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"One for All": Explaining Radical Action Strategies in Disadvantaged Groups

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Master Thesis – Applied Social Psychology

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Abstract

Perhaps due to the topic's complexity and multi-disciplinary relevance, the literature on radicalization is characterized by fragmentation and interpretational inconsistencies, whose effects impact academic as much as applicative efforts (i.e., real-life interventions). It is of primary importance for current research to adopt an integrative approach to transcend such fragmentations and develop a better understanding of radicalization. Throughout this study we focus on a group-level understanding of radicalization, conceptualized in terms of radical collective action. We aim to integrate the collective action literature pertaining to the social identity approach by confronting predictions form the classic theories of intergroup behaviour, Social Identity Theory (SIT), Self-Categorization Theory (SCT) and the Social Identity Model of Deindividuation Effects (SIDE) with their more modern counterparts, the Normative Conflict Model of Dissent (NCM) and the Nothing-to-Lose explanation of radical action (NTL). We do this by experimentally crossing strategic considerations of outgroup accountability (anonymity vs. visibility, SIDE), with considerations of ingroup norms (moderate vs. radical norm, NCM) to understand the effects on endorsement of radical vs. moderate collective action strategies within a stably disadvantaged condition (NTL). We further discuss the primacy of NTL with regards to radical collective action, and how this theory can be further developed to integrate SIDE and NCM predictions.

Introduction

The recent upsurge in ideologically-motivated terrorism throughout the West highlights once more the relevance of radical beliefs in driving complex social phenomena such as the 2021 violent storming of the United States Congress (Institute of Economics & Peace, 2023). Whilst decades worth of research on the topic of radicalization helped provide an *a posteriori* explanation for the riot, the unexpectedness and force with which the violent mob "organised" and took action left many baffled and reinstated a sense of urgency among scholars in the field of extremism to prevent similar future occurrences. This study aids such attempts by bridging two theoretical gaps affecting current knowledge on radicalization. Specifically, we provide additional evidence in support of a group-based understanding of radicalization, while solving relevant theoretical discrepancies occurring at this intermediate level of analysis.

Perhaps by virtue of its changing relevance over time, radicalization's literature appears to be particularly fragmented (Alonso et al., 2008; Minerva-Nasser et al., 2011; Neumann & Kleinmann, 2013). An important contributor to such complexity is the still ongoing debate regarding the theoretical perspective through which radicalization should be interpreted. Indeed, while a part of the literature assumes this process to occur at the individual-personality level (i.e., micro), an opposing group of scholars propose the adoption of a broader societal-focused (i.e., macro) outlook (for reviews see Schmid, 2013; Smith & Muhlhausen, 2018; Trimbur et al., 2021). Only recently, and strengthened by increased perceptions of the inadequateness of all-or-nothing perspectives, has the literature evolved towards a more intermediate, group-level social psychological understanding of the factors constituting radicalization. There is now increased acknowledgement that it is social groups, defined by their resources, norms, and the symbolic value they hold for their members, that determine whether people adopt and/or enact radical beliefs (Doosje et al., 2016; Kruglanski

et al., 2015; Moyano et al., 2022; Saab et al., 2016; Schmid, 2013; Wolfowicz et al., 2021). Given the ever-growing evidence in support of such a group-based understanding of radicalization, we frame our study within this perspective and provide further evidence to support it by redefining radicalization in terms of collective actions strategies.

More specifically, we conceptualise radicalization as the social process through which individuals come to form and/or accept radical collective strategies as appropriate means to benefit their group's social condition. We adopt such a reconceptualization of the phenomenon as it permits us to locate our study within the theoretical framework provided by the social identity tradition, which not only represents one of the most historically relevant perspectives on intergroup behaviour, but also one of those most affected by complications and contradictions (Rosenbusch, 2017; Spears et al., 2015). Indeed, the social identity approach was the first to offer a truly socio-psychological (i.e., group-level) perspective by shifting the focus from "the individual in the group" to the "group within the individual" (Spears, 2001; Tajfel & Turner, 2004) However, while Social Identity Theory (SIT; Tajfel, 1978; Tajfel et al., 1979) has been proven to be very well placed to predict moderate intergroup behaviours such as peaceful protests (van Zomeren et al., 2008), recent radical-focused developments of the theory have highlighted its significant shortcomings when applied to extreme antisocial manifestations of collective strategies (e.g., radical collective action; Greijdanus et al., 2023; Jiménez-Moya et al., 2015; Rosenbusch, 2017, Spears et al., 2015; Tausch et al., 2011; Van Zomeren et al., 2013). Our goal throughout this study is to understand how classic theories of intergroup behaviour, can be integrated with more modern understandings of radical collective action; namely we want to advance the Nothing-to-Lose explanation of radical action (Scheepers et al., 2006) by investigating group norms' role in determining the quality of intergroup behaviour (Packer, 2008). By integrating considerations of normative nature in the NTL's conceptualization of radicalization, we transcend

contradictions with classic theories of collective action and ultimately provide a more comprehensive understanding of group-based radicalization.

Moderate Collective Action: The Social Identity Approach

SIT revolutionised the modern understanding of intergroup behaviour by relocating its psychological antecedents as occurring at the social level of identification (Hornsey, 2008; Spears, 2011). Indeed, one of the most important contributions of SIT lies in its conceptualization of individuals' selves as varying along an interpersonal-intergroup continuum where the latter end of the spectrum entails the activation of people's *social identity* (Tajfel & Turner, 2004). Identification at this level implies that people act *as,* and on the *behalf* of their membership group (i.e., ingroup), especially in response to identity threats resulting from interactions with more powerful outgroups (i.e., other social groups) (Tajfel & Turner, 2004; Wright, 2009). In other words, when one's ingroup is perceived to be illegitimately exploited, its members (might) develop the collective drive to engage in strategic behaviours, such as (peaceful) collective action, to reinstate their positive social identity. Nevertheless, while perceptions of illegitimate disadvantage are sufficient conditions for the development of collective action, according to SIT they become relevant in driving social change *only* when the unfair status to be challenged is perceived to be also changeable (Tajfel, 1978; Tajfel & Turner, 2004). Thus, it is perceptions of hierarchical instability that allow disadvantaged groups to develop cognitive alternatives such as collective strategies to ameliorate their ingroup's social condition.

The cognitive antecedents of intergroup behaviour were further developed by the Self-Categorization Theory (SCT; Turner et al., 1987) which was the first to introduce the concept of context-dependent depersonalization as one of primary importance. Indeed, Turner and

colleagues suggested that when individuals' social identity becomes salient, they rely less on individualistic perceptions, and more on those which they believe are coherent with their social affiliation. According to SCT this process drives group behaviour by activating collectively-shared normative prescriptions (i.e., *group prototypes,* and *group norms*) on how group members ought to feel and act in intergroup circumstances (Turner et al., 1987).

While SIT and SCT represent the core of the social identity approach, extensive research within this tradition has led to other relevant theoretical developments, that are especially relevant for understanding collective action and protest behaviour. Firstly, the recent dual pathway model of collective action (van Zomeren et al., 2004) has highlighted the transferability of SIT's conceptualization of status instability to the concept of group efficacy. The latter can be defined as the extent to which individuals believe they have the possibility and capability to successfully advance their social conditions (Bandura, 1996; 2000). Such an interpretation integrates that of instability theorised in SIT as only unstable status conditions are thought to empower efficacy beliefs of devalued group members to take action for social change (van Zomeren et al., 2004, 2008). The introduction of the concept of efficacy becomes especially relevant to highlight the limitations of the social identity perspective on radical intergroup behaviour. Indeed, while the social identity approach assumes collective action to occur *only* in conditions of status instability (i.e., high group efficacy), recent findings actually suggest that more radical strategies emerge from perceptions of *stable* low status, and thus also low group efficacy (see NTL discussion, Tausch et al., 2011). Secondly, research within the social identity tradition has also provided extensive evidence in support of the positive relation between group identification and (moderate) collective action (Ellemers, 1993; Ellemers et al., 1999; van Zomeren, Spears, et al., 2008). Therefore, the more individuals felt they belonged to and cared about their ingroup, the more they were found to engage in moderate collective strategies to benefit said group (van Zomeren et al., 2008).

Once more however, while these findings appear to be in line with the social identity's tradition on collective action, they do not account for the complexity characterising radicalised individuals, as the relation between identification and radical collective action appears to be less linear (see NTL discussion; Jiménez-Moya et al., 2015; Rosenbusch, 2017).

Punishable vs. Unpunishable Collective action: A SIDE perspective

As its name suggests the Social Identity Model of Deindividuation Effects (SIDE; Reicher et al., 1995) finds its origins in the social identity tradition. Nevertheless, it represents an important development in the literature as it offers a theoretical understanding of radical, as well as moderate collective strategies.

According to SIDE, people are aware social actors who strategically evaluate whether specific preconditions are met before engaging in intergroup behaviour (Postmes & Spears, 1998; Reicher et al., 1995). Thus, while the cognitive mechanisms of social identification and group prototypicality (i.e., acting according to group norms) represent the foundation upon which intergroup behaviour develops in conditions of illegitimate social disadvantage, SIDE innovatively recognizes the importance for individuals to adapt their collective strategies to match the social circumstances in which they operate (Spears, 2017). This is the *strategic dimension* of intergroup behaviour, which assures maximisation of positive outcomes via access to ingroup social support, and reduces harmful repercussions by limiting outgroup accountability (Reicher et al., 1995). Indeed, while identifiability to fellow ingroup members enhances collective actions by highlighting the possibility of mutual support, the cover of anonymity towards the oppressing outgroup enhances collective strategies by lowering the chances of being caught and punished (Reicher et al., 1995; Spears, 2017).

It is within these strategic considerations that SIDE advances knowledge on radicalization. Indeed, while SIDE refers to punishable and unpunishable actions, this differentiation can be easily redefined in terms of the radical vs. moderate dichotomy referred to throughout this article. More specifically, SIDE defines punishable strategies by referencing their transgressive nature in relation to widely shared societal norms which often represent the base of peaceful coexistence (e.g., respect of others life, possessions etc.) (Reicher & Levine, 1994; Reicher et al., 1995). Such a definition is theoretically compatible with that of *nonnormative action* (Wright et al., 1990a; Wright, 2009) which is commonly employed by scholars of the collective action literature. Nevertheless, it offers a better representation of radicalization's complexity, as it identifies the potential conflict between broad and local social norms (Reicher & Levine, 1994). In other words, while punishable, radical action violates *superordinate intergroup* norms (i.e., norms which transcend social affiliation), it may very well be normative, and therefore compatible with a group's local norms. Referencing once more the Capitol Hill Riot example, the QAnon's followers who used violence to force their way into congress have been legally and socially identified as "terrorist radicals" who resorted to widely unacceptable means of collective action. This however, does not mean their ingroup (i.e., fellow QAnon supporters) also condemned their actions: on the contrary given the group's extremist beliefs, they endorsed and prompted the violence which occurred on January 6th (Roose, 2021).

Radical Collective Action: NCM & NTL

While the SIDE model made important advancements in the literature on collective action (for a recent application to *radical* collective action see Greijdanus et al., 2023), it is still affected by two significant theoretical limitations. Firstly, SIDE conceptualises radicalization or punishable action solely in terms of intergroup norm violations. On the other

hand, the more recent Normative Conflict Model of Dissent (NCM; Packer, 2008, 2009) which focuses on potential conflicts between individuals' personal beliefs and their ingroup's norms, suggests the relevance also of the intragroup dimension of norm violation. In other words, radical action may be defined as such, both at the social or local level, where the latter entails the adoption of radical means against the ingroup's moderate norm to obtain social change. While there are different reasons as to why individuals may decide to distance themselves from their group's norms, the most surprising element of Packer's theory lies in the supposed relation between normative dissent (i.e., distancing from norms) and individuals' degree of group identification (Packer, 2008). Indeed, quite originally, Packer suggests that rather than low identifiers, it is people who care *most* about their group (i.e., high identifiers) that are more likely to violate its norms. Importantly however, this occurs solely when said group's norms are perceived to be inadequate or harmful to the group itself or its goals (Packer, 2008). This type of reasoning is extremely relevant to modern developments of radical action, as the increase in lone-wolf offender attacks which oftentimes clash with the broader social group within which they operate, is a prime example of normative dissent. Thus, integrating NCM's conceptualization of group's norms, or rather normative dissent, to understand acceptance and adoption of radical actions may offer an innovative and ecologically relevant perspective on radicalization.

Furthermore, and as mentioned above, while SIDE's strategic contributions represent one of its most important features, they also provide a limited explanation as to why radical action comes to be. This critical point is well developed by the Nothing-to-Lose explanation of radical action (Scheepers et al., 2006), according to which people do not necessarily need social support nor lack of accountability to engage in radical strategies (Scheepers et al., 2006; Spears et al., 2015; Tausch et al., 2011). NTL suggests that extreme forms of intergroup

behaviour arise from pervasive experiences of deprivation and low group efficacy induced by prolonged and *stable* experiences of social disadvantage (in opposition to SIT's clause of instability, Scheepers et al., 2006). In these types of social circumstances individuals' desire to exit the condition of disadvantage transcends preoccupations of intergroup repercussions and rather leads to desperate and aggressive confrontation which may at first glance appear illogical (Scheepers et al., 2006). Nevertheless, research on the double-natured role of group identification developed within this theory's tradition, helps convey radicalization's desperate rationale. While high identifiers have been found to engage more often in radical strategies due to a higher investment in their related social identity (Rosenbush, 2017), the inverse relation has also been found to be true (Jiménez-Moya et al., 2015). Indeed, radical strategies require a larger commitment in comparison with their more moderate counterparts, as their endorsement is linked with more negative intergroup evaluations which can undermine the group's reputation at the social and personal level. In other words, high identifiers are more likely to risk everything by means of radical action to benefit the group they so heavily rely upon (Rosenbusch. 2017). However, they are also more sensitive to harmful social evaluations resulting from radical actions, which may hamper, rather than enhance, their engagement in such forms of action (Jiménez-Moya et al., 2015).

In summary, our goal throughout this study is to integrate the collective action literature pertaining to the social identity approach by confronting NTL's findings on radical strategies with SIT, SCT and SIDE's more classic predictions. We do this by crossing strategic considerations of outgroup accountability (anonymity vs. visibility, SIDE), with considerations of ingroup norms (moderate vs. radical norm, NCM) within a stable disadvantaged condition to understand the effects on endorsement of radical vs. moderate collective action strategies (NTL). Table 1a provides a visual representation of the plotted

interactions. The labels in the quadrants refer to the type of behaviour we expect to find when combining the theories' key features, and use the language proposed by Packer (2008) to distinguish them.

The table can be read in three different ways. First, the distinction between the quality of the action (moderate vs. radical), highlights the theoretical debate between classic theories of collective action and modern radical-focused ones (SIT vs. NTL). On the other hand, and of greater relevance to the purpose of the current study, by focusing solely on the right-hand side of the table, *we distinguish between different types of radical action* by building an initial taxonomy of radical collective strategies. By relying on each theory's specific contribution, we identify the *different motives* and *features* underlying individual collectively-driven radical action (i.e., carried out by the individual, but on the behalf of and for their ingroup's benefit). First, we refer to SIDE's distinction between identifiability and anonymity to include strategic considerations of collective action. Because radical strategies are punishable, we expect people to endorse them more highly when they are guaranteed the protective cover of anonymity towards the opposed outgroup. As discussed above however, only considering outgroup norm violations offers a limited perspective, which we integrate with NCM predictions. This can be visualised by comparing the quality of the individual's endorsed action (moderate vs. radical action) in reference to their *ingroup's* prescriptive norms (moderate vs. radical norms). We focus our interpretation on people who violate their moderate group norms by endorsing radical strategies (i.e., upper right "martyr" and "lone-wolf" dissent). According to NCM, we expect the experience of normative dissent to be more prevalent in high identifiers, which in turn would make them the most likely subgroup to develop positive attitudes towards radical action (see Table 1b, Dissent vs. Martyr/Lone Wolf

Dissent). The study's complete set of hypotheses will be outlined in more detail in the next section, following a more concrete explanation of the study's design.

Table 1a. The plotted interactions between SIT, SIDE, NCM and NTL. The labels in the quadrants refer to the type of behaviour we expect to find when combining the theories' characteristics (based on NCM; Packer, 2008).

		Quality of the Action			
		Moderate Action		Radical Action	
		Identifiable	Anonymous	Identifiable	Anonymous
Group Norms	Moderate Norms	Loyal Conformity	Loyal Conformity	"Martyr" Dissent	"Lone-wolf" Dissent
	Radical Norms	Dissent	Dissent	Uneasy Conformity	Uneasy Conformity

Table 1b. This table refers to the taxonomy provided in table 1a, with specific focus on the effects of group identification. Indeed, we indicate with a higher number of +/- the supposed strength of the relation between identification and the collective action strategy which would arise from the combination of group norms x quality. We collapsed the conditions pertaining to the IV of visibility to facilitate the table's readability.

Group Norms		Quality	
		Moderate Action	Radical Action
	Moderate Norm	+ + + + +	---
		Loyal Conformity	Martyr/Lone Wolf
			Dissent
	Radical Norm	--	+ + + +
		Dissent	Uneasy Conformity

Our Study

In order to transcend the methodological limitation permeating the literature on radicalization outlined above, we designed an experimental study based on the paradigm created and first utilised by Rosenbush (2017). Since we wanted to test the validity of NTL's predictions in comparison to those from more classic theories of intergroup behaviour, we needed to create the optimal conditions for NTL (i.e., radical) strategies by conveying a stable and unfair social disadvantage. Rosenbusch's paradigm allows us to do this by creating social groups and identities which can be manipulated and controlled in experimental settings. We utilised the bogus distinction between ego- (i.e., exploit*ing*) and community-focused groups (i.e., exploit*ed,* see Design) to control perceptions of belonging and social status, upon which we then manipulated normative features and measured positive attitudes towards moderate and radical action. Given the relevance of group identification within the social identity approach, we also measured this construct and studied its moderating effects on the different qualities of collective strategies to best grasp the conditions under which radicalization occurs. However, due to recent findings highlighting the particularly complex relation between group identification and radical action (see Jiménez-Moya et al., 2015 vs. Rosenbusch, 2017), we also measured and tested a second potential moderator, adherence to

group goals to investigate whether it could potentially function as a more specific predictor. We chose to test this alternative moderator due to Becker and colleagues' (2011) findings that radical individuals tend to be more attached to the group's cause, rather than the group itself. Finally, and due to modern understandings of radicalisation as both cognitively and emotionally rooted (Tausch et al., 2011; van Zomeren et al., 2004, 2008) we also measured negative and positive intra- and inter-group emotions to explore their potential effects on radicalization. Of particular interest were the negative intergroup emotions of anger and contempt as classic perspectives on collective action argue for the role of anger in driving social change, while NTL proposes that it is rather the extreme dehumanisation resulting from contempt that elicits radical manifestations (Tausch et al., 2011).

Participants

The experiment took place on the online platform Qualtrics and was advertised among first-year psychology students at a Dutch university. A total of 292 (< female) students signed up, from which 11 were excluded due to having responded to less than half of the necessary items. A further 6 participants failed the weak attention check, which should have resulted in their exclusion according to the pre-registered details of the study. Nevertheless, a conservative analysis excluding these participants did not produce statistically significant results to the one including the whole sample. Therefore, for reasons of statistical power we carried out the main and exploratory analysis by including the complete sample of 281 participants. A compensation of 0.5 ECTs was received by all participants who took part in the study.

Design and procedure

The study followed a 2 (group norms: moderate vs. radical) x 2 (visibility of action: identifiable vs. anonymous) x 2 (quality of action: moderate vs. radical) x moderator (group identification: continuous, centred) design, with between-subjects on the first factor and within-subjects on the remaining. The study was pre-registered and participants were randomly assigned to the experimental conditions.

The study was advertised on a university-based platform (SONA) where Ps had the possibility to sign up in exchange for a small portion of course credits. Upon registering and initiating the study, Ps were provided all the necessary information for its completion. Given the social desirability effects elicited by questions pertaining to radical action, Ps were told they would participate in a study aimed at collecting additional data on the reliability of the (fictitious) Individual Social Focus-Test, with regards to which they would receive additional information at a later stage of the study. They were then asked to complete a word-association task (Rosenbusch, Appendix A), which was a fabricated procedure to manipulate individuals' social identity. Indeed, once Ps completed the task, they were presented with a screen (Appendix B) showing the percentage of accuracy of their allocation to the community-focused group. All Ps were arbitrarily allocated to the community focused-group in order to create the perfect NTL condition, as community agents would be described in the study's following step, as those suffering from pervasive exploitation (Appendix C).

After receiving their fake group membership diagnosis, Ps were randomly allocated either to the moderate or radical norm condition. Ps were asked to read a brief text which differed solely in its last paragraph. The first sections were the same for both conditions, and provided the (fictitious) theoretical background supporting the Individual Social Focus-Test.

More specifically, Ps were told about the scientific evidence in support of what was described as a new two-group theory involving the opposing groups of ego-focused and community-focused individuals. Ego-agents were described as being *"mainly absorbed by their own egotistical desires" which* oftentimes led them "*to exclude and even exploit community-agents*". They were further described as not caring about their exploitation and rather justifying with a "dog eat dog" mentality. On the other hand, community agents' defining features revolved around empathy, prosocial behaviour and values which are widely recognized as being honourable. They were further described as being heavily exploited by ego-agents and representing the minority of the worldwide population (25%). These two clauses were fundamental to convey the desperation of community-agents' social position, characterised by a stably low social status (i.e., exploitation) in addition to a low group efficacy (i.e., possibility to change) determined by a general lack of support (only 25% of people are community agents who might help). The text's last paragraph differed depending on Ps' allocation, indeed it specified their ingroup's prescribed set of strategies to oppose the described exploitation. In the moderate condition Ps were told community-agents operate according to moderate norms (e.g., peaceful protests; Appendix D), while people in the radical condition were told their group prescribed and was accepting of radical means (e.g., guerilla tactics; Appendix E). Following the manipulation, Ps were then asked to respond to manipulation checks, measures of attitudes towards collective action, measures of group identification, adherence to group norms, emotional responses, and finally to questions investigating the believability of the cover story. Before exiting the study, they were offered a full debriefing.

Hypotheses Overview

Given the complexity of the study, Table 2 provides a summary of the pre-registered research questions and hypotheses addressed by the current experiment.

Table 2. Overview of the study's research questions and hypotheses. In addition to these, and as declared in the introductory section we also carried out exploratory analyses relating to the moderator measuring adherence to group goals and Ps' emotional reaction to exploitation. We did not formulate any specific hypotheses with regards to emotion's role or adherence to group goals, as these were the subject of a peripheral exploratory analysis.

Research Question	Related Hypotheses
RQ1: Does the endorsement of individual actions for collective purposes differ depending on whether the quality of the action is moderate or radical?	H1: Overall, we expect individuals to show higher levels of endorsement for moderate actions, rather than radical (Wright, 2001).
RQ2: Does the endorsement of individual actions for collective purposes differ depending on whether the action is identifiable or anonymous towards the in-group and out-group?	H2: In accordance with the SIDE model's strategic dimension, we expect endorsement of radical actions to be higher when anonymity is granted towards the out-group (Rosenbusch, 2017). However, since we expect the in-group to also represent a determining source of disapproval for radical actions when they contrast group norms (NCM). H3: We also expect individuals to act

against their group's norms in radical ways more often in the anonymity condition rather than in the identifiable one, as endorsement of radical action while anonymous safeguards individuals from repercussions, both from the in- and out-group (Spears et al., 2002).

RQ3: Do group norms influence the type of collectively-driven action individuals will endorse?

H4: We expect individuals whose group is explicitly accepting of radical norms, to be more likely to endorse these types of strategies in comparison to individuals whose group endorses moderate action.

RQ5: Does social identification moderate the relationship between the IVs and the endorsement of radical action?

H5: We hypothesise high identifiers who care most for their group's social status, to be more likely to endorse radical collective action to challenge the oppressive out-group. However, we assume this to happen only when the group's efficacy is perceived as stably low, resulting in a nothing-to-lose mentality (NTL). We believe this to be the case, as a stable and desperate enough condition might shift high identifiers' attitudes towards strategies which would otherwise be considered threatening to their group's reputation, and for this reason avoided (Jiménez-Moya, et al., 2015, Packer,

2008).

H6: Additionally, we also expect the desperate condition of one's group (NTL) to push high identifiers to choose radical strategies in situations where they perceive their group's norms (i.e., moderate) to be in conflict with the group's goals and survival (NTL + NCM; Packer, 2008).

In other words, we expect high identifiers to be more likely to endorse nonnormative radical action when their group's norms are perceived as being too moderate to properly address the dire condition in which the group finds itself in. Further, we hypothesise the endorsement of radical action by high identifiers to be facilitated (i.e., we expect to find higher rates of endorsement) when concealment of their identity from in-and out-group members (i.e., anonymity) protects them from potential repercussions (e.g., punishment from the out-group, or ostracization form one's in-group; SIDE).

Measures

Attention and Manipulation Checks

In order to verify whether participants had read all the material accurately they were first asked to correctly recognize their membership group on the basis of the diagnosis they had received during the first phase of the study. They were asked to complete the sentence "My test result showed I am a …" with one of three options (1) community-focused person, (2) ego-focused person, (3) no clear result.

Further, we tested whether Ps had cognitively assimilated the information provided by the text. We did this by asking participants to indicate the truthfulness (or not) of a series of four statements. The first two represented contextual embedding to prevent the emergence of demand effects, while the latter two focused on testing our manipulation of the norm ("*Community agents were likely to protest through vandalism, against ego-agents' exploitation*" and "*Community agents were likely to protest through peaceful demonstrations, against ego-agents' exploitation*").

Collective Action Scales

This study's primary variables of interest were positive attitudes towards different forms of collective action strategies, with special focus on ones of radical nature. We obtained the different types of collective actions by crossing our two within-subject factors, as suggested in table 2. We therefore obtained 4 collective action strategies (Identifiable/Moderate; Identifiable/Radical; Anonymous/Moderate; Anonymous/Radical), which were investigated by means of 4 items each. The collective action scales were adjusted and (re-)constructed on the basis of Rosenbusch's (2017) reported data for each of his original item's reliability. An example of one item for each collective action scale is provided in Table 2, whilst the full scales with their respective reliabilities and related analyses can be found in Appendix F. Importantly, given the introduction of the in-group as a potential source of disapproval for radical action, we designed items which would convey either identifiability or

anonymity towards both the in- and out-group, as this allowed us to include NCM predictions. Overall, the utilised scales were reliable ($\alpha > 0.7$), with only the visible radical scale having a reliability slightly below average ($\alpha = .62$). This is in line with previous research on radical collective action. Indeed, this type of strategies represent the most threatening for Ps, which in turn leads to a higher heterogeneity in responses causing a slight reduction in reliability (Rosenbusch, 2017; Tausch et al., 2011).

Positive attitudes were measured by asking Ps to rate the extent to which they found a certain type strategy justifiable (7-point scale, completely unjustified to completely justified). Higher scores indicated higher positive attitudes towards the rated strategy. One final remark on the chosen DVs for this study regards the choice to investigate attitudes, as opposed to intentions or actual behaviour. While actual behaviour is extremely hard to measure in experimental settings (see Reicher et al., 1995, Wright et al., 1990b for notable examples), action-intentions are a common measure of radicalization within the collective action literature (Greijdanus et al., 2023; Jiménez-Moya et al., 2015; Packer & Chasteen, 2010; Rosenbusch, 2017; Tausch et al., 2011; van Zomeren et al., 2008; Van Zomeren et al., 2010, 2013). Nevertheless, they are limited by the social desirability effects they elicit within respondents which may ultimately complicate interpretations. As Wolfowicz and colleagues' (2021) work suggests however, while not all who hold radical attitudes engage in radical behaviour, the majority of those who do engage in radical actions hold radical attitudes. Therefore, measuring attitudes and gaining a better understanding of the situational constraints they arise from, allows us to also contribute to the ever-growing field of research focused on designing effective interventions to prevent and counter (violent) extremism (P/CVE).

Table 3. The four types of collective action strategies investigated in the current study. Every quadrant was obtained by crossing quality x visibility of action (within-subject factors). Each quadrant further includes an example of one item composing the collective action scale used to measure attitudes towards the specific type of collective action.

		Quality of the Action	
		Moderate	Radical
Visibility of the Action	Identifiable	Identifiable Moderate Collective Action Strategies E.g., *To what extent would you consider it to be justified to openly criticise and challenge ego-agents in public?*	Identifiable Radical Collective Action Strategies E.g., *To what extent would you consider it justified to openly vandalise businesses of ego-agents that exploit others?*
	Anonymous	Anonymous Moderate Collective Action Strategies E.g., *To what extent would you consider it justified to anonymously donate money to activist groups who do research and publicise the crimes of ego-agents?*	Anonymous Radical Collective Action Strategies E.g., *To what extent would you consider it justified to create an anonymous online profile to troll specific ego-agents who have been shown to exploit community-agents?*

Measures of Group Identification

We referred to the hierarchical model of group identification (Leach et al., 2008) to obtain an accurate measure of group identification. According to this model there are two core components of group identification; because of its relevance in relation to our DVs, we focused specifically on the self-investment component. More specifically we adopted/adjusted

7 items pertaining to the solidarity, satisfaction and centrality sub-dimensions of this component, which were respectively measured on a 7-point scale (not at all-very much). The scale's reliability was extremely high (α = 0.92; see Appendix G for the complete reliability analysis).

Exploratory Analysis: Measures of adherence to group goals and Emotions

As mentioned in previous sections we also tested an alternative moderator, people's adherence to what was described as their ingroup's goals (i.e., community-agents). Ps were first made aware that community-agents' collective goal was to challenge *"the current, unjust social structure"* and therefore implicitly challenge their group's persecutors, ego-agents. Since we are not aware of any existing scale measuring this specific factor, we created 4 ad-hoc items to measure the extent to which people felt "close" to their group's described goal (α = 0.885, Appendix H for full reliability analysis). All items were measured on a 7-point scale (not at all-very much).

Furthermore, we also included 18 measures of group emotions. We tested a total of 9 (5 negative, and 4 positive) emotions both in relation to the out-group (i.e., intergroup emotions) and to one's ingroup (i.e., intra-group emotions). While past studies have mainly focused on measuring intergroup emotions (especially of the negative type, anger vs. contempt debate; van Zomeren et al., 2004, 2008 vs. Tausch et al., 2011), we also included measures of intragroup dimension due to our choice to include NCM predictions. Indeed, while SIT, SIDE and NTL predict individuals' (radical) attitudes partly on the basis of the affective reaction provoked by outgroup injustice (van Zomeren et al., 2004), NCM introduces the potential for collective action attitudes to be elicited by negative emotions elicited by the ingroup. This may be especially true in conditions of normative dissent, where

one's ingroup is perceived to promote ineffective moderate ingroup norms in social circumstances which are perceived to require more extreme measures. Indeed, we expected high identifiers to develop more negative intra-group emotions when their fellow ingroup members were described as endorsing ineffective group norms (martyr/ lone wolf quadrants, p. 13). All items were measured on a 7-point scale (not at all-very much). Appendix I provides the reliability analysis for the positive and negative subscales of intragroup and intergroup emotions respectively.

Believability of the cover story

Finally, we included a funnel debriefing procedure by including 5 items meant to progressively assess in more detail the adequacy of the experimental paradigm used. The items included open ended questions (2) and multiple-choice questions (3), with the last, most conservative measure of believability in the cover story being "*Do you find your diagnosis as either a community- or ego-agent believable?*". 1 multiple choice item was measured on a 7-point scale (strongly disagree-strongly agree), while the other two were measured on a 5-point scale (extremely unbelievable- extremely believable). Circa 50 % of Ps believed in the cover story (38% indicated they perceived the cover story to be somewhat believable, while 12% extremely believable), while circa 33 % expressed suspiciousness towards the experimental paradigm. A further 12% indicated they found the feedback provided neither believable, nor non-believable. This data was not further analysed in the current study, but will be will be taken into account when discussing the current paradigm and its limitations.

Results

All analyses were carried out on SPSS-28. The main analysis consisted of a repeated measures analysis of variance with between- and within-subjects effects. All underlying assumptions needed for an RM-ANOVA analysis were met with the exception of a slight deviation from normality registered for the identifiable radical collective action scale. This was to be expected as previous researchers reported the same issue in the past (Tausch et al., 2011). Nevertheless, since all other variables were normally distributed and this type of analytic method is robust to weak violations of normality (Blanca et al., 2023) we proceeded with this type of analysis. Appendix J offers an overview of the correlations among all variables considered in the study.

Manipulation Checks

We verified the effectiveness of our manipulation by computing a crosstab analysis of people's allocated group norms in relation to what they perceived their ingroup prescribed in terms of collective action strategies. Overall, the results' direction was coherent with our desired manipulation; people in the radical condition perceived their group endorsed radical strategies ($n_{rad.}$ = 58) more often than people in the moderate condition ($n_{mod.}$ = 13). This also applied to Ps in the moderate norm condition as they more commonly identified these types of strategies as being prescriptive for their group ($n_{rad.}$ = 111) than individuals in the radical condition ($n_{mod.}$ = 67). However, an analysis of the manipulation check's incorrect responses reveals the manipulation to have been weak. This might have been due to the fact that Ps did not perceive the conveyed norm as precluding the possibility for other types of strategies. Tables 4 and 5 show that coherently with common logic, people in the radical condition perceived community agents to also endorse moderate strategies (incorrect responses, n = 67, Table 4), more often in comparison to people in the moderate condition asked about the group's endorsement of radical strategies (incorrect responses, n =13, Table 5). This is in line

with the idea that while moderate actions can easily be taken into consideration by "radical groups" (i.e., radical norm) because of their less forceful nature, the opposite is not true for "moderate groups". Indeed, while a preference for moderate action (conveyed by the norms) does not necessarily exclude the *possibility* for radical ones, Ps in the moderate group (i.e., moderate norm) are warier of these types of strategies due to their discrepancy with the more moderate actions endorsed by their group.

Table 4. Crosstabs for people's group norms in relation to what they perceived their ingroup prescribed in terms of collective action strategies. The first manipulation check investigated moderate collective strategies (the emphasis was not present in the original script).

		Manipulation check 1 – Community agents were likely to protest through ***peaceful demonstrations***, against ego-agents' exploitation.			
		True	False	Not specified	Total
Group Norms	Moderate	111	8	21	140
	Radical	67	29	45	141
Total		178	37	66	281

Table 5. Crosstabs for people's group norms in relation to what they perceived their ingroup prescribed in terms of collective action strategies. The second manipulation check investigated radical collective strategies (the emphasis was not present in the original script).

		Manipulation check 2 – Community agents were likely to protest through ***vandalism***, against ego-agents' exploitation.			
		True	False	Not specified	Total
Group Norms	Moderate	13	91	36	140
	Radical	58	57	26	141

Total	71	148	62	281

Main Analysis: Collective Action & Group Identification

Our principal analysis consisted in a four-way RM-ANOVA with as between-subjects factor, group norms (moderate vs. radical norms), and within-subjects factors the variables of visibility (identifiable vs. anonymous) and quality of the collective action strategy (moderate vs. radical action). We further introduced group identification as continuous moderator. I discuss the study's results in light of the Hypotheses listed in Table 2.

H1: Quality of the Action

As hypothesised, we did find a strong main effect for quality of the collective action strategies ($F (281,1) = 1077.48$, $p < .001$, $\eta^2_p = .79$). An analysis of the marginal means revealed that overall Ps held more positive attitudes towards moderate ($M_{mod.} = 4.83$, SE = .06) rather than radical strategies ($M_{rad.} = 3.05$, SE = .06; $t (281) = 1.78$, $p < .001$). Such evidence is in line with past research in the field which has also found an overall preference for more moderate means, as these are perceived to be more widely acceptable (Jiménez-Moya et al., 2016; Rosenbusch, 2017; Wright et al., 2001).

H2 & H3: Visibility of the action

In line with SIDE's strategic predictions, we hypothesised an interaction effect between the variables of Visibility x Quality (see Table 2). As expected, we found a significant interaction effect ($F (281,1) = 22.39$, $p < .001$, $\eta^2_p = .07$), whose direction however was opposite to what we initially predicted. Specifically, Ps tended to develop more positive attitudes towards identifiable radical strategies ($M_{identrad.} = 3.16$, SE = .06) rather than anonymous ones ($M_{anonrad.} = 2.94$, SE = .07; $t (281) = .22$, p < .001). In different words these

results seem to suggest people prefer to engage in radical strategies when identifiable to the "punishing" outgroup rather than anonymous. However, interpretations of this effect require caution due to the heterogeneous nature of the items used to create the collective action scales. Indeed, this study has no way of definitively discerning whether the observed interaction was spuriously caused by the different content of the moderate vs. radical items, rather than by the IVs themselves. Notwithstanding, the linearity between the direction of this effect and the study's other findings, could be seen as suggesting the hypothesized interaction to have indeed been caused by the supposed variables. Table 6 provides the complete post-hoc analysis qualifying the Visibility x Quality interaction effect.

Furthermore, according to NCM the ingroup might also represent a source of disapproval for radical strategies when these violate the group's prescribed moderate norms. In turn this might lead people to prefer the cover of anonymity when violating their group's norms with more radical strategies. We therefore hypothesised and tested the three-way interaction between Visibility x Quality x Norm, which however was not significant (F $(281,1) = 1.05, p > .05$).

Table 6. Pairwise comparisons qualifying the Visibility x Quality interaction.

						95% Confidence Interval for Difference	
Quality	(I) Visibility	(J) Visibility	Mean Difference (I-J)	SE	p-value	Lower Bound	Upper Bound
Moderate	Identifiable	Anonymous	-.146	.65	.024	-.273	-.019
	Anonymous	Identifiable	.146	.065	.024	.019	.273
Radical	Identifiable	Anonymous	.222	.052	<.001	.120	.324
	Anonymous	Identifiable	-.222	.052	<.001	-.324	-.120

H4: Group Norms

We hypothesised a main effect of group norms, indicating Ps in the radical norm condition would develop positive attitudes towards radical strategies more often than Ps in the moderate condition. In line with what was suggested by our manipulation check we found no main effect of group norms (F (281,1) = .56, p > .05). Table 7 crosses the responses on the collective action scales by group norms and shows there were no significant differences between the two group norm conditions. Nevertheless, more detailed analyses including the moderating effects of group identification revealed that despite the manipulation's seemingly weak effect, it was still influential in determining complex attitudinal patterns as described below.

Table 7. Means for the 4 different types of collective action strategies crossed by the group norm manipulation.

		Group Norms		
		Moderate Norms	Radical Norms	t
Collective Action Strategy	Identifiable Moderate	M = 4.74 (SD = 1.22)	M = 4.79 (SD = 1.12)	t (281) = -.140, p = .889
	Anonymous Moderate	M = 4.83 (SD = 1.37)	M = 4.99 (SD = 1.28)	t (281) = - .819, p = .413
	Identifiable Radical	M = 3.09 (SD = 1.05)	M = 3.23 (SD = 1.18)	t (281) = -.980, p = .328
	Anonymous Radical	M = 2.89 (SD = 1.20)	M = 2.98 (SD = 1.18)	t (281) = -.504, p = .615

H5 & H6: Group Identification

As expected from previous research's findings, we found a significant main effect of group identification (F (281,1) = 28.72, $p < .001$, $\eta^2_p = .09$), which was however qualified by three higher-order interactions.

In line with our predictions, we first found a significant two-way interaction between the IVs of Quality x Group Identification (F (281,1) = 19.26, $p < .001$, $\eta^2_p = .06$). Once again, however, the relation we had initially hypothesised was reversed. Indeed, given our experimental paradigm and the creation of the "ideal" NTL condition, we expected a higher degree of group identification to be related to higher endorsement of radical strategies in conditions of stable desperation (see Table 2). Post-hoc analyses however favoured SIT's

more classic perspective, and NTL's more conservative interpretation (Jiménez-Moya et al., 2015 vs. Rosenbusch, 2017), according to which group identification is positively related to moderate strategies (B = .33, $p < .001$) rather than radical (B = .06, $p = .366$) presumably because the latter pose too high of a risk to ingroup reputation (Jiménez-Moya, et al., 2015).

The findings in support of a (nearly) significant three-way interaction between Quality x Group Identification x Group Norms ($F (281,1) = 3.52$, $p = .061$) seem to further favour the complexity of radical action as proposed by NTL. Indeed, an analysis of the correlations between the three variables involved revealed group identification to be significantly correlated to radical actions *solely* when this type of strategy was endorsed in the moderate norm condition (r = .28, $p < .001$) while not in the radical condition (r = .07, $p = .386$). We further tested the pattern revealed by the correlations by means of a post-hoc analysis, which confirmed our intuitions were correct with regards to the relevance of including group norms (i.e., NCM predictions) when predicting radical collective action (first part of H6, see Table 2). We found statistically significant regression coefficients for group identification, solely for radical action endorsed in the moderate norm condition (B = .22, $p < .001$), and not in the radical norm condition (B = .06, $p = .386$). This seems to confirm and expand upon NCM's claim that only high identifiers are willing to dissent from their group's endorsed norms, by suggesting this is especially true when the dissent occurs in circumstances of stable social disadvantage (NTL).

Nevertheless, we hypothesised high identifiers' violation of their group norms would occur in radical ways *only* in strategic circumstances, namely when the punishable nature of the strategy remained anonymous from disapproving fellow ingroup members (second part of H6). We did not find support for the supposed four-way interaction between Quality x Visibility x Group Identification x Group Norms ($F (281,1) = .26$, $p = .610$). However, we did

find an unpredicted three-way interaction between Quality x Visibility x Group Identification (F (281,1) = 6.79, p = .010, η^2_p = .02). A simple slopes analysis of high identifiers'(+1SD) attitudes revealed they preferred anonymous ($M_{anonmod.}$ = 5.40, SE = .10) over identifiable ($M_{identmod.}$ = 5.10, SE = .09; t (281) = .29, p > .001) strategies when these were moderate, in contrast to identifiability ($M_{identrad.}$ = 3.37, SE = .09) over anonymity ($M_{anonrad.}$ = 3.10, SE = .09; t (281) = .27, p < .001) for strategies of radical nature. On the other hand, the same analysis of low identifiers (-1SD) revealed this group expressed preferences with regards to the visibility of the collective action *only* when this was of radical nature. More specifically, low identifiers seemed to once more prefer identifiable radical action ($M_{identrad.}$ = 2.95, SE = .09) over anonymous ($M_{anonrad.}$ = 2.78, SE =.10; t (281) = .17, p = .021). Tables 9 and 10 report the results of the simple slope analyses for high and low identifiers.

Table 8. Post-hoc analyses carried out to test the Quality x Group Identification x Group Norm interaction (NCM). The regression coefficients in the quadrants refer to group identification. To provide a transparent perspective on the data, the table provides the regression coefficients for the analysis including the variable of Visibility, and the one excluding it (collapsed visibility). Importantly, we did not find a four-way interaction including visibility of the action.

		Quality of the Action			
		Moderate		Radical	
		Identifiable	Anonymous	Identifiable	Anonymous
Group Norms	Moderate Norms	B = .285**	B= .385**	B = .241 **	B = .212** p = .006
		Collapsed visibility B = .335**		Collapsed visibility B = .226**	
	Radical Norms	B = .266**	B = .409**	B =.091 p = .268	B = .041 p = .619
		Collapsed visibility B = .337**		Collapsed visibility B = .066 p = .386	

** indicate significance at the 0.01 level (2-tailed)

Table 9. Simple slopes analysis for the Quality x Visibility x Group Identification interaction, for the population of high identifiers (+ 1 SD).

						95% Confidence Intervals for Difference	
Quality	Visibility (I)	Visibility (J)	Mean Difference (I-J)	SE	p-value	Lower Bound	Upper Bound
Moderate	Identifiable	Anonymous	-.299	.091	.001	-.479	-.119
	Anonymous	Identifiable	.299	.091	.001	.119	.479
Radical	Identifiable	Anonymous	.272	.073	< .001	.128	.417
	Anonymous	Identifiable	-.272	.073	<.001	-.417	-.128

Table 10. Simple slopes analysis for the Quality x Visibility x Group Identification interaction, for the population of low identifiers (- 1 SD).

Quality	Visibility (I)	Visibility (J)	Mean Difference (I-J)	SE	p-value	95% Confidence Intervals for Difference	
						Lower Bound	Upper Bound
Moderate	Identifiable	Anonymous	.007	.092	.942	-174	.187
	Anonymous	Identifiable	-.007	.092	.942	-.187	.174
Radical	Identifiable	Anonymous	.171	.074	.021	.026	.316
	Anonymous	Identifiable	-.171	.074	.021	-.316	-.026

Exploratory Analysis: Adherence to Group Goals and Emotions

We found a highly significant correlation between adherence to group goals and group identification ($r = .756$, $p < .001$), which might suggest that our alternative moderator is a sub-dimension of group identification. Despite this however, when we attempted to replicate the previous analysis with adherence to group goals as moderator, the strength of the effects was lessened or in some cases lost (e.g., three-way interaction including group norms, see Appendix K). Additionally, given the lack of literature on the topic and issues of multicollinearity derived from the high correlation among the two moderators we did not reach a conclusion with regards to whether adherence to group goals does indeed represent a more specific predictor of radicalization.

Finally, while the focus of the current study is not on the emotional "pathway" to collective action (van Zomeren et al., 2004), we specifically analysed the emotions of anger and contempt, as these are the two most contended in the current literature on radicalisation. We did not find support for Tausch et al., (2011) claims that radical collective action is best predicted by the emotion of contempt as the most prevalent intergroup emotion registered among our Ps was that of disappointment ($M = 3.75$, SD = 1.77), followed by anger ($M = 3.22$, SD = 1.59). This seems to be more in line with classic theories of collective action suggesting anger lies at the base of extreme forms of social change. Nevertheless, and of most interest for the current study is our finding of a possible affective expansion of the NTL theory. Indeed, an analysis of the intra-group emotions revealed people tended to display more positive emotions towards their ingroup when they engaged in radical action that contrasted their ingroup's norms (B = .22, $p < .001$) than when they did not (B = .10, $p = .086$). While these results were not supported by a higher order interaction ($F (281,1) = 2.41$, $p = .121$, $\eta^2_p = .009$) they are in line with a theoretical development of the NTL inclusive of normative considerations as proposed in the NCM, and suggest one possible direction for future research (see Future Directions).

Discussion

Our results support recent theoretical developments claiming the fundamental difference between moderate and radical collective action strategies. We integrated SIT's (and related theories) classic knowledge on intergroup behaviour and demonstrated the theory's strength in predicting *moderate* forms of collective action. In line with previous research, we found people prefer moderate over radical strategies supposedly due to their more socially acceptable nature (Rosenbusch, 2017; Wright 2001). Additionally, we also found support for

SIDE's strategic prediction that anonymity in moderate strategies is preferable over identifiability, given it limits the possibility of experiencing negative repercussions from the outgroup (see H3, Reicher et al., 1995). We found this to be true only among high identifiers (see Table 10), which once again reconfirms SIT's claim that in order for collective preoccupations to emerge (and therefore collective actions), the group needs to be relevant in the psychological organisation of the individual (Ellemers et al., 1999).

Considerations of strategic nature (i.e., identifiability vs. anonymity) however, become harder to interpret when applied to *radical* collective strategies. Indeed, as reported in Table 2 and in our discussion of the results, we initially expected Ps to showcase more positive attitudes towards radical actions when they were granted anonymity towards the outgroup. We expected such an effect due to the high-risk nature of radical strategies which elicit more severe social consequences such as harsher punishments from the outgroup they target (i.e., incarceration). Surprisingly, this was not the case, as we found a pervasive preference (i.e., present among both high and low identifiers, Tables 9 and 10) for identifiable over anonymous radical action. While we formulated our initial hypotheses to align with Rosenbusch's (2017) findings that SIDE mechanisms are successfully transferable to the field of radical action, our results are better understood within the theoretical framework provided by the NTL. Indeed, in its very first conceptualization the "nothing-to-lose mindset" was defined by Scheepers et al. (2006) as the ultimate aggressive strategy, which differed from other forms of outgroup derogation (resulting from different forms of in-group bias) in its apparent disregard for rational strategic considerations. In their study, Scheepers and colleagues (2006) found that people in a stable, desperate condition were indeed found to showcase *harsher* forms of ingroup bias (i.e., maximum differentiation), in conditions where they were *recognizable* (and therefore punishable) to the outgroup. The authors explained this seemingly illogical form of intergroup behaviour as the "*ultimate attempt to fluster the out-*

group" (Scheepers et al., 2006, p. 951) arising from a rational appraisal of the impossibility to successfully engage in other (more moderate) forms of action. We can therefore explain our findings in light of Ps rational evaluation of their desperate circumstances, which lead them to believe that in a condition where they had nothing left to lose, the most "strategic" thing to do was to confront the outgroup more firmly and openly (i.e., by means of radical strategies). This latter more fitting interpretation, against our initial predictions, highlights an important theoretical conflict between the SIDE model and NTL which can be best untangled by introducing the additional factor of group identification.

This debate redefines the question at the centre of the radical collective action field as being focused on uncovering *when* radical strategies become strategic, and *how t*he definition of strategic varies according to individuals' group identification. Our study contributes importantly to these question as it offers a bridging perspective on past conflictual findings on the matter. Indeed, as outlined previously, past research has offered evidence in support of a mutually contradictory relation between identification and radical action, where both high and low identifiers were found to have (significant) motives to engage (or disengage) from this type of strategies. On the one hand, and in line with the social identity approach's rationale, because radical strategies require a heightened devotion to one's ingroup (i.e., they imply more risks), high identifiers are expected to be the ones more committed to endorse these types of strategies. They rely more on their social identity, which in turn makes them more readily prepared to adopt socially unacceptable means to protect their group (and social identity; Rosenbusch, 2017). In technical terms this implies a positive relation between identification and radical collective action which was indeed found by Rosenbusch (2017). On the other hand, because the group's positive value is partly derived from its *social reputation* (Tajfel and Turner, 2004), the endorsement of strategies widely recognized as unacceptable, might hamper high identifiers' endorsement of such strategies out of fear of tarnishing their

group's reputation (Jimenez-Moya et al., 2015). In technical terms this implies a negative relation between group identification and radical action, which was indeed found by Jimenez-Moya et al.'s (2015) study. We offer a clearer picture of identification's effects on radical action by differentiating the strategic motives underlying its adoption in different subpopulations (i.e., high vs. low identifiers), as a reaction to the pervasive experience of desperation created by a stable condition of group disadvantage (i.e., NTL).

When the situation offers no perspectives, we found both high and low identifiers to be more likely to endorse *identifiable* radical strategies. In the case of high identifiers this can be explained by the fact the severe threat to their ingroup, inspires the need to adopt extreme measures (i.e., identifiable) to confront and challenge successfully the oppressing outgroup, regardless of their effect on the group's reputation (Table 10). In other words, in a context where survival is prioritised, a *"no risk, no reward"* type of mentality is adopted by high identifiers who redefine their action to be strategic when it allows them to successfully challenge (and overthrow) the oppressing outgroup (in line with positive relation found by Rosenbusch, 2017). On the other hand, in the same condition of desperation low identifiers are also more likely to engage in identifiable radical action. This can be explained by the fact that since they do not care about the group's reputation, the most strategic thing for them to do is to adopt as extreme measures as necessary (*"by hook or by crook"* mentality) to exit their *individual* condition of deprivation, regardless of their effects on their membership group (Jimenez-Moya et al., 2015). Arguably this might be seen as another form of intergroup behaviour, individual mobility, which as the name suggests, actually represents a non-collective based strategy (for a more in-depth discussion see Jimenez-Moya et al., 2015). Future research on NTL should focus on defining and more clearly discerning low identifiers' motives for radical social change. Despite this, our study's findings allow us to make better sense of the SIDE vs. NTL debate by innovatively discerning differences within the "nothing-

to-lose" mentality among high and low identifiers, by considering the different strategic motives underlying their engagement in radical collective action.

Finally, our goal to successfully differentiate between different forms of collective radical strategies was further met by implementing intragroup considerations of normative nature (NCM). Indeed, by manipulating the group's endorsed norms, we were able to demonstrate that radical strategies which develop in stably disadvantaged social circumstances, are not only a product of strategic evaluations, but also include a close evaluation of individuals' own personal beliefs against those endorsed and promoted by their membership group. Coherently to NCM's predictions we found a positive relation between group identification and normative dissent which allows us to better define when radical strategies occur as a result of the group's endorsed norm. In line with our predictions, we found high identifiers were more likely to showcase positive attitudes towards radical strategies when their group's endorsement of moderate norms was perceived to be counterproductive (or even harmful) to their condition of stable and illegitimate social disadvantage (NTL). The lack of such effect among individuals allocated to the radical norm condition suggests that people exposed to extensive deprivation whose group is perceived to inadequately respond to such experiences, develop significantly more positive appraisal of radical strategies because of a perceived need *to do something*, even if it contradicts the group's norms. This is in line with the NTL mentality outlined above according to which *"desperate means require desperate measures"*, especially when considering the relation between normative dissent and radical action was significant solely for high identifiers. Indeed, while high identifiers are the ones most wary of preserving a positive group reputation, they are also the ones most reliant on its related social identity. It is therefore reasonable they would be the ones risking their group's reputation by challenging its moderate

norms, as the ineffectiveness of such prescriptions in desperate times, might supress concerns for personal and group image, in favour of considerations for the group's ultimate survival.

These findings therefore suggest a successful integration of the theoretical frameworks provided by NTL and NCM which future studies should attempt to replicate and further develop. Additionally, we initially hypothesised a four-way integration including also SIDE's strategic dimension as outlined in H6. However, in retrospect of the evidence described in the previous section on SIDE, our initial prediction of a preference for anonymous over identifiable dissenting strategies (i.e., lone wolf behaviour vs. martyr, see Table 1a) might have been *too* conservatively formulated on the basis of classic theories of collective action. Nonetheless, we did not find a four-way interaction including intra group-related strategic considerations (i.e., identifiability and anonymity towards the "incapable" ingroup), which represents once more an interesting "knot" for future studies to unravel.

Conclusions: Future directions and Theoretical Limitations

The current study adds onto the already-existing literature supporting NTL's superiority in predicting *radical* collective action. However, we move beyond previous findings by expanding NTL's theoretical horizons through the integration of normative considerations, and by providing initial evidence in support of the complementarity of SIDE and NTL predictions.

Firstly, future studies should develop current findings on the proposed NCM and NTL integration both from a methodological and theoretical perspective. From a methodological point of view, while the paradigm designed by Rosenbusch (2017) and re-adapted in this study has been proven to be appropriate, it also has important limitations which need to be addressed. Indeed, as discussed previously there was still a large portion of Ps who reported

they did not find the cover story at the base of the experiment credible (33%, the same percentage obtained also by Rosenbush's most conservative analysis). While this still represents the minority of Ps, future studies should develop the paradigm in a matter that makes the distinction between ego- and community agents more *credible* and more *pervasive*. With regards to the credibility, we addressed the two main sources of disbelief identified by Rosenbusch (2017), namely by resizing the percentages of the population diagnosed as either ego or community agents (i.e., not *everyone* fell into either category, some people were described as borderline/intermediate), and reducing the judgemental connotation of our experimental material. This was achieved by presenting participants with what was described to them as an extract form a scientific paper, which in itself should elicit feelings of objectiveness. Given the paradigm's believability was not significantly improved from Rosenbusch's experiment, future studies should focus on developing the material differently.

Additionally, because NTL speaks to *internalized* experiences of profound disadvantage, the paradigm should be developed in such a manner to convey and elicit feelings of desperation. One possible direction is to implement a longitudinal design involving interactions with supposed ingroup and outgroup members over a prolonged period of time. Beyond transcending current limitations, such a design would also allow to better control for the strategic variables of accountability and social support (see Reicher et al., 1995 for examples). This would be fundamental to further unravel *intra*-group effects of radical action, as predicted by the NCM. Indeed, future research should focus on uncovering the affective and attitudinal effects of engaging in radical action which violates the group's norms on the individual, its ingroup and their reciprocal interaction. Our preliminary analysis on intragroup emotions already shows promising results of a new, previously ignored dimension of NCM, relating to the affective consequences of intragroup violation in NTL conditions.

Finally, our results and analysis on the role of group identification on collective action seems to provide initial evidence in support of a dual, complementary route to radicalization as occurring at the group level. By redefining *what* is (or becomes) strategic in conditions of stable social disadvantage, SIDE predictions help us make sense of the elusive experience of desperation previously described by NTL. Therefore, the mutually contradictory nature of group identification potentially suggests a "dual-pathway" to radical action possibly explained by two complementary routes respectively focusing on NTL and SIDE predictions. Future research should work to provide an integrative model of NTL, SIDE (and NCM) to radicalization.

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Appendix

Appendix A. Rosenbusch's (2017) word-association task used to arbitrarily allocate individuals to the community-focused group. Given the fictitious nature of the task, its results were discarded for the main analysis.

Instructions: In this part of the study, you will be asked to complete the ISF-T test. You will be given more information about the test and the meaning of your results in the coming sections of the study. Instructions:

You will be repeatedly presented with a bold key-word. Below the key word there will be 4 other words.

Your task is to choose and click on the word that you associate most strongly with the key word.

There are no right or wrong answers, but concentration is important. Simply click on the option that you spontaneously relate to the key word.

Prompts:

Key word: Love

- Commitment

- Partner

- Passion

- Good

Key word: Hatred

- Violence

- Enemy

- Mean

- Bad

Key word: Together

- Bond
- Team
- Friends
- Power

Key word: People

- Nation
- Crowd
- Culture
- Union

Key word: Force

- Physical
- Military
- Evil
- Strong

Key word: Politics

- Leadership
- Media
- Law-making
- Democracy

Key word: Exploitation

- Wrong

- Violation

- Condemnable

- Anti-social

Key word: Social

- Friendly

- Fun

- Network

- Activities

Key word: Growing

- Mature

- Adult

- Character

- Change

Key word: Profit

- Money

- Gain

- Business

- Good

Key word: Human

- Rights

- Strength

- Morals

- Compassion

(New item, not included in Rosenbusch, 2017) Key word: Individuality

- Original

- Selfish

- Vanity

- Pioneer

Appendix B. Individual Social Focus Test's diagnosis. All Ps received the same diagnosis which allocated them to the community-focused group. The images showing the percentages of the test's accuracy were taken by the original Rosebush (2017) study.

TEST EVALUATION

Score	48
Diagnosis	COMMUNITY-FOCUSED PERSON
Person-Group-Fit	97%
Probability of ego-focused personality	<1%

EGO - COMMUNITY SPECTRUM

| Ego-agent | | | | | | | | | Community-agent | |
| -50 | -40 | -30 | -20 | -10 | 0 | 10 | 20 | 30 | 40 | 50 |
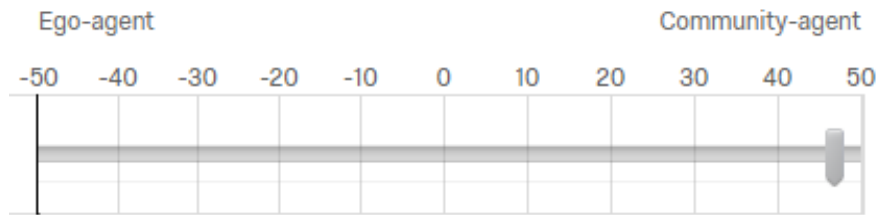
The questions you just answered are a part of a diagnostic tool, the Individual-Social Focus Test (ISF-T; Moore et al., 2022). This tool allows to correctly allocate individuals either to the community-focused group or the ego-focused group.

According to your answers you are a COMMUNITY-FOCUSED person.

You can learn more about this distinction, and its implications, in the brief summary presented on the next page.

In case you were curious to learn more about this distinction and the literature supporting it, please do not hesitate to contact the email-address of the researcher provided at the end of the study.

Appendix C: The first section of the text Ps were asked to read. All participants, regardless of the norm manipulation, read the following instructions and paragraphs.

Instructions: As previously mentioned, we will now provide you with a brief summary of a recent journal article written by Professor Spears (University of Groningen) in collaboration with Professor Moore (University of British Columbia), which is currently under revision.

This article presents their most recent findings on their two-group social theory, which posits the existence of a clear-cut distinction between community- and ego-focused groups.

Participation in this study will contribute to the literature by providing additional evidence for the validity of the ISF-T. Please closely read the text below as you will be asked to answer additional questions later.

—---

[on a separate page]

Community-agents vs. Ego-agents: When systematic exploitation is rendered visible.

This paper presents further evidence in support of a two-group theory separating society into ego-focused and community-focused people (Spears & Moore, 2016). Community-focused individuals are typically concerned with the well-being of others. They tend to gravitate towards professional positions which allow them to help others (Spears and Moore, 2016; Moore et al., 2022) and are characterised by low levels of egotism and dark-triad traits (Paulhus & Willimas, 2002). Ego-agents, in contrast, are mainly absorbed by their own egotistical desires and tend to aspire towards positions of power, which not only serve their own interests but which also tend to exclude and even exploit community-agents (Rosenbusch, 2017).

The two groups are disproportionately present in society (Rosenbusch, 2017). In the populations studied, 65% of people were found to match the characteristics of the ego-focused group while only 25% to manifest the typical profile community-agents (with the rest borderline/intermediate). These differences have also been found to be so pervasive as to predict individuals' choices in career and college preferences (Rosenbusch, 2017). For example, in Rosenbusch's sample 90% of psychology students could be classified as community-agents whereas a similarly high percentage of economics students displayed the profile of ego-agents (perhaps reflecting their focus on economic self-interest).

Recently the evidence for the two-group theory has been reinforced due to the reliability of a new diagnostic tool. A central aim of the current study is the identification of the two groups members' emotional and behavioural reactions when made aware of their social condition, given that these two types remain typically hidden from view. This follows up a recent unpublished study in which ego-focused individuals expressed no remorse for their group's exploitative tendencies and justified their social standing with the "dog eat dog" mentality. By contrast, community-focused individuals generally reacted with shock and outrage, to the revelation that unbeknown to them, they are regularly and routinely exploited by ego-agents [...]

Appendix D: Moderate norm manipulation. Italics and emphasis were added to the current text to aid comprehension, but were not present in the original text read by Ps (to avoid demand effects).

"[Precedent text, see appendix C] However, true to type perhaps, this resulted in them only *endorsing rather moderate strategies to protest* the injustice and discrimination that has occurred hitherto, largely unknown and under cover, not least given the difficulty in definitively identifying exploiting ego-agents without testing them. Specifically, they supported actions such as the *organisation of peaceful demonstrations and petitions as the most appropriate way to protest against exploitation by ego-agents*, allowing them to maintain the moral high ground ("[...] **we do not want to be like them**").

Appendix E: Radical norm manipulation. Italics and emphasis were added to the current text to aid comprehension, but were not present in the original text read by Ps (to avoid demand effects).

"[Precedent text, see appendix C] As a result *they showed a higher endorsement of radical behaviours* to challenge what they saw as unjust discrimination, *including "guerrilla tactics"* (e.g., **vandalism, internet trolling, public shaming) as well as more direct action (rioting and violent forms of protest)** intended to highlight their cause and challenge the injustice (**"It is our right to stand up by whatever means, especially after all we've been through"**).

Appendix F. The collective action scales for each type of collective action strategy investigated, with their respective reliability analyses.

Identifiable Moderate Collective Action Scale (α = .708)

Item	Scale Mean if Item Deleted	Cronbach's Alpha if Item Deleted
To what extent would you consider it to be justified to *openly criticize and challenge ego-agents in public?*	14.58	.588
To what extent would you consider it to be justified to *verbally confront ego-agents about their oppressive and ego-centred behaviour?*	13.98	.654
To what extent would you consider it to be justified to *publicly question the reputation of individuals who clearly belong to the ego-focused group?*	15.02	.653
To what extent would you consider it to be justified to *sign a petition advocating investigation into the criminal activity of ego-agents?*	13.56	.678

Identifiable Radical Collective Action Scale (α = .628)

Item	Scale Mean if Item Deleted	Cronbach's Alpha if Item Deleted
To what extent would you consider it to be justified to *publicly shame ego-agents for their exploitation of others?*	9.08	.453
To what extent would you consider it to be justified to *violently confront ego-agents because of their oppressive and ego-centred behaviour?*	10.49	.582
To what extent would you consider it to be justified to *openly vandalize businesses of ego-agents that exploit others?*	10.12	.472
To what extent would you consider it to be justified to *sign a petition to prosecute ego-agents for their exploitation of community-agents?*	8.23	.699

Anonymous Moderate Collective Action Scale (α = .824)

Item	Scale Mean if Item Deleted	Cronbach's Alpha if Item Deleted
To what extent would you consider it to be justified to *anonymously donate money to activist groups who do research and publicize the crimes of ego-agents?*	14.56	.748
To what extent would you consider it to be justified to *anonymously print and distribute flyers to inform everybody about the wrongdoings of ego-agents?*	15.30	.812
To what extent would you consider it to be justified to *explain to ego-agents through an online alias the damage they have caused to community agents?*	14.39	.784
To what extent would you consider it to be justified to *organize online groups using a pseudonym to discuss strategies to educate ego-agents about their exploitation?*	14.67	.767

Anonymous Radical Collective Action Scale (α = .734)

Item	Scale Mean if Item Deleted	Cronbach's Alpha if Item Deleted
To what extent would you consider it to be justified to *anonymously donate money to community-focused activists committed to naming and shaming influential ego-agents?*	8.44	.697
To what extent would you consider it to be justified to *create an anonymous online profile to troll specific ego-agents who have been shown to exploit community agents?*	8.57	.660
To what extent would you consider it to be justified to *anonymously donate to hacker groups who sabotage the businesses of ego-agents?*	9.08	.666
To what extent would you consider it to be justified to *write slogans with spray cans on walls in the city centre to mobilize others against ego-agents?*	9.16	.675

Appendix G. Reliability analysis for the moderator group identification. The items referred to the sub-dimensions of solidarity, satisfaction and centrality of the self-investment component of group identification as conceptualised by Leach et al. (2008).

Group Identification Scale (α = .928)

Item	Scale Mean if Item Deleted	Cronbach's Alpha if Item Deleted
I feel a bond with community-agents	27.36	.911
I feel solidarity with community -agents	27.32	.913
I feel committed to the community-focused group	27.78	.914
I am glad to be a community agent	26.81	.916
I think that community-agents have a lot to be proud of	27.08	.915
Being a community-agent gives me a good feeling	27.13	.916
Now that I know I am a community agent, this represents an important part of my identity	28.68	.931

Appendix H. Reliability analysis for the ad-hoc scale used to measure the alternative moderator, adherence to group goals.

Adherence to group goals scale (α = .885)

Item	Scale Mean if Item Deleted	Cronbach's Alpha if Item Deleted
I am willing to pursue community agents' goals	11.23	.842
I see the community-focused group's aims as my own	11.78	.817
Community-agents' goals are consistent with my own goals	11.35	.845
There are circumstances under which I would give precedence to community-agents goals over my personal goals	12.06	.899

Appendix I. Reliability analysis for the 4 sub-scales used to measure the inter- and intra-group emotions.

Negative INTER-group emotions (α = .866)

Emotion	Scale Mean if Item Deleted	Cronbach's Alpha if Item Deleted
Anger	11.98	.811
Fear	12.82	.859
Contempt	12.41	.855
Disappointment	11.44	.830
Disgust	12.18	.827

Positive INTER- group emotions (α = .803)

Emotion	Scale Mean if Item Deleted	Cronbach's Alpha if Item Deleted
Admiration	5.92	.770
Respect	5.35	.759
Solidarity	5.93	.725
Empathy	5.20	.763

Negative INTRA-group emotions (α = .824)

Emotion	Scale Mean if Item Deleted	Cronbach's Alpha if Item Deleted
Anger	5.99	.767
Fear	6.08	.789
Contempt	5.66	.868
Disappointment	5.88	.762
Disgust	6.09	.762

Positive INTRA-group emotions (α = .904)

Emotion	Scale Mean if Item Deleted	Cronbach's Alpha if Item Deleted
Admiration	13.24	.898
Respect	12.40	.867
Solidarity	12.98	.870
Empathy	12.47	.869

Appendix K. Alternative RM-ANOVA with adherence to group goals as moderator instead of group identification. The analysis included Identifiability x Quality x Group Norms x Adherence to group goals interactions. We only report the significant main and interaction effects found for this analysis.

Source	df	Mean Square	F	p-value
Adherence to group goals	1	230.547	73.615	< .001
Quality	1	892.468	1013.730	< .001
Identifiability x Quality	1	9.495	22.323	<.001
Identifiability x Quality x Adherence	1	2.359	5.547	.019

Appendix J. Correlations among all variables involved in the study, namely between the IdentMod, IdentRad, AnonMod, AnonRad collective actions scales, group identification and group norms. Additionally, we also include the exploratory variables of adherence to group norms and emotions.

Correlations

		IdentModMean	IdentRadMean	AnonModMean	AnonRadMean	IdentMean	GroupNorm	AdherGroupGoalsMean	PosIntraEmotionMean	NegIntraEmotionMean	PosInterEmotionMean	NegInterEmotionMean
IdentModMean	Pearson Correlation	1	.581**	.627**	.515**	.298**	.022	.385**	.312**	-.175**	-.070	.311**
	Sig. (2-tailed)		<.001	<.001	<.001	<.001	.713	<.001	<.001	.003	.243	<.001
	N	281	281	281	281	281	281	281	281	281	280	280
IdentRadMean	Pearson Correlation	.581**	1	.515**	.720**	.196**	.066	.403**	.252**	.065	.007	.373**
	Sig. (2-tailed)	<.001		<.001	<.001	<.001	.267	<.001	<.001	.276	.902	<.001
	N	281	281	281	281	281	281	281	281	281	280	280
AnonModMean	Pearson Correlation	.627**	.515**	1	.521**	.378**	.063	.416**	.346**	-.218**	-.178**	.307**
	Sig. (2-tailed)	<.001	<.001		<.001	<.001	.290	<.001	<.001	<.001	.003	<.001
	N	281	281	281	281	281	281	281	281	281	280	280
AnonRadMean	Pearson Correlation	.515**	.720**	.521**	1	.142*	.036	.306**	.176**	.005	-.099	.316**
	Sig. (2-tailed)	<.001	<.001	<.001		.017	.545	<.001	.003	.938	.099	<.001
	N	281	281	281	281	281	281	281	281	281	280	280
GroupIdentMean	Pearson Correlation	.298**	.196**	.378**	.142*	1	.047	.756**	.730**	-.215**	.029	.406**
	Sig. (2-tailed)	<.001	<.001	<.001	.017		.430	<.001	<.001	<.001	.624	<.001
	N	281	281	281	281	281	281	281	281	281	280	280
GroupNorm	Pearson Correlation	.022	.066	.063	.036	.047	1	.051	.117	.072	.053	.155**
	Sig. (2-tailed)	.713	.267	.290	.545	.430		.392	.049	.229	.380	.009
	N	281	281	281	281	281	292	281	281	281	280	280
AdherGroupGoalsMean	Pearson Correlation	.385**	.403**	.416**	.306**	.756**	.051	1	.713**	-.145*	.089	.452**
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001	.392		<.001	.015	.139	<.001
	N	281	281	281	281	281	281	281	281	281	280	280
PosIntraEmotionMean	Pearson Correlation	.312**	.252**	.346**	.176**	.730**	.117	.713**	1	-.121*	.161**	.514**
	Sig. (2-tailed)	<.001	<.001	<.001	.003	<.001	.117	<.001		.042	.007	<.001
	N	281	281	281	281	281	281	281	281	281	280	280
NegIntraEmotionMean	Pearson Correlation	-.175**	.065	-.218**	.005	-.215**	.072	-.145*	-.121*	1	.439**	.183**
	Sig. (2-tailed)	.003	.276	<.001	.938	<.001	.229	.015	.042		<.001	.002
	N	281	281	281	281	281	281	281	281	281	280	280
PosInterEmotionMean	Pearson Correlation	-.070	.007	-.178**	-.099	.029	.053	.089	.161**	.439**	1	-.018
	Sig. (2-tailed)	.243	.902	.003	.099	.624	.380	.139	.007	<.001		.760
	N	280	280	280	280	280	280	280	280	280	280	280
NegInterEmotionMean	Pearson Correlation	.311**	.373**	.307**	.316**	.406**	.155**	.452**	.514**	.183**	-.018	1
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001	.009	<.001	<.001	.002	.760	
	N	280	280	280	280	280	280	280	280	280	280	280

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).