain induced by various forms of social exclusion. These strategies all have the benefit of being easy to implement, and generally within the control of the excluded individual (i.e., they do not depend on the sources of exclusion having a change of heart and behaving more inclusively). However, as of yet, the potential for these behaviors to disrupt the connection between exclusion and radicalism specifically has not been documented.

Deradicalization

Third, given that many individuals have already become radicalized, efforts could be aimed at deradicalizing those who have become committed to extremist ideologies. Deradicalization programs worldwide stress the importance of three cornerstones: reappraisal of ideological interpretations, support in life challenges (like educational or occupational issues), and strengthening of emotional structures and networks—or in other words—re-inclusion (Rabasa et al., 2010). Interestingly, the approach to restore feelings of inclusion to oppose radicalism is not new: In historical approaches of deradicalization, the latter had been realized successfully by incentives to marry and start a family. For example, to become dismantled, members of the “Black September,” the Palestinian militant organization that carried out the Munich massacre during the 1972 Summer Olympics, were given the prospect of marriage with a “carefully selected” bride, a reward of 3000 Dollars for marriage and of 5000 Dollars for a first child (Dechesne, 2011). As another example, Christian Picciolini, a former leader of the U.S. neo-Nazi movement, has focused on deradicalizing individuals who have been recruited by hate groups, especially White nationalist and supremacist groups (Picciolini, 2017a, 2017b; <https://www.christianpicciolini.com/>). Anecdotal, Picciolini argues his most effective strategies have focused on providing these individuals with a sense of compassion and social acceptance first, and then providing them with opportunities to interact with members of groups that they had been radicalized against but with whom they had little experience. The lack of belonging, as well as a sense of identity and meaning, seem to be a key focus for Picciolini, and reflects common trends in the scientific literature on

radicalism among White extremists (Hales et al., 2020). Finally, Webber et al. (2018) reported promising results of an intervention aimed at deradicalizing members of the Sri Lankan extremist Tamil Tigers group. Restoring one of the usually threatened needs in the aftermath of exclusion, the intervention aimed to provide a sense of personal significance, and appears to meaningfully reduce extremism. In sum, while complicated and likely costly, deradicalization appears possible, and, considering the stakes, ought to be a top priority for policy makers and researchers alike.

CONCLUSION

This review synthesized the current state of research on social exclusion, radicalism, and radicalization, demonstrating that social exclusion has a key role in understanding why individuals show an increased willingness to engage in illegal and violent action for a political, religious, or other ideological cause. Supporting the impression of terrorism experts, it seems that exclusion can indeed make radicalism flourish. We built upon these connections and identified an agenda for future research, as well as considerations for social policy to both decrease experiences of systemic marginalization and social exclusion and to disrupt the causal pathway from these negative social experiences to radicalism.

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REFERENCES

- Aureli, N., Marinucci, M. & Riva, P. (2020) Can the chronic exclusion-resignation link be broken? An analysis of support groups within prisons. *Journal of Applied Social Psychology*, 50(11), 638–650. <https://doi.org/10.1111/jasp.12701>
- 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. <https://doi.org/10.1016/j.jesp.2007.07.004>
- Bäck, E.A., Bäck, H., Altermark, N. & Knapton, H. (2018) The quest for significance: attitude adaption to a radical group following social exclusion. *International Journal of Developmental Science*, 12(1-2), 25–36. <https://doi.org/10.3233/DEV-170230>
- Baele, S.J., Brace, L. & Coan, T.G. (2021) From “Incel” to “Saint”: analyzing the violent worldview behind the 2018 Toronto attack. *Terrorism and Political Violence*, 33(8), 1667–1691. <https://doi.org/10.1080/09546553.2019.1638256>
- Baumeister, R.F., Twenge, J.M. & Nuss, C.K. (2002) Effects of social exclusion on cognitive processes: anticipated aloneness reduces intelligent thought. *Journal of Personality and Social Psychology*, 83(4), 817–827. <https://doi.org/10.1037/0022-3514.83.4.817>
- Bélanger, J.J., Caouette, J., Sharvit, K. & Dugas, M. (2014) The psychology of martyrdom: making the ultimate sacrifice in the name of a cause. *Journal of Personality and Social Psychology*, 107(3), 494–515. <https://doi.org/10.1037/a0036855>
- Betts, K.R. & Hinsz, V.B. (2013) Group marginalization: extending research on interpersonal rejection to small groups. *Personality and Social Psychology Review*, 17(4), 355–370. <https://doi.org/10.1177/1088868313497999>
- 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>

- Chermak, S. & Gruenewald, J.A. (2015) Laying a foundation for the criminological examination of right-wing, left-wing, and Al Qaeda-inspired extremism in the United States. *Terrorism and Political Violence*, 27(1), 133–159. <https://doi.org/10.1080/09546553.2014.975646>
- Corner, E., Taylor, H., Van Der Vegt, I., Salman, N., Rottweiler, B., Hetzel, F., Clemmow, C., Schulten, N. & Gill, P. (2021) Reviewing the links between violent extremism and personality, personality disorders, and psychopathy. *The Journal of Forensic Psychiatry & Psychology*, 32(3), 378–407. <https://doi.org/10.1080/14789949.2021.1884736>
- Coyle, C.E. & Dugan, E. (2012) Social isolation, loneliness and health among older adults. *Journal of Aging and Health*, 24(8), 1346–1363. <https://doi.org/10.1177/0898264312460275>
- Dechesne, M. (2011) Deradicalization: not soft, but strategic. *Crime, Law and Social Change*, 55(4), 287–292. <https://doi.org/10.1007/s10611-011-9283-8>
- DeWall, C.N. (2010) Forming a basis for acceptance: Excluded people form attitudes to agree with potential affiliates. *Social Influence*, 5(4), 245–260. <https://doi.org/10.1080/15534511003783536>
- Doosje, B., Moghaddam, F.M., Kruglanski, A.W., de Wolf, A., Mann, L. & Feddes, A.R. (2016) Terrorism, radicalization and de-radicalization. *Current Opinion in Psychology*, 11, 79–84. <https://doi.org/10.1016/j.copsyc.2016.06.008>
- 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>
- Edgell, S. & Duke, V. (1986) Radicalism, radicalization and recession: Britain in the 1980s. *British Journal of Sociology*, 37(4), 479–512. <https://doi.org/10.2307/590713>
- Eisenberger, N.I., Lieberman, M.D. & Williams, K.D. (2003) Does exclusion hurt? An fMRI study of social exclusion. *Science*, 302(5643), 290–292. <https://doi.org/10.1126/science.1089134>
- Faulkner, S., Williams, K.D., Sherman, B. & Williams, E. (1997) The silent treatment: its incidence and impact [Presentation]. Chicago, IL, United States: Sixty-Ninth Annual Midwestern Psychological Association.
- Fayant, M.P., Muller, D., Hartgerink, C.H.J. & Lantian, A. (2014) Is ostracism by a despised outgroup really hurtful? *Social Psychology*, 45(6), 489–494. <https://doi.org/10.1027/1864-9335/a000209>
- Finkel, E.J. (2014) The I3 model: metatheory, theory, and evidence. In: Olson, J.M. & Zanna, M.P. (Eds.) *Advances in experimental social psychology*, Vol. 49, Waltham, MA: Elsevier, pp. 1–104. <https://doi.org/10.1016/B978-0-12-800052-6.00001-9>
- Fix, R.L. & Fix, S.T. (2013) The effects of mindfulness-based treatments for aggression: a critical review. *Aggression and Violent Behavior*, 18(2), 219–227. <https://doi.org/10.1016/j.avb.2012.11.009>
- Gardner, W.L., Pickett, C.L. & Knowles, M. (2005) Social snacking and shielding: using social symbols, selves, and surrogates in the service of belonging needs. In: Williams, K.D., Forgas, J. P. & von Hippel, W. (Eds.) *The social outcast: ostracism, social exclusion, rejection, and bullying*. New York, NY: Psychology Press, pp. 227–241.
- Gill, P., Horgan, J. & Deckert, P. (2014) Bombing alone: tracing the motivations and antecedent behaviors of lone-actor terrorists. *Journal of Forensic Sciences*, 59(2), 425–435. <https://doi.org/10.1111/1556-4029.12312>
- Gillions, A., Cheang, R. & Duarte, R. (2019) The effect of mindfulness practice on aggression and violence levels in adults: a systematic review. *Aggression and Violent Behavior*, 48, 104–115. <https://doi.org/10.1016/j.avb.2019.08.012>
- Gómez, Á., Morales, J. F., Hart, S., Vázquez, A. & Jr, S., 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. <https://doi.org/10.1177/0146167211424580>
- 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>
- Goodacre, R. & Zadro, L. (2010) O-Cam: a new paradigm for investigating the effects of ostracism. *Behavior Research Methods*, 42(3), 768–774. <https://doi.org/10.3758/BRM.42.3.768>
- Graf, J. (2016) Er wurde zurückgewiesen—überall. Wie Breivik zum Massenmörder wurde. [He got rejected—everywhere. How Breivik became a mass murderer.] N-tv. <https://www.n-tv.de/politik/Wie-Breivik-zum-Massenmoerder-wurde-article18245816.html>
- Graupmann, V. & Pfundmair, M. (2022) When ostracism is mandated: COVID-19, social distancing, and psychological needs. *The Journal of Social Psychology*, <https://doi.org/10.1080/00224545.2022.2026284>
- Grueter, M. & Masters, R.D. (1986) Ostracism as a social and biological phenomenon: an introduction. *Ethology and 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)

- Hafez, M. & Mullins, C. (2015) The radicalization puzzle: A theoretical synthesis of empirical approaches to homegrown extremism. *Studies in Conflict & Terrorism*, 38(11), 958–975. <https://doi.org/10.1080/1057610X.2015.1051375>
- Hales, A.H., Kassner, M.P., Williams, K.D. & Graziano, W.G. (2016a) Disagreeableness as a cause and consequence of ostracism. *Personality and Social Psychology Bulletin*, 42(6), 782–797. <https://doi.org/10.1177/0146167216643933>
- Hales, A.H., Ren, D. & Williams, K.D. (2017) Protect, correct, and eject Ostracism as a social influence tool. In Harkins, S. J., Burger, J. M. & Williams, K. D. (Eds.) *The oxford handbook of social influence*. Oxford University Press, pp. 205–217. <https://doi.org/10.1093/oxfordhb/9780199859870.013.26>
- Hales, A.H., Wesselmann, E.D. & Williams, K.D. (2016b) Prayer, self-affirmation, and distraction improve recovery from short-term ostracism. *Journal of Experimental Social Psychology*, 64, 8–20. <https://doi.org/10.1016/j.jesp.2016.01.002>
- Hales, A.H., Wesselmann, E.D. & Williams, K.D. (2020) Social ostracism, religion, and existential concerns. In: Vail, K. & Routledge, C. (Eds.) *The science of religion, spirituality, and existentialism*. London, U.K.: Elsevier, pp. 153–166. <https://doi.org/10.1016/B978-0-12-817204-9.00012-3>
- Hales, A.H. & Williams, K.D. (2018) Marginalized individuals and extremism: The role of ostracism in openness to extreme groups. *Journal of Social Issues*, 74(1), 75–92. <https://doi.org/10.1111/josi.12257>
- Hales, A.H. & Williams, K.D. (2020) Extremism leads to ostracism. *Social Psychology*, 51(3), 149–156. <https://doi.org/10.1027/1864-9335/a000406>
- Hales, A.H., Wood, N.R. & Williams, K.D. (2021) Navigating COVID-19: insights from research on social ostracism. *Group Processes and Intergroup Relations*, 24(2), 306–310. <https://doi.org/10.1177/1368430220981408>
- Henry, P.J., Sidanius, J., Levin, S. & Pratto, F. (2005) Social dominance orientation, authoritarianism, and support for intergroup violence between the Middle East and America. *Political Psychology*, 26(4), 569–584. <https://doi.org/10.1111/j.1467-9221.2005.00432.x>
- Hogg, M.A. (2014) From uncertainty to extremism: social categorization and identity processes. *Current Directions in Psychological Science*, 23(5), 338–342. <https://doi.org/10.1177/0963721414540168>
- Hogg, M.A. & Adelman, J. (2013) Uncertainty-identity theory: Extreme groups, radical behavior, and authoritarian leadership. *Journal of Social Issues*, 69(3), 436–454. <https://doi.org/10.1111/josi.12023>
- Horgan, J. (2008) From profiles to pathways and roots to routes: perspectives from psychology on radicalization into terrorism. *The ANNALS of the American Academy of Political and Social Science*, 618(1), 80–94. <https://doi.org/10.1177/0002716208317539>
- Horgan, J.G. (2014) *The psychology of terrorism*. New York, NY: Routledge. <https://doi.org/10.4324/9781315882246>
- Hornsey, M.J. & Jetten, J. (2004) The individual within the group: Balancing the need to belong with the need to be different. *Personality and Social Psychology Review*, 8(3), 248–264. https://doi.org/10.1207/s15327957pspr0803_2
- Hughes, C. (2015) Paris attacks Bataclan gunman rejected by army and police after failing tests. Mirror. <https://www.mirror.co.uk/news/world-news/paris-attacks-bataclan-gunman-rejected-6996956>
- Jaki, S., De Smedt, T., Gwóźdz, M., Panchal, R., Rossa, A. & De Pauw, G. (2019) Online hatred of women in the Incels.me forum: linguistic analysis and automatic detection. *Journal of Language Aggression and Conflict*, 7(2), 240–268. <https://doi.org/10.1075/jlac.00026.jak>
- 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/10.1111/pops.12376>
- Jones, E.E., Wirth, J.H., Ramsey, A.T. & Wynsma, R.L. (2019) Who is less likely to ostracize? Higher trait mindfulness predicts more inclusionary behavior. *Personality and Social Psychology Bulletin*, 45(1), 105–119. <https://doi.org/10.1177/0146167218780698>
- Kendi, I.X. (2019) *How to be an antiracist*. One World.
- 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), 38–48. <http://doi.org/10.5334/jeps.bo>
- 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>
- Kowalski, R.M., Leary, M., Hendley, T., Rubley, K., Chapman, C., Chitty, H., Carroll, H., Cook, A., Richardson, E., Robbins, C., Wells, S., Bourque, L., Oakley, R., Bednar, H., Jones, R., Tolleson, K., Fisher, K., Graham, R., Scarborough, M., Anne Welsh, S., Longacre, M. & Longacre, M. (2021) K-12, college/university, and mass shootings: similarities and differences. *The Journal of Social Psychology*, 161(6), 753–778. <https://doi.org/10.1080/00224545.2021.1900047>

- 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(S1), 69–93. <https://doi.org/10.1111/pops.12163>
- Lancaster, J.B. (1986) Primate social behavior and ostracism. *Ethology & Sociobiology*, 7(3–4), 215–225. [https://doi.org/10.1016/0162-3095\(86\)90049-X](https://doi.org/10.1016/0162-3095(86)90049-X)
- Leary, M.R., Kowalski, R.M., Smith, L. & Phillips, S. (2003) Teasing, rejection, and violence: case studies of the school shootings. *Aggressive Behavior*, 29(3), 202–214. <https://doi.org/10.1002/ab.10061>
- 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>
- Moghaddam, F.M. (2005) The staircase to terrorism: a psychological exploration. *American Psychologist*, 60(2), 161–169. <https://doi.org/10.1037/0003-066X.60.2.161>
- Molden, D.C., Lucas, G.M., Gardner, W.L., Dean, K. & Knowles, M.L. (2009) Motivations for prevention or promotion following social exclusion: being rejected versus being ignored. *Journal of Personality and Social Psychology*, 96(2), 415–431. <https://doi.org/10.1037/a0012958>
- Molet, M., Macquet, B., Lefebvre, O. & Williams, K.D. (2013) A focused attention intervention for coping with ostracism. *Consciousness and Cognition: An International Journal*, 22(4), 1262–1270. <https://doi.org/10.1016/j.concog.2013.08.010>
- Moskaleiko, S. & McCauley, C. (2009) Measuring political mobilization: the distinction between activism and radicalism. *Terrorism and Political Violence*, 21(2), 239–260. <https://doi.org/10.1080/09546550902765508>
- Nezlek, J.B., Wesselmann, E.D., Wheeler, L. & Williams, K.D. (2015) Ostracism in everyday life: the effects of ostracism on those who ostracize. *The Journal of Social Psychology*, 155(5), 432–451. <https://doi.org/10.1080/00224545.2015.1062351>
- Nordgren, L.F., Banas, K. & MacDonald, G. (2011) Empathy gaps for social pain: why people underestimate the pain of social suffering. *Journal of Personality and Social Psychology*, 100(1), 120–128. <https://doi.org/10.1037/a0020938>
- Pfundmair, M. (2019) Ostracism promotes a terroristic mindset. *Behavioral Sciences of Terrorism and Political Aggression*, 11(2), 134–148. <https://doi.org/10.1080/19434472.2018.1443965>
- Pfundmair, M., Aßmann, E., Kiver, E., Penzkofer, M., Scheuermeyer, A., Sust, L. & Schmidt, H. (2022) Pathways toward Jihadism in Western Europe: an empirical exploration of a comprehensive model of terrorist radicalization. *Terrorism and Political Violence*, 34(1), 48–70. <https://doi.org/10.1080/09546553.2019.1663828>
- Pfundmair, M., Aydin, N. & Frey, D. (2017) Whatever? The effect of social exclusion on adopting persuasive messages. *The Journal of Social Psychology*, 157(2), 181–193. <https://doi.org/10.1080/00224545.2016.1192098>
- Pfundmair, M., Eyssel, F., Graupmann, V., Frey, D. & Aydin, N. (2015) Wanna play? The role of self-construal when using gadgets to cope with ostracism. *Social Influence*, 10(4), 221–235. <https://doi.org/10.1080/15534510.2015.1074102>
- Pfundmair, M., Pachurka, R., Späth, P., Witiska, T. (2022) *Social exclusion in the life of terrorists* [Presentation]. Twenty-third Meeting of the Society for Personality and Social Psychology, San Francisco, CA, USA.
- Pfundmair, M. & Wetherell, G. (2019) Ostracism drives group moralization and extreme group behavior. *The Journal of Social Psychology*, 159(5), 518–530. <https://doi.org/10.1080/00224545.2018.1512947>
- Picciolini, C. (2017a) *White American youth: my descent into America's most violent hate movement—and how I got out*. New York, NY: Hachette Book.
- Picciolini, C. (2017b) My descent into America's neo-Nazi movement—and how I got out. TED. https://www.ted.com/talks/christian_picciolini_my_descent_into_america_s_neo_nazi_movement_and_how_i_got_out
- Poon, K.T., Jiang, Y. & Teng, F. (2020) Putting oneself in someone's shoes: the effect of observing ostracism on physical pain, social pain, negative emotion, and self-regulation. *Personality and Individual Differences*, 166, 110217. <https://doi.org/10.1016/j.paid.2020.110217>
- Porter, L.E. & Keibell, M.R. (2011) Radicalization in Australia: examining Australia's convicted terrorists. *Psychiatry, Psychology and Law*, 18(2), 212–231. <https://doi.org/10.1080/13218719.2010.482953>
- Pretus, C., Hamid, N., Sheikh, H., Ginges, J., Tobena, A., Davis, R., Vilarroya, O. & Atran, S. (2018) Neural and behavioral correlates of sacred values and vulnerability to violent extremism. *Frontiers in Psychology*, 9, 2462. <https://doi.org/10.3389/fpsyg.2018.02462>
- Rabasa, A., Pettyjohn, S.L., Ghez, J.J. & Boucek, C. (2010) Deradicalizing Islamist extremists. RAND Corp.

- Ramsey, A.T. & Jones, E.E. (2015) Minding the interpersonal gap: Mindfulness-based interventions in the prevention of ostracism. *Consciousness and Cognition. An International Journal*, 31, 24–34. <https://doi.org/10.1016/j.concog.2014.10.003>
- Rapoport, D.C. (2004) The four waves of modern terrorism. In Conin, A. K. & Ludes, J. M. (Eds.) *Attacking terrorism: elements of a grand strategy*. Washington, DC: Georgetown University Press, pp. 46–73.
- Ren, D., Wesselmann, E.D. & Williams, K.D. (2018) Hurt people hurt people: ostracism and aggression. *Current Opinion in Psychology*, 19, 34–38. <https://doi.org/10.1016/j.copsyc.2017.03.026>
- 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. <https://doi.org/10.1177/1368430220917215>
- Riva, P. & Eck, J. (Eds.) (2016) *Social exclusion: Psychological approaches to understanding and reducing its impact*. Berlin, Germany: Springer. <https://doi.org/10.1007/978-3-319-33033-4>
- Riva, P., Montali, L., Wirth, J.H., Curioni, S. & Williams, K.D. (2017) Chronic social exclusion and evidence for the resignation stage: an empirical investigation. *Journal of Social and Personal Relationships*, 34(4), 541–564. <https://doi.org/10.1177/0265407516644348>
- 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>
- Rodger, E. (n.d.) My twisted world: The story of Elliot Rodger. <https://assets.documentcloud.org/documents/1173619/rodger-manifesto.pdf>
- 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. <https://doi.org/10.1111/j.1467-6494.2009.00611.x>
- Rudert, S.C., Hales, A.H. & Büttner, C.M. (2021) Stay out of our office (vs. our pub): target personality and situational context affect ostracism intentions. *Journal of Experimental Social Psychology*, <https://doi.org/10.1016/J.JESP.2021.104142>
- Rudert, S.C., Janke, S. & Greifeneder, R. (2017) Under threat by popular vote: German-speaking immigrants' affect and cognitions following the Swiss vote against mass immigration. *PlosOne*, 12(4), e0175896. <https://doi.org/10.1371/journal.pone.0175896>
- Sageman, M. (2004) *Understanding terror networks*. Philadelphia: University of Pennsylvania Press. <https://doi.org/10.9783/9780812206791>
- Schaafsma, J. & Williams, K.D. (2012) Exclusion, intergroup hostility, and religious fundamentalism. *Journal of Experimental Social Psychology*, 48(4), 829–837. <https://doi.org/10.1016/j.jesp.2012.02.015>
- 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>
- Schuurman, B. (2020) Research on terrorism, 2007–2016: a review of data, methods, and authorship. *Terrorism and Political Violence*, 32(5), 1011–1026. <https://doi.org/10.1080/09546553.2018.1439023>
- Silber, M.D. & Bhatt, A. (2007) *Radicalization in the West: The homegrown threat*. New York, NY: NYPD Intelligence Division.
- Sommer, K.L. & Yoon, J. (2013) When silence is golden: ostracism as resource conservation during aversive interactions. *Journal of Social and Personal Relationships*, 30(7), 901–919. <https://doi.org/10.1177/0265407512473006>
- Snyder, C.R. & Fromkin, H.L. (1980) *Uniqueness: The human pursuit of difference*. New York, NY: Plenum Press. <https://doi.org/10.1007/978-1-4684-3659-4>
- Troisi, J.D. & Gabriel, S. (2011) Chicken soup really is good for the soul: “Comfort food” fulfills the need to belong. *Psychological Science*, 22, 747–753. <https://doi.org/10.1177/0956797611407931>
- 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>
- Twenge, J.M., Catanese, K.R. & Baumeister, R.F. (2003) Social exclusion and the deconstructed state: time perception, meaninglessness, lethargy, lack of emotion, and self-awareness. *Journal of Personality and Social Psychology*, 85(3), 409–423. <https://doi.org/10.1037/0022-3514.85.3.409>

- Van Beest, I., Carter-Sowell, A.R., van Dijk, E. & Williams, K.D. (2012) Groups being ostracized by groups: is the pain shared, is recovery quicker, and are groups more likely to be aggressive? *Group Dynamics: Theory, Research, and Practice*, 16(4), 241–254. <https://doi.org/10.1037/a0030104>
- 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/10.1016/j.jesp.2005.03.005>
- Webber, D., Chernikova, M., Kruglanski, A.W., Gelfand, M.J., Hettiarachchi, M., Gunaratna, R., Lafreniere, M. & Belanger, J.J. (2018) Deradicalizing detained terrorists. *Political Psychology*, 39(3), 539–556. <https://doi.org/10.1111/pops.12428>
- Weight-Neville, D. & Halafoff, A. (2010) *Terrorism and social exclusion: misplaced risk-common security*. Cheltenham, U.K.: Edward Elgar Publishing. <https://doi.org/10.4337/9781781000700>
- Wesselmann, E.D., Bagg, D. & Williams, K.D. (2009) I feel your pain: the effects of observing ostracism on the ostracism detection system. *Journal of Experimental Social Psychology*, 45(6), 1308–1311. <https://doi.org/10.1016/j.jesp.2009.08.003>
- Wesselmann, E.D., Grzybowski, M.R., Steakley-Freeman, D.M., DeSouza, E.R., Nezlek, J.B. & Williams, K.D. (2016) Social exclusion in everyday life. In: Riva, P. & Eck, J. (Eds.) *Social exclusion: psychological approaches to understanding and reducing its impact*. Berlin, Germany: Springer, pp. 3–23. https://doi.org/10.1007/978-3-319-33033-4_1
- Wesselmann, E.D., Ren, D., Swim, E. & Williams, K.D. (2013b) Rumination hinders recovery from ostracism. *International Journal of Developmental Science*, 7(1), 33–39. <https://doi.org/10.3233/DEV-131215>
- Wesselmann, E.D., Wirth, J.H., Pryor, J.B., Reeder, G.D. & Williams, K.D. (2013a) When do we ostracize? *Social Psychological and Personality Science*, 4(1), 108–115. <https://doi.org/10.1177/1948550612443386>
- Whitehouse, H., McQuinn, B., Buhrmester, M. & Swann, W.B. (2014) Brothers in arms: Libyan revolutionaries bond like family. *Proceedings of the National Academy of Sciences*, 111(50), 17783–17785. <https://doi.org/10.1073/pnas.1416284111>
- Williams, K.D. (1997) Social ostracism. In Kowalski, R. (Ed.), *Aversive interpersonal behaviors* (pp. 133–170). New York, NY: Plenum. https://doi.org/10.1007/978-1-4757-9354-3_7
- Williams, K.D. (2009) Ostracism: A temporal need-threat model. In Zanna, M. P. (Ed.), *Advances in experimental social psychology*, Vol. 41, Elsevier, pp. 275–314. [https://doi.org/10.1016/S0065-2601\(08\)00406-1](https://doi.org/10.1016/S0065-2601(08)00406-1)
- Williams, K.D., Hales, A.H. & Michels, C. (2019) Social ostracism as a factor motivating interest in extreme groups. In Rudert, S.C., Greifeneder, R. & Williams, K.D. (Eds.) *Current directions in ostracism, social exclusion, and rejection research*. Routledge, pp. 18–31. <https://doi.org/10.4324/9781351255912-2>
- Williams, K.D. & Jarvis, B. (2006) Cyberball: a program for use in research on interpersonal ostracism and acceptance. *Behavior Research Methods*, 38(1), 174–180. <https://doi.org/10.3758/BF03192765>
- 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>
- Yang, L.Q., Caughlin, D.E., Gazica, M.W., Truxillo, D.M. & Spector, P.E. (2014) Workplace mistreatment climate and potential employee and organizational outcomes: a meta-analytic review from the target's perspective. *Journal of Occupational Health Psychology*, 19(3), 315–335. <https://doi.org/10.1037/a0036905>
- 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/10.1016/j.jesp.2003.11.006>

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