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WHY TO EMBRACE AND ABANDON SOCIAL GROUPS?
**An analysis of the causes for (de)fusion with common
and extreme groups**

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Como un tatuaje que quedó grabado en mi memoria.

Recuerdo hasta la ropa que llevaba el día que conocí a Ángel Gómez. Habíamos quedado a las seis de la tarde en su despacho para hablar, no sabía muy bien de qué. Yo no era psicóloga, ni tenía idea de qué significaba “endogrupo” y mucho menos qué era la fusión de la identidad. Con su voz grave y suave, Ángel describió qué significaba investigar y cómo, con constancia y sin prisas, se podía construir algo muy grande. En ese instante, sin saberlo, me convertí en un *buque transatlántico*, aparentemente lento, pero obstinadamente dirigido hacia adelante. Mi vida cambió ese día sin que yo fuese consciente y nunca encontraré palabras suficientes para agradecer a esa persona, en ese momento desconocida, la oportunidad que me ofreció. Muchísimas gracias Ángel, por creer en mí, por permitirme aprender de ti, crecer contigo, y ver al mismo tiempo cómo lo haces tú.

Como la infinita belleza del desierto en primavera.

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Como el día que el miedo se convirtió en ganas de aprender.

Dejar tras de mí a mi familia, e irme a Israel tanto tiempo, a un lugar donde ni entendía nada, ni conocía a nadie fue más difícil de lo que nunca imaginé. Tenía tanto miedo, que me dio una tendinitis cervical la primera vez que hablé con Erik, el coordinador del equipo de investigación. Sin embargo, allí sentado en su oficina de cristal estaba Eran Halperin para hacer fácil todo. Como un milagro, Eran hablaba y yo lo entendía, y lo mejor de todo fue que él también me entendía a mí, pero no solo el idioma, sino la tristeza y la pena que sentía por haber dejado en Madrid a mi marido y a mis hijos.

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Como la vida se desborda de sí misma.

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Como que somos una ínfima parte de todo lo demás.

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To whom ask why,
and mindfully
listens the answer

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Resumen

En la última década, la fusión de la identidad - un sentimiento visceral de unión con el grupo - se ha convertido en una de las teorías más importantes capaz de predecir el comportamiento extremo (Gómez, Chinchilla et al., 2020; Gómez y Vázquez, 2015; Swann et al., 2012). La proliferación de esta teoría, y el hecho de que se haya revelado empíricamente como uno de los principales mecanismos que explica la radicalización violenta (ver Wolfowicz et al, 2021), hace necesario comprender qué lleva a las personas a fusionarse con un grupo o a defusionarse de él, y a unirse o a abandonar grupos violentos. El principal objetivo de esta tesis fue intentar dar respuestas a estas cuestiones. Asimismo, se analizó qué factores podrían motivar a los individuos fusionados a reducir su alta disposición a realizar sacrificios extremos por el grupo.

El Capítulo 1 incluyó dos paquetes de estudios que trataron de entender por qué las personas podrían llegar a fusionarse con los grupos, y si esas razones podrían ser diferentes dependiendo de la naturaleza del grupo en cuestión. En el primer paquete, los Estudios 1 y 2 examinaron las razones que motivaban a las personas a fusionarse con un grupo local (p.ej., familia) o un grupo extendido (p.ej., el país), un grupo natural (cuya pertenencia está determinada por nacimiento como es el caso de la familia) o un grupo elegido (p.ej., amigos). El Estudio 3 exploró las razones que justificaban la fuerte fusión que experimentaban miembros de un conocido club de seguidores de fútbol. En el Paquete 2, ex miembros de los Tigres de Liberación de Tamil Eelam indicaron la principal razón por la que ellos u otros miembros se unieron al grupo (Estudio 1), y ex miembros de distintas organizaciones islamistas radicales describieron sus historias de vida en una entrevista personal (Estudio 2), lo que permitió identificar momentos clave en su proceso de radicalización violenta.

El Capítulo 2 analizó por qué las personas podrían defusionarse o abandonar grupos importantes para ellas, y si esas razones podrían ser diferentes dependiendo de la naturaleza del grupo. En los tres primeros estudios, los participantes aportaron razones para defusionarse de un grupo local o extendido (Estudio 1), de un grupo natural o elegido (Estudio 2), y finalmente las razones que justificaron defusionarse de grupos con los que se sintieron fusionados en el pasado (Estudio 3). En el Estudio 4, miembros de un grupo de hooligans enumeraron las razones que podrían llevarlos a defusionarse en el futuro del club de seguidores, y finalmente, ex miembros de los Tigres de Liberación de Tamil

Eelam revelaron la principal razón por la que ellos u otros compañeros habían abandonado el grupo (Estudio 5).

En el Capítulo 3, se abordó cómo reducir la disposición a luchar y morir por el grupo entre los individuos fusionados. Específicamente, se analizó si sentir ira hacia miembros del propio país socavaría la relación entre la fusión de la identidad y la disposición a realizar comportamientos extremos por el grupo.

Los estudios incluidos en los Capítulos 1 y 2 utilizaron metodología cualitativa basada en preguntas de respuesta corta y entrevistas para explorar las razones que podían llevar a fusionarse y unirse a los grupos, o defusionarse de ellos y abandonarlos. Los estudios incluidos en el Capítulo 3 se realizaron utilizando diseños experimentales para analizar los efectos causales de una manipulación que podría reducir las acciones extremas por el grupo entre los individuos fusionados.

El análisis de las razones para fusionarse o defusionarse de los grupos apoyó la hipótesis de la especificidad grupal, lo que significa que los procesos subyacentes a la fusión y a la defusión parecen no ser idénticos para todos los grupos, sino que muestran variaciones dependiendo de la naturaleza de los mismos (p.ej., satisfacción de necesidades personales para fusionarse con grupos locales, o compartir valores fundamentales para fusionarse con grupos extendidos). Sin embargo, la categoría relacionada con el establecimiento o debilitamiento de los lazos relacionales (p.ej., confianza, cohesión, unidad, sentimientos de hermandad) fue constantemente mencionada por los participantes en todos los grupos, tanto entre las razones para fusionarse con grupos comunes o entrar en grupos violentos, como para defusionarse de grupos comunes o abandonar grupos violentos.

Los estudios experimentales revelaron que los participantes fuertemente fusionados disminuyeron su disposición a realizar comportamientos extremos por el grupo cuando sentían ira hacia miembros de su grupo, en comparación con los participantes a los que no se les indujo la ira, algo que no sucedió con los individuos no fusionados o débilmente fusionados, quienes expresaron la misma disposición al comportamiento extremo por el grupo tanto cuando se inducía la ira como cuando no.

Esta tesis ofrece una visión integral de las razones que pueden motivar a las personas a fusionarse o defusionarse de los grupos, además de comprender qué las lleva a entrar en grupos violentos o a abandonarlos. En conjunto, consideramos nuestros resultados valiosos y útiles a la hora de aumentar el conocimiento, no únicamente sobre la fusión de la identidad, sino también sobre los procesos involucrados en la

radicalización y la desradicalización violenta. Destaca el uso de una metodología sensible a la subjetividad de las personas. Esperamos que nuestros hallazgos sirvan para promover nuevos modelos de cohesión social en la desafiante época en la que vivimos.

Abstract

In the last decade, identity fusion - a visceral feeling of oneness with the group - has been established as one of the most important theories capable of predicting extreme behavior (Gómez, Chinchilla et al., 2020; Gómez and Vázquez, 2015; Swann et al., 2012). The expansion of this theory, and the fact that it has been empirically demonstrated that it is one of the most central mechanisms that explains violent radicalization (see Wolfowicz et al, 2021), requires an in-depth exploration about why people fuse with or defuse from a group, in addition to why people join or leave violent groups. Answering these questions is the main purpose of this dissertation. We also explored those factors that might motivate fused individuals to reduce their high willingness to make extreme sacrifices for the group.

Chapter 1 included two packages of studies that tried to understand why people can feel fused with groups, and if such reasons might be different depending on the nature of the group. In the first package, Studies 1 and 2 examined the reasons that motivated people to fuse with a local group (e.g., family) or an extended group (e.g., country), an ascribed group (whose belonging is determined by birth such as family) or a chosen group (e.g., friends). Study 3 explored the reasons that justified the complete fusion of members of an extreme football fan club. In Package 2, the Liberation Tigers of Tamil Eelam (LTTE) reported the main reason why they or other members joined the group (Study 1), and members of different radical Islamist organizations reported their narratives of life in a personal interview (Study 2).

Chapter 2 analyzed why people could defuse from or leave groups important to them, and if such reasons might be different considering the nature of the group. In the first three studies, participants reported reasons for defusing from a local or extended group (Study 1), from an ascribed or chosen group (Study 2), and finally the real reasons that led them to defuse from groups in the past (Study 3). In Study 4, the individuals of a group of hooligans explained the reasons that could lead them to defuse in the future. Finally, former members of the LTTE revealed the main reason why they or other terrorists had left the group.

In Chapter 3, we designed two experiments oriented to reduce the willingness to fight and die for the group among fused individuals. Specifically, it was analyzed if

feeling anger against members of their own country would undermine the relationship between identity fusion and the willingness to engage in extreme progroup behaviors.

Studies included in Chapters 1 and 2 used qualitative methods based on short-answer questions and interviews to explore reasons to get (de)fused and embracing or abandoning groups. Studies included in Chapter 3 were conducted using experimental designs to analyze the causal effects of a manipulation that could reduce the extreme progroup actions among fused individuals.

The analysis of the reasons for getting fused with a group or defused from a group supported the group-specificity hypothesis, that is, the processes underlying (de)fusion were not identical for all groups but showed a relative variation depending on the nature of the specific group considered (e.g., satisfaction of personal needs for fusing with local groups and shared core values for fusing with extended groups). However, the category of relational ties (e.g., trust, respect, inclusion, commitment, or brotherhood feelings among ingroup members) was constantly mentioned by groups varying in nature and radicalization.

Results of experimental studies showed that strongly fused participants decreased their willingness to self-sacrifice for the group when they felt anger towards other group members compared to non-angry fused participants, something that did not happen with weakly fused participants, who expressed the same willingness to sacrifice whether they were angry or not.

This thesis provides a general and integral representation of why people might fuse with, and defuse from groups, and why people can embrace and abandon violent groups. Altogether, we consider that these findings are valuable and useful to advance our knowledge not only about identity fusion, but also about the processes of violent radicalization and de-radicalization. We have implemented a methodology able to capture people's voices, sensible to the subjectivity of human beings. We hope that these findings could be implemented for promoting new models of social cohesion in a challenging age.

Introduction

Nowadays, the world is facing significant global challenges such as the coronavirus disease (COVID-19) pandemic, the climate change, or the threats to democracy and security provoked by radicalization and terrorism (United Nation [UN], n.d.). As the Institute for Economics and Peace (IEP) has pointed out, violent extremism and, specifically terrorism, is a growing threat for individuals, societies, and even for global economies (Global Terrorism Index [GTI], 2017; Sinai, 2018). As a response, the United Nation General Assembly has adopted the UN Global Counter-Terrorism Strategy, a “global instrument to enhance national, regional and international efforts to counter terrorism”, and 2020-2030 has been declared “the Decade of Action”.

The importance to prevent the radicalization processes, when using violence as a means to achieve the pursued goals, and to enhance the rehabilitation and reintegration for those who have been involved in violent actions should take a central stage (see UN Security Council Report, A/RES/75/291, 2006). As Vladimir Voronkov, Under-Secretary-General of the United Nations Counter-Terrorism Office, has recently asseverated: “Rehabilitation and reintegration are the next challenges of Members States to break the vicious cycle of violence” (UN, 2021). Different initiatives like the Countering Violent Extremism (CVE) Working Group, are supporting projects around the world to achieve this goal. Enhancing collective identities, community’s empowerment, addressing historical grievances and discrimination, or instilling optimism and a sense of purpose and identity among youth, are some of their targets (Global Counterterrorism Forum, n.d). These complex goals need a theoretical and empirical support to guarantee its efficacy and, accordingly, an integrative comprehension of violent radicalization is necessary to frame this difficult path.

A recent meta-analysis (Wolfowicz et al., 2021) due to provide a comprehensive assessment of models and empirical evidence on the radicalization field, has determined the contribution of risk and protective factors to different outcomes of radicalization (i.e., radical attitudes, intentions, and behaviors). Findings showed that most crucial risk factors for radical attitudes were related to group belonging or interpersonal relations between ingroup members (e.g., “deviant peers”, “in-group connectedness”, or “highly similar ties”). Importantly, Wolfowicz et al (2021) found that, among dozens of variables, **feeling fused with a group** was the best predictor for experiencing radical intentions, which are predictors of behaviors according to the theory of Planned Behavior (Ajzen, 1991).

However, **which is the relation between getting fused with a group and violent radicalization? Is there a relation between deradicalization and/or disengagement and de-fusion?** And importantly, if the response to the previous questions is affirmative, and when fusion is related to violent behaviors that ultimately could damage others, **is there any possibility for preventing and/or decreasing the feelings of fusion with a group and/or its consequences?**

Recent literature has provided initial data and discussions that might help to give some responses to these questions. For example, the author of this dissertation, together with one of the co-originators of the theory, prof. Gómez, and his team, has previously explored the factors related with the ontogeny of fusion to determine at what age children are conscious of the feelings of fusion with a group (Gaviria et al., 2015), the alternative paths that could be manipulated to reduce fusion with a group and/or its effects, as degrading collective and/or relational ties with other group members (Gómez et al., 2019), and has deeply reviewed the underlying mechanisms that explain (mediate), and increase (moderate) identity fusion, as well as all the potential targets with which an individual can be fused to – e.g., a group, another individual, a value, an animal, a brand – (Gómez, Chinchilla, et al., 2020).

However, although promising, the answer to why people enter and leave groups for whom they would be willing to express the ultimate self-sacrifice is still a challenge that needs to be solved. Answering these important questions is the main goal of this dissertation.

Why to embrace and abandon social groups? An Analysis of the causes for (de)fusion with common and extreme groups

Why do people enter groups for whom they would be willing to fight, kill or even die? And which are the factors that motivate some individuals to abandon these groups (in case they do it)?

In the last decade, one of the most important theories able to predict extreme pro-group behavior has been identity fusion -a visceral feeling of oneness with a group- (Gómez, Chinchilla et al., 2020; Gómez & Vázquez, 2015; Swann et al., 2012). Dozens of investigations in countries of the five continents have empirically demonstrated that identity fusion predicts different outcome measures capturing pro-group behaviors, as well as the factors that mediate and moderate its effects. Also, two further theoretical

models that are being also successful in the study of extreme pro-group behaviors, and in violent radicalization and terrorism, included and/or are based on, identity fusion, as the devoted actor model, which join being fused with a group whose members share a sacred value (immune to material or non-material trade-offs), (see for example Gómez et al., 2017), or the 3N model of radicalization, which includes the Needs, the Narrative, and the Network (see for example Kruglansky et al., 2019). The expansion of the theory, and the fact that identity fusion has been even empirically demonstrated as, perhaps, the main mechanism explaining violent radicalization (see Wolfowicz et al., 2021), call for a deep exploration about the relation of fusing or de-fusing with a group, and entering versus leaving violent groups. Giving a response, almost initial, to this question, is the main purpose of the present dissertation.

Here we want to explore and determine whether getting fused with a group and/or defusing from a group are also reasons for joining and/or leaving violent groups, but also which other factors different from identity fusion can help to fulfill the puzzle of radicalization, deradicalization and disengagement.

To that end, the main goal of the present doctoral dissertation is twofold: (1) to identify the processes associated with joining extremist groups; and (2) to determine those factors that motivate individuals to leave radical groups.

In addition to that, and anticipating the relevant role of identity fusion with the paths to violent radicalization and de-radicalization, we wanted to add a final extra chapter deepen into the factors that might motivate individuals to reduce the costly sacrifices that they would be willing to do for the group by reducing identity fusion.

Summarizing, **the present dissertation includes three series of studies organized in three chapters** described below (see Table 1 for a broad view). We combined qualitative and quantitative methods to achieve the general goals.

Studies included in Chapters 1 and 2 used a qualitative approach based on the responses to short-answer questions and interviews to explore reasons to get (de)fused and embracing or abandoning groups. We conducted a content analysis to extract the categories identified by laypeople to get (de)fused or embracing/abandoning groups. Additional quantitative analyses compared the categories of reasons depending on the nature of the groups considered. Studies included in Chapter 3 were conducted using experimental designs to analyze the causal effects of a manipulation that could reduce the extreme progroup actions among fused individuals.

Chapter 1 includes two packages of studies to understand why people feel attracted by, and get fused with groups, and why former members of terrorist organizations embraced violent groups. **Package 1** comprises three studies: Studies 1 and 2 were conducted online with participants from the general population, whereas Study 3 was conducted using a pencil-and-paper procedure with members of a radical football fan club, the Riazor Blues. In Study 1, participants expressed reasons to get fused with local groups (e.g., family, friends) or extended groups (e.g., country), and in Study 2, with ascribed groups (i.e., belonging determined by birth such as family) or chosen groups (i.e., freely chosen such as friends). In Study 3, members of the Riazor Blues justified their strong feeling of fusion with the group. **Package 2** contains two studies: in Study 1, former members of the Liberation Tigers of Tamil Eelam (LTTE) reported the main reason explaining how they, or other members of the group, came to join the group; and in Study 2, former members of Islamist radical groups talked about their life on a personal interview identifying key moments in their process of radicalization.

Chapter 2 includes five studies to understand why people defuse from groups and abandon violent organizations. Studies 1-3 were conducted via online surveys with participants from the general population. In Study 1, participants thought about possible reasons for defusing from a local or an extended group. In Study 2, participants reported reasons that might motivate defusion from ascribed or chosen groups. In Study 3, participants reported the reasons that justified real experiences of defusion from groups in the past. In Study 4, members of the Riazor Blues, completely fused with the football fan club, explained why they might defuse from their group in the future. Finally, in Study 5, former LTTE members, revealed the main reason for abandoning the terrorist group.

Chapter 3 includes two studies to analyze the role of emotions on the consequences of identity fusion. Studies 1 and 2 experimentally tested the effects of inducing feelings of anger toward ingroup members on willingness to fight and die for the group. Study 2 examined if priming feelings of anger could reduce feelings of personal agency, which, in turn, undermined endorsement of extreme sacrifices for the group.

The **last chapter** presents the **General Discussion** of this dissertation. We discuss the relevance, theoretical and methodological implications, and applicability of these findings for group dynamics, as well as the limitations and implications of this thesis for future research.

Table 1*Summary of Studies*

Chapter	Package	Perspective	Design and Methodology	Analysis	Categories	Studies	Sample/Group
1. Causes of fusion and violent radicalization	1. The things that bind us: Why being fused -viscerally connected to- a group?	Identity Fusion Theory	Transversal design Qualitative Quantitative	Content analysis McNemar test Binomial logistic regressions	Shard relational ties	Study 1 <i>n</i> = 224	General/Local <i>n</i> = 106 General/Extended <i>n</i> = 118
					Shared experiences		General/Ascribed <i>n</i> = 295 General/Chosen <i>n</i> = 281
					Shared core values	Study 2 <i>n</i> = 296	
	2. Why people enter and embrace violent groups	Identity Fusion Theory	Transversal design	Content analysis McNemar test	Compliance	Study 1 <i>n</i> = 44	Ex-terrorist LTTE
					Attitude change literature	Study 2 <i>n</i> = 21	Ex-terrorist Islamist radicals
		2. Why people leave violent groups: From defusion to de-radicalization	Identity Fusion Theory	Transversal design Qualitative Quantitative	Content analysis McNemar test Binomial logistic regressions	Degrading relational ties	Study 1 <i>n</i> = 223
	Study 2 <i>n</i> = 568					General/Ascribed <i>n</i> = 276 General/Chosen <i>n</i> = 292	
Degrading collective ties	Study 3 <i>n</i> = 181					General Past reasons	
Random events	Study 4 <i>n</i> = 30					Extremist Riazor Blues	
3. Anger toward ingroup member attenuates the effect of identity fusion through reducing feelings of personal agency	Identity Fusion Theory	Transversal and experimental design	Correlations ANOVAs Linear regressions	Untenability of defusion	Study 5 <i>n</i> = 66	Ex-terrorist LTTE	
					Study 1 <i>n</i> = 454	General population	
						Study 2 <i>n</i> = 811	General population

CHAPTER 1

Causes of fusion and violent radicalization

Package 1

The things that bind us. Why being fused -viscerally connected- to a group?

**The Things that Bind Us:
Why being fused -viscerally connected to- a group?**

Abstract

Identity fusion refers to a visceral feeling of oneness with a group capable of motivating extraordinary self-sacrifices on behalf of the group or its members. The fact that identity fusion can predict extreme behaviors that might cause damage to others calls for a particular interest to determine the factors that cause identity fusion. Previous research has shown that intense shared experiences -positive or negative- and shared biology -real or perceived- are potential geneses of fusion. Although these two factors were theoretically predicted by academics to originate fusion, and previous work has consistently demonstrated that such predictions are correct, there is no investigation up to date exploring which are the causes of a visceral feeling of oneness with a group according to the spontaneous responses of individuals. This is the main goal of the present chapter. To that end, two studies conducted online with general population examined the reasons that motivate people to get fused with a local (e.g., family) or an extended (e.g., country) group (Study 1), or to an ascribed (place of birth) or a chosen (e.g., sport team) group (Study 2). A final self-report field study explored what makes followers of a real extremist group -hooligans- to get fused with a group (Study 3). Together, results showed that participants justified why they get fused with a group through mainly four mechanisms: shared relational ties, shared experiences, shared core values, and satisfaction of personal needs. The preeminence of the different kinds of categories causing fusion regarding the type of group, the relation between such categories and those previously identified in the literature, and its relevance for preventing violent radicalization are discussed.

Keywords: Identity Fusion, Extreme behavior, Personal Needs, Relational Ties, Shared Values, Shared Experiences.

1.1. Theoretical Background

Groups are essential for human beings as they play multiple functions for individuals' psychological wellbeing, socialization, and identity development. During the last decade, research has shown that some people can experience a profound visceral connection with a group that can motivate them to sacrifice their personal interests on behalf of the group or its members. This visceral feeling of oneness with a group, capable to motivate extreme behavior, is known as *identity fusion* (see Gómez, Brooks et al., 2011; Swann, Gómez et al., 2009; Swann et al., 2012 for the first developments and the establishment of the theory). Identity fusion is a process especially characterized by the simultaneous salience of both personal and social identities which synergistically interact to motivate pro-group behavior, and the emphasis of the relational ties established with group members that contribute to feelings of family-like mutual obligation (for a recent review see Gómez et al., 2020).

Since the origin of the theory, scientists have mainly focused on the consequences of fusion and the factors that mediate or moderate its effects. However, although being fused with a group might have potential negative consequences¹, the investigation about the causes of fusion has been more limited. Perhaps, the most fruitful line of research comes from anthropologists and the role of rituals as a strategy to increase the bond with groups. According to that, sharing intense negative experiences with other group members originates, and/or increases feelings of fusion (e.g., Jong et al., 2015; Kavanagh et al., 2020; Páez et al., 2015; Reese & Whitehouse, 2021; Whitehouse et al., 2017; Whitehouse & Lanman, 2014). Considering the feelings of familial ties that strongly fused individuals develop with other ingroup members, perceiving such members as brothers or sisters is another line of research that has explored the perception of relational ties between individual members of the group as a potential origin or reinforcement of fusion (Swann et al., 2012). Finally, the fact that the groups might be a vehicle to satisfy personal need has also been suggested as a potential originator of fusion. Below we briefly summarize each of these perspectives

¹ Note that being fused with a group does not imply something negative, because someone can be fused with a group (e.g., an NGO, the family) and does his/her best to defend and take care for such group.

Shared experiences as antecedents of identity fusion

Since the first steps of the theory, Swann et al. (2012) theoretically discussed how sharing “bonding” experiences with others in a group context could constitute a cause for developing a sense of local fusion. After the suggestions made by the original authors of the theory, sharing experiences as one of the potential origins of identity fusion has received extensive empirical evidence. For instance, Jong et al. (2015) analyzed the role of shared negative experiences in the development of identity fusion confirming that shared dysphoric experiences (e.g., public humiliation) were indirectly associated with individual’s levels of identity fusion with the group, and this was mediated by personal reflection on such experiences. They also found experimental evidence of this process, by making salient collective negative experiences such as the Boston Marathon Bombings, state levels of identity fusion increased among those who experienced this event more negatively. Whitehouse et al. (2017) showed that sharing painful experiences can enhance identity fusion in different populations (e.g., military veterans, college fraternity members, football fans, twins). Newson et al. (2021) proved that, compared to fans of more successful football clubs, fans of the least successful clubs were more bonded and more willing to sacrifice themselves for other fans of the club. Also, dysphoric experiences mediated the relationship between club defeat and identity fusion with the club. The authors argue that the memories of past defeats were part of fans’ self-concepts, fusing them to their club. Similarly, postpartum mothers who perceived sharedness of their childbirth experience increased their level of fusion with those mothers who had lived the experience with similar levels of pain and agony (Tasuji et al., 2020).

Not only negative, but also sharing positive and self-transformative experiences contributes to such sentiment of fusion with the group. Paez et al. (2015) showed that during participation in a collective dance and a music performance, perceived emotional contagion and synchrony were positively associated to identity fusion. More recently, Kavanagh et al. (2020) have found that transformativeness and perceived sharedness of group-defining events were predictive of identity fusion among Indonesian Muslims, and that the self-transformative power of group experiences (e.g., whether the collective experience had a very significant role in shaping participants’ self) seems especially relevant. Muzzulini and colleagues (2021) have also recently found that flashbulb memories of the outcome of the Brexit referendum had a self-transformative effect

through a process of personal reflection that, in turn, led to identity fusion via perceived sharedness with the group.

Sharing emotional experiences -positive and/or negative- with group members is undoubtedly a mechanism of bonding. However, it might not be the unique pathway that can bind people together so intensely. Maintaining strong relational ties with group members might also contribute to a visceral feeling of oneness with the group and its members, and satisfaction of personal needs, as we describe in the next sections.

Antecedents of identity fusion based on relational ties

One of the principles of identity fusion is the ability of fused people to establish and project *relational ties* towards other ingroup members, as they recognize and appreciate the idiosyncrasy and uniqueness of each one. Fused people form relational ties with members with whom they have direct contact and opportunities to share experiences (local fusion) but can also project metaphorical relational ties into larger groups, even when not having direct contact with its members (extended fusion). These ties are so strong that fused individuals perceive group members as their own “family” (i.e., as their brothers and sisters), and it is this family-like connection the reason why they are willing to display extraordinary pro-group behaviors for the destiny of the group (Swann et al., 2012; Swann, Buhrmester, et al., 2014). Maintaining healthy relational ties with ingroup members has been demonstrated to be a crucial factor for fused people, and the degradation of such ties can diminish levels of state (i.e., momentarily) identity fusion (Gómez et al., 2019).

Several characteristics might reinforce the relational ties with the group. Cohesiveness in small groups has generally been understood in terms of interpersonal attraction among group members (see Lott & Lott, 1965). The existence of strong ties and cooperation (Sacchi et al., 2009), the degree of interaction, and the interpersonal bonds among the members of the group (Denson et al., 2006) have been established as important dimensions of group entitativity (e.g., group unity and coherence). In general, intimacy (Collins & Read, 1990), interdependence (Whitton & Kuryluk, 2012), and trust (Holmes & Rempel, 1989) are important characteristics of strong bonds.

Satisfying personal needs and shared defining characteristics

The group is an essential part for fused individuals' self-concept because for strongly fused individuals the self and the group are the same thing. The salience of the social self in any way diminishes the salience of the personal self. Both, social and personal identities are tightly connected among fused people, they are mutually reinforced and synergically interact to motivate pro-group behavior. Research has found that fused people have a clear self-concept (Besta et al., 2016), and that they increase their disposition to fight and die for their groups when their personal self (and not only their social self) is activated or threatened (Besta et al., 2013; Gómez, Brooks et al., 2011; Swann et al., 2009). The capability of the group for satisfying the motivational needs of the personal self might also contribute to increase identity fusion. It is well known that groups account for several human needs. Love, belonging, and relatedness are considered some of the most basic needs for humans (Maslow, 1968; Ryan & Deci, 2000). Ingroups are considered as social resources (Correl & Park, 2005) that have psychological utility and work as tools for the fulfillment of cognitive and motivational needs of individuals (Yzerbyt & Demoulin, 2010).

The perception that individuals share “a common social identification of themselves” (Turner, 1982, p.15) is critical to determine group belonging. It is quite understandable that similar people would form groups. Theories on affiliation defend that people feel attracted to others that are like them (e.g., Byrne, 1971), and individuals tend to be more comfortable with people who share their beliefs and values (Rokeach, 1960). Sharing core characteristics, whether biological such as genes or symbolic (non-physical) such as values or beliefs, serves to project the relational ties typical of local fusion to extended fusion (i.e., fusion with unknown group members). A set of studies conducted by Swann, Buhrmester, et al. (2014) in different countries (i.e., China, India, the United States and Spain) confirmed that perception of familial ties among fused group members can be increased by priming shared core values or shared genes, and consequently, it can enhance progroup behavior on behalf of the extended group.

Objectives and hypotheses

Up to date, the examination of the origins of identity fusion has been almost exclusively focused on the role of sharing intense emotional experiences (e.g.,

Whitehouse et al., 2017; Whitehouse & Lanman, 2014), but we still do not have a global vision of all its potential antecedents. The primary goal of this research was to advance in the knowledge of the possible originators of identity fusion.

To understand what motivates people to establish such strong connection -identity fusion- with some groups, three studies were conducted using mixed-methods and combining qualitative and quantitative analyses. Studies 1 and 2 made a first attempt to explore the main reasons that might lead people to feel fused with “normalized” groups, as well as the possible differences of such processes depending on the nature of the group: local (e.g., family, friends) or extended groups (e.g., country, gender) in Study 1, and ascribed or chosen groups in Study 2. In Study 3, we focused on a radical football-fan group.

The kind of alignment with a group can vary depending on the nature of such group. A classical distinction differentiates between “common identity” groups and “common bond” groups (Prentice et al., 1994). Common identity groups are primarily based on the establishment of collective ties, attachments to the group as a whole, whereas common bond groups are based on the relational ties shaped by direct attachment among group members. Similarly, Easterbrook and Vignoles (2013) considered that groups can be conceptualized as social categories, as a function of their similarities or shared characteristics (Turner et al., 1987) or as social networks, based on the quality of relationships and interactions among individual group members (Deaux & Martin, 2003; Serpe & Stryker, 2011). Different motives can drive the connection depending on the nature of the group. Easterbrook and Vignoles (2013) found that, whereas the quality of interpersonal bonds predicted feelings of belonging to both kinds of groups, perceived intragroup similarity predicted feelings of belonging within groups perceived as social categories, but not within those perceived as networks.

Considering the nature of identity fusion, we expect that, in addition to shared experiences, lay people would think in the establishment of positive and strong relational ties as important reasons for being fused with any group. Satisfaction of personal needs, such as social support or recognition, might be more salient when thinking about local groups, as participants may establish a direct and linear association between group members and their own needs (Ryan & Deci, 2000; Yzerbyt & Demoulin, 2010). We can also infer from previous works (Swann, Buhrmester, et al., 2014) that shared core values, ideas or objectives could be especially salient as a motive for being fused with extended groups, also in line with previous findings (Easterbrook & Vignoles, 2013).

1.2 Study 1. Reasons that lead people to become fused with local vs. extended groups

Groups can vary regarding its size and the level of interaction of its members. We can have direct contact with members of primary, small face-to-face, groups such our colleagues at work or our family (which can be defined as social networks with high interdependence), but we cannot interact with most of the members of secondary and extended groups such as our preferred political party or our country (which can be defined as social categories). Study 1 made a first attempt to explore the main reasons that might lead people to feel fused with a group, as well as the possible differences of such processes depending on whether the group was local (e.g., family, friends) or extended (e.g., country, gender).

1.2.1. Method

Participants

After pre-screening and deletion of those who did not think in a valid group, the sample resulted in 224 participants from 19 to 72 years-old (56.7% women; $M_{\text{age}} = 35.44$ years, $SD = 12.01$), most of them with Spanish nationality (97.2%). Participants were recruited using a snowball technique: Psychology undergraduate students asked their acquaintances to participate. They participated on voluntary basis and did not receive monetary compensation. They filled out an online questionnaire designed in Qualtrics with the following measures.

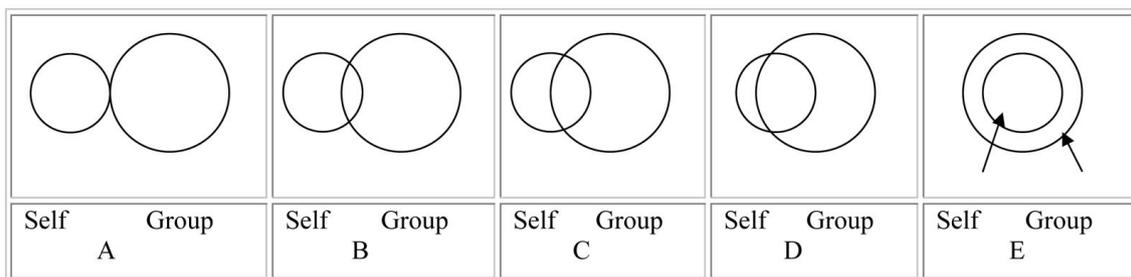
Measures and procedure

Participants were introduced with the original pictorial measure of identity fusion (Swann, Gómez et al., 2009) including five vignettes. Each vignette included a small circle representing the self and a big circle representing the group, varying in its relationship from A to E (see Figure 1). They were asked to think about an important group for them with which they felt certain unity and commitment but not so much as to select option 'E' (fused option where the small circle was totally embedded into the big circle). In the *local-group condition* ($n = 121$; 54.0%), participants were instructed to

think in a group in which they knew all its members (e.g., family, friends, colleagues), whereas in the *extended-group condition* ($n = 103$; 46.0%), participants should think on a group where they did not know all its members (e.g., country, region, religious group, gender, ethnic group). Those participants in the extended-group condition who initially thought in family or friends and colleagues were derived to the local condition.

Figure 1

The pictorial measure of identity fusion



Note: From A to D options identify non-fused participants, only the picture number E represents feeling of fusion with the group (Swann et al., 2009).

Participants then completed the verbal fusion scale (Gómez, Brooks et al., 2011) with reference to “My Group”, with items such as “My group is me” or “I am strong because of my group” (7 items, $\alpha = .83$), ranging from 0 (*totally disagreed*) to 6 (*totally agreed*). They also wrote three reasons that could make them feel more attached to that group in a way to feel like in option E (completely fused). A question for control attention was introduced² (i.e., “If you are reading this question, please mark number five”). Participants reported their sex, age and nationality and were debriefed.

Each participant listed three reasons to become fused with the group, resulting in 672 reasons in total. Researchers read and extracted the main labels of all reasons following a descriptive coding (First Cycle coding). Then, we turned to theory and developed a coding scheme based on group theories that could capture the main reasons that participants had generated (Second Cycle coding) (Saldaña 2013). We clustered reasons into four major categories that were coherent to previous literature (e.g., Besta et al., 2013; Gómez, Brooks et al., 2011; Newson et al., 2021; Paez et al., 2015; Swann et al., 2012; Swann, Buhrmester et al., 2014; Whitehouse et al., 2017): relational ties,

² As the results did not change when introducing or not people who did not answer this question well, all participants were considered for the analyses.

satisfaction of personal needs, shared experiences, and shared core values (see Table 1 for the category framework and thematic indicators). An additional category captured ‘other reasons’ to accommodate potential responses that did not fit within any of the four previous rationales, as well as invalid responses and disagreements.

Table 1

Category framework for content analysis (thematic indicators)

Category	Thematic Indicators		
Satisfaction of personal needs	Emotional and belonging needs covered by the group and its members.		
	<ul style="list-style-type: none"> • Emotional support • Love • Happiness • Recognition 	<ul style="list-style-type: none"> • Unconditional help • Protection • Security 	<ul style="list-style-type: none"> • Empathy • Affection • Significance
Relational ties	Positive interpersonal relations and strong relational ties within the group among group members. Attitudes or explicit behaviors that facilitate or increase the quality of the relationship and reinforce the bonds among the members of the group and explicit references to familial ties.		
	<p>Social ties</p> <ul style="list-style-type: none"> • Loyalty • Honesty • Commitment • Respect • Union 	<p>Biological ties</p> <ul style="list-style-type: none"> • Consanguinity • Blood relationship • Parentage • Sharing genes • Genetic link 	<p>Group dynamics</p> <ul style="list-style-type: none"> • Coordination • Organization • Collaboration • Communication • Cohesion
Shared core values	Sharing symbolic (non-physical) defining characteristics		
	<ul style="list-style-type: none"> • Common values • Ideas 	<ul style="list-style-type: none"> • Objectives • Ideologies 	<ul style="list-style-type: none"> • Traditions • Interests
Shared experiences	Spending time and sharing experiences: dysphoric, positive, or general experiences.		
	<p>Negative experiences</p> <ul style="list-style-type: none"> • Death or illness • Terrorist attacks, war • Discrimination towards the group • Painful experiences 	<p>Positive experiences</p> <ul style="list-style-type: none"> • To win a competition • Celebrations • To share good moments • Overcoming difficulties 	<p>No valence</p> <ul style="list-style-type: none"> • Share good and bad moments • Living together • Hanging out together

After these five distinct rationales were generated, two judges (different from those who created the categories) read and classified the reasons into the categories. They were offered the possibility to discuss their disagreements and achieve an agreement

based on the description of the categories. As each participant gave three reasons, it was decided whether the reasons of each participant *did* or *did not* pertain to each of the four categories presented by indicating *yes* (coded 1) or *not* (coded 0) in each rationale. Those reasons wherein disagreement was found were then rated as ‘other reasons’ ($n = 37$). Inter-judge reliability (assessed with Cohen’s kappa) based on the 672 reasons was quite respectable: personal needs (.96), relational ties (.97), shared values (.97), and shared experiences (.95).

1.2.2. Results

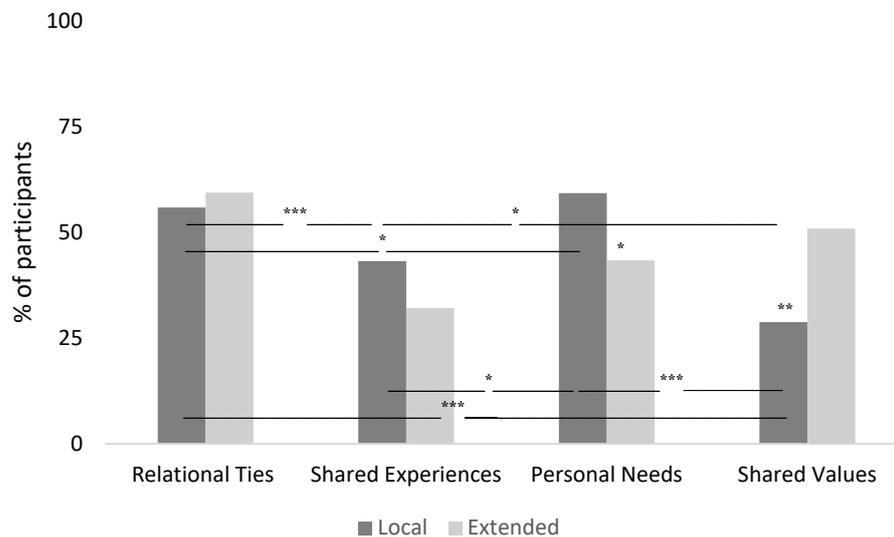
When thinking in local groups, participants mainly referred to friends or colleagues (57.9%) and family (34.7%). When thinking in extended groups, participants thought in country (20.4%), clubs/teams (17.5%), city/region (14.6%), work (14.6%), gender (3.9%), or university/school (7.8%). Participants reported more feelings of identity fusion (verbal scale) with local groups such as family or friends ($M = 4.34$; $SD = 1.14$) than with extended groups such as the country ($M = 3.62$; $SD = 1.12$), $t_{(222)} = -4.75$, $p < .001$.

Figure 2 shows the percentage of participants who mentioned each category and the comparison between local-group vs. extended-group conditions. A significant number of participants (more than 55%) referred to *relational ties* as the reason to fuse with both local and extended groups. They explicitly alluded to the existence of biological and familial ties. For example, P/L121³ affirmed that he would fuse with his group if the members of the group were his family; and P/E97, who was thinking in his friends, referred to “consanguinity”. Several participants mentioned the existence of social ties as friendship, fellowship, trust, commitment, or loyalty, and positive and harmonic group dynamics. There were different examples of the importance of cohesion within the group. Participant 54, in the local-group condition (P/L54), argued, “to work as a team in an appropriate way (...)”. In the extended-group condition, P/E36 said “more participation when we are in group”.

³ “P/L” refers to participants in the local-group condition, “P/E” refers to the extended-group condition.

Figure 2

Percentage of participants who mentioned a category of fusion with a local or an extended group (Study 1)



Note: Each participant offered three reasons. The graphic represents the proportion of participants (from the total of participants) who mentioned each specific reason: 100% would mean that all participants mentioned at least one reason. *** $p < .001$, ** $p < .01$. Asterisks and lines on the top (extended condition) or on the bottom (local condition) of bar graph refer to comparisons between categories within conditions. Asterisks just on the top of bars refer to comparisons between conditions for each category.

More than a quarter of participants mentioned *shared experiences*: “we stay more hours together, sharing” (P/L161), “I share a lot of time” (P/E103), or “we are playing a match” (P/E151). Some of these experiences were negative: “during a family problem” (P/L106), “painful circumstances or with illness” (P/L209), “a terrorist attack” (P/E92), “if a member of the group died” (P/E160). Other experiences were highly positive: “good moments” (P/L170), or “a sport victory” (P/E141).

Satisfaction of personal needs was also an important reason argued to become fuse with local and extended groups. Reasons within this category covered necessities of different nature: “if they were more concerned for me, my job, and my own problems” (P/L55), “sentimental support” (P/L133), “receiving unconditional help” (P/L20), “if I were a more important person in the group” (P/E109), “if I felt covered and protected by the group” (P/E104), and very frequently they named “love” (e.g., P/L177, P/E14).

Shared core values were especially important for fusion with extended groups, but were also mentioned for local groups. For instance, “fighting for a common project”

(P/L145), “ideological affinity” (P/L38), “feeling totally identified with the objectives of the group” (P/L165), “united by the vocation for veterinary” (P/L217), “sharing the same kind of ideals” (P/E108), “personal and ideological similitudes” (P/E94), and “compatibility of opinion” (P/E201).

We tested whether the identity fusion of participants could vary depending on the reason offered. A t-test for independent samples revealed that those participants who gave reasons about satisfaction of personal needs experienced more identity fusion with the group ($M = 4.17$; $SD = 1.06$) than those who did not mention this reason ($M = 3.83$; $SD = 1.29$), $t_{(222)} = 2.15$, $p = .033$. No other differences in fusion were found depending on other reasons ($ps > .05$).

To identify a hierarchy of reasons in each condition, a McNemar’s test was run (see Figure 2). As Table 2 shows, the test revealed that the category of relational ties was significantly more mentioned than shared values in the local condition, and more than shared experiences and personal needs in the extended group condition. The category of shared experiences was less mentioned than personal needs in the local condition. In the extended group condition, the category of shared experiences was less cited than shared values. The category of personal needs was significantly more mentioned than shared core values in the local condition.

In order to test whether there were differences in the reasons between local vs. extended groups, a series of logistic regressions were run. The predictor was the group (-1 extended, 1 local) with extended group as the reference. We considered whether the category was named at least once or not named at all by each participant. Intergroup comparisons were run by groups (local and extended) regarding the (non)appearance of reasons related to each category. The analysis (see Table 3) showed that participants referred to the category of *satisfaction of personal needs* significantly more for fusion with local groups than for fusion with extended groups. By contrast, *shared core values* were a reason more argued for those who thought about an extended group than for those who thought in a local group. There were no significant differences in the frequency of participants who referred to relational ties and shared experiences between local-group and extended-group conditions.

Table 2

Percentage of participants who mentioned each category and comparisons between categories within conditions (Study 1)

Conditions	Category	Relational Ties			Shared Exp.		Pers. Needs	
		<i>f</i> (%)	χ^2	<i>p</i>	χ^2	<i>p</i>	χ^2	<i>p</i>
Local	Relational ties	68(56.2%)						
	Shared exp.	52(43.0%)	2.96	.085				
	Personal needs	72(59.5%)	0.40	.704	6.30	.022		
	Shared values	36(29.8%)	14.56	< .001	3.41	.064	17.01	< .001
Extended	Relational ties	63(59.4%)						
	Shared exp.	33(32.0%)	11.39	< .001				
	Personal needs	44(42.7%)	4.65	.030	2.21	.215		
	Shared values	52(50.5%)	0.98	.321	7.01	.016	1.35	.366

Note. *f* shows the frequency and % shows the percentage (in brackets) of participants of each group that cited at least one reason related to each category. The rest of the columns show the comparisons between pairs of categories within each condition who cited at least one reason to each category.

Table 3

Percentage of participants who mentioned each category and comparisons between local-group vs. extended-group conditions (Study 1)

Category	Local <i>n</i> = 118	Extended <i>n</i> = 106	Total <i>f</i>	<i>b</i>	<i>se</i>	Wald's χ^2	<i>p</i>	Exp (<i>b</i>)	95% CI	
Relational ties	68(56.2%)	63(59.4%)	131	-0.12	0.27	0.20	.648	0.88	0.51	1.50
Shared experiences	52(43.0%)	33(32.0%)	85	0.46	0.28	2.81	.094	1.59	0.93	2.78
Personal needs	72(59.5%)	44(42.7%)	116	0.67	0.27	6.21	.013	1.97	1.15	3.25
Shared values	36(29.8%)	52(50.5%)	88	-0.87	0.28	9.85	.002	0.41	0.24	0.71

Note. *f* shows the frequency and % shows the percentage (in brackets) of participants of each group that cited at least one reason related to each category. The rest of the columns show the comparisons between local and extended groups who cited at least one reason related to each category.

1.2.3. Discussion

Study 1 analyzed the reasons that participants considered important for being fused with local or extended groups. Participants offered reasons to get fused related to

relational ties, shared experiences, the satisfaction of personal needs, and shared core values. Relational ties, that included interpersonal bonds and trust, was a very important reason for feeling fusion with both local and extended groups. This finding is not surprising given the importance of the establishment of relational ties within the theory of identity fusion. Fused people can establish actual relational ties with members of local groups, but also metaphorical relational ties with members of extended groups, being this phenomenon one of the main characteristics that differentiates identity fusion from other processes (see Swann et al., 2012).

Like Easterbrook and Vignoles (2013) found when predicting feelings of belonging within groups perceived as social categories or perceived as networks, shared core values was a more important reason for extended groups (social categories) than for local groups (networks). On the contrary, the satisfaction of personal needs was a more important reason for local groups than for extended groups. The next study was designed to determine whether these categories of reasons for being fused with local and extended groups are also useful to examine the reasons of fusion with ascribed and chosen groups, and whether different causes of fusion are argued depending on the nature of the group.

1.3. Study 2. Reasons that lead people to become fused with ascribed vs. chosen groups

We cannot choose to belong to some groups. We are simply born with a specific sex and ethnicity. The boundaries of such groups are quite impermeable, and consequently, the individual has difficulties to abandon such groups. There are other groups that we decide to belong to, such as a club. We choose these groups freely, its boundaries are more permeable, and it is easier to enter and to exit from them. Study 2 aimed to confirm the main reasons that might lead people to feel fused with a group depending on whether they are ascribed to the group (i.e., membership by birth) or if they freely choose to pertain to that group (i.e., membership by choice).

1.3.1. Method

Participants

After pre-screening and deleting of those who did not give any reason, the sample resulted in 576 participants from 18 to 71 years-old (53.8% women; $M_{\text{age}} = 36.28$ years, $SD = 12.19$), most of them with Spanish nationality (96.2%). Participants were recruited by using the same methodology as in Study 1.

Measures and procedure

Following an intergroup design, participants were randomly assigned to either the ascribed-group condition ($n = 287$; 49.8%) or the chosen-group condition ($n = 289$; 50.2%). In the *ascribed-group* condition, they were asked to think in a group to which they belong by birth (e.g., family, country, gender). In the *chosen-group* condition the group should be one to which they do not belong by birth, but by choice (e.g., friends, university, sport team). Those who indicated a chosen or an ascribed group in the wrong condition were changed to the appropriate condition as in Study 1.

After writing the group, participants completed the verbal fusion scale (Gómez, Brooks, et al., 2011) ($\alpha = .80$), and then followed the same procedure as in Study 1. Each participant thought about three reasons to become closer to the group resulting in 1,721 reasons as some participants did not give all the reasons required. Inter-judge reliability based on the 1,721 reasons was quite respectable for personal needs (.96), relational ties (.95), shared core values (.96), and shared experiences (.97). For Study 2, 88 participants named at least once “other reasons”.

1.3.2. Results

Participants who specified an ascribed group referred to family (80.5%), city/region (13.2%) and gender (5.2%). Chosen groups were more diverse such as friends or colleagues (65.4%), clubs/teams (11.8%), work (10%) and university/school (7.3%). As expected, those participants in the ascribed condition who indicated groups such as family were already significantly more fused with their group ($M = 4.44$; $SD = 1.19$) than

those participants who thought in chosen groups ($M = 3.89$; $SD = 1.08$), $t_{(573)} = -5.76$, $p < .001$.

Figure 3 shows the percentage of participants who mention each category and the comparison between ascribed vs. chosen conditions. Reasons that involve *Relational ties* were extensively mentioned and included examples of social ties as friendship, trust, sincerity, unity, but also biological bonds. Familial ties were often cited within this category for ascribed groups, “they are my blood” (P/A508)⁴; but also, for chosen groups: “they are my family” (P/A484, P/C170). *Shared experiences* included general experiences such as “having lived good and bad moments” (P/C107 and P/A373), or positive experiences such as “my wedding” (P/A315), “special situations like birthdays, travels...” (P/C278); and negative experiences such as “some illness” (P/A456), or “if we lived together experiences close to death” (P/C28). A significant number of participants referred to the category of *satisfaction of personal needs* for both ascribed and chosen groups. Love was an often-repeated idea (38 times was named): “the love that we feel for each other makes me feel happy” (P/A359), or for instance “unconditional love” (P/A331). Social support was also frequent: for example, “moral and sentimental support” (P/A576), or “received emotional support in hard moments.” (P/C100). *Shared core values* included sharing interests, aspirations, or values such as “it defends my same ideals” (P/A539), “same opinions and social fight” (P/C13), or a “common history” (P/A363, P/C212).

As in Study 1, those participants who gave reasons about satisfaction of personal needs showed more identity fusion with the group ($M = 4.26$; $SD = 1.18$) than those who did not mention this reason ($M = 4.03$; $SD = 1.13$), $t_{(574)} = 2.34$, $p = .023$. No other differences in fusion were found depending on other reasons ($ps > .05$).

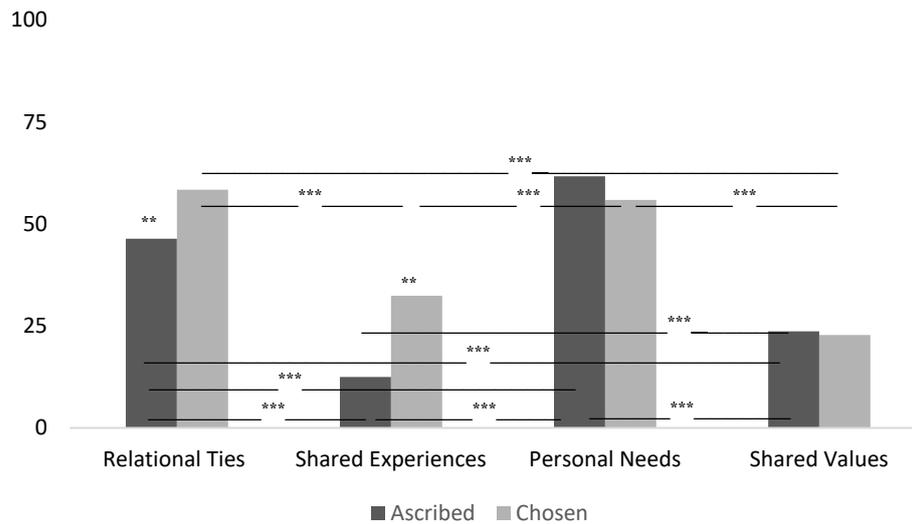
To compare the frequencies of reasons offered by participants between categories within each condition, a McNemar’s test was run (see Figure 3). As Table 4 shows, the test revealed that the category of relational ties on ascribed condition was significantly more named than shared experiences and shared values but less than personal needs. However, in the chosen group condition, the category of relational ties was significantly more referred than shared experiences and shared values, but similarly than personal needs. Shared experiences were significantly less named than personal needs in both conditions and also than shared values in the ascribed group condition. At last, personal

⁴ “P/C” refers to chosen-group condition, and “P/A” refers to ascribed-group condition.

needs were more referred than shared values in both conditions.

Figure 3

Percentage of participants who mentioned a category of fusion with an ascribed and a chosen group (Study 2)



Note: Each participant offered three reasons. The graphic represents the proportion of participants (from the total of participants) who mentioned each specific reason: 100% would mean that all participants mentioned the reason. $*p < .05$. Asterisks and lines on the top (chosen condition) or on the bottom (ascribed condition) of the bar graph refer to comparisons between categories within conditions. Asterisks just on the top of bars refer comparisons between conditions for each category.

We conducted a series of logistic regression to test whether there were differences regarding the (non)appearance of reasons related to each category between groups (-1 chosen, and 1 ascribed). The predictor was the group with chosen group as the reference. The analysis showed that participants referred to the category of *relational ties* and *shared experiences* significantly more when thinking in chosen groups than when thinking in ascribed groups (see Table 5).

Table 4

Percentage of participants who mentioned each category and comparisons between categories within conditions (Study 2)

Conditions	Category	<i>f</i> (%)	Relational Ties		Shared Exp.		Pers. Needs	
			χ^2	<i>p</i>	χ^2	<i>p</i>	χ^2	<i>p</i>
Ascribed	Relational ties	132(46.0%)						
	Shared exp.	37(12.9%)	63.57	< .001				
	Personal needs	176(61.3%)	15.82	< .001	110.73	< .001		
	Shared values	63(22.0%)	32.33	< .001	8.67	.006	70.07	< .001
Chosen	Relational ties	169(58.5%)						
	Shared exp.	91(31.5%)	67.13	< .001				
	Personal needs	163(56.4%)	0.16	.689	28.65	< .001		
	Shared values	71(24.6%)	56.00	< .001	2.91	.088	48.14	< .001

Note. In Local and Extended columns are the frequency and percentage (in brackets) of participants of each group that cited at least one reason related to each category. The rest of the columns show the comparisons between pairs of categories within each condition who cited at least one reason to each category.

Table 5

Percentage of participants who mention each category and comparisons between ascribed vs. chosen conditions (Study 2)

Category	Ascribed <i>n</i> = 295	Chosen <i>n</i> = 281	Total <i>f</i>	<i>b</i>	<i>se</i>	Wald's χ^2	<i>p</i>	Exp (<i>b</i>)	95% CI	
Relational ties	132(46.0%)	169(58.5%)	301	-0.50	0.16	8.94	.003	0.60	0.44	0.84
Shared experience	37(12.9%)	91(31.5%)	128	-1.13	0.21	27.28	< .001	0.32	0.21	0.49
Personal needs	176(61.3%)	163(56.4%)	339	0.20	0.17	1.44	.230	1.22	0.87	1.71
Shared values	63(22.0%)	71(24.6%)	134	-0.15	0.19	0.55	.458	0.86	0.58	1.27

Note. In Ascribed and Chosen columns are the frequency and percentage (in brackets) of participants of each group that cited at least one reason related to each category. Next columns present the comparisons between ascribed and chosen groups who cited at least one reason related to each category.

1.3.3. Discussion

Study 2 confirmed that the categories identified in Study 1 as potential causes for being fused with a local or an extended group are also possible reasons for causing fusion with ascribed and chosen groups. Reasons regarding satisfaction of personal needs and

relational ties were frequently offered. Relational ties and living experiences with the members of the group were more important reasons to become fused for chosen groups than for ascribed groups. That is, having relationships of quality and sharing experiences seem common reasons for becoming fused with groups easy to abandon with permeable boundaries and freely chosen to pertain to. Extending the relational or even familial ties to groups that are not our family is a characteristic of identity fusion. For groups easy to abandon such as friends, interpersonal bonds are crucial, as you belong to the group by choice. We should also note that participants felt less fusion with chosen groups than for ascribed groups.

Sharing core values was less frequently mentioned than in Study 1. Study 1 showed that this reason was especially used with social categories or extended groups where the individual does not know all members. In this study, participants might have thought in groups as social networks more frequently than in groups as social categories. They mainly thought in family and friends or colleagues. This fact could explain why less than twenty-five percent of the participants mentioned this reason.

Studies 1 and 2 delimited the most important reasons to get fused with normalized and non-radical groups. In order to know if the same reasons can be found in a real group that has been involved in violent behaviors, we conducted a field study with a known Hooligan group in Spain: the Riazor Blues.

1.4. Study 3. Reasons for being fused with a hooligan group

The Riazor Blues is one of the most famous hooligans' groups in Spain. The group was developed as a sport club in 1987, and they are ultras of Deportivo de La Coruña. As Spaaij and Viñas (2005) have highlighted, the group has undergone some ideological transformation, from a right-wing group to a radical left-wing movement. According to the authors, some events seem to have increased the union of its members (e.g., the death of Jimmy, a member of Riazor Blues, at the hands of a member of another team in 2014; for more information about the event see The Guardian, 2014). Study 3 explored the reasons argued by thirty of its members as reasons to be totally fused with the group.

1.4.1. Method ⁵

Participants

Thirty members of Riazor Blues (50% women), 40% of participants were young (from 18 to 25 years old), 13.33% were between 31 and 35 years-old, and 6.7% from 36 to 40 years-old. Forty percent lived with a partner, 26.7% were single, 20% were divorced, and 13.3% were married.

Measures and procedure

A member of the research team contacted a member of the group, and this member distributed the questionnaire (pencil-and-paper) among the rest of the soccer fans, who responded to the questionnaire individually. Anonymity was guaranteed. The questionnaire included the following variables:

Identity fusion (pictorial measure and verbal scale)

Participants reported to what extent they were fused with the Riazor Blues by using the pictorial measure (Swann et al., 2009) with five different pictures depicting a different relation between a small circle (the individual) and a big circle (the Riazor Blues). Only those participants who selected the last option with the small circle totally embedded into the bigger circle, were considered fused with the group. Not surprisingly, all participants (100%) were fused with the Riazor Blues. The same scale used in studies 1 and 2 measured to what extent participants agreed with seven items regarding fusion with the Riazor Blues ($\alpha = .90$).

Fight and die scale

In order to measure participants' willingness to endorse extreme pro-group behaviors for the Riazor Blues they completed the fight and die scale (7-point response scale, Swann et al., 2009). Examples of items included: "I would fight someone physically

⁵ We are especially thankful to Manuel Rivero, who made possible the data collection with members of Riazor Blues.

threatening another member of Riazor Blues” and “I would sacrifice my life if it saved another Riazor Bues member’s life” ($\alpha = .98$).

Reasons for fusion

They also reported reasons for fusion with the group answering to the following question: “Please, think about three reasons why you feel such unity with the Riazor Blues.” One participant did not give any reason and another participant gave only two reasons. A total of 86 reasons were given. Two independent judges read and categorized the reasons that could explain why they felt such unity with the Riazor Blues following the theoretical framework in Study 1. Inter-judge agreement based on the 86 reasons was acceptable for every category: personal needs (.79), relational ties (.84), shared core values (.71) and shared experiences (.74). There were few disagreements, only 8 participants named at least once reasons categorized as “other reasons”.

1.4.2. Results

Fusion and willingness to fight and die for the Riazor Blues

According to the pictorial measure, all participants were totally fused with the Riazor Blues, choosing option five. They reported a high feeling of identity fusion by using the verbal scale ($M = 4.77$; $SD = 1.08$), above the theoretical mean point (3) of the scale, $t_{(29)} = 8.95$, $p < .001$. They showed a moderate tendency to fight and die for the group ($M = 3.35$; $SD = 2.21$), no different from the mean point of the scale, $t_{(29)} = 0.86$, $p = .395$. As expected, identity fusion was positively related to fight and die for the Riazor Blues, $r_{(28)} = .52$, $p = .003$.

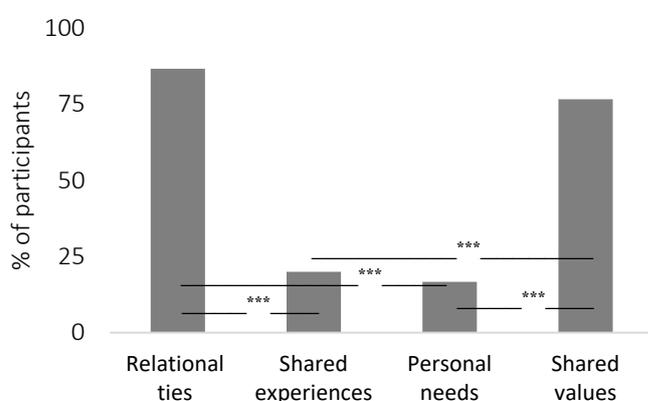
Reasons why being fused with the Riazor Blues

Figure 4 illustrates the percentage of participants who mention each category. According to the judges, 86.7% of the participants ($n = 26$) reported reasons related to relational ties. A closer inspection to the category revealed five main ideas: familial ties, brotherhood, unity, friendship bonds, and fellowship. Nine participants alluded to familial ties: “they are my family” (P19), “we are family” (P29), “they are my only family” (P30).

Ten participants explicitly mentioned the idea of brotherhood: “companions are like brothers” (P8), “because they are my brothers” (P11). Seven participants mentioned reasons regarding friendship or friendship bonds. Eleven participants referred reasons related to unity: “because we are united” (P3) or “there are ties of union” (P10). Two participants (P26 and P28) mentioned the existence of fellowship. There were other reasons such as “having an intimate partner in the group” (P25) or motivational forces such as “passion and force” (P27).

Figure 4

Percentage of participants who mentioned a category of fusion with the Riazor Blues



Note: Each participant offered three reasons. The graphic represents the proportion of participants (from the total of participants) who mentioned each specific reason: 100% would mean that all participants mentioned the reason.

They also claimed that *shared core values* were important: 76.7% participants ($n = 23$) referred reasons related to having a common cause for being together, in this case related to the sport team or football. Most of them (19 participants) referred to the team (i.e., the *Depor* as they call it) as the common cause: P20 said “for the *Depor* win the Champions League,” P22 “encouraging the team,” P6 “*Depor* wins with our support,” and P18 “cheering up the *Depor*.” Apart from the team itself, participants also mentioned sport values such as sportsmanship (P21 and P24) and being football fans (P1 and P14). Some participants also emphasized general ideals: “the ideas of the group” (P18) and “the ideas that the group defends” (P29). Two participants referred to social values such as “fighting against racism” (P19) and “fighting against fascist powers” (P4).

Few participants (5 participants, the 16.7% of the sample) referred to *satisfaction of personal needs*: “they make me feel I am one more” (P6), “acceptance” (P2), “they

always support me” (P11), “I feel accepted” (P13), or “it is part of my life” (P8). Another 20% (6 participants) referred to *shared experiences* with the group: “going to the stands all matches” (P12), “the emotion in every game” (P29), “I enjoyed” (P30), “cheering” (P4). “Cheering the *Depor*” (P20, P18) was coded as both shared values and shared experiences as it can be an action that is shared with other members of the team, but at the same time is also a common goal.

To compare the frequencies of reasons offered by participants between categories, a McNemar’s test was run (see Figure 4). The test revealed that the category of relational ties was significantly mentioned by more participants than shared experiences ($\chi^2_{(1)} = 15.04, p < .001$), and personal needs ($\chi^2_{(1)} = 17.39, p < .001$), but not than shared values ($p = .508$). The category of shared values was also significantly more reported by Riazor Blues members than shared experiences ($\chi^2_{(1)} = 13.47, p < .001$), and personal needs ($\chi^2_{(1)} = 13.13, p < .001$). No other significant differences were found ($p = 1.000$).

1.4.3. Discussion

Study 3 confirmed that the reasons of fusion found in studies 1 and 2 were also useful to classify the reasons of fusion for members totally fused with a Hooligan Group. Their reasons were more frequently related to both the quality of the relationship with the group and the values shared with the Riazor Blues (i.e., being football fans). These findings are coherent with identity fusion theory. According to Swann et al. (2012), “people may fuse with groups on the basis of an abstraction, such as a common cause or important value” (p. 3). The extension of familial ties to members of the fan club also reflects one characteristic of identity fusion. Riazor Blues members can extent familial ties to group members, and this combination of strong relational ties with the idea of sharing core values can contribute to potentially extreme actions on behalf of the group.

1.5. General discussion

The primary goal of this research was to advance in the knowledge of the possible antecedents of identity fusion from the perspective of lay people. Studies 1 and 2 made a first approach to explore the main reasons that people thought that might lead them to feel fused with a group, as well as the possible differences of such processes depending on whether the group was local (e.g., family, friends) or extended (e.g., country, gender),

ascribed (e.g., family) or chosen (e.g., friends). Content analysis yielded four major categories of reasons for increasing identity fusion: existence of relational ties, shared experiences, satisfaction of personal needs, and shared core values.

One of the main contributions of this work is that both groups and reasons of fusion were not pre-selected by researchers but given by the own participants. Even if the reasons derived from the content analysis were based on self-informed data, the categories were coherent with previous scientific literature (Buhrmester et al., 2015; Gómez et al., 2019; Swann, Buhrmester et al., 2014; Vázquez, Gómez, Ordoñana, et al., 2017; Whitehouse et al., 2014). Another contribution of the present research is the possibility to offer a global vision of these antecedents, contrary to previous research which has been focused on unique causes of fusion such as shared experiences. These findings show global evidence about the reasons that people think could make them feel fused with different kinds of groups and allow us to go beyond shared experiences as antecedents of identity fusion.

In general (for easily comparing groups and categories see Figure 5), our findings confirmed that ingroup-related issues were crucial aspects for identity fusion. Establishing relational ties with group members was cited as an important reason to become more attached to the group. These reasons included some ideas such as familial ties, brotherhood, unity, or friendship bonds. Reasons related to the quality of the relationship within the group were significant for any group, and especially for chosen groups, whose boundaries are permeable. This is not surprising given that establishing relational ties and projecting familial ties to groups that are not family is one of the defining characteristics of identity fusion (Swann et al., 2012; Swann, Buhrmester et al., 2014).

Satisfaction of personal needs was also an extremely important reason for attachment. It is widely accepted that group attachment serves to fulfill personal and social needs. The reasons related to satisfaction of personal needs were especially argued when considering local groups such as family or friends. These local groups, characterized by stable and rewarding relationships, can fulfill some of the more pervasive needs of human beings such as acceptance and belonging (Baumeister & Leary, 1995; Maslow, 1968). By contrast, reasons regarding shared core values were more important when considering extended groups.

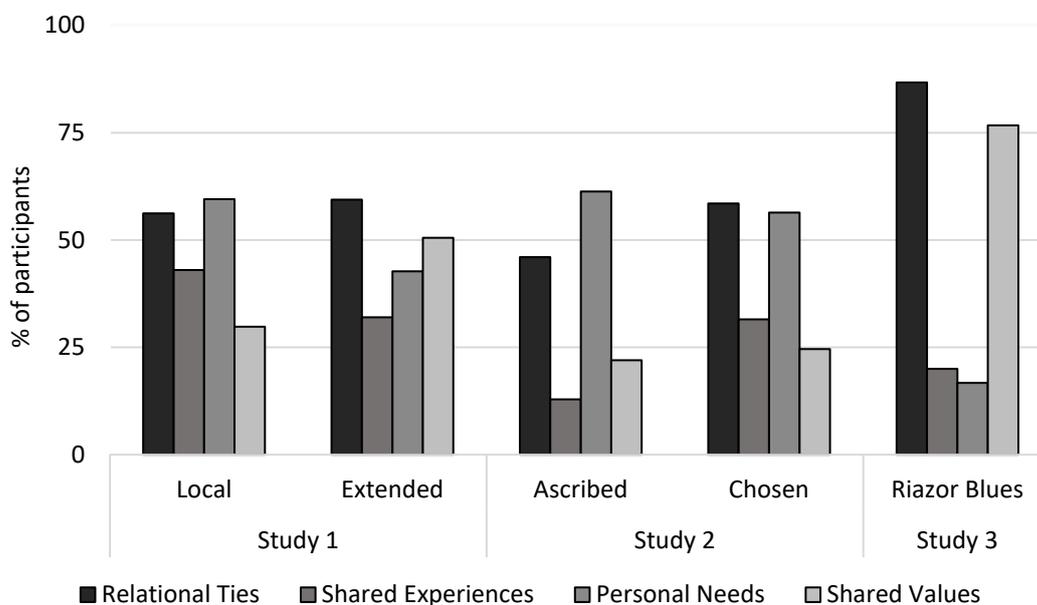
This finding can be supported by previous research. Easterbrook and Vignoles (2013) have previously found that perception of similarities is an antecedent for social

categories (i.e., extended groups where we do not know all members) but not especially for networks (i.e., local groups where we know all members). These results suggest that both common-bond groups and common-identity groups (Prentice et al., 1994) might arise in different ways, cover different needs and have different functions. Reasons to become more attached to local and extended groups seem to be relatively different and might be considered and fully explored in future research.

Study 3 revealed that the same reasons for feeling unity with a normalized group were cited by members of a radical football-fan group. Reasons by its members revealed they could be projecting the familial ties relegated to family members to members of the Riazor Blues. The predominant use of familial ties with a group of football fans is supported by the idea that fused people can extent familial ties to more extended groups outside the natural family (Swann, Buhrmester et al., 2014). This fact, together with the idea of sharing core values could explain the strong willingness to extreme actions on behalf of the group.

Figure 5

Comparative figure with the percentage of participants who mentioned a category of fusion.



Limitations

This work is not free of limitations, especially related to the methodology. We asked participants to write the most important reasons that they thought could lead them to feel intensely attached to their group. They expressed their subjective opinion about the possible reasons. However, inferred reasons might not fit with actual reasons. Other circumstances, beyond the consciousness of the participants, might influence their alignment with groups. Even though, understanding what people are thinking about reasons to become fused with a group informs us about how they experience their reality. The fact that inferred reasons of lay people fit quite well with the main principles of the identity fusion theory, and group literature constitutes additional evidence of the validity of the results.

A difficulty with the content analysis was the interpretation of the text. Categories were not mutually exclusive: relational ties, for example, can also fulfill important personal needs such as belonging. The same happened with shared core values and shared experiences: cheering a team was included as part of shared core values as it was assumed that people share with the group his/her love for the team, however, it might be also understood as a collective experience. We cannot discard other alternative interpretations might be possible for the specific text analyzed. Some reasons did not contain much information and were open to free interpretation. Despite both judges used the same criterion to solve interpretation disagreements, the same concept might be interpreted in a different way.

Future studies and conclusions

Future studies can use these preliminary categories to design the script for focus groups and semi-structured interviews with normalized and radicalized groups. Longer discourses and interviews extracted from focus groups or personal meetings can be systematically analyzed based on these previous categories. Future quantitative research might also contribute to consolidate these preliminary findings. Scales based on these dimensions could be designed as quantitative research would lend easier to compare reasons of fusion with different groups in different contexts.

Despite the limitations of this work, these three studies represent a first and preliminary approach to the integrative study of the causes of identity fusion from the

perspective of lay people. On the one hand, knowing about the causes to become fused with normalized groups can have implications to potentiate social connection, and personal and social well-being. On the other hand, learning about the causes of fusion with radical groups can have applications for prevention. Groups allow us to define ourselves, to fulfill important satisfaction needs, and to understand the world we live in. Understanding the processes that contribute to develop the visceral feeling of oneness that characterizes identity fusion will surely have relevant implications for promoting healthy social relationships.

Package 2

Why people enter and embrace violent groups?

Why people enter and embrace violent groups?^{6 7}

Abstract

We distinguish two pathways people may follow when they join violent groups: compliance and internalization. Compliance occurs when individuals are coerced to join by powerful influence agents. Internalization occurs when individuals join due to a perceived convergence between the self and the group. We searched for evidence of each of these pathways in field investigations of former members of two renowned terrorist organizations: The Liberation Tigers of Tamil Eelam (LTTE) (Study 1) and Islamist radical groups (Study 2). Results indicated that ex-fighters joined LTTE for reasons associated with both compliance and internalization but that ex-fighters joined Islamist radical groups primarily for reasons associated with internalization. When compliance occurred, it often took the form of coercion within LTTE but involved charismatic persuasion agents within Islamist groups. This evidence of systematic differences in the reasons why fighters enter violent groups suggests that strategies for preventing radicalization and fostering de-radicalization should be tailored to particular groups.

Keywords: Radicalization, Terrorism Identity Fusion, Collective Identity, Social Influence.

⁶ This manuscript has been published: Gómez, Á., Martínez, M., Martel, F. A., López-Rodríguez, L., Vázquez, A., Chinchilla, J., ... & Swann, W. B. (2021). Why people enter and embrace violent groups. *Frontiers in psychology, 11*, 3823. <https://doi.org/10.3389/fpsyg.2020.614657>

⁷ We are especially thankful Mal Hettiarachchi and Naffes Hamid, who made possible the data collection with members of LTTE, and with ex members of violent Islamist groups.

1.1. Theoretical introduction

Violent extremism and terrorism pose a growing threat to peace and security worldwide. To reduce this threat, the UN has recently declared 2020-2030 the Decade of Action. A top priority is fighting violent extremism through the adoption of systematic preventive measures (UN Global Counter-Terrorism Strategy, A/RES/60/288, 2006). Identifying these measures requires understanding the fundamental issue of why people join violent groups. Although previous researchers have developed several distinct classification systems for organizing the reasons people join violent groups (e.g., Bjørge, 2011; Cottee & Hayward, 2011; Hafez & Mullins, 2015), no single formulation has won widespread acceptance among researchers.

The present research aims to contribute to understanding why people join violent groups in three ways. First, we draw on the attitude change literature (e.g., Bagozzi & Lee, 2002; Kelman, 1952, 1958) to distinguish two general pathways through which people may come to join violent groups: compliance and internalization. Second, we elaborate three situationally-driven sub-pathways that give rise to compliance (charismatic persuasion agent, propaganda, and coercion) and three identity-driven sub-pathways that give rise to internalization (personal, relational, and collective identities). Third, we assess the applicability of our formulation in understanding why members of two violent terrorist organizations joined the group. Specifically, in Study 1 we used semi-structured interviews to directly assess the experience of ex-members of the Liberation Tigers of Tamil Eelam (LTTE), a militant terrorist organization of Sri Lanka. In Study 2 we analyzed the life stories of former Islamist radicals who were ex-members of violent jihadist groups. Prior to introducing our formulation, we review past attempts to understand the roots of terrorism.

Why people join violent terrorist groups: basic personal needs, shared realities, and the desire for immersion through identity fusion

Previous studies have devoted considerable attention to the question of why people join violent groups (e.g., Borum, 2011; Campana & Lapointe, 2012; Horgan, 2005; Horowitz, 2015; McCauley & Moskalenko, 2008; Moghaddam, 2005; Newman, 2006; Sánchez-Cuenca & de la Calle, 2009; Scull et al., 2020; Wiktorowicz, 2005).

Intuitively, one might believe that alignment with terrorist groups is explained by radical ideology.

This commonsense assumption collides with the fact that most people holding radical ideas do not actually engage in terrorism, and many terrorists are not completely radicalized (Bjørge, 2011). Radicalization does not inevitably lead to violence and terrorism, even though it can facilitate them (Bjørge & Horgan, 2009). After all, previous research indicates that attending religious services (thought to enhance coalitional commitment) is a more powerful predictor of support for suicide attacks than religious devotion (Ginges et al., 2009). Therefore, radical worldviews are only one among many potential causes of joining violent terrorist groups (Kruglanski & Fishman, 2009).

With such distinctions in mind, Borum (2011) defines radicalization as “the process of developing extremist ideologies and beliefs”. This development of ideology is conceptually different from actual extremist acts, which Borum defines as action pathways, or “the process of engaging in terrorism or violent extremist actions” (p. 9). Our current focus is not the adoption of extremist ideologies per se, but the reasons that motivated former terrorists to join and support a terrorist group in the first place.

In line with the foregoing reasoning, the 3N model (Bélanger et al., 2019; Kruglanski et al., 2018; Lobato et al., 2020) identifies three general drivers of joining violent groups: need, narrative and network. According to this perspective, group membership can satisfy basic needs such as the need to feel valued and to be respected by others (Kruglanski et al., 2018). Different factors such as personal failures, interpersonal rejection, individual or collective grievances, or social alienation can induce a loss of personal significance through the loss of a compelling life narrative and the corresponding sense of purpose. To restore it, people may join groups that offer them a sense of purpose paired with feelings of camaraderie (Bélanger et al., 2019). Therefore, through joining such groups, individuals can address the basic need to be respected by others, they can establish a new narrative that gives their life meaning, and they also can experience the social benefits of being part of a network of people.

Groups do not operate in an ideological vacuum, but promote a shared reality (Hardin & Higgins, 1996), an ideological narrative that in the case of terrorist and violent organizations legitimizes violence. Such a narrative could be extraordinarily appealing after suffering a loss of personal significance or meaning, when people usually experience a thirst for revenge against those, they consider blameworthy (Kruglanski & Orehek,

2011). By virtue of being part of a violent group and the adoption of its narrative, the use of violence that is generally reprimanded becomes tolerable (Bélanger et al., 2019).

Another motive that could explain why some individuals join these violent groups is identity fusion, or the development of a feeling of visceral sense of connection with the group (Swann et al., 2012). One of the key characteristics of violent and terrorist groups is that their members are willing to fight and even die for the group, and identity fusion research has consistently confirmed that fusion is a successful predictor of such extreme actions (see Gómez et al., 2020 for a review). Up until now, two main mechanisms have been identified as a cause or an amplifier of fusion with a group: shared experiences with other individuals, particularly dysphoric experiences (e.g., Whitehouse et al., 2017), and shared values (e.g., Swann et al., 2014). Of particular interest here is the fact that individuals might even fuse with groups that they do not (yet) belong to and with whom they do not share any previous association, such as when they perceive that the negative treatment suffered by an outgroup clashes with one's own beliefs (Kunst et al., 2018). Examples of fusion with a group have been found among Libyan insurgents fighting against the Gaddafi regime (Whitehouse et al., 2014), captured ISIS fighters (Gómez et al., 2017), Pakistani participants supporting the Kashmiri cause (Pretus et al., 2019), supporters of an Al Qaeda associated group (Hamid et al., 2019), Northern Irish loyalist and republican paramilitaries (Ferguson & McAuley, 2020), and fighters against the Islamic State including Peshmerga, Iraqi army Kurds, and Arab Sunni Militia (Gómez et al., 2017).

Although there is an impressive number of theoretical models on the causes of violent extremism (e.g., Hafez & Mullins, 2015; Neumann & Kleinmann, 2013; Pisoui & Ahmed, 2016; Vergani et al., 2018), less common are investigations including empirical data about this issue. A recent qualitative examination of the themes explaining why people join terrorist groups (i.e., ISIS and Al-Qaeda) in Kuwait through interviews with prison inmates identified five reasons for involvement: religious identity development (progression of the religious identity), personal connections (development of close social bonds with individuals and religious organizations), propaganda (influence by social media), defense of Islam (perception that Islam and specifically, the Sunni sect of Islam is under threat), and social marginalization (social risk factors) (Scull et al., 2020). Although this model is promising, one of its limitations is that it is based on the analyses of interviews with members of terrorist groups that are focused on ideological factors. Terrorists from groups with a different focus than ideology or from groups with a similar

focus but in different contexts might decide to embrace such groups for reasons not captured with this sample. For instance, some authors have suggested that the reasons for entering into terrorist groups differ in conflict zones (i.e., trauma and revenge) and non-conflict zones (i.e., discrimination, marginalization, frustrated aspirations, desire for adventure, romance, personal significance, or the desire to be heroic) (Speckhard, 2015). Another limitation of this model is that it is based on interviews with only nine terrorists, so its generalizability is questionable.

While the previous models have contributed enormously to the identification and systematization of the reasons leading to involvement in violent groups, they have stopped short of providing an overarching scheme that explains how the various factors relate to one another. Another important limitation is that most of these classifications have not been supported by empirical data (see Scull et al., 2020 for an exception). In other words, previous research has not tested whether the classification is valid for groups with diverse organizational structures and whether the reasons for joining specific types of terrorist groups differ.

Our goal here is to take a preliminary step toward developing an overarching scheme informed by empirical data. At a very general level, the approach we suggest is reminiscent of the time-honored distinction within social and personality psychology between explanations of nature vs. nurture, genetics vs. environment, or traits vs. situations (e.g., Mischel, 1968). In a more specific sense, our approach draws on a classic theme in the social influence literature first advanced by Kelman (1958). He distinguished two forms of attitude change, one produced by internalization and the other produced by compliance. In the present context, we argue that internalization occurs when people are drawn into terrorist groups by the fit between the group and personal qualities such as identities, ideologies, narratives, needs, grievances, or background characteristics. It comprises an ample variety of motives that include, among others, the pursuit of power, status, and the desire to become a hero (e.g., Kruglanski et al., 2019); the establishment of close relational bonds with others (e.g., Gómez et al., 2019); and the adoption of highly valued causes (e.g., Atran, 2010). In contrast, compliance occurs when people are compelled to enter the group due to features of the situation, most notably propaganda, threats, or other situational pressures.

Although some authors have discussed compliance and internalization as potential reasons for joining violent groups (e.g., McCauley & Moskaleiko, 2008), no research to date has systematically studied the role of these processes in the decision to join such

groups. To determine the viability of this approach, we sought to identify terrorist groups in which either compliance or internalization seemed likely to emerge.

For evidence of the role of compliance, we were guided by a report by the United Nations Office on Drugs and Crime (UNODC, 2018), which indicated that forced recruitment is especially high in Africa and Asia (see Becker, 2010). For example, the Liberation Tigers of Tamil Eelam (LTTE) has been accused of forced recruitment of children, especially after 2002 (Ramesh, 2004).

For evidence of internalization, we referred to accounts of religious terrorist groups such as ISIS who are renowned for recruiting followers in mosques, prisons, and through social media sites in Western democratic countries (Berger, 2015).

Given these accounts, we selected a sample of former LTTE members and a second sample of former Islamist terrorists (mainly ISIS and Al-Qaeda members) for the current research. We expected to discover more evidence of compliance among former LTTE members than former members of Islamist groups. Conversely, we also expected to find more evidence of internalization among former members of Islamist groups than former members of LTTE.

1.2. Overview of the current research

To test our predictions, we examined two groups that varied in ideology, nationality, and type of radicalization. Study 1 analyzed ex-members of the Liberation Tigers of Tamil Eelam (LTTE), a ruthless ethno-nationalist separatist terrorist group, proscribed by 32 countries as a terrorist organization (including the European Union, Canada, the United States, and India). The LTTE is the only terrorist group that has assassinated two serving heads of state using suicide bombers (the Prime Minister of India in 1991 and the President of Sri Lanka in 1993). All the participants interviewed in Study 1 were Asian.

Study 2 focused on Islamist radicals who, at some point, were members of violent jihadist groups. These groups included ISIS, Al-Qaeda, or one of their associated organizations that can be considered part of the global jihadi movement. All groups associated with the global jihadi movement oppose liberal democracies and are in favor of authoritarian religious oligarchies ruled by a fundamentalist interpretation of Sharia (Islamic law). While some of these groups believe in nationalism in the short-term, all of them ultimately seek to establish a borderless worldwide Caliphate in the

long-term. In addition, these groups consider violent offensive jihad (Holy War) as the only way to achieve these goals. They also claim that it is incumbent upon all Muslims to engage in or facilitate this holy war. Most of the participants interviewed in Study 2 were European.

We pooled analyses for the protocols from either semi-structured interviews (Study 1), or from narratives derived from audio recordings (Study 2). Based on our research questions, the characteristics of the studies, and the nature of the data obtained, we combined data-driven coding in the First Cycle (descriptive coding method) with theory-driven coding in the Second Cycle (theoretical coding) that allowed us to refine our initial categorization (for a discussion of coding methods see Saldaña, 2013). After an initial review of the data using a descriptive coding method, we extracted specific codes for each participant. Such codes were labels –words that reflected the main topic of the reasons to embrace the radical group– such as force, propaganda, family issues, personal issues, and/or ideals. This first descriptive coding revealed two main patterns: internal forces (i.e., reasons related to the individual that push to the radical group, that based on Kelman, 1952, correspond to identity-related reasons or internalization) and external forces (i.e., reasons related to external sources that pull the participant towards the radical group, that based on Kelman, 1952, correspond to influence or conformity reasons or compliance). These two categories were subdivided into subcategories. We elaborated three identity-related reasons for joining terrorist groups that reflect different forms of internalization (influences on personal, relational, and collective identities), and a second cluster of three reasons that involved compliance (charismatic persuasion agent, propaganda, and coercion). *Personal identity* refers to those aspects of the self-concept that allow differentiation from all others and make us unique; *relational identity* is derived from connections with significant others and encompasses one’s roles in close relationships; and *collective identity* comprises the cognitions, emotions, and values strongly linked to group membership. Compliance through a *charismatic persuasion agent* refers to being convinced by an individual group member such as a radicalized Imam cleric or a professional recruiter; *propaganda* refers to being convinced to join by recruitment material such as videos on the Internet; and *coercion* refers to being taken into the group by force. With the foregoing theoretical framework in mind, two judges recategorized the reasons in a second cycle coding, and then, intercoder agreement was evaluated. Then, frequency counts were presented for each category and subsequent subcategories and they were ordered in a hierarchical way with typical exemplars. Chi-

squared tests was used to compare pairs of percentages within groups, and z-score tests were used to compare proportions between groups. What follows is a presentation of the methodology and results of each individual study.

1.3. Study 1. Why ex-members of the Liberation Tigers of Tamil Eelam (LTTE) joined the group

The LTTE's guerilla and terrorist activities were targeted at achieving a mono-ethnic separate state for the Tamil people in Sri Lanka. Upon its foundation on 5 May 1976, the LTTE commenced its campaign for a separate state. The murder of the Tamil Mayor of Jaffna, Alfred Duraiappa, in 1975, was the LTTE's first assassination and was conducted personally by Velupillai Prabhakaran, the leader of the LTTE. The LTTE was a well-developed terrorist group that operated an overt/semi-covert political wing and a clandestine military wing. Over time, the LTTE developed capabilities in guerrilla and mobile warfare but continued to employ terrorism until the end of the movement. They even developed affiliations with outside organizations, both within and beyond the theatre of conflict, to establish a support base and ensure a steady stream of funding. The LTTE was finally defeated militarily in May 2009. The Sri Lankan government launched a formidable rehabilitation program to reintegrate the majority of the former members of the LTTE into the community. However, while the LTTE's operational capability on the ground has been neutralized, LTTE's overseas networks remain intact, and continue to pose a threat to Sri Lanka. Study 1 aimed to understand the reasons that a sample of ex-Tamil Tigers gave for joining this terrorist group.

1.3.1. Method

Participants

Seventy-five ex-members (38 women and 33 men; four did not report sex) of the LTTE were interviewed by a member of the research team. Their age varied from 22 to 56 with a mean age of 34 ($SD = 7.82$). Seventy-three had Sri Lankan nationality (two did not report nationality). Most of them were of Tamil ethnicity and Hindu. Only forty-four of them gave reasons for joining the group and were included in the analyses.

Procedure

Interviews were conducted in Kilinochchi and Viswamadu community centers, two regions where former LTTE members were reintegrated. The sample was selected randomly from a group of former LTTE members during community follow-up visits by the researcher. Community leaders gathered all the former terrorists who were available to participate in the study during the community visits. The data were collected using a structured questionnaire. Respondents were asked “How did you or others come/happen to join the LTTE? (What were the key reason that encouraged others/you to join this group?)”. Because we were interested in the main reason for joining the group, participants were asked to think and choose only one, so the reasons showed in the result section are mutually exclusive. To diminish social desirability bias, the interviewer used third-person language instead of second-person language when discussing highly sensitive topics.

After the interview, two judges read all the reasons provided by the participants and decided which pathway aligned with each given reason. They could discuss preliminary disagreements as needed. The reasons that didn’t fit in with any of the pathways were classified as *other*.

1.3.2. Results

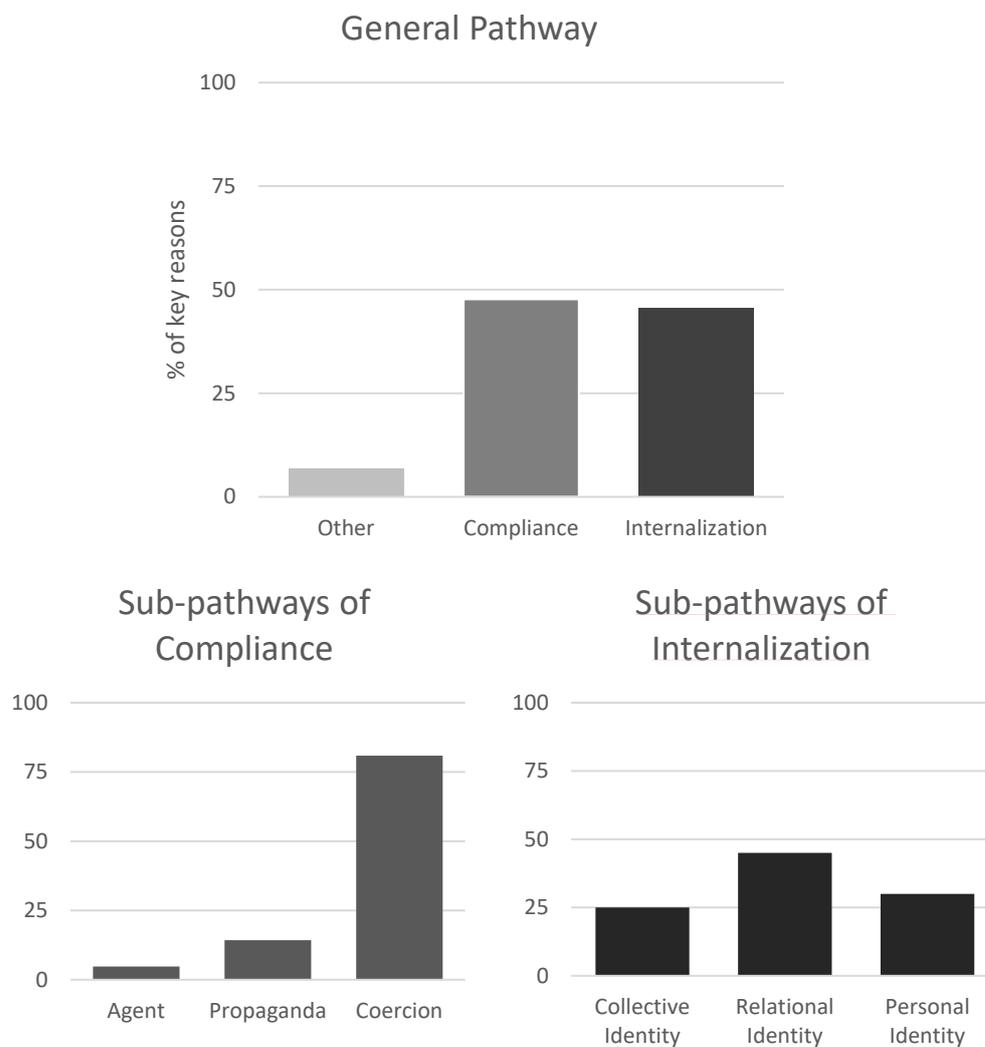
Judges showed a complete agreement in the sub-pathways of collective identity, relational identity, propaganda, and charismatic persuasion agent ($k = 1$), and an adequate inter-judge agreement in the sub-pathways of personal identity ($k = .83$), and coercion ($k = .86$). Those three reasons where there was disagreement were categorized as Other⁸. Figure 1 shows the percentage of the key reasons why participants joined LTTE. Ex-fighters from LTTE expressed an equivalent number of reasons for compliance versus internalization, $\chi^2(1) = 0.02, p = .876$. Within sub-pathways of compliance, more participants expressed reasons related to coercion than propaganda, $\chi^2(1) = 9.80, p = .002$, or charismatic persuasion, $\chi^2(1) = 14.22, p < .001$. Within

⁸ Three reasons (P27: LTTE being there – everywhere; P61: LTTE was always there; and P62: When I was arrested by security) were categorized as “other” due to disagreements in the categorization process.

sub-pathways of internalization, there were no differences in the percentages of participants who expressed reasons related to personal, relational or collective identity.

Figure 1

Percent breakdown of key reasons that former members joined LTTE



Almost half of the participants mentioned some form of compliance as the key reason for joining (47.7%). Looking at the compliance pathway, most identified *Coercion* as the main reason for entering the group (80.9% of the total reasons referred to compliance). Some examples of coercion are (“P” refers to the participant number): P14 remembered joining “By force when going to school”; P21 told that she “did not like to join but had to” because “one in every family joined”; P50 explained he joined “When LTTE forcefully gathered people”; and P60 told she joined because of death threats by

LTTE. *Propaganda* was mentioned by a 14.3% of participants. Some examples of propaganda are: P25 mentioned different kinds of publicity by LTTE; P38 mentioned “Street drama of LTTE media”; and P44 referred to “Publicity, street drama, video” and “LTTE publicity”. *Charismatic Persuasion Agent* was mentioned by a 4.8% of participants. An example was P3, who talked about politicians highly valued by the community who recruited them. Approximately half of the participants gave reasons for joining related to internalization (45.5%). Around half of these participants referred to *Relational Identity* as the reason for joining the group (45%). The examples for this sub-pathway refer to the loss of relational ties as a reason for becoming part of LTTE: P1 recognized having joined because people he knew died; P10 referred to losses and displacement; P15 remembered joining when his family died; P40 joined after his mother died; P49 joined because of loss of relatives; and P56 declared he joined after his wife’s death. *Personal Identity* was mentioned by 30% of participants who referred to internalization. Some examples are: P4 mentioned “Not much education”, whereas P5 talked about the “Bad situation around us” as reasons for joining. P8 recognized having a very hard life and P59 joined because she was systematically neglected from jobs. Finally, *Collective Identity* was mentioned by 25% of those who referred to internalization. Examples are: P12 said “The attachment I have about my ethnicity”; P13 “Thought we wanted a Tamil nation”; P19 joined “To get rights for Tamils”; P73 did it “to fight against discrimination and differences in social status, class”.

1.3.3. Discussion

Study 1 shows that when we asked former LTTE about their main reason for joining the group, around half of them mentioned compliance while the other half referred to internalization. In the case of compliance, most participants explained that they joined the group because of coercion, some of them because of propaganda, and almost none because of the influence of a charismatic leader. However, in the case of internalization, the motives referring to the different sub-pathways were more balanced. The loss of relational ties such as, for example, the death of family members, was a key reason that encouraged joining LTTE. However, personal and collective identity were also mentioned as reasons for joining the group.

One of the limitations of this study is that former LTTE members were instructed to report “the key” reason that encouraged them to join. This procedure does not allow

for the possibility that several, instead of just one, factors motivated them to enter the group. That is, complex social phenomena, such as entering violent groups, are often due to multiple causes acting together (e.g., Atran, 2020; Vergani et al., 2018). To learn more about the full range of considerations that led people to join violent groups, in Study 2, we recorded life stories of members of radical Islamist organizations to identify all the myriad reasons that drove them to embrace violent groups as opposed to just the most important reason.

1.4. Study 2. Why Islamist radicals joined the group

Study 2 analyzed the life stories of twenty-one Islamist radicals who were, at some point in their lives, members of violent jihadist groups. These groups included ISIS, Al- Qaeda, or one of their associated organizations that are considered part of the global jihadi movement.

1.4.1. Method

Participants

A total of 21 participants (18 men and 3 women, ranging in age from 21 to 59 years) qualified for this study by indicating that they had been a member of a jihadist terrorist organization at some point in their lives. There were no age, gender, or nationality criteria pre-established. Most participants were European. Six participants were Belgian, another three were Belgian-Moroccan, four participants were from Britain and three from France. Single individuals were Belgian-Tunisian, Pakistani-Spanish, Kosovan, Egyptian, and German.

Procedure

A member of the research team interviewed participants and then created life stories based on each interview. The way each participant was recruited for the interview varied person-to-person. In some cases, the participant was introduced to the researcher by a social worker or a community member. Sometimes, it was another participant who introduced the researcher to the next participant following a snowball

technique. Other times, a friend or a family member introduced the participant. On some occasions, a lawyer introduced the participant, or the researcher contacted the participant online and arranged a face-to-face meeting.

The locations of the meetings were as diverse as the recruitment method. Some interviews took place in a lawyer's office with the participant's attorney present. Other times, they took place in the participant's domicile with no one else present. Lastly, some of the interviews were conducted in cafes or parks. All participants were told that the purpose of the interview was to attain their life history to show how and why they joined the Islamist group. They were informed that this research would be used for academic publications and that their identities would be anonymized. After oral consent was obtained, the researcher followed a semi-structured questionnaire. In some cases, there were multiple meetings with the same participant. The interviews took two hours on average and all responses were handwritten by the researcher.

The researcher gathered all the information of the life stories of each participant and then recorded a clip-summary of each life story separately. Then two members of the research team listened to the recordings and did a first round of coding by discussing the pathways that aligned with the reasons given for joining the Islamist groups. We organized the reasons for joining these violent Islamist groups into the same pathways as in Study 1: compliance (charismatic persuasion agent, propaganda, or coercion), and internalization (influences on personal, relational, or collective identities). Then two independent judges categorized the reasons given within the life stories of why participants joined the terrorist groups. They were offered the possibility to discuss preliminary disagreements. It was decided whether the reasons of each participant *did* or *did not* pertain to each of the pathways presented by indicating *yes* (coded 1) or *not* (coded 0) in each rationale. Reasons where disagreement was found were then rated as *other*. It is important to note two key differences in methodology between this and the previous study. First, in Study 1 we asked participants directly about the reasons for why they had joined the group, whereas in Study 2 this information emerged spontaneously during the conversation. Second, participants could only give one reason for why they joined the group in Study 1; in Study 2 they were able to give multiple reasons.

1.4.2. Results

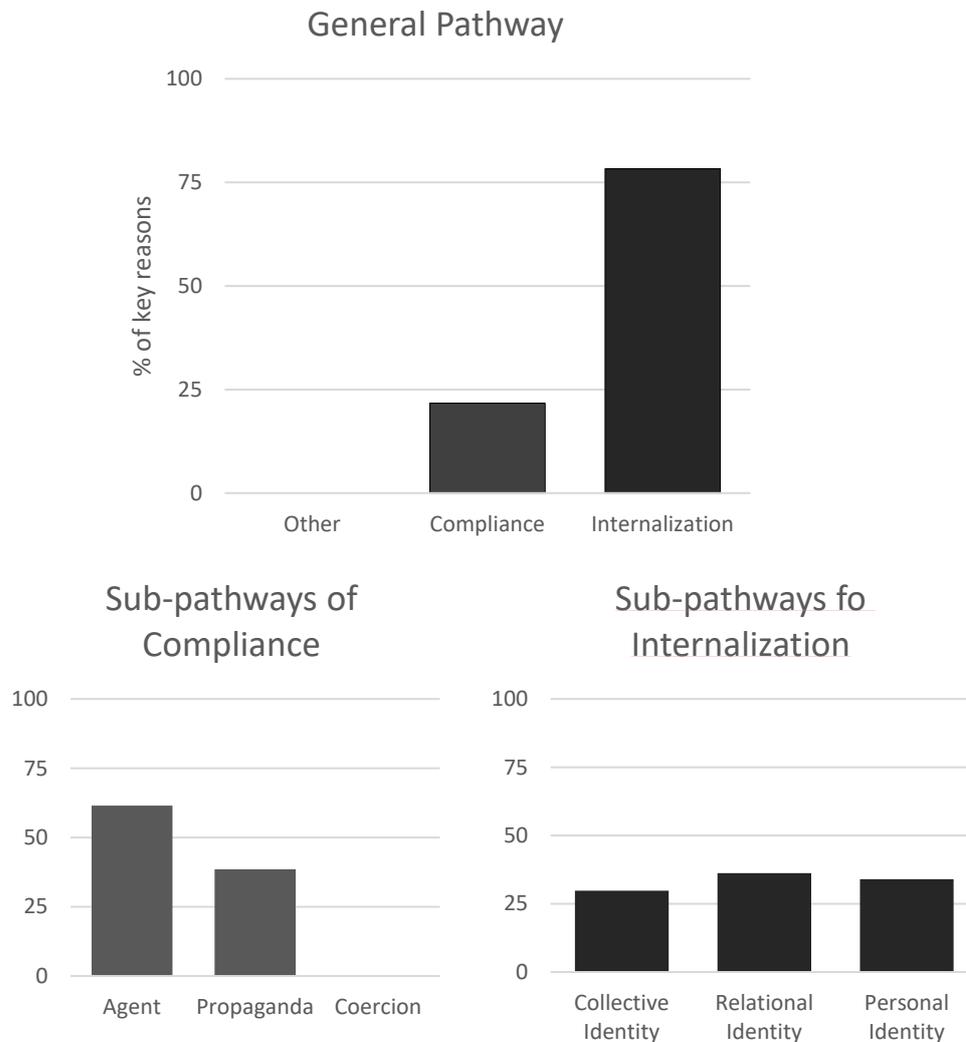
The inter-judge agreement was complete for the sub-pathways of personal identity, relational identity, charismatic persuasion agent, and propaganda ($k = 1.00$). The agreement for collective identity was acceptably high ($k = .89$). There were no reports of coercion in this sample. Each life story included several reasons that could explain why participants joined radical groups. This study did not include one unique reason, but several, as the process of radicalization is complex and might entail different sources for influence throughout the life of an individual. So, contrary to what was reported in Study 1, where the total number of reasons was equivalent to the total number of participants, in Study 2 the 21 participants gave a total of 60 different reasons for joining the terrorist group. Many life histories contained elements with overlapping themes. For example, 16 life stories included reasons related to personal identity, but some of the same life stories also included reasons related to relational identity, collective identity, or some kind of social influence. The internalization pathway included a total of 47 reasons, with 16 life stories including personal-identity reasons, 17 included relational-identity reasons, and 14 included collective-identity reasons. A total of 13 reasons were considered evidence of compliance, with 8 life stories including reasons related to the presence of a charismatic agent and 5 including some form of propaganda. To transform the percentage of life stories where a reason was present (e.g., internalization) to the percentage of that specific reason among the total number of reasons presented in the life stories, we considered the total number of reasons offered as 100% (n reasons = 60) instead of the total number of participants/life stories analyzed ($n = 21$). So, the 47 reasons related to internalization corresponded to 78.3% of the total reasons present in the life stories. As in Study 1, the percentage of the subcategories took the total number of reasons in each category to be 100%. Please see Table 1, for reconversion values for both studies.

Figure 2 shows the percentage of life stories in Study 2 where the specific reason (compliance versus internalization) was mentioned. For each of these two pathways, the percentage of reasons that referred to each of the corresponding sub-pathways were listed. Note that for clarity, we are reporting the results here in the same format that we did in Figure 1. However, the data collection process was different in that participants in Study 1 reported only the single most important reason for joining, whereas participants in Study 2 reported all the reasons that came to mind. Overall, life stories in Study 2

included more reasons related to sub-pathways of internalization (a total of 47 reasons) than reasons related to compliance (a total of 13 reasons), $\chi^2(1)=19.27, p<.001$.

Figure 2

Percent breakdown of key reasons that former members joined Islamic terrorist groups



Over 80% of the life stories analyzed included some kind of internalization as the key reason for joining the group. Regarding the sub-pathways of internalization, about one third of the reasons reported by participants referred to *Relational Identity*, such as disappointments with the close family that deteriorated their relational ties: P1 was very upset with her father, her family was disappointed at her, and she ran from home; P4 experienced feelings of exclusion and isolation from his family and his community. P4's family and community did not understand him from the beginning, and he remained isolated; P8 showed an unhealthy family relationship, and he was looking for a home, a

place to belong; P10 also came from a broken home (i.e., his parents got divorced when he was very young, he had an absent father who was unable to help him), he had a big network of Moroccan friends, with whom he felt oneness and who satisfied his need to belong. One of his friends died, and, during the funeral in the mosque, he had a transformative experience and realized that he wanted to be part of the religious community. The group of Jean Louis Denis (a recruiter who convinced others to go to Syria to fight against the Syrian government) became a kind of family to him.

The idea of going to Syria was important to him because he thought that there, he would be offered a family, a wife, a home, and the support necessary to sustain them; P11 also came from a broken home (i.e., divorced parents) and experienced tension with his parents, including lots of conflicts with his father. He went to Morocco to see some friends and he felt a sense of belonging. Finally, he went to Syria with his friend; P16 also came from a broken home and had experienced losses and divorce. She got in touch with a man from Syria online and initiated a virtual romance with him. She later converted to radical Islam to be with him and to marry him. Another participant, P9, mentioned that during a stay in prison he found a group of radical Islamists who were willing to accept him; he established close relational ties with members of a terrorist group which allowed him to overcome his feelings of social isolation.

Approximately another third of the reasons reported by participants refer to examples of setbacks or advancements of their personal identity. P1, for example, used to live in the street after leaving her home, she had a “wild life”, no self-respect and feelings of desperation. She wanted personal recognition and looked for redemption. P2 had depression and emotional problems and found in radical Islam an escape from depression; she also wanted to be part of something exciting. P6 saw in Syria an opportunity to become someone important: to be a hero. P11 was very overweight and had been teased because of that. P16 was looking for a change in her life. P15 had problems with the law. P19 has been kicked out from school and has an aggressive personality.

Finally, 29.8% of the internalization reasons included references to collective identity in terms of Muslim identity or sharing values and important ideas with a radicalized group. For example, P3 wanted to live a conservative religious life. P6 wanted to help Syrians because he believed that his own group (Kosovans) had lived through something similar in the 1990s. P7 and P15 mentioned problems with the “new world order”. P11 was committed to ideas such as liberating Palestine and feeding

refugees. He really wanted to embrace the Islamic identity, and he was very politicized. P12 was committed to the idea of defending and standing up with other people to fight against the discrimination of Muslims. Born from a white Belgian mother and a Moroccan father, he had some identity conflict issues. He was an Arab in Belgium and a White in Morocco. He was looking for a new, broader, and clearer collective identity. Feeling oppression and racism in both countries, he was really attracted to the idea of a Muslim Ummah.

On the other hand, less than a quarter of participants reported reasons related to compliance as a pathway for joining the group (21.7%). When looking at the sub-pathways of compliance, about two thirds of their expressions (61.5%) referred to the influence of a charismatic persuasion agent. For example, P1 was deeply influenced by an Arabic teacher who helped refugees. P3 was persuaded by neighbors, and, presumably by P2 (who was his wife). P10, P11, and P13 were politicized by Jean Louis Denis, the charismatic leader mentioned before, who encouraged them to go to Syria to show that they were real Muslims by trying to stop the humanitarian crisis of the refugees by combating its true causes. P20 met this top recruiter in Brussels as well and he became radicalized.

The other third of reasons related to compliance referred to propaganda (38.5%) that in most cases was combined with the influence of charismatic leaders. For example, P2 was recruited by her neighbors as well as by watching videos on internet. P4 met an Imam who influenced him, in addition to watching propaganda videos. P12 met an old colleague, the son of a radicalized Imam, who put ideas in his mind about what it meant to be a true Muslim. Afterwards he and his friends began to watch videos of propaganda. No examples of coercion were identified in the life stories of the former Islamist terrorists.

1.4.3. Discussion

When we analyzed the main reasons that former Islamist terrorists spontaneously gave for joining their terrorist group, results indicated that most examples referred to the internalization pathway. Here, the distribution of the reasons in the three sub-pathways was quite evenly balanced between examples referring to relational, personal, and collective identity. Less common were examples of the compliance pathway, which usually corresponded to the influence of a charismatic leader combined with

propaganda.

1.5. Additional analyses

Although the procedure of Study 1 and Study 2 was different, we sought to make rough comparisons between them by transforming the original percentage of participants in Study 2 to make it comparable to Study 1 (see Table 1). We then compared the proportions of specific reasons for each group using a z-score test. Ex-Islamist radicals showed significantly more internalization reasons (47 over a total of 60 reasons) than LTTE ex-fighters (21 over a total of 44 reasons), $z = 3.46$, $p < .001$. The opposite pattern was found for compliance, with LTTE ex-fighters offering more reasons regarding compliance than ex-Islamist radicals, $z = 2.80$, $p = .005$. More specifically, within the compliance reasons, LTTE ex-fighters showed more reasons related to coercion than Islamists, $z = 5.26$, $p < .001$, whereas Islamists offered slightly more reasons related to a charismatic persuasive leader than LTTE ex-fighters, $z = 1.98$, $p = .048$. However, there were no differences between groups in the proportion of propaganda, $z = 0.29$, $p = .772$. Within the internalization category, there were no differences between LTTE ex-fighters and Islamists in the proportion of reasons related to personal, relational, or collective identity.

Table 1

Reconversion of values for both studies

LTTE ex-fighters			Ex-Islamist radicals		
<i>Reasons for joining</i>	<i>n</i>	<i>%</i>	<i>Reasons for joining</i>	<i>n</i>	<i>%</i>
Total	44	100%	Total	60	100%
Compliance	21	47.73%	Compliance	13	21.67%
Internalization	20	45.45%	Internalization	47	78.33%
<i>Compliance</i>	<i>n</i>	<i>%</i>	<i>Compliance</i>	<i>n</i>	<i>%</i>
Total	21	100%	Total	13	100%
Charismatic agent	1	4.76%	Charismatic agent	8	61.54%
Propaganda	3	14.29%	Propaganda	5	38.46%
Coercion	17	80.95%	Coercion	0	0%
<i>Internalization</i>	<i>n</i>	<i>%</i>	<i>Internalization</i>	<i>n</i>	<i>%</i>
Total	20	100	Total	47	100
Personal Identity	6	30%	Personal Identity	16	34.04%
Relational Identity	9	45%	Relational Identity	17	36.17%
Collective Identity	5	25%	Collective Identity	14	29.79%

1.6. General discussion

The current research provides empirical evidence regarding why people enter terrorist groups. Specifically, in two studies former members of terrorist groups were asked for either their primary reason for joining (Study 1, former LTTE members), or for their life narratives in which they spontaneously referred to reasons for joining (Study 2, former members of radical Islamist groups). Mindful of the classic distinction in attitude-change literature advanced by Kelman (1958), we inspected participants' responses. We identified two pathways through which people may join violent groups: compliance and internalization. Compliance occurred when individuals joined groups because they were persuaded by a charismatic persuasive agent, exposed to propaganda, or coerced. In contrast, internalization occurred when individuals joined groups because of a convergence between the self and the group associated with their personal, relational, or collective identities.

The results of these two studies offered empirical evidence in line with our hypotheses. As expected, compliance was more frequently cited among former LTTE members than among former Islamist radicals. While almost half of former LTTE members reported compliance as a reason for joining the group, Islamist radicals cited compliance much less frequently. Also consistent with our expectations, former members of Islamist groups cited internalization more frequently than former LTTE participants: while more than three quarters of the reasons given by Islamist radicals for why they joined the group referred to internalization, less than half of former LTTE participants reported that this was a motive for joining.

As we have seen, a sizeable proportion of LTTE members were forced to join through coercion. Consequently, we notice that some of them, even if they had been engaged in the radical group, were not cognitively radicalized. This was the opposite of our sample of Islamist radicals, who embraced the importance of the "cause" (collective identity). These findings confirm Borum's (2011) contention that the process of radicalization is not necessarily the same as the process of action pathways, and that some members of terrorist groups can commit violent actions without being deeply ideologically radicalized. Whereas LTTE members were forced to enter in the group by coercion, Islamist radicals were persuaded by propaganda, which can explain why Islamist radicals show more cognitive radicalization than LTTE members. Another

relevant finding is that personal identity reasons were more important for Islamist extremists than for LTTE members. This finding was not surprising given that most members of LTTE were forced to join, which could explain the relative powerlessness of their group to fit their personal identity. This confirms what has been commonly highlighted in the context of violent extremist research: non-identical root causes might apply to different types of terrorism and to the same types of terrorism in different contexts (e.g., Noricks, 2009; Rapoport, 2004; Speckhard, 2015). It is necessary to note as well that most of the former Islamist extremists that we interviewed were European, whereas most LTTE members were Asian, which is consistent with Vergani and colleagues' (2018) conclusions that personal factors play a more prominent role in Europe, North America, and Australia than in the rest of the world.

Previous research might support why internalization in general, and personal identity in particular, is a relevant factor for joining Islamist radical groups. Although persuasion and propaganda are also important for understanding Islamist radicalization (e.g., Gendron 2017; Kruglova, 2020), people do not become Islamist radicals through mere coercion or brainwashing (Sageman, 2004, 2008). Islamist terrorists typically go through a process involving active and selective engagement with groups that fit their idiosyncratic characteristics, thus suggesting internalization (Chernov-Hwang & Schulze, 2018; Scull et al., 2020). Other examples of internalization might be the research by Scull and associates (2020), indicating that participants in their study experienced a process in which religion became a central part of their personal identity. As their religious identity developed, they met people involved with Al-Qaeda or ISIS who, in turn, exposed them to propaganda in support for the radical ideology (see also Dawson & Amarasingam, 2017 who suggest existential concerns and religiosity). And some other investigations suggest that establishing relational bonds and relationships with members of Islamist terrorist groups are the common thread encouraging entry as well as in fostering commitment (Chernov-Hwang & Schulze, 2018).

Taken together, the present studies make a series of theoretical and empirical contributions to previous research regarding the reasons for entering into terrorist groups. First, we have introduced a new way of conceptualizing the reasons why people enter violent groups that draws on classic work on attitude change (Kelman, 1958). Our conceptualization is also based on an extensive review of the main theoretical models on the causes of engagement in terrorist groups, including the 3N model (Kruglanski et al. 2018), the model of the three Ps of radicalization (Vergani et al., 2018), and the model

developed by Hafez and Mullins (2015), among others. By integrating the insights offered by these approaches, our conceptualization offers a new lens through which to contemplate the reasons that motivate individuals to join violent groups. Our conceptualization also makes it possible to establish distinctions between different types of terrorist groups that have been not considered until now. We believe that these distinctions will be useful for explaining why and how people decide to enter terrorist groups and for identifying the people and circumstances which are at high-risk for the creation of more adherents to a terrorist group.

Second, most of previous research on the causes that explain why individuals join terrorist groups is based on theoretical approaches to the phenomenon and does not satisfy the minimal methodological and empirical requisites of rigorous science (Neumann & Kleinmann, 2013; RAND, 2016). At an empirical level, for instance, studies have usually relied on secondary sources, opportunistic interviews, and even anecdotal evidence to support their arguments; investigations including samples of current and former terrorists have been inappropriately scarce (e.g., Neuman & Kleinmann, 2013; RAND, 2016). As a result, there is a huge quantity of concepts and theoretical models that are not backed up by tangible evidence within the field, which has prompted some experts to make a call for more scientifically-grounded research on why people join terrorist groups (e.g., Schuurman, 2018). Our studies responded to this call by including two samples of former terrorists and, as such, they increase our confidence in the possibility that the different pathways and sub-pathways leading to engagement with violent extremist groups that we have established with our model are a true reflection of this process.

Third, our research also may be useful for designing cost-effective strategies to counter violent extremism and, more specifically, to prevent people who are not yet members of terrorist groups from joining them. Our results indicate that factors related to compliance and internalization play a determining role in this process and that their relative importance vary as a function of the type of terrorist group along with the context in which the groups operate. This could help us design preventive interventions tailored to the specific characteristics of different terrorist groups and socio-political circumstances in which these interventions are meant to be applied.

When dealing with groups or contexts in which internalization predominates as a reason for joining, these strategies should be aimed at fighting feelings of discrimination, marginalization, and social alienation so that people from populations

that are at risk may experience a better fit between themselves and groups that do not support violence. This goal can be achieved in several ways, such as advancing community-aimed educational interventions (RAN, 2019), promoting the values of tolerance, solidarity and acceptance (RAN, 2019), or running interventions aimed at the development of feelings of brotherhood toward nonviolent people through the practice of sport, like the London Tiger group has been doing in the UK for more than a decade (National Academies of Sciences Engineering and Medicine, 2017). People are often looking for new groups that allow them to satisfy their personal needs, to engage in meaningful relational roles, and to feel that there is a noble and legitimate cause behind their actions. When non-violent groups are able to provide these things, people may be more open to joining the ranks of such groups even though they do not commit violent offenses (e.g., Atran, 2010, 2020).

On the other hand, when we approach groups or circumstances in which compliance is more important than internalization as a reason for joining, the specific strategies that we should use will depend on the sub-pathways through which compliance exerts its effects. If people join terrorist groups mostly through propaganda and charismatic influence agents, strategies aimed at increasing resistance to persuasion, like the diffusion of counter-narratives, educational interventions to increase individuals' critical thinking, or public discrediting of terrorist leaders by former terrorists should be particularly effective (RAN, 2019). However, although some research focused on the Islamic state support the positive effect of counter-narratives, there is also evidence that counter-narratives can have counterproductive effects on sympathizers of ISIS and individuals at great risk of radicalization, and regardless of the source of the message all counter-narratives with a religious argument backfired (Bélanger, Nisa, et al., 2020). If people join because of coercion, "hard" measures, like the decapitation of terrorist organizations, that is, the killing or imprisonment of terrorist leaders, may be needed (Price, 2012).

Lastly, our studies highlight some potential future lines of research. First, future investigations could test whether our conceptualization applies not only to ethno-nationalist separatist and religious terrorists but also to single-issue, left-wing, and right-wing violent extremists by examining the relative importance that compliance and internalization have in these different groups. Given the upsurge of terrorism from the radical right that has occurred in the last decade in some Western countries (Atran, 2020), we think that a deep exploration of the reasons that are driving people to join

right-wing extremist groups at increasing rates would be particularly advisable. Second, other studies could test our model with violent groups that do not fall under the umbrella of terrorism, like Latin gangs or criminal organizations like the mafia, and compare them to terrorist groups. As gang members are more motivated by friendship, affiliation, and personal interest and less motivated by ideological causes than terrorists (Decker & Pyrooz, 2011), we think that internalization via personal and relational identity fit may be more frequent among gang members than among terrorists and, conversely that internalization via collective identity may be more common among terrorists than gang members. Third, some longitudinal studies could be run to gain a better understanding of how the process of joining violent extremist groups unfolds in real-time and to discover the different ways in which the factors covered by our model interact and influence the end result of this process. It is possible, for instance, that charismatic influence agents and propaganda mutually reinforce the impact of the internalization sub-pathways, thus making individuals more prone to becoming terrorists.

1.7. Limitations

The present research has some limitations. In particular, the different results obtained in the two studies could be due to methodological differences as opposed to the intrinsic characteristics of the groups (i.e., LTTE members were asked about the main reason for joining the group, whereas Islamist radicals recounted their life stories and the reason/s for joining were extracted from the narratives).

Another potential limitation is that former terrorists may be concerned with presenting themselves in a favorable light that is not particularly accurate, which raises concerns about the validity of their reports. In particular, the interviewees may adjust their responses to give a good impression of themselves or the group, to appear less responsible for their actions and decisions, or to preserve their positive self-image. After all, former terrorists tend to overemphasize the role of situational/external factors such as persuasion, coercion and duty in explaining their involvement to dilute their own culpability (Horgan, 2014). They are also inclined to downplay the role of personal motives such as need for power, status, and thrill-seeking, which are rarely expressed in interviews (Horgan, 2014). These issues are especially notable in Study 1, where participants were explicitly asked for their reasons for joining the group. Although some researchers have found that terrorists are sincere in their answers (Kruglanski et al.,

2019) and others have argued that it is necessary to take terrorists accounts of their motivations seriously (Dawson, 2019; Nilsson, 2018), we need to be cautious when interpreting interview data from terrorists or we run the risk of over- or under-stating the significance of certain experiences and events (Horgan, 2012, 2014).

Also, terrorists go through a dynamic and transformative process as they move along the different stages of radicalization and engagement. Their explanations of their reasons for joining the group may differ depending on their stage of (dis)engagement (Horgan, 2012). There is no reason to suppose that the explanations offered at one particular stage should be taken as more valid than those given at others (Dawson, 2019). Furthermore, as our main research interest is extreme behavior, our focus has been members of two of the most violent groups in history, whose members are willing to kill (and maybe some of them actually did it) and die if necessary, for the group or for their convictions, whether the categories that we have used here would apply to non-violent groups is an empirical question that open the door for future research. Finally, the samples were quite small. Future research should assess the generalizability of our findings.

To address these limitations, future researchers might consider: (1) using the same methodology for data collection independently of the group and the stage of radicalization; (2) making use of sophisticated coding and analysis techniques (Miles et al., 2019); (3) combining qualitative and quantitative research methods (White, 2000); (4) collecting data with people at different stages of radicalization; and (5) comparing and verifying the data obtained from interviews with other data sources, such as the penitentiary and judicial records.

1.8. Conclusions

As the UN has acknowledged, (UN Global Counter-Terrorism Strategy, A/RES/60/288, 2006), measures and policies aimed at countering violent extremism should focus on the prevention of radicalization among members of vulnerable communities. To this end, we need to understand the reasons that drive individuals to join violent extremist groups (e.g., Bakker, 2015; Schuurman, 2018). With the present research, we have attempted to integrate classic socio-psychological research on attitude change (Kellman, 1958) with more contemporary approaches to the study of terrorism (e.g., Kruglanski et al., 2018; Vergani et al., 2018). We report two studies with former

members of terrorist groups that offer empirical support for our conceptualization that reasons for joining terrorist groups fall under the categories of internalization or compliance, which in turn can further be broken down into easily identifiable sub-pathways. It is our hope that this new theoretical frame will provide new insights into how to prevent violent radicalization as well as foster de-radicalization.

CHAPTER 2

Why people leave violent groups: From defusion to de-radicalization

Abstract

Identity fusion was originally formulated as a visceral feeling of “oneness” with a group. This feeling is thought to be so powerful that it motivates individuals to do extraordinary self-sacrifices on behalf of the group or its members. Recent research has explored the role of fusion in violent groups. In this report, we ask if degradations in fusion may cause people to leave violent groups. We build on previous evidence that degrading either of two components of fusion diminishes allegiance to social groups, relational ties (i.e., sentiments toward individual group members) or collective ties (i.e., sentiments toward the group as a whole). In three studies we found that participants indicated that degrading collective ties or relational ties reduced fusion, whether the group was local (e.g., sport team), or extended (e.g., country), ascribed (e.g., family), or chosen (e.g., friends), and whether the reasons for defusion resided in the past (Study 3) or future (Studies 1-2). In each instance, degrading relational ties was a more common reason for defusion than degrading collective ties. An additional field study replicated these findings with a hooligan group (Study 4). Together, these results suggest degrading collective, and especially relational, ties as strategies for deradicalization. A final study with former terrorists (the Liberation Tigers of Tamil Eelam, LTTE) revealed that when asked for reasons for abandoning the group, they referred to both degrading relational and collective ties. These findings help establish a link between defusion and leaving violent groups and point to degrading either relational or collective ties as strategies for fostering deradicalization.

Keywords: Identity Fusion, Collective Ties, Relational Ties, Deradicalization, Extreme Behavior, Terrorism.

2.1. Theoretical background

During a lifetime, a person can belong to multiple groups, but at some point, the individual can feel less attached, and finally abandon them due to different reasons. The material and psychological difficulties of the rupture of such relationships can vary as much as their impact and consequences depending on the nature of the group, the relation itself, and the functions that the group was fulfilling. A deep connection with a group can undoubtedly contribute to people's wellbeing but sometimes it can also entail a risk for individuals or even for societies, as in the case of the attachment with an extremist or violent group. Either in one case or another, a deep understanding of how people can leave behind relevant groups in their life is a matter of profound importance. Leaving a group can be difficult when the commitment of the individual is, or has been, so strong that he/she has been willing to make the ultimate sacrifice for the group. Such kind of deep connection with a group has been described as identity fusion.

Some individuals can experience a visceral feeling of oneness with the group called *identity fusion*, that can motivate extraordinary actions on behalf of the group or its members (for a recent review see Gómez, Chinchilla et al., 2020; see also Swann et al., 2012). Although being fused with a group has no negative implications *per se* and it can motivate positive behaviors (Buhrmester et al., 2015), it can also constitute a key mechanism to explain individuals' radical intentions in a context of violent radicalization (see Wolfowicz et al., 2021). Accordingly, understanding how people reduce, or break, feelings of being strongly connected to groups, especially when these groups are radical or violent, is a question of major social interest. To understand the reasons that might reduce identity fusion, we need to fully comprehend the nature of this phenomenon and the peculiar ties that fused individuals project towards the group and its members.

Identity fusion is a process especially characterized by a simultaneous establishment of collective and relational ties (see Swann et al., 2012). Fused individuals project strong sentiments of alignment with the group as a whole (collective ties), but also, and particularly, with individual group members (relational ties). The establishment of relational ties with group members is comparable to the bonds that link family members, and fused individuals come to feel that other fellows are like their brothers and sisters, which allows them to perform behaviors normally exclusively reserved to their family. Whereas the establishment of collective ties might be common to both social

identification (Tajfel & Turner, 1979) and identity fusion, relational ties seem one of the most characteristic features of identity fusion (Gómez et al., 2019).

Experiencing familial ties entails the recognition of the idiosyncrasy of group members in a way that other members are not perceived merely as a piece conforming the group, but as valuable individuals with their own special value. Identity fusion predicts the strength of relational ties with fellow members (e.g., Vázquez et al., 2017) which, in turn, mediates the relationship between fusion and the disposition to sacrifice themselves for the group (e.g., Buhrmester et al., 2015; Swann, Buhrmester et al., 2014). That is, experiencing relational ties is one of the psychosocial mechanisms that explain the consistent relationship between fusion and extreme behavior. Swann, Buhrmester et al. (2014) found that when fused people perceived that group members shared core characteristics, they were more likely to project the familial ties that are common to local (smaller) groups onto an extended group, and this process enhanced their willingness to fight and die for this group.

Although identity fusion is a quite stable process characterized by irrevocability (Gómez, Brooks et al., 2011), research has found that the degradation of collective and relational ties may reduce the sense of identity fusion and its consequences, at least temporarily. Recently, Gómez et al., (2019) have experimentally manipulated the degradation of collective and relational ties and found that the derogation of both kinds of ties were able to decrease state identity fusion (i.e., at that precise moment) which in turn reduced extreme pro-group behavior via attenuated group-related agency.

Although identity fusion has been recognized as a fundamental mechanism to understand extreme behavior in violent contexts (see for example Atran et al., 2014; Gómez et al., 2017; 2021; Hamid et al., 2019; Knijnik & Newson 2020; Newson et al., 2020; Pretrus et al., 2019; Silva et al., 2020), as far as our knowledge is concerned no previous research has analyzed the possibility that affecting the relational ties or the collective ties involved in identity fusion might contribute to deradicalization processes.

A recent meta-analysis has found that identity fusion is the most powerful predictor for explaining individuals' radical intentions compared to other variables implicated in the radicalization process (Wolfovicz et al., 2021). We propose that the strong relational ties established with other group members, and characteristics of strongly fused individuals, can account for the difficulty of leaving violent groups. This research aimed at analyzing whether degradation of relational and/or collective ties might be one of the motives of deradicalization.

However, the deradicalization process is complex as a myriad of factors contribute to the maintenance of a strong commitment with radical or violent groups. Accordingly, other motives beyond decreased identity fusion can obviously explain why radicalized members can leave a radical or violent group. Within the deradicalization literature, researchers have identified several circumstances external to the group dynamics that can favor the disengagement and reattachment from the radical group such as finding a new job, development of new social roles or even to entry in prison (see Ali et al., 2017; Altier et al., 2014; Bjørgo, 2011; Horgan, 2008). This investigation explores the strength of these other factors in comparison to those related to defusion, as motives for deradicalization.

Objectives and hypotheses

Given the significant role played by identity fusion in the process of radicalization (see Gómez, Bélanger et al., 2021; Wolfowicz et al., 2021), it might be reasonable to infer that degrading the ties underlying the intense feeling of identity fusion may motivate people to leave not only common and normalized groups, but also radicalized and violent groups. The goal of this research was twofold. On the one hand, we aimed at identifying the reasons that fused people and members of extremist and violent groups spontaneously argue as possibilities (in the future) or justifications (in the past) for leaving social groups. On the other hand, we aimed at analyzing if these reasons might vary depending on the nature of the social group: regular (common or “normalized” groups), versus extremist or violent; and based on their characteristics (local vs. extended and ascribed vs. chosen). We hypothesized that degradation of both collective and relational ties can be identified as reasons expressed by participants when they imagine abandoning (in the future) or really abandoned (in the past) significant groups. Given the peculiarity of relational ties in the sentiments of identity fusion, we expect to find more reasons related to this kind of rupture.

We conducted five studies and examined seven groups that varied in its nature, ideology, extremist levels, and type of radicalization. Studies 1, 2 and 4 analyzed possible reasons for defusion in the future, whereas Studies 3 and 5 asked for the reasons that justified real experiences of defusion (Study 3) or abandonment of the group (Study 5) in the past. Among “normalized” groups, we analyzed the possible reasons offered by fused participants for leaving a social group either local (i.e., family or friends) or extended

(e.g., the country) in Study 1, or either ascribed (e.g., family) or chosen (e.g., friends) in Study 2. In Study 3, participants already defused from their groups offered the reasons that justified why not feeling such attachment anymore. In Study 4, members of a Spanish hooligan group, the Riazor Blues, all fully fused, reported possible reasons for contemplating defusion. In Study 5, ex-members of the terrorist group Liberation Tigers of Tamil Eelam (LTTE) were interviewed about why LTTE members had left the terrorist group.

2.2. Study 1. Reasons that might lead people to defuse from local vs. extended groups in the future

In Study 1 we made a first attempt to understand the spontaneous reasons that members of different groups offered when facing the possibility to defuse from their groups, and whether these reasons might vary depending on the characteristics of the group. On the one hand, local groups constitute primary and small groups where members know each other and normally establish strong relational ties based on the relationship among its members (e.g., family, friends). On the other hand, extended groups are bigger groups where not all its members know each other and the ties that favor the alignment might be more based on sharing common features with the group as a whole (e.g., the country). We expected to find a differential pattern of reasons of defusion associated to local vs. extended groups, with more allusions to degradation of relational ties when considering local groups, and more allusions to collective ties when considering extended groups.

2.2.1. Method

Participants

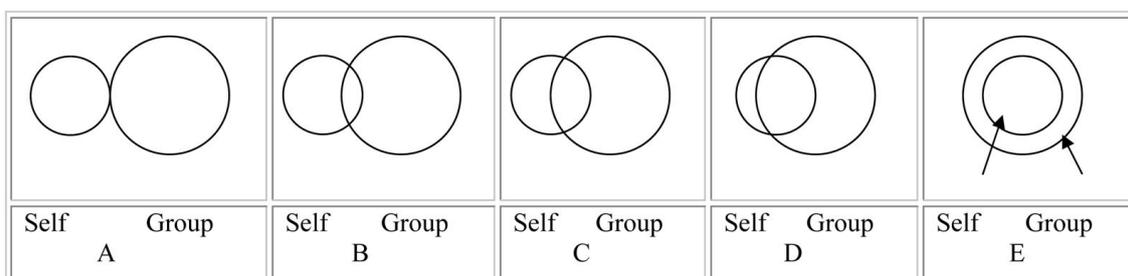
Two-hundred and twenty-three Spanish citizens (63.2% women; $M_{age} = 36.01$ years, $SD = 11.18$) participated in this study. Following a convenience non-probabilistic sampling, participants were recruited using a snowball technique: Psychology undergraduate students asked their acquaintances to participate. They participated on voluntary basis and did not receive monetary compensation.

Measures and procedure

Participants were introduced with the original pictorial measure of identity fusion (Swann, Gómez et al., 2009) including 5 vignettes (Figure 1). Each vignette showed a varying distance between a small circle representing the self, and a big circle, representing the group, from A to E. They were asked to think about a group with which they felt such unity and commitment that they could choose option ‘E’. Participants were randomly assigned to the condition of local vs. extended group: 117 participants (52.5%) were assigned to the local-group condition and 106 to the extended-group condition (47.5%). In the local-group condition, participants were instructed to think in a group in which they knew all its members. They mainly thought in family (49.6%) or friends/colleagues (34.2%). In the extended-group condition, participants were instructed to think in a group in which they did not know all members of the group. They mainly thought in their city/region (26.4%) or the country (17.0%). Those participants in a specific condition who thought in a group clearly identified as a typical group of a different condition were changed to the appropriate condition before conducting the analyses (i.e., those participants in the local condition who wrote “my country”). As a kind of manipulation check, participants also reported their level of identity fusion with the specific group by answering to the verbal scale of identity fusion developed by Gómez, Brooks et al. (2011) with seven items (e.g., “My group is me” or “I am strong because of my group”, $\alpha = .74$) ranging from 0 (*totally disagreed*) to 6 (*totally agreed*).

Figure 1.

The pictorial measure of identity fusion



Note: A to D options identify non-fused participants. Only the picture number E represents feeling of fusion with the group (Swann et al., 2009).

Then, participants were asked to think about three reasons or situations that could make them feel less attached to that group. Qualitative methods were used to analyze the content of the discourse that participants offered about possible reasons of defusion in the future, and quantitative methods were used to identify significant differences of the categories between groups and among categories within a group. A coding scheme was inductively generated in this Study 1 and applied subsequently. Content analysis was performed through a three-cycle coding (see Saldaña, 2013). A first cycle coding revealed emergent reasons of defusion that were then clustered into four major categories based on previous literature on identify fusion (Gómez et al., 2019) and deradicalization (e.g., Bjørge, 2011; Horgan, 2008): degrading relational ties, degrading collective ties, random events, and untenability of defusion. This four-category framework was applied in a second cycle coding. Then, subcategories within the category of degrading relational ties were identified and applied in a third cycle coding. See Table 1 for the [sub]categories framework generated in Study 1.

The category *degrading relational ties* involves the rupture with a group due to the deterioration of the sentiments toward individual group members, and it is mainly related to difficulties in interpersonal relationships within the group. The subcategory *degrading relational ties among group members* refers to uneasy and problematic interpersonal relationships within the group, or lack of unity or cohesion among ingroup members. The subcategory of *degrading relational ties between the individual and the group* expressed feelings of betrayal and lack of trust of the individual toward the group due to insincerity or disloyalty as well as feeling that the personal identity of the individual is devalued, not recognized, or threatened by the group.

The category *degrading collective ties* implies the rupture with a group due to sentiments toward the group as a whole, and it is mostly related to discrepancies or disengagement from the ideas that the group represents.

The reasons related to issues that escape the control of individuals not related to group dynamics or interpersonal issues were included within a third category of *random events*.

The exhaustive denial about defusion was categorized as *untenability of defusion*. An additional category named “*other*” accommodated potential responses that did not fit within any of previous rationales, and inter-judge disagreements.

Table 1

(Sub)categories framework for content analysis (thematic indicators) and illustrative examples

Degrading Relational Ties	
A rupture of the relational ties that unify group members due to difficulties in interpersonal relationships within the group.	
Among group members	Between the individual and the group
Uneasy and problematic interpersonal relationships within the group, lack of unity or cohesion among ingroup members.	Feelings of betrayal and lack of trust in the group due to insincerity or disloyalty toward the individual. Personal identity devalued, not recognized, or threatened.
<ul style="list-style-type: none"> • <i>“Bad atmosphere within the group.”</i> • <i>“Lack or impossibility of communication.”</i> • <i>“Having a confrontation with other members of the group.”</i> • <i>“Egos and power struggles.”</i> • <i>“Lack of commitment of the members.”</i> 	<ul style="list-style-type: none"> • <i>“Betrayal, because the people who make up this group are those I least expect to betray me.”</i> • <i>“Betrayal by someone in the group.”</i> • <i>“Disappointment with my group in different situations that require moral support and not knowing how to give it in any way.”</i> • <i>“That they did not consider my opinions about aspects that affected the group.”</i> • <i>“Organizing activities without me.”</i>
Degrading Collective Ties	
Rupture with the group due to discrepancies with the ideas that it represents. Not feeling like a team or perceiving irrevocable differences or disagreements with group values, norms, rules, objectives.	
<ul style="list-style-type: none"> • <i>“Discrepancies of criteria when acting”.</i> • <i>“Different basic principles”.</i> • <i>“Differences of opinions or points of view”.</i> 	
Random events	
Uncontrollable reasons not related to the group dynamics.	
<ul style="list-style-type: none"> • <i>“The circumstances of my life may radically change”.</i> • <i>“Lack of time to dedicate to each of the group members”.</i> • <i>“I would feel less attached to the group, when I have a partner and I spend more time with that partner”.</i> 	
Untenability of defusion	
Impossibility to feel less attached or bonded to the group.	
<ul style="list-style-type: none"> • <i>“I can't imagine any reason why I could distance myself from my group”.</i> • <i>“Nothing”.</i> 	

Content analysis following three coding cycles as described above revealed the (sub)categories specified in Table 1. Two research assistants read and categorized the reasons following this framework. Inter-judge reliability (assessed with Cohen's kappa) based on the 668 reasons⁹ was quite respectable in this study: degrading relational ties among ingroup members (.98), degrading relational ties between the individual and the group (.96), degrading collective ties (.95), random events (.95), and total agreement for untenability of defusion. For Study 1, only 30 participants mentioned reasons categorized as "other" at least once.

2.2.2. Results

Participants were strongly fused with the group they had chosen, with the mean of the verbal fusion scale above the midpoint of the scale (3), $M = 4.56$; $SD = 1.09$; $t_{(222)} = 21.23$, $p < .001$. However, there were differences depending on the condition: participants who thought in a local group were significantly more fused with such group, $M = 4.74$; $SD = 1.06$, than participants who thought in an extended group, $M = 4.35$; $SD = 1.09$; $t_{(221)} = 2.69$, $p = .008$.

In order to find a response-pattern in participants' reasons for defusing from a group, we considered whether the category was named at least once or not named at all by each participant. The analysis of frequencies (see Figure 2) showed that a greater number of participants referred to the *degradation of relational ties* (at least once) as the reason that would make them defuse from their group, followed by the category of *random events*, and the *degradation of collective ties*. Arguments within degradation of relational ties involved, among other things, loss of trust in other members of the group: for example, "that everyone lied to me at a certain point" (P/L141)¹⁰, "insincerity" (P/L21), or "selfishness" (P/E67). Random events included examples of circumstances not involving the group, that is, beyond group dynamics, that put physical distance between the individual and the group such as "lack of time" (P/L101) or "to live in another city" (P/E248). Degradation of collective ties implied a rupture with the principles, values, or objectives of the group such as "if the basic principles were different" (P/L143).

To identify a hierarchy of reasons in each condition, a McNemar's test was run

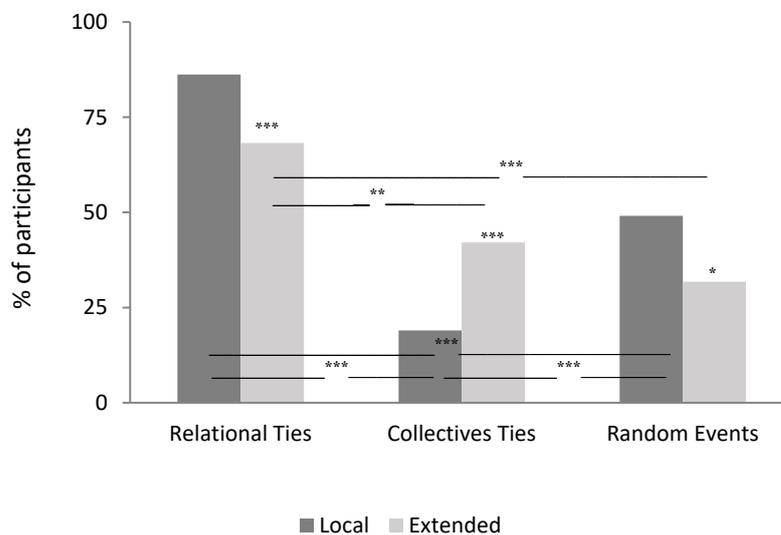
⁹ The total of the responses should be 669, however one participant did not write one reason.

¹⁰ "P/L" refers to participants in the local-group condition, "P/E" refers to the extended-group condition.

due to the binomial nature of the data (appeared or not appeared) (see Figure 2). The test revealed that degradation of relational ties was the most frequently mentioned category, more than degradation of collective ties in both local-group, $\chi^2_{(1)} = 69.34, p < .001$; and extended-group condition, $\chi^2_{(1)} = 9.46, p = .002$; and more than random events in both conditions: local-group, $\chi^2_{(1)} = 30.68, p < .001$; and extended-group condition, $\chi^2_{(1)} = 20.13, p < .001$. Degradation of relational ties was more attributed to problems *among group members* in general than *between the individual and the group* in the local-group condition, $\chi^2_{(1)} = 19.5, p < .001$; and in the extended-group condition, $\chi^2_{(1)} = 12.15, p < .001$. Within the local-group condition, the random events category was more frequently mentioned than degradation of collective ties, $\chi^2_{(1)} = 21.78, p < .001$; whereas there were no significant differences in the extended-group condition between both categories, $\chi^2_{(1)} = 2.72, p = .162$.

Figure 2

Percentage of participants who mentioned a category of defusion from a local or an extended group (Study 1)



Note: Each participant offered three reasons. The graphic represents the proportion of participants (from the total of participants) who mentioned each specific reason: 100% would mean that all participants mentioned at least one reason. *** $p < .001$, ** $p < .01$. Asterisks and lines on the top (extended condition) or on the bottom (local condition) of the bar graph refer to comparisons between categories within conditions. Asterisks between bars refer to comparisons between conditions for each category.

To test whether there were differences between local vs. extended groups regarding the (non)appearance of reasons related to each category we conducted a series of logistic regressions. The predictor was the group with extended group as reference (-1 extended, 1 local). Table 2 shows the percentage of participants of each group that cited at least one reason related to each category and the comparison between local-group vs. extended-group conditions. Left columns show the comparisons between local-group and extended-group conditions. The analyses showed that there were significant differences in the probability that participants refer to a specific reason of defusion between conditions. Compared to the extended-group condition, participants who thought about local groups were more likely to report at least one thematic indicator related to degradation of relational ties, especially due to problems among group members, and random events. In contrast, participants in the extended-group condition were more likely to report at least one reason related to collective ties than those in the local-group condition.

Table 2

Frequency and percentage of participants who mentioned each (sub)category and comparisons between local-group vs. extended-group conditions (Study 1)

Category	Local <i>n</i> = 117	Extended <i>n</i> = 106	Total <i>f</i>	<i>b</i>	<i>se</i>	Wald's χ^2	<i>p</i>	Exp (<i>b</i>)	95% CI	
Degradation of relational ties ¹¹	101(86.3%)	72(67.9%)	173	-1.09	0.34	10.31	.001	2.98	1.53	5.80
<i>Among</i>	81(69.2%)	55(51.9%)	136	-0.74	0.27	6.94	.008	2.08	1.20	3.60
<i>Between</i>	43(36.8%)	29(27.4%)	72	-0.43	0.29	2.23	.135	1.54	0.87	2.72
Degradation of collective ties	21(17.9%)	46(43.4%)	67	1.25	0.31	16.30	.001	0.28	1.55	0.52
Random events	55(47.0%)	34(32.1%)	91	-0.63	0.28	5.12	.024	1.87	1.08	3.24
Untenability	6(5.1%)	3(2.8%)	9	-0.62	0.72	0.73	.391	1.85	0.45	7.61

Note. In Local and Extended columns are the frequency and percentage (in brackets) of participants of each group that cited at least one reason related to each category. The rest of the columns show the comparisons between local and extended groups who cited at least one reason related to each category.

¹¹ The sum of frequencies of the subcategories is higher than the frequency of relational ties category because of the level of inclusiveness. That is, a participant could mention different reasons related with both subcategories, but these reasons only quantified as one reason for the more inclusive category of degradation of relational ties.

2.2.3. Discussion

Participants in Study 1 offered spontaneous reasons when facing the possibility to defuse from their groups. Content analysis revealed that they mainly thought in reasons that implied the degradation of relational ties, that is, the rupture of the relational ties that unify group members due to difficulties in interpersonal relationships within the group, especially among group members in general, such as lack of unity or problematic communication. Degrading relational ties was important for defusion from local groups, but also from extended groups. This finding is not surprising because the establishment of relational ties is crucial for fused individuals who can project the relational ties typical of local groups to extended groups (Swann et al., 2012). Our results replicate previous findings indicating that degrading relational ties has a stronger effect than degrading collective ties for reducing fusion and its consequences (Gómez et al., 2019).

Differences in the probability of participants to refer to a specific reason for defusion were found when considering defusion from local vs. extended groups. The category of degrading relational ties was more frequently mentioned from local groups than from extended groups, and specifically those reasons referred to problems among ingroup members such as lack or impossibility of communication, loss of trust or having a confrontation with other members of the group. Also, random events were more important for defusion from local than from extended groups. These results are coherent because in local groups all people know each other, and an intense interaction among them is a necessary condition to conform the group (Lewin, 1948), and relational ties are crucial for maintaining healthy-group relationships (Forsyth, 2006). On the contrary, collective ties were most frequently offered as an argument for defusion from extended groups. This finding was expected given that sharing core characteristics is important for alignments with extended groups (Swann, Buhrmester et al., 2014). In the next study we tried to confirm these categories of reasons for defusion with ascribed or chosen groups.

2.3. Study 2. Reasons that might lead people defused from ascribed vs. chosen groups in the future

People have no choice to belong to some groups such as the family or the country, which are, by the way, quite difficult to abandon. In Study 2, we explored the spontaneous

reasons that members of ascribed versus chosen groups offered when facing the possibility to defuse from their groups. Based on previous findings and coherent with literature on group dynamics (Collins & Read, 1990; Holmes & Rempel, 1989; Whitton & Kuryluk, 2012), it was expected that participants of ascribed groups (i.e., belonging determined by birth, and not chosen) would contemplate more the untenability of defusion.

2.3.1. Method

Participants

Five hundred and sixty-eight Spanish citizens (60.9% women; $M_{age} = 36.02$ years, $SD = 12.72$) participated in Study 2. Data collection followed the same procedure that Study 1.

Measures and procedure

Participants were asked to identify a group with which they were fused based on the pictorial measure of identity fusion (see Swann et al., 2009) as in Study 1. According to the specific condition, they were asked to think in an ascribed group, whose belonging was determined by birth, or a chosen group, a group whose belonging is not determined by birth, but by choice. Those participants in a specific condition who thought in a group clearly identified as a typical group of a different condition were changed to the appropriate condition before conducting the analyses. Around half of the participants (292 participants, 51.4%) were assigned to the chosen-group condition. They mainly chose friends/colleagues (66.1%) or a club/team (12.3%). Around the other half (276 participants, 48.6%) were assigned to the ascribed-group condition. They mainly chose family (83.3%), but also country (7.2%) or gender (6.9%).

Participants reported their level of fusion using the 7-item verbal scale of identity fusion (Gómez, Brooks et al., 2011) ($\alpha = .76$) and the reasons that could lead them to abandon the group resulting in 1,703 reasons as one participant only gave two reasons. Two research assistants read and categorized reasons for defusing from specific groups using the same framework generated in Study 1. Inter-judge reliability based on the 1,703 reasons was quite respectable: degrading relational ties among ingroup members (.98),

degrading relational ties between the individual and the group (.97), degrading collective ties (.95), random events (.98), and a total agreement was found for untenability of defusion. For Study 2, 33 participants mentioned reasons categorized as “other” at least once.

2.3.2. Results

Participants were strongly fused with the group they had chosen, with the mean of the verbal fusion scale (ranging from 0 to 6) above the midpoint of the scale (3) ($M = 4.74$; $SD = 1.10$; $t_{(567)} = 37.65$, $p < .001$). However, there were differences depending on the condition: participants who thought in an ascribed group were significantly more fused ($M = 4.98$; $SD = 1.07$) than participants who thought in a chosen group ($M = 4.51$; $SD = 1.06$), $t_{(566)} = 5.18$, $p < .001$.

In order to find a response-pattern in participants' reasons for defusing from a group, we considered whether the category was named at least once or not named at all by each participant. The analysis of frequencies (see Figure 3) showed that a great number of participants referred to degrading *relational ties* (at least once) as the reason that would make them defuse from their group, followed by *random events*, and degradation of *collective ties*. Arguments of degradation of relational ties included examples such as “lack of respect” (P/C10)¹², “betrayal” (P/A393), “rejection from the group to me” (P/A453), or “holidays without me” (P/A463). Arguments for random events included circumstances such as “if we did not meet frequently” (P/C277), “distance from my friends” (P/C274), or “war” (P/A498). Degradation of collective ties included examples such as “politics and philosophy changes” (P/C212), or “radical opinions” (P/A493).

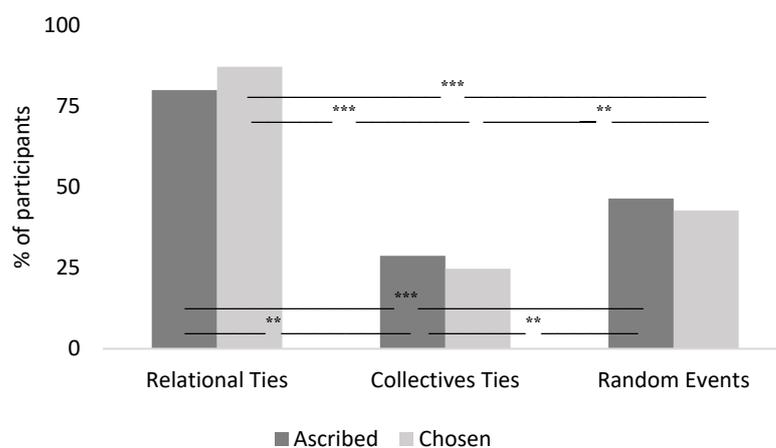
To identify a hierarchy of reasons in each condition, a McNemar's test was run due to the binomial nature of the data (appeared vs. not appeared). The test revealed that degradation of relational ties was the most frequently mentioned category, more than degradation of collective ties in both ascribed-group, $\chi^2_{(1)} = 112.12$, $p < .001$; and chosen-group condition, $\chi^2_{(1)} = 144.75$, $p < .001$; and more than random events in both conditions: ascribed-group, $\chi^2_{(1)} = 76.00$, $p < .001$; and chosen-group condition, $\chi^2_{(1)} = 76.59$, $p < .001$. Degradation of relational ties was more attributed to problems *among group members* in general than *between the individual and the group* in the ascribed-group

¹² “P/C” refers to participants in the chosen-group condition, “P/A” refers to ascribed-group condition.

condition, $\chi^2_{(1)} = 18.00, p < .001$; and in the chosen-group condition, $\chi^2_{(1)} = 24.95, p < .001$. The category of random events was a category more frequently mentioned than degradation of collective ties in both conditions, ascribed-group, $\chi^2_{(1)} = 8.92, p = .003$; and chosen-group, $\chi^2_{(1)} = 14.46, p < .001$ (see Figure 3).

Figure 3

Percentage of participants who mentioned a category of defusion from an ascribed or a chosen group (Study 2)



Note: Each participant offered three reasons. The graphic represents the proportion of participants (from the total of participants) who mentioned each specific reason: 100% would mean that all participants mentioned at least one reason. *** $p < .001$, ** $p < .01$. Asterisks and lines on the bottom (ascribed condition) or on the top (chosen condition) of bar graph refer to comparisons between categories within conditions.

To test whether there were differences between ascribed vs. chosen groups regarding the (non)appearance of reasons related to each category we conducted a series of logistic regressions. The predictor was the group with chosen group as reference (-1 chosen, 1 ascribed). Table 3 shows the frequency and percentage (in brackets) of participants of each group that cited at least one reason related to each category and the comparison between ascribed-group vs. chosen-group conditions. Left columns show the comparisons between ascribed-group and chosen-group conditions. The analysis revealed that, compared to chosen-group condition, participants who thought in ascribed groups were a 186% more likely to report reasons related to *untenability of defusion*, but no other differences were found.

Table 3

Percentage of participants who mention each (sub)category and comparisons between ascribed vs. chosen group conditions (Study 2)

Category	Ascribed <i>n</i> = 289	Chosen <i>n</i> = 279	Total <i>f</i>	<i>b</i>	<i>se</i>	Wald's χ^2	<i>p</i>	Exp (<i>b</i>)	95% CI	
Degradation of relational ties	226(81.9%)	248(84.9%)	474	0.22	0.22	0.95	.329	0.80	0.51	1.24
<i>Among</i>	174(63.0%)	182(62.3%)	356	-0.03	0.17	0.31	.860	1.03	0.73	1.44
<i>Between</i>	122(44.5%)	112(38.4%)	234	-0.24	0.17	2.00	.157	1.27	0.91	1.78
Degradation of collective ties	76(27.5%)	76(26.0%)	152	-0.07	0.19	0.16	.685	1.08	0.74	1.56
Random events	110(39.9%)	122(41.8%)	253	-0.08	0.17	0.21	.641	0.92	0.66	1.29
Untenability	23(8.3%)	9(3.1%)	32	-1.05	0.40	6.80	.009	2.86	1.29	6.29

2.3.3. Discussion

In Study 2 we analyzed the hypothetical reasons for defusing from ascribed versus chosen groups. Content analysis revealed that most of the reasons spontaneously offered by participants could be identified as a form of degradation of relational ties, random events beyond the control and responsibility of the participants and the group, and, although less frequently mentioned, different forms of the degradation of collective ties with the group. These results confirmed again the importance of relational ties for fused individuals regardless of the nature of the group. It was not surprising that participants found hard thinking about possibilities of defusion from ascribed groups, as the boundaries of these groups are psychologically and materially more impermeable, something that makes difficult the possibility to abandon a group such as the family.

One of the limitations of Studies 1-2 was that participants were asked to imagine reasons for defusing in the future, that is, hypothetical reasons that might not fit with actual reasons. In the following study, participants were asked to report reasons that justified defusion already materialized in the past.

2.4. Study 3. Real reasons for defusing from groups in the past

People may hypothesize about the reasons to defuse from groups. However, these reasons might be different from the reasons that would lead them to feel defused from a

group. Study 3 aimed to analyze the reasons that have led participants to defuse from a social group in the past and contrast these findings with the hypothetical reasons in the future found in Studies 1 and 2. We expect to identify the same categories, although the predominance of reasons might be different compared to previous studies.

2.4.1. Method

Participants

Four-hundred and thirty-two Spanish citizens volunteered to participate in this study (62.7% females; $M_{age} = 36.90$ years, $SD = 12.43$). They were recruited using the snowball technique as previous studies.

Measures and Procedure

Participants were asked to identify a group with which they had been strongly fused in the past (represented with the “E” option on the pictorial identity fusion scale; Swann et al., 2009) but did not feel that way anymore in the present. Of these, 58% reported that no group met these conditions. The fact that more than half of participants were unable to find this possibility confirms the irrevocable nature of fusion (Swann et al., 2012). These individuals were debriefed and thanked. The remaining participants ($n = 181$; 67.4% females; $M_{age} = 36.66$ years, $SD = 11.85$) reported that the group from which they were defused fell mainly into one of the following categories: friends (47%), family (29%), work and colleagues (13%), or leisure group (6%). Only 7.7% of participants mentioned an extended group as nationality or gender. Then, they reported the three main reasons that undermined their attachment to that group and their level of identity fusion state, that is, right now (e.g., “Right now, I feel that my group and I are one”) adapted from Gómez, Brooks et al. (2011), ($\alpha = .89$).

Following the same procedure used in Study 2, two research assistants read and categorized the responses based on the framework specified in Table 1. Inter-judge reliability (assessed with Cohen’s kappa) based on the 543 reasons (i.e., 181 participants gave three reasons each) was quite respectable: degrading relational ties among ingroup members (.96), degrading relational ties between the individual and the group (.97), degrading collective ties (.98), and random events (.98). Twenty-eight participants

mentioned reasons that did not fit any category at least on one occasion. These reasons were categorized as “other”.

2.4.2. Results

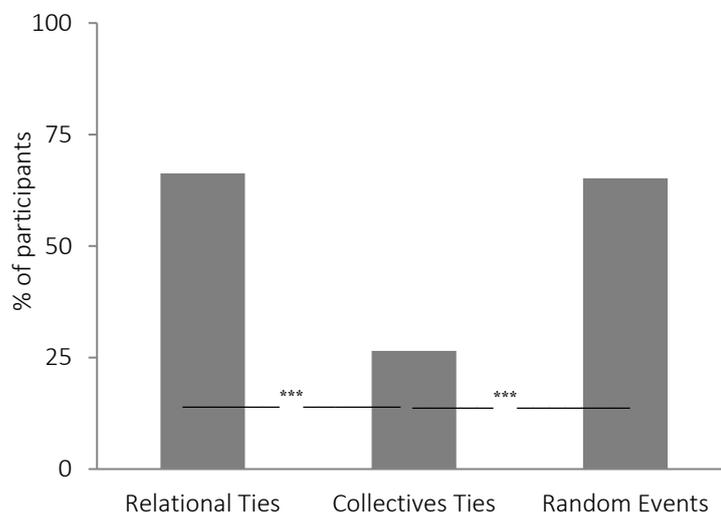
Participants showed low levels of identity fusion state with the chosen group, with the mean of the scale (ranging from 0 to 6) significantly below the midpoint of the scale (3) ($M = 2.34$; $SD = 1.66$; $t_{(180)} = 18.96$, $p < .001$).

To find a response-pattern in participants' reasons for defusing from a group in the past, we considered whether the category was mentioned at least once or not named at all by each participant. As shown in Figure 4, around 60% of the participants referred to the degradation of *relational ties* (66.3%) and *random events* (65.2%) as the main reasons for defusing from their groups. The degradation of *collective ties* was the cause of defusion by 26.5% of the participants. Degradation of relational ties involved “lack of trust” (P32), “falsehood” (P27), “betrayal” (P119) or “infidelity towards me” (P299). Random events included external circumstances to the group dynamics such as “classes ended” (P28), “distance” (P79), “lack of time” (P88) or “labor ties” (P141). Degradation of collective ties included “different values” (P72), or “social radicalization” (P308).

McNemar's tests were run to compare the frequencies of reasons offered by participants. Degradation of relational ties and random events were significantly mentioned by more participants than degradation of collective ties, $\chi^2_{(1)} = 40.6$, $p < .001$ and $\chi^2_{(1)} = 45.78$, $p < .001$, respectively. No significant differences were found between *relational ties* and *random events*, $\chi^2_{(1)} = 0.13$, $p = .712$. Within degrading relational ties, difficulties *among members* ($n = 103$, 56.9%) were mentioned significantly more than *between the individual and the group* ($n = 39$, 21.5%), $\chi^2_{(1)} = 43.12$, $p < .001$. Nobody referred reasons related to *untenability of defusion*. In this study “death” means that *another member of the group died*, but not the participant's death, and accordingly it referred to something that was out of the control of the participant (*random events* category). *Other* category was named by 27 participants (14.9%).

Figure 4

Percentage of total participants who mentioned a category as a justification of defusion in the past (Study 3)



Note: *** $p < .001$ McNemar's test.

2.4.3. Discussion

In Study 3 participants reported the reasons that motivated real experiences of defusion in the past. The same categories found in studies 1 and 2 were found, however, the category of random events was argued as a reason for defusion by almost the same number of participants that mentioned the degradation of relational ties. That is, even if the degradation of relational ties, especially among group members, was again an important reason for defusion, when thinking about real experiences of defusion instead of hypothetical situations, random events gained prominence.

Studies 1, 2 and 3 consistently showed the most important reasons to defused from normalized and common groups. Given that identity fusion is a strong predictor of extreme behavior, studies 4 and 5 analyze the reasons for leaving extremist groups. We aimed to confirm if the same (sub)categories of reasons previously identified could also work for defusion from members that are fused with a radical group (Study 4) or left a terrorist group (Study 5).

2.5. Study 4. Reasons that might motivate defusion from a hooligan group

The *Riazor Blues* is one of the best-known hooligan groups in Spain. The group was founded as a sport club in 1987 and has been appointed as an ultra deport club, involved in different violent acts (see The Guardian, 2014). Study 4 explored the reasons argued by thirty members of this group, trying to confirm if the same reasons identified in previous studies as a potential cause of defusion would emerge for those participants belonging to a radical group.

2.5.1. Method ¹³

Participants

Thirty volunteers (40% from 18 to 25 years old, 13.33% between 31 and 35, and 6.7% from 36 to 40, 50% women) participated with the understanding that their responses would remain anonymous.

Measures and Procedure

An investigator of the research team contacted a member of the group who distributed paper and pencil questionnaires among the soccer fans. Anonymity was guaranteed. Participants reported to what extent they were fused with the Riazor Blues using the pictorial fusion scale (Swann et al., 2009). Then, they were asked to think about three reasons why they might stop feeling that sentiment of unity with the Riazor Blues.

Two independent judges read and categorized the reasons participants gave for potentially leaving the group. Inter-judge reliability based on the 73 reasons was quite acceptable for degradation of relational ties among ingroup members (.97), degrading collective ties (.90), and random events (.92). The agreement was complete for degradation of relational ties between the individual and the group and for untenability of defusion.

¹³ We are especially thankful to Manuel Rivero, who made possible the data collection with members of Riazor Blues.

2.5.2. Results

All participants were fused with the Riazor Blues, choosing the option E of the pictorial scale, and scoring quite high on the verbal measure of identity fusion ($M = 4.77$; $SD = 1.08$), above the theoretical mean point (3) of the scale, $t_{(29)} = 3.88$, $p = .001$.

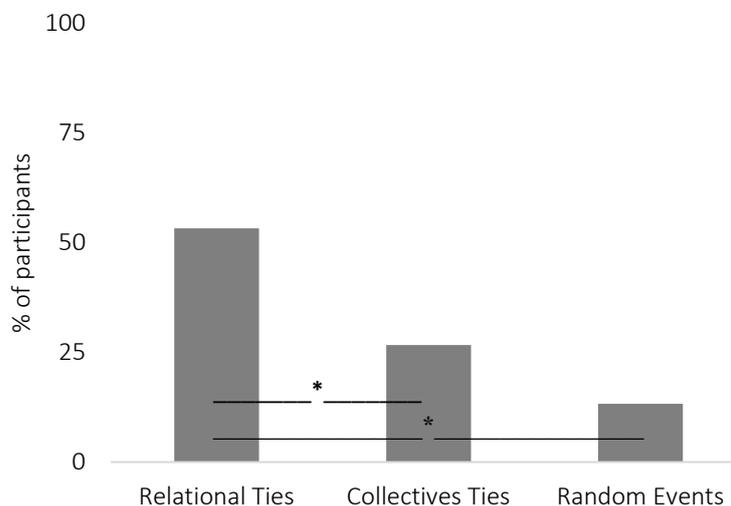
To find a response-pattern in the possible reasons of participants for defusing from the Riazor Blues in the future, we considered whether the category was mentioned at least once or not named at all by each participant. In general, members of Riazor Blues were quite reluctant to give reasons of defusion, supporting the irrevocability principle (Swann et al., 2012). Ten participants (33.3%) expressed *untenableity of defusion*, P9, P17, P13, P26 explicitly said “none”, and P19 said “nothing”. Nine participants did not give at least one reason required from the three reasons required leaving blank spaces.

As shown in Figure 5, Riazor Blues members referred to the degradation of *relational ties* as a possible reason for defusion (16 individuals, 53.3%). Within the category of degradation of *relational ties*, most participants argued reasons related to difficulties *among group members* (16 participants, 53.3%). For example, P8 argued “if there were problems among us” and clarified “but there are not”; P21 considered “if there is no brotherhood or lack of respect”, P1 mentioned “des-unity”, P6 mentioned “internal wounds”, P12 said “fight inside the group”, and P22 said “internal problems”. The degradation of relational ties *between the individual and the group* subcategory was mentioned only by 2 participants (6.7%): P14 said “I feel alone,” and also “If I did not have brothers who support me”. The next category most mentioned by participants was degrading *collective ties*, mentioned by 8 participants (26.7%). P20 wrote “soccer isn't what it used to be”, “disagreements” (P5), “aggressiveness”(P1). The third-one was *random events* (4 participants, 13.3%). Some examples referred to issues as “the schedules” (P10). P15 argued “stop going to the stands of the game for the schedules of the matches”, whereas P20 considered “to mature”. Two participants mentioned reasons that did not fit in any category and were categorized as “other”.

According to McNemar's tests, *degradation of relational ties* was significantly mentioned by more participants than degradation of *collective ties*, $\chi^2_{(1)} = 4.90$, $p = .021$ and also, than *random events* $\chi^2_{(1)} = 6.50$, $p = .012$. However, degradation of *collective ties* was not cited by more participants than *random events*, $\chi^2_{(1)} = 0.90$, $p = .344$. Degradation of relational ties was more due to difficulties *among members* than *between the individual and the group*, $\chi^2_{(1)} = 16.07$, $p < .001$.

Figure 5

Percentage of total participants who mentioned a category (Study 4)



*Note: * $p < .05$ McNemar's test.*

2.5.3. Discussion

In Study 4 members of a hooligan group called Riazor Blues reported possible reasons for defusing from the Riazor Blues. Reasons offered by its members fit into the pre-established categories. Degrading relational ties was again the most mentioned reason for defusion, followed by collective ties, and finally random events.

Remarkably, hooligans found it difficult to give reasons for defusing from the group. Approximately, a third expressed that there was nothing that could lead them to defuse from the group, and another third did not offer the three reasons required. We can infer that for individual fused with a group such as the Riazor blues, imagining reasons for defusing might be especially difficult or even painful (Gómez, Morales et al., 2011; Swann et al., 2012).

In this study, and as happened in Studies 1-2, Riazor Blues members gave hypothetical reasons that could move them to abandon the group (by imagining the future), but these were not related to real experiences of defusion. Study 5 was conducted with ex-members of a terrorist group, the Liberation Tigers of Tamil Eelam (LTTE), to

explore if reasons argued for defusion might be also found among the reasons for leaving behind a terrorist group.

2.6. Study 5. Reasons for leaving a terrorist group: the case of the Liberation Tigers of Tamil Eelam (LTTE)

The Liberation Tigers of Tamil Eelam (LTTE) was a militant terrorist organization of Sri Lanka that operated from 1976 to achieve an independent homeland for Hindu Tamils in Northeastern Sri Lanka. They provoked thousands of civil-war-related deaths, with many tens of thousands more displaced by the fighting (see Center for International Security and Cooperation, n.d.). In this study, we were interested in understanding why some members left the LTTE, a group that had extensive control over their members, intense indoctrination to retain them, and severe punishments as a deterrent for leaving the group. Those who left were not quite accepted nor by the community at the time (due to their history with the LTTE), nor by the group (that viewed them as traitors). Despite this, some of them left the group, for the various reasons provided in these interviews.

2.6.1. Method¹⁴

Participants

Sixty-six previous members of LTTE (17 men, 13 women and 36 did not report their sex) were interviewed. All of them were Sri Lankan Tamil with Tamil ethnicity, with an age range of 26 to 56 ($M_{\text{age}} = 34.80$, $SD = 7.82$).

Procedure

One of the members of the research team interviewed the participants. The process of data-collection was described in Chapter 1 of the present thesis, as part of the description of the procedure (see Gómez, Martínez et al., 2020). On this occasion, former

¹⁴ We are especially thankful Mal Hettiarachchi, who made possible the data collection with members of LTTE.

Tamil Tigers were asked “How did you or other members of the group left/abandoned the LTTE? / What were the key reasons that encouraged others/you to abandon this group?”. Participants were asked to think and choose only one reason, and to diminish social desirability bias, the interviewer used third-person language instead of second-person language when discussing highly sensitive topics.

After the interview, following the same procedure used in previous studies, two research assistants read all the reasons provided by the participants and categorized the responses based on the framework specified in Table 1. They could discuss preliminary disagreements as needed. The reasons that did not fit in with any of the pathways were classified as *other*. Disagreements were solved by a third judge. The inter-judge agreement was total: kappa = 1.

2.6.2. Results

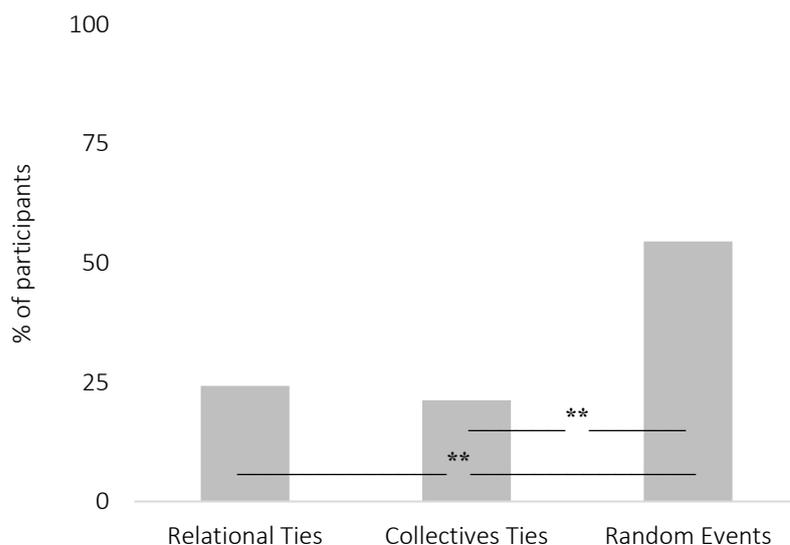
As shown in Figure 6, a great number of participants referred to *random events* as the main reason for leaving LTTE (36 participants, 54%), followed by the degradation of *relational ties* (16 participants, 24.2%) and, lastly degradation of *collective ties* (14 participants, 21.2%). Within *random events*, three kinds of reasons emerged. First, the *end of war* (17 participants, 47.2%) for example: “war is over” (P111, P81, P50), “army operations in the area” (P55) or “army arrested me” (P106). Eleven participants (30.5%) referred to *family issues*: for instance, “if home problems and people died in the family” (P30) or “when I heard the news of my relative's losses” (P17). Finally, eight participants (22.2%) mentioned other personal issues such as “to be injured” (P88), “fighting was enough” (P16), “could not accept that situation” (P27), “if the mind is weak and scared then they leave” (P93), or “it was enough. Too long” (P101).

The next most mentioned category was degrading *relational ties*: for instance, as an example of problems *among members* P92 said “if there are internal problems with LTTE they leave”, and due to problems *between the individual and the group*: P34 argued “stayed for 1 month in punishment and left LTTE”; P41 explained “when over punished”, and P109 said “when spoken badly and in a low way”. Other examples were “he felt that he was not respected by the LTTE suicide handler that worked in the city” (P14), and “when they feel they are not trusted” (P104).

Within degrading *collective ties*, participants mentioned reasons as “some disagree with some point – like killing” (P19) or “(...) this is not the organization I thought I worked for” (P37).

Figure 6

Percentage of total participants who mentioned a category (Study 5)



Note: ** $p < .01$ McNemar's test.

The McNemar's test yielded significant differences between the degradation of *relational ties* and *random events*, $\chi^2_{(1)} = 8.48$, $p = .008$, and also between degradation of *collective ties* and *random events*, $\chi^2_{(1)} = 10.58$, $p = .003$. No significant differences emerged between degradation of *relational ties* and *collective ties*, $\chi^2_{(1)} = 0.03$, $p = .856$. Within degrading *relational ties*, significant differences emerged between the subcategories of *among members* (3 reasons) and *between the individual and group* (13 reasons), $\chi^2_{(1)} = 5.64$, $p = .017$. No participant referred reasons related to *untenability of defusion*, and no reason was categorized as *other*.

2.6.3. Discussion

Results suggested that random events, out of the control of the individual or the group, were quite important for leaving a terrorist group. This finding was not surprising because Tamil Tigers were defeated by the Sri Lankan military forces in a huge offensive

army, so the end of the war was a reason highly cited. Also, in this category were included reasons related with the conflict (e.g., to be injured) and family problems, external to the group. On the other hand, although both, the degradation of relational ties and collective ties pathways, were similarly referred by participants, significant differences between subcategories of degrading relational ties emerged. Problems between the individual and the group were more common than problems among other members of the group. This result was quite different from the obtained for regular and “normalized” groups in our previous studies but was coherent with the dynamics of the organization. LTTE prepared professional soldiers using extreme practices in the training programs, or hard punishments (Hopgood, 2005) that could raise problems between the former member and the organization.

2.7. Summary and comparison among studies

Figure 7 shows the percentages of participants who mention each reason considering the studies 1 to 4. To facilitate a global view of reasons of defusion depending on the nature of the group, we created a figure that allows us to visually compare the results obtained for all groups except Tamil Tigers who reported only one reason and they answered to how they left/abandoned the LTTE (Figure 8).

Taken together, findings from studies 1-4 revealed that the degradation of relational ties, that is, a rupture of the ties that unify and link group members due to difficulties in interpersonal relationships within the group, is considered an important reason for diminishing the visceral feeling of union with a group. As figure 7 shown when remembering real experiences of defusion, random events gained predominance, especially when understanding the reasons for leaving a terrorist group behind (Figure 6). In every study, degradation of relational ties overpassed degradation of collective ties, that was intended as a rupture with the group due to discrepancies to the ideas (group values, norms, rules, objectives) that it represents.

Figure 7

Comparative figure indicates the percentage of participants who mentioned a category in Studies 1-4

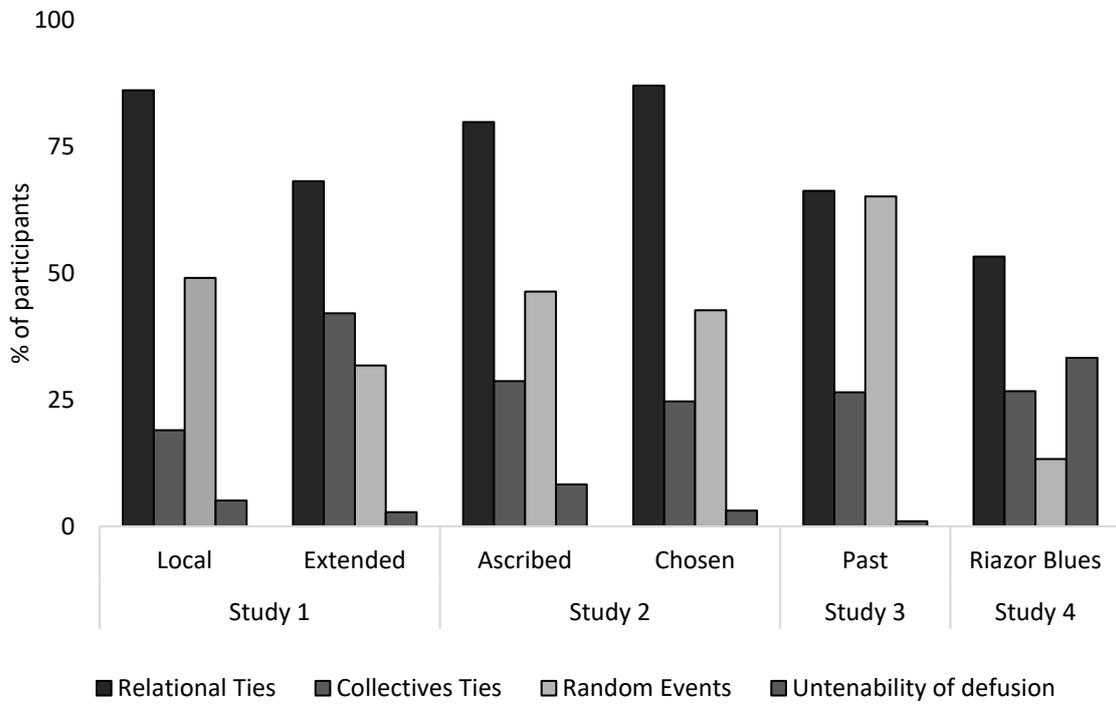
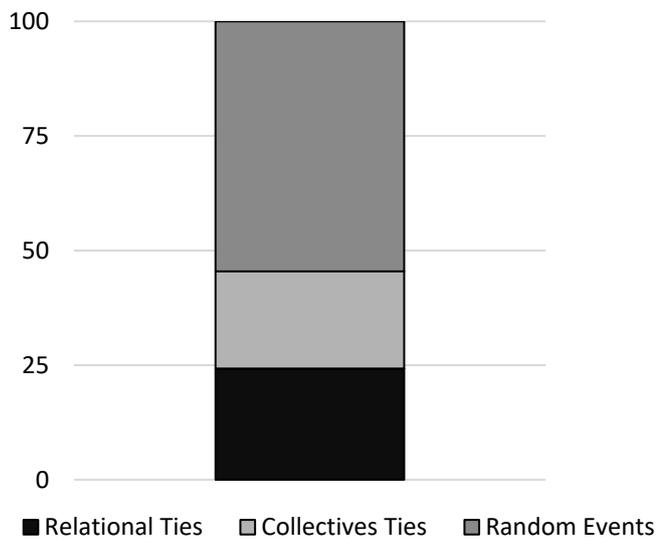


Figure 8

Percentage of participants who mentioned a category in Studies 5 LTTE



2.8. General discussion

Considering that a strong connection with some groups might entail a risk, the study of the reasons why people may leave behind significant groups in their lives is crucial. The present research offers empirical evidence about the reasons that people spontaneously argue about why leaving an important social group. Different types of groups were considered: local and extended groups, ascribed and chosen groups, one hooligan group, and one terrorist group. To increase the validity of the results, the temporal dimension was considered: participants reported possible reasons of defusion in the future (Studies 1, 2 and 4) and justifications of real experiences of defusion in the past (Studies 3 and 5).

The analytical approach combined qualitative and quantitative methods (White, 2000). Content analysis was used to inductively extract the categories of reasons in Study 1. Text data was submitted to three coding cycles (see Saldaña, 2013) and a coding framework was specified with three main categories: degrading *relational ties* within the group (Buhrmester et al., 2015; Gómez et al., 2019; Swann, Gómez et al., 2014; Vázquez et al., 2015; Vázquez et al., 2017; Whitehouse, McQuinn et al., 2014), degrading *collective ties* with the group (Vazquez et al., 2019) and *random events* (e.g., Bjørge, 2011; Horgan, 2008).

Degrading relational ties, which denotes a feeling of rupture with the group due to difficulties in the relationships within the group, gained great importance as reason of defusion. It was not unexpected given that the projection of familial ties is a defining characteristic of identity fusion (see Gómez, Chinchilla et al., 2020; Swann et al., 2012). Therefore, the derogation of such relational ties within the group might make people feel less fused with the group as previous experimental evidence has already proved (Gómez et al., 2019). However, this research advanced our knowledge in different directions.

Some categories of reasons were more important for some groups possibly because groups are tendentially covering different personal needs to different levels (Correl & Park, 2005; Maslow, 1968; Ryan & Deci, 2000; Yzerbyt & Demoulin, 2010). This evidence is even clearer when extremist or violent groups are considered. Within defusion from local groups, in which all people meet and interact with each other, the degradation of relational ties was considered as a reason for defusing by more participants

than when considering an extended group, especially degrading relational ties among group members. People need healthy relationships within the group, good and efficient communication, cohesion, or friendship (Cohen & Wills, 1985), and the degradation of such processes might jeopardize the relationship with the group. In extended groups, more participants mentioned reasons related with the degradation of collective ties than when considering local groups. Presumably, for extended groups, personal relationships with members seem less important, but the ideas, values, and norms that the group represents seems crucial. That is coherent, as sharing principles, values, or norms are intrinsically satisfying and a key factor to form social groups (Byrne, 1971; Rokeach, 1960; Turner, 1982). The most prominent reason for defusion from ascribed and chosen groups was also degrading relational ties. These findings, together with those from the rest of the studies, help to explain why previous research has found that degrading relational ties is one of the most effective strategies to reduce fusion, at least temporarily (Gómez et al., 2019). In this study, participants who thought in ascribed groups were more likely to report reasons related to untenability of defusion compared to the chosen-group condition, a coherent result given the material and psychological difficulty to abandon ascribed groups.

When evoking real experiences of defusion, random events gained prominence as reasons for leaving the group. Relationships among ingroup members were also important, but uncontrollable reasons such as change of work center, to emigrate to other country, or lack of free time for daily life obligations were mainly offered by participants. This finding is quite relevant as it shows how people tend to ignore motives out of control or beyond the group dynamics, which at the end might be more powerful than what they initially had thought.

Hypothetical reasons of defusion offered by members of a real radical group, as the Riazor Blues, showed again that problems in relational ties were important reasons for defusing with the group, specifically problems among group members. Again, the group is covering basic needs, especially when participants openly expressed that other Riazor Blues member were like their family (Whitehouse, Mc Quinn et al., 2014; Whitehouse et al., 2017). Not surprisingly, these participants were especially reluctant to write hypothetical reasons of defusion, as they might find difficulties to conceive them.

For Study 5, a different pattern of results emerged. Interestingly, degradation of both *relational* and *collective ties* was similarly mentioned by ex-Tamil Tigers. LTTE organization had created an armed resistance with people who shared these objectives.

Their main target was recovering the Tamil identity and the restoration of the perceived discrimination from the majority Sinhalese population, by setting up a separate state called “Tamil Eelam” (Hopgood, 2005). Thus, both interpersonal bonds with other Tigers and collective ties based on the objectives of the group may have maintained the commitment with the group, and consequently were reasons for leaving the organization. The end of the war (within the category of random event) was the most prominent reason for leaving the group. On this point, we cannot know if participants beyond feeling de-attachment, also experienced di-engagement from the group (Ebaugh, & Ebaugh, 1988). However, considering that lots of members of the Tamil Tiger organization were forced to join (Becker, 2010), there is a possibility they never felt fully fused with the group in the first place, and they never felt authentic attachment. Future studies should be conducted with other violent organizations characterized by strong links of attachment such as gangs. In contrast with previous studies, degrading relational ties was more based on problems *between the individual and the group*. In the context of the Tamil Tiger organization, the extreme practices in the training of cadres, or the harsh punishment that people suffered, could endanger their physical and mental integrity (Hopgood, 2005) which may have led to these feelings of disconnection.

The present research was not free of limitations. The use of open-ended questions allowed us to access people’s natural conceptions, but despite its benefits, free writing provided a huge variety of responses from only one word (e.g., “distrust”) to long sentences subject to the problem of interpretation. To confirm our results, future studies should be designed using experimental methodology, or by developing a scale based on the categories to systematically extract the causes for defusion from different groups in different contexts, and most importantly, quantitatively to compare the responses between them.

Main contributions and implications

Taken together, our findings offered empirical evidence about the conceptions of people regarding the reduction of identity fusion with a significant group. A worth contribution of this research is the comprehensive picture of arguing reasons of defusion considering different groups from benign and regular groups to radical and terrorist groups. Although the same categories of reasons were identified in all groups, a different pattern of results raised depending on the nature of the group. Results suggest that groups

are covering different needs, and consequently, the process of defusion, and even deradicalization, would not be the same for all kind of groups and organizations as well as the process of the radicalization is different depending on the group (see Gómez, Martínez et al., 2020).

We think these results contribute to two different directions. On the one hand, these studies allowed an advance in the theory of identity fusion by confirming the prominent role of relational ties even when considering its reduction, and the theoretical differentiation between collective and relational ties. On the other hand, learning about the most sensitive reasons for leaving groups may also help to design appropriate deradicalization programs based on empirical evidence. Enhancing relational ties with other no-violent groups, or the community may help members of terrorist groups to keep the correct direction within the deradicalization process or building community resilience to violent extremism (e.g., Weine, 2013).

CHAPTER 3

**Anger toward ingroup members
attenuates the effects of identity fusion
through reducing feelings of personal
agency**

Abstract

Identity fusion -a visceral feeling of oneness with a group, individual, value or entity- is a robust predictor of extreme pro-group behaviors. Previous research suggested that, among strongly fused individuals, increasing willingness to self-sacrifice for ingroup members is motivated by emotional engagement with the group. However, little is known about the role of emotions for reducing such propensity. To fill this gap, we conducted two experiments testing the effects of inducing feelings of anger toward ingroup members on willingness to fight and die for the group. Strongly fused individuals reduced their willingness to fight and die for the group when they felt anger toward ingroup members (Studies 1 & 2). Furthermore, priming feelings of anger reduced feelings of personal agency – the capacity to initiate and control intentional behavior –, which, in turn, undermined endorsement of extreme sacrifices for the group (Study 2). Apparently, deteriorating the emotional engagement with ingroup members restrains strongly fused to translate their convictions into self-sacrificial behavior through reducing feelings of personal agency.

Keywords: Identity Fusion, Group-based Emotions, Ingroup Anger, Progroup Behavior, Personal Agency.

3.1. Theoretical Introduction

Identity fusion is a visceral feeling of oneness with a group that motivates people to display extraordinary self-sacrifices on behalf of the group or its members (see Swann et al., 2009; 2012; for a recent review, see Gómez, Chinchilla et al., 2020). Recently, identity fusion has been shown to be the best predictor of radical intentions (see Wolfowicz et al., 2021). In this context, efforts to find ways to temper the relation between identity fusion and its associated extreme behavior seem worthy.

Although being fused with a group is extraordinary difficult to modify because of its irrevocability (Gómez, Brooks et al., 2011; Swann et al., 2012), previous research has provided preliminary evidence of strategies that can reduce temporarily the sense of identity fusion and its consequences, as degrading relational or collective ties (Gómez et al., 2019). However, although earlier work has shown that fused individuals experience a deep emotional engagement with the group that compels them to be ready for self-sacrifice to protect other group members (Swann, Gómez et al., 2014), the role that emotions can play in weakening the connection between identity fusion and extreme progroup behavior remains unclear. This research aims to analyze whether feelings of anger towards ingroup members can attenuate the usual willingness of fused people to fight and die for the group.

The role of emotions in identity fusion

Fused people feel so immersed in the group and connected to other fellow ingroup members that come to feel a deep visceral sense of oneness with the group. They experience a profound emotional bond with the group in part due to the relational ties projected towards their companions. Their personal identity and their social identity are merged, but both remain active, and synergically motivate progroup behavior. The simultaneous salience of both personal and social identities can explain why fused people maintain a strong feeling of personal agency when acting to protect the group (see for example Gómez, Brooks et al., 2011). Arousal has proved to place a central stage in this process. Research has shown that when emotionally activated, by increasing their arousal through physical exercise, fused individuals enhance their personal agency and, in turn, amplify their willingness to fight and die for their group (Swann Gómez, Huici et al.,

2010). That is, arousal can work as a catalyst of extreme progroup behavior, as it is a powerful amplifier of emotions and behavior.

Beyond general arousal, Swann, Gómez et al. (2014) explored the cognitive and emotional mechanisms underlying the high disposition of fused people to make sacrifices for group members. Participants were faced with several versions of the trolley dilemma, where they must decide between leaving ingroup members die and saving them by self-sacrificing. Then, they justified such decision. Results showed that when strongly fused persons learned that members of their group were endangered, they recognized experiencing emotions as if that was happening to themselves. The justifications offered by fused people for the intention to self-sacrifice to protect ingroup members were more emotional and deontological than those reported by weakly fused. This means that the content of responses of strongly fused was highly loaded with tension, distress, and anxiety derived from the immediate belief about what was the morally correct course of action. These intense emotional reactions, in turn, mediated the effects of fusion on the endorsement of sacrificing themselves. This research confirmed that the emotional concern was directly implicated in the decisions of fused individuals to make extreme progroup actions.

Recently, Gómez et al. (2021) conducted survey-interviews in prisons and found that jihadists' admiration toward members of radical Islamist groups amplified their willingness to engage in costly sacrifices for religion because of the binding effect arose by admiration for radical Islamist groups. Experimental evidence reinforced the idea that admiration for ingroup members increased identity fusion, and in turn, the promptness to engage in costly progroup behaviors. Whereas admiration can have a binding effect, increasing identity fusion and its consequences, we estimate that other emotions can derogate the bonds, and mitigate the willingness for extreme behavior for the group.

Taken together, these findings suggest that the emotional experience is inherent to the process of identity fusion and may be even responsible, at least in part, for the extreme progroup behavior displayed by fused individuals. However, as far as our knowledge goes, no previous research has inquired about the opposite path, how feeling negative emotions towards ingroup members can attenuate the relationship between identity fusion and extreme progroup behavior. The premise that sustains the hypothesis is that emotions can be a powerful trigger for the extreme behavior of fused people, and, therefore, they might be also a powerful neutralizer of such behavior.

Emotions, as a powerful catalyst for behavior

According to Lerner et al. (2015), “emotions constitute potent, pervasive, predictable, sometimes harmful and sometimes beneficial drivers of decision making” (p. 799). Emotions, as intense mood and physiological alteration have also an incomparable explanatory power when trying to understand and predict behavior (see Duker et al., 2021), as they can influence the cognitive interpretation of specific situations, alter the decision-making process, and trigger or inhibit actions.

People can feel emotions as individuals, because their personal interests have been thwarted or achieved (Batson et al., 2007), but they can also experience group-based emotions because of their group membership (Smith, 1993). Research has shown that group-based emotions are best predictors of action tendencies that involve the group than individual emotions (e.g., ingroup solidarity and support) (see Smith et al., 2007), and contribute to regulate both intragroup and intergroup attitudes, and people’s behavior (Mackie et al., 2000; Smith, 1993).

Behavior towards outgroup members has been proved to be highly influenced by emotions toward the outgroup. However, behavior towards the own group can also be affected by emotions felt toward the ingroup itself. Literature has shown that, sometimes, the ingroup can provoke more intense reactions on its members, even negative, precisely due to the connection with the group. The classic “black sheep” effect is a good example of how people have more intense negative reactions towards ingroup deviants than towards outgroup deviants. Marques et al., (1988) demonstrated that people inflict greater punishments to ingroup members than outgroup members if they are blamed for negative actions, especially when the cues for evaluation are significant for people’s social identity. This evidence shows that negative attitudes towards the ingroup might be of interest to a real comprehension of group dynamics.

Little research has investigated the negative reactions of fused people towards the ingroup. Vázquez et al. (2017) found that strongly fused individuals diminished their feeling of oneness with their group over time due to negative ingroup actions (e.g., a corruption scandal). Likewise, Gómez et al. (2019) showed that remembering conflicts with other ingroup members or negative actions committed by the ingroup leaders weakened the relationship between fusion and progroup behavior. Interestingly, this effect was mediated by group-related agency (i.e., the capacity to initiate and to control intentional behavior) (Gómez, Brooks et al., 2011; Swann, Gómez, Huici et al., 2010).

These results are coherent with the possibility that negative emotions were activated in response to the ingroup's wrongdoing.

Feeling anger towards those ingroup members who deviate from the norm could be behind these reactions. Anger is an emotional state whose intensity can vary from vexed or angry to furious. It usually has physical activation effects, such as raising heart rate, blood pressure, adrenaline, or noradrenaline levels, among others. People feel anger when someone behaves in an unfair or illegitimate way against us or against members of our group (e.g., Averil, 1983; Carver et al., 2009; Halperin, 2015; Mackie et al., 2000; Lazarus, 1991). Anger provides for a wide range of important adaptive functions (Camras, 1992) such as overcome obstacles to achieve goals (Saarni et al., 2006), or organize and regulate social and interpersonal behaviors (Oatley & Jenkins, 1996).

The moral component of anger is one of their defining characteristics. Anger increases under unfair situations (Averill, 1983; Mackie et al., 2000), is related to the blame and responsibility of the perpetrator of deviant actions (Halperin, 2015), and its emotional goal of anger is to rectify perceived injustice (Fisher & Roseman, 2007). Leach et al. (2006) showed that feeling anger about ingroup advantage stimulated different forms of political action in favor of the outgroup (e.g., to write letters, take to the streets, donate money to the cause) to compensate the systemic disadvantage.

Although fused people can be motivated to see their group fellows under a positive light (Whitaker et al., 2021), it does not imply absolute blindness to the harmful behavior of ingroup members. On the contrary, fused people, because of their strong alignment with the group and their commitment, might be more sensitives to the actions that other fellow members perform if they hurt the group. In the current research, it was hypothesized that feelings of anger toward ingroup members could undermine the relationship between identity fusion and the willingness to engage in extreme progroup behaviors.

Overview of the present research

Two experiments examined whether experiencing anger towards members of the ingroup (the country) attenuated the relationship between identity fusion and willingness to fight and die for the group (Experiments 1 and 2). Additionally, the relationship between personal agency and willingness to fight and die for the group was also explored

(Experiments 2). And finally, if experiencing anger towards members of the ingroup would also moderate the relation between identity fusion and personal agency (Exp. 2).

We report all measures, conditions and exclusions in the method sections. We did not determine sample size a priori. To collect data, undergraduate students recruited participants using the snowball technique. We collected as many participants as possible during one month in the first academic semester. No additional data were collected after an initial data analysis. Ethics committee approval of the university was received.

3.2. Study 1

In Study 1, we examined the effect of priming feeling anger towards members of the ingroup attenuates the relationship between identity fusion and willingness to fight and die for the group. To that end, we experimentally induced feelings of anger towards ingroups member (i.e., anger condition from now on) as compared to a no-activation condition (i.e., control condition from now on). We expected that activating feelings of anger towards members of the ingroup would attenuate the willingness to fight and die for the group for fused individuals.

3.2.1. Method

Participants

We recruited 454 participants using the snowball technique wherein undergraduates enrolled in an online distance learning psychology course from UNED asked their acquaintances to participate. Fifty participants were removed because they did not fill the attention questions correctly (i.e., “If you are reading this question, please mark number five”) or because they wrote about a situation not related to the experimental induction. A total of 404 persons were included in the study (60.6% women; $M_{age} = 36.54$, $SD = 13.53$, 96% Spaniards).¹⁵

Design and procedure

¹⁵ Questionnaire was adapted to no-Spaniard participants in study 1 and 2. Results obtained did not vary with nationality as a covariate.

Participants were invited to collaborate in a study about intergroup relations. First, they responded to a measure of fusion with their country. After that, they were randomly assigned to one of two conditions (*Anger* vs. *Control*). Following the experimental manipulation, participants completed the manipulation checks and reported their willingness to fight and die for their country. Participants were then debriefed, thanked, and dismissed.

Identity fusion (pictorial measure)

We used the pictorial version of the identity fusion scale to measure identity fusion with the participant's country, which include pairs of circles, a small circle representing the self and a big circle representing the group, with 5 different degrees of overlap, from no overlap (A option) to full overlap where the small circle is fully inside and in the center of the big circle (E option), (Swann et al., 2009). The E option represents fusion with the group, while the other four options, A-B-C-D, indicate non-fusion (see Swann et al., 2009 for more details). Respondents were asked which pictorial representation most closely reflected their relationship to their group, and 25.2% of participants were fused with their groups. The percentage of fused participants on each experimental condition was similar, $F(1, 402) = 1.89, p = .169, \eta_p^2 = .279$.

Experimental conditions

After responding to the measure of fusion with the group, the participants were randomly assigned to the anger or to the control condition.

In the *anger condition* ($N = 198$), participants read a definition of anger based on previous research (e.g. Averil, 1983; Carver et al., 2009; Halperin, 2015; Mackie et al., 2000; Lazarus, 1991) as follow: “*Anger is an emotional state whose intensity can vary from vexed or angry to furious. Anger can have physical activation effects, such as raising heart rate, blood pressure, adrenaline or noradrenaline levels, among others. We can feel anger when someone (a single person, a group, or even ourselves) behaves in an unfair or illegitimate way, against ourselves or against members of our group. But the key feature that distinguishes anger from other emotions is that we feel that we have power or control over the instigator of the event. On the other hand, it must be considered*

that the main objective of anger emotion is to motivate the attack to achieve better results for ourselves or our ingroup and in this way, restore the offense". After that, participants were asked to describe in detail a situation in which they felt anger because members of their own country did something against the group. Example for participants' descriptions on anger condition: *"It causes me anger or discomfort when there are people ... who are ashamed to say that they are Spanish and want to show an image to the public that is not real"*, *"When being outside of Spain, I come across other Spanish tourists who don't know how to behave (shouting, pushing, sneaking into places, showing off that they won't pay on the subway, filling their backpack with things from the breakfast buffet without no dissimulation ...). These behaviors annoy and irritate me because they are giving a negative image of Spaniards that embarrasses me, and that makes people from the other country think that we are all the same"*.

In the *control condition* ($N = 206$), participants described their last commute to work or university. Both inductions were similar to that used in prior research manipulating emotions (Strack et al., 1985). Participants could take as long as they needed when writing about these scenarios. Example for participant's description on control condition: *"My office is 15 minutes walking from my house, so I walk most days"*, or *"Depending on the day of the week, I walk together with other colleagues that I find on my way"*.

Manipulation checks

To test if the manipulation of anger was successful, we use a two items scale based on Shuman et al., (2017). Participants were asked to report to what extent they felt angry and furious on a Likert scale from 0 (*Not at all*) to 6 (*Absolutely*), $r[402] = .88, p < .001$. These two items were averaged into a single category, as *anger*.

Willingness to fight and die for the group

Participants completed the 7-items scale of willingness to fight and die for the group (e.g., "I would fight someone physically threatening another member of my country", "I would sacrifice my life if it saved the life of another member of my country"), taken from Swann et al. (2009). Responses were recorded on a 0 (*strongly disagree*) to 6

(*strongly agree*) Likert scale ($\alpha = .78$). Items were averaged into a composite index. Higher values indicated a greater willingness to fight and die for one's country.

3.2.2. Results

Manipulation checks

To examine whether the experimental manipulation on anger was effective, we ran a one-way ANOVA with the anger manipulation as between-groups factor. Significant differences were found between conditions, and participants in the control condition ($M = 0.96$, $SD = 1.49$) showed less angry than participants in the anger condition ($M = 4.50$, $SD = 2.37$), $F(1, 402) = 502.39$, $p < .001$, $\eta_p^2 = .55$. In order to examine whether feelings of anger were significantly different depending on identity fusion, we ran a one-way ANOVA with the identity fusion as between-groups factor. No significant differences were found ($p = .676$).

Willingness to fight and die for the group

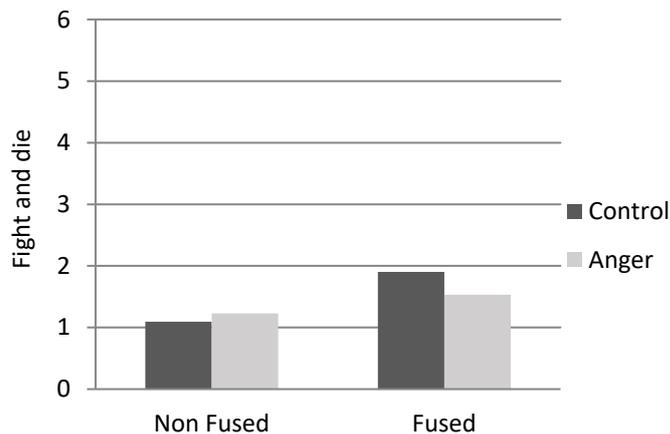
A $2(\text{Fused vs. Non-fused}) \times 2(\text{Anger vs. Control})$ ANOVA on willingness to fight and die revealed a significant main effect of fusion, $F(1, 400) = 24.41$, $p < .001$, $\eta_p^2 = .05$. Fused participants reported greater willingness to fight and die for the group ($M = 1.70$, $SD = 1.31$) than not fused participants ($M = 1.15$, $SD = .83$). However, this main effect was qualified by a significant two-way interaction, $F(1, 400) = 5.05$, $p = .025$, $\eta_p^2 = .01$. In the control condition, fused participants reported a significantly greater willingness to fight and die for the group than non-fused participants (Fused: $M = 1.90$, $SD = 1.27$ vs. non-fused: $M = 1.09$, $SD = .82$), $F(1, 400) = 24.41$, $p < .001$, $\eta_p^2 = .05$. In the anger condition, such difference was marginal (Fused $M = 1.53$, $SD = 1.33$ vs. non-fused: $M = 1.23$, $SD = .85$), $F(1, 400) = 3.85$, $p = .050$, $\eta_p^2 = .01$. The main effect of the anger manipulation was not significant, $F(1, 400) = 1.09$, $p = .295$, $\eta_p^2 = .01$.

Put differently, the anger manipulation effect was greater for fused participants, and they marginally reduced their willingness to fight and die for their group in the anger condition ($M = 1.53$, $SD = 1.33$) vs. the control condition ($M = 1.90$, $SD = 1.27$), $F(1, 400) = 3.62$, $p = .058$, $\eta_p^2 = .01$. In contrast, non-fused participants did not report statistical differences on their willingness to engage in progroup behavior depending on the anger

manipulation (anger condition: $M = 1.23$, $SD = .85$ vs. control condition: $M = 1.09$, $SD = .82$), $F(1, 400) = 1.43$, $p = .232$, $\eta_p^2 = .001$ (see Figure 1).

Figure 1

Willingness to fight and die for the group as a function of identity fusion (Study 1)



Sensitive power analysis

We performed a sensitivity power analysis using G*Power (Faul et al., 2007) considering an alpha significance criterion of 0.05, a sample size of 404 participants and three predictors (identity fusion, anger manipulation, and the two-way interaction). The minimum effect to be detected with 80% power was $f = 0.14$ ($f^2 = 0.02$).

3.2.3. Discussion

Consistent with our predictions, results indicate that feeling anger toward ingroup members significantly reduces the predictive power of identity fusion on willingness to fight and die for the group. However, when feelings of anger are not activated, results replicate previous findings that identity fusion positively predicts willingness to fight and die for the group (e.g., Gómez, Brooks et al., 2011; Gómez, Morales et al., 2011; Swann, Buhrmester et al., 2014; Swann, Gómez, Dovidio et al., 2010; Swann, Gómez, Huici et al., 2010).

Study 1 represents the first empirical proof up to date that feeling negative emotions toward ingroup members, in particular, feelings of anger, attenuate willingness to self-

sacrifice for fused individuals. However, although promising, the results obtained in Study 1 have two main limitations. First, the measure of identity fusion was dichotomous, and the distribution of fused versus non-fused individuals was not equivalent. Study 2 solves this limitation by including the verbal measure of identity fusion (Gómez, Brooks et al., 2011) that allows for a continuous distribution on identity fusion. Second, and more importantly, the results obtained in Study 1 identify a new strategy to reduce the effects of identity fusion on willingness to fight and die for the group, but not the mechanism underlying such effect. Recent research has demonstrated that feelings of anger reduce the sense of agency (Christensen et al., 2019), which implies a diminution on the feelings of control and responsibility (Yoshie & Haggard, 2013, 2017). In this regard, a key characteristic that distinguish strongly fused individuals is their feelings of personal agency on behalf of the group, what mediates the effect of fusion on pro-group behavior (e.g., Gómez, Brooks et al., 2011, 2019; Swann et al., 2010). Consistent with these findings, we expect that personal agency will mediate the effect of fusion on willingness to fight and die for the country. However, this mediation might be moderated by the manipulation of anger, such that the indirect effect of identity fusion on willingness to fight and die for the group via personal agency will be stronger in the control condition than in the experimental condition.

3.3. Study 2

Study 2 was designed to replicate evidence that priming feelings of anger toward ingroup members diminishes the pro-group consequences of being fused with a group, and also to identify the underlying mechanism driving this effect. Replicating the results of Study 1, we predict that reminding an anger-inducing situation will reduce the effect of identity fusion on willingness to fight and die for the group as compared to a control condition in which a neutral situation is described. In addition, the induction of anger will also weaken the effect of fusion on personal agency as well as the effect of agency on willingness to fight and die for the group as compared to the control condition. In other words, fusion will be more strongly associated with agency and agency will be more strongly associated with willingness to fight and die for the group in the control than in the experimental condition. Consistent with previous findings, we also expect that personal agency mediates the effect of fusion on willingness to fight and die for the group. However, such indirect effect might be moderated by the manipulation of anger. In

particular, the indirect effect via personal agency will be larger in the control condition than in the anger condition.

3.3.1 Method

Participants

As in Study 1, we utilized the snowball technique to recruit participants. A total of 874 participants responded online. Sixty-three participants were removed according to the same criteria for exclusion as in Study 1. Finally, 811 participants were included (62.5% women, mean age = 35.59, $SD = 13.35$, 93.7% Spaniards).

Design and procedure

The procedure was similar to Study 1. Participants responded to the verbal measure of fusion with their country (Gómez, Brooks et al., 2011). After that, they were randomly assigned to one of two experimental conditions, *Anger* ($N = 274$) vs. *Control* ($N = 271$). Examples that participants reported in the anger condition are: “I have felt anger when members of my own country disregard members of vulnerable groups”, “When I see how members of my country criticize and attack others because of their sexual orientation, ethnic, race, ideology, etc”. Immediately after, they completed the manipulation checks and reported their feelings of personal agency and their willingness to fight and die for their country. Participants were debriefed, thanked, and dismissed.

Identity fusion (verbal scale)

We used the 7-item *verbal fusion* scale (Gómez, Brooks et al., 2011, e. g. “I am one with my country,” and “I am strong because of my country”), ranged from 0 (*strongly disagree*) to 6 (*strongly agree*), $\alpha = .87$. Items were averaged into a composite index. Higher scores reflected stronger fusion with the participant’s country. The mean of identity fusion on each experimental condition was similar, $B = -0.15$, $t(809) = -1.608$, $p < .108$, 95% CI [-0.33, 0.03].

Manipulation checks

The same items for emotions as Study 1 were used. *Anger* (angry and furious), $r[809] = .93, p < .001$.

Personal agency

We used the 5-item *personal agency* scale (Gómez, Brooks et al., 2011; Swann, Gómez, Huici et al., 2010, e. g. “I am able to control what my group does” and “I am able to control what my group does in the same way that I control what I do”), ranged from 0 (*strongly disagree*) to 6 (*strongly agree*), $\alpha = .76$. Items were averaged into a composite index. Higher scores reflected that people feel more agency.

Willingness to fight and die

The same scale as study 1 was used ($\alpha = .79$).

3.3.2. Results

Manipulation Checks

As Study 1, we ran a one-way ANOVA with the anger manipulation as a between-groups factor. Significant differences were found between conditions, participants in the control condition showed less angry ($M = 0.28, SD = 0.91$) than participants in the anger condition ($M = 3.92, SD = 1.18$), $F(1, 809) = 2419.11, p < .001, \eta_p^2 = .75$. In order to examine whether feelings of anger were significantly different depending on identity fusion levels, a simple linear regression was calculated. No significant result was found ($p = .226$).

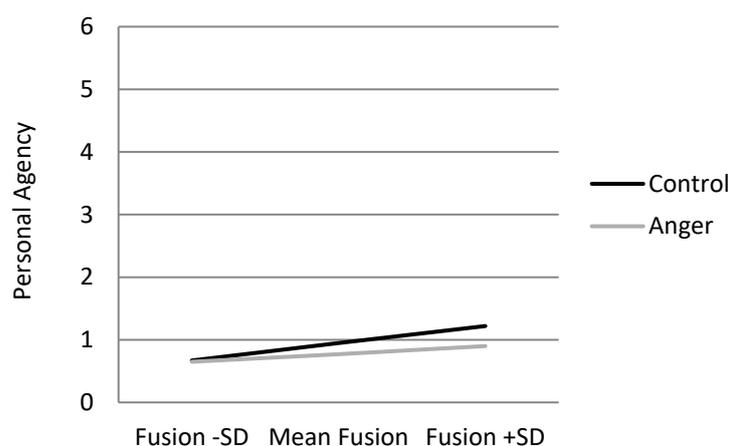
Personal agency

A linear regression analysis including identity fusion (centered), anger manipulation (effect coded, 1 anger, 0 control), and its interaction revealed a significant main effect of identity fusion on personal agency, $B = 0.21, t(807) = 6.80, p < .001, 95\% \text{ CI } [0.15, 0.27]$. Strongly fused participants reported greater personal agency than weakly fused participants. The analysis also revealed a significant two-way interaction, $B = -0.12,$

$t(807) = -2.47, p = .013, 95\% \text{ CI} [-0.21, -0.02]$. As figure 2 shows, identity fusion was significantly more predictive of personal agency in the control condition, $B = 0.21, t(807) = 6.80, p < .001, 95\% \text{ CI} [0.15, 0.27]$, than in the anger condition, $B = 0.09, t(807) = 2.68, p < .001, 95\% \text{ CI} [0.02, 0.16]$. The manipulation of anger did not affect personal agency, $B = 0.08, t(807) = 0.68, p = .496, 95\% \text{ CI} [-0.15, 0.31]$.

Figure 2

Personal agency as a function of identity fusion and anger conditions (Study 2)



Put differently, as we can see in Figure 2; strongly fused participants reduced their personal agency when anger was primed as compared to the control condition, $B = -0.32, t(807) = -3.74, p = .001, 95\% \text{ CI} [-0.50, -0.15]$. However, the manipulation of anger did softly affect the personal agency of weakly fused participants, $B = -0.02, t(807) = -0.25, p = .001, 95\% \text{ CI} [-0.19, -0.14]$.

Willingness to fight and die for the group

Identity fusion as predictor of willingness to fight and die for the group

A linear regression analysis including identity fusion (centered), anger manipulation (effect coded, 1 anger, 0 control), and its interaction revealed a significant main effect of identity fusion, $B = 0.40, t(807) = 14.24, p < .001, 95\% \text{ CI} [0.34, 0.46]$. Strongly fused participants reported greater willingness to fight and die for the group than weakly fused participants. Additionally, a main effect of anger manipulation emerged, $B = 0.31, t(807) = 2.87, p = .004, 95\% \text{ CI} [0.09, 0.52]$, participants in the anger condition

reported less willingness to fight and die for the group compared to the control condition. Also, a significant two-way interaction between the anger manipulation and identity fusion was found, $B = -0.16$, $t(807) = -3.79$, $p < .001$, 95% CI [-0.24, -0.07]. As Figure 3 (Panel A) shows, strongly fused participants showed lower willingness to fight and die for their group when anger towards the ingroup was primed compared to the control condition, $B = -0.25$, $t(807) = -3.23$, $p < .001$, 95% CI [-0.41, -0.10]. Contrarily, the manipulation of anger softly increased the willingness to fight and die for weakly fused participants, $B = 0.16$, $t(807) = 2.14$, $p < .001$, 95% CI [0.01, 0.32].

Put differently, as we can see in Figure 3 (Panel A) strongly fused participants reduced their willingness to fight and die for their group when anger towards the ingroup was primed as compared to the control condition, $B = -0.25$, $t(807) = -3.23$, $p = .001$, 95% CI [-0.40, -0.10]. However, the manipulation of anger affected the willingness to fight and die of weakly fused participants on the opposite direction, $B = 0.16$, $t(807) = 2.14$, $p = .032$, 95% CI [0.01, 0.32].

Personal agency as predictor of willingness to fight and die for the group

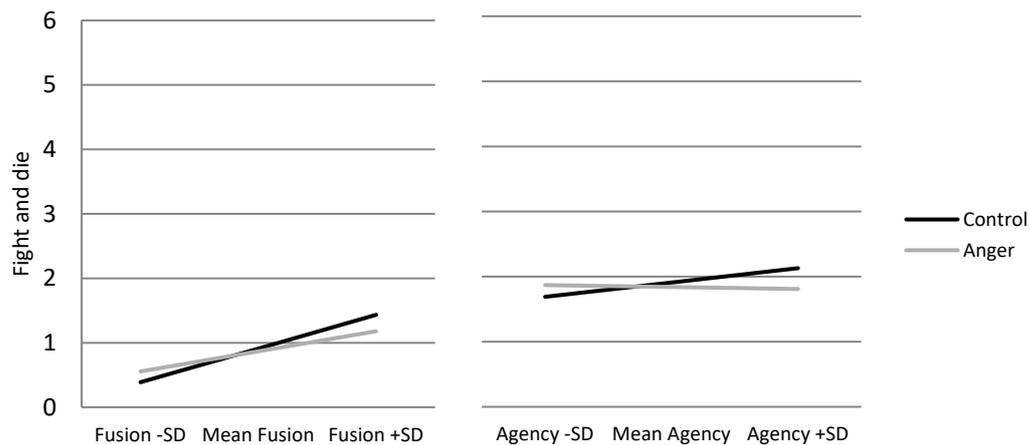
A linear regression analysis including personal agency (centered), anger manipulation (effect coded, 1 anger, 0 control), and its interaction on willingness to fight and die for the group revealed a significant main effect of personal agency on willingness to fight and die, $B = 0.24$, $t(807) = 5.72$, $p < .001$, 95% CI [0.16, 0.32], indicating a greater willingness to fight and die for participants who reported higher personal agency. The analysis also showed a significant two-way interaction between experimental manipulation and personal agency, $B = -0.27$, $t(807) = -3.81$, $p < .001$, 95% CI [-0.42, -0.13]. As Figure 3 (Panel B) shows, personal agency significantly predicted the willingness to fight and die for those participants in the control condition, $B = 0.24$, $t(807) = 5.72$, $p < .001$, 95% CI [0.16, 0.32], but it did not in the anger condition, $B = -0.03$, $t(807) = -0.53$, $p = .593$, 95% [-0.14, 0.08]. The main effect of experimental manipulation did not emerge, $B = 0.17$, $t(807) = 1.95$, $p = .051$, 95%CI [-0.00, 0.34].

Put differently, as we can see in Figure 3, (Panel B); participants who reported high personal agency levels reduced their willingness to fight and die for the group when ingroup anger was primed as compared to the control condition, $B = -0.32$, $t(807) = -3.46$, $p = .001$, 95% CI [-0.50, -0.13]. However, the manipulation of anger did not affect the

willingness to fight and die of weak agency participants, $B = 0.16$, $t(807) = 1.95$, $p = .051$, 95% CI [-0.00, 0.34].

Figure 3

Willingness to fight and die for the group as a function of identity fusion (Panel A) of personal agency (Panel B) and anger conditions (Study 2)



Panel A: *Willingness to fight and die as a function of Identity Fusion and anger conditions (Study 2)* Panel B: *Willingness to fight and die as a function of Personal Agency and anger conditions (Study 2)*

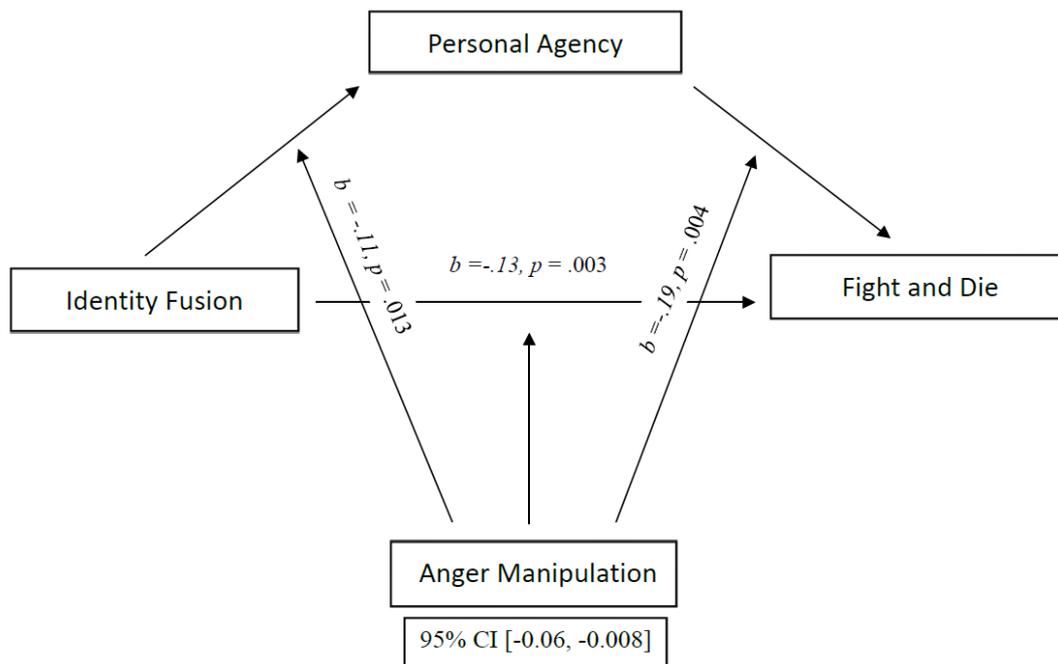
Moderated mediation

To test whether personal agency mediates the effect of fusion on willingness to fight and die in the control but not in the anger condition, we conducted a moderated mediation bootstrapping test (n boots = 5,000) using Model 59 of the PROCESS SPSS macro provided by Hayes (2018). As can be seen in Figure 4, fusion was included as the predictor, personal agency was the mediator, willingness to fight and die was the outcome measure, and the manipulation of anger was considered the moderator. The analysis revealed small but significant indirect effects of identity fusion on willingness to fight and die via personal agency both in the control, $B = 0.02$, 95% CI [0.002, 0.049]; and in the anger condition, $B = -0.009$, 95% CI [-0.023, -0.001]. The index of moderated mediation was significant, $B = -0.03$, 95% CI [-0.060, -0.008] indicating that the indirect

effect via personal agency was significantly stronger in the control condition than in the anger condition.

Figure 4

Second-stage moderated mediation model (Study 2) (PROCESS macro, Model 59)¹⁶



Sensitive power analysis

We performed a priori power analyses using G*Power (Faul et al., 2007) considering an alpha significance criterion of 0.05, an 80% of power, a difference between slopes of $|\Delta| = .30$, and three predictors (identity fusion, anger manipulation, and the two-way interaction). A sample of 621 participants was required for this analysis.

3.3.3. Discussion

As expected, results of Study 2 replicated previous findings. Strongly fused individuals were more willing to fight and die for the group, and this effect was mediated by feelings of personal agency (Gómez, Brooks et al., 2011; Swann et al., 2010). Further,

¹⁶ Identity fusion and anger manipulation were the predictor variables, personal agency the mediator and willingness to fight and die the dependent variable.

the effects of fusion on willingness to fight and die for the group were attenuated by feelings of anger toward ingroup members. Importantly, this attenuation was justified because feelings of anger moderated the effect of fusion on feeling of agency, and the effect of personal agency on willingness to fight and die for the group.

3.4. General discussion

Previous research has found that strongly fused individuals experience a deep emotional engagement with the group that compels them to be ready for self-sacrifice to protect other group members (Swann, Gómez et al., 2014), and that binding emotions such as admiration for specific group members can amplify their willingness to engage in costly sacrifices for the values of the group (Gómez, Bélanger et al., 2021). This work examined whether priming feelings of anger towards ingroup members could diminish the sense of personal agency and the extreme pro-group consequences of being fused with a group.

In two experiments, participants were asked to describe in detail a situation in which they felt anger toward the ingroup because members of their country did something against the group versus a control condition in which participants described a daily-life activity. Results showed that strongly fused individuals did not feel angrier than weakly fused when recalling a memory of bad behavior of group members, however their feelings of anger had different consequences. Specifically, in both experiments strongly fused participants decreased their willingness to self-sacrifice for the group when they felt anger compared to non-angry fused participants, something that did not happen with weakly fused participants, who expressed the same disposition of extreme behavior when they were angry, or they were not. That is, anger affected the willingness to display extreme behavior for the group among strongly fused participants, but not for weakly fused participants. Summarizing, feeling anger toward ingroup members significantly reduced the predictive power of identity fusion on willingness to fight and die for the group, confirming the hypothesis that anger could attenuate the relation between fusion and extreme pro-group behavior, probably because it was working as a disruptive emotion that can break the emotional ties between the fused individual and the group.

Results also showed that strongly fused participants reduced their personal agency when anger was primed, but the manipulation of anger did not affect the personal agency of weakly fused participants. Interestingly, personal agency significantly predicted the

willingness to fight and die in the control condition, but it did not in the anger condition. This finding means that anger was breaking the connection between personal agency and extreme behavior.

Taken together, these results showed that feelings of anger towards ingroup members effectively decreased the extreme consequences of fusion on their progroup behavior and on their personal agency, a powerful mediator of the consequences of fusion. These findings are important because identity fusion has consistently shown to be a strong predictor of extreme behaviors for the benefit of the group (e.g., Swann, Buhrmester et al., 2014), and a better predictor of radical intentions than other related variables (Wolfowicz et al., 2021). For these reasons, reducing the link between identity fusion and willingness to extreme pro-group behavior is significant. And this research showed that feeling anger towards ingroup members because they had behaved badly towards the group can be a mechanism in this process.

The nature of identity fusion can help to understand how this attenuation was possible. Fused people are especially sensitive to intragroup processes. Vázquez et al. (2017) found that strongly fused individuals primed by an unpleasant ingroup situation, diminished their feeling of oneness with their group. In the same vein, Gómez et al., (2019) showed that remembering negative actions committed by ingroup members reduced the willingness to defend the group. The current research advances our knowledge by identifying a specific emotion that can account for these processes. Learning that the group was hurt ,because other ingroup members do not behave as they should do, increased anger feelings and affected the decisions of strongly fused individuals.

This is understandable given the strong relational ties of fused people with other group members, and not only because of the existence of collective ties with the group as a whole (e.g., Swann et al., 2012; Gómez et al., 2019). That means that fused persons are psychologically and emotionally connected to other individuals of the group, and there is a deep interdependence in a way that what other members do affect them, and vice versa. Fused individuals consistently show their disposition to defend or help the group because of deontological reasons and emotional engagement (Swann, Gómez et al., 2014). However, fused individuals also need reciprocity, that is, that other ingroup members act as they would do (Paredes et al., 2018; Whitaker et al., 2021). This implicit expectation for reciprocity might explain that anger feelings raised by a possible rupture of trust in other group members can temper their extreme progroup behavior. Presumably, learning

that other ingroup members did not behave as they would do increased anger feelings and that changed their decisions to sacrifice for a group whose members are not acting as they should.

Our findings are in line with those of Gómez and colleagues (2019) who demonstrated that undermining relational or collective ties weaken the association between identity fusion and their progroup behaviors. Our results complement this evidence by identifying the emotion involved. Inducing anger toward ingroup members might be a powerful tool to mitigate the extreme sacrifices that fused individuals are willing to commit, especially if these actions (i.e., self-sacrifice) are counter normative and counterproductive.

In another vein, although intergroup emotions have received a lot of attention by scholars (e.g., Mackie et al., 2008) not many studies have addressed the question of within-group emotions. Our research contributes to this field providing knowledge about how the oneness between the individual and the group determines the consequences of anger feelings when ingroup members are involved.

Limitations and future lines of research

This work is not free of limitations, especially regarding the experimental design used in the experiments. Participants were asked to freely describe one situation where ingroup members had behaved badly which evoked anger. A look at the content of these situations revealed a range of emotions and situations, and not a unique emotion as anger. For instance, some participants wrote about an embarrassing situation in which Spaniards and immigrants were involved. In such situations, shame and anger emotions could work together to determine the effects. Additionally, these situations might entail a rupture in the trust of the values of the group, or moving other processes related. Although the manipulation checks evidenced that they felt angrier than in a control condition, we cannot be sure that the effects were due exclusively to feelings of anger. Future studies should include a cleaner design to isolate the effect of anger vs. multiple emotions when analyzing the attenuating role of anger in the relation between fusion and extreme behavior. On the other hand, the size of the indirect effect was small, suggesting that different explanations might be leading the effect of the manipulation, and the directionality of the mediational analyses cannot be confirmed with a cross-sectional design. Future studies should overcome these limitations by using within-subjects and longitudinal designs.

Theoretical contributions and implications for deradicalization processes

The current work showed how feelings of anger toward ingroup members had a decreasing effect on their progroup behavior for those strongly fused with the group. Although we need to be cautious about the interpretation of these findings, we can deduce that feeling anger towards ingroup members might alter the relation between identity fusion and extreme behavior.

Our findings advance identity fusion theory in at least three ways. These studies represent the first systematic investigation of the effects of a discrete emotion (i.e., anger) on the relationship between identity fusion and its extreme consequences. Second, results consistently showed how inducing ingroup anger attenuated those effects. Third, our data suggested that although people (strongly vs. weakly fused) reported the same anger levels, ingroup anger did not equally affect all participants.

As this was the first time that discrete emotions were the focus of research for identity fusion theory, these findings open the door for using discrete emotions as a tool to diminish the counterproductive extreme behaviors that fused people could display. Defusing people from malevolent groups or avoiding that people become fused with them include the possibility to facilitate fusion with other benevolent groups. In this regard, priming positive and binding emotions toward “regular” groups could increase the possibility to fuse people with them, whereas priming disruptive emotions such as anger towards radical groups can diminish the potential extreme behavior characteristic of fused people.

We consider that these findings have clear implications for application. The evidence obtained has consistently shown how feeling anger against ingroup members was a determinant factor on the behavior of fused people. As it was expected, fused people were extremely sensitive to ingroup problems. These findings could help to improve counter terrorism preventive measures (UN Global Counter-Terrorism Strategy, A/RES/60/288, 2006). Showing betrayal, distrust, discomfort, or doubt within the group could be even a more effective strategy than questioning their moral principles from outside the group (e.g., counternarratives strategies; Vlahos, 2008). Breaking emotional ties with one's own group and its members could push them to search other realities.

General discussion

4.1. Summary of findings

The goal of this dissertation was to analyze whether de-fusion -reducing or eliminating the visceral feeling of oneness with a group and its consequences- might be part of the complex road to (de)radicalization, in particular regarding violent groups. The empirical work developed during the previous chapters has tried to contribute to understanding the processes that can lead to fusion or defusion, and to embrace or abandon extreme and violent groups. In addition, we also explored some factors that might motivate fused individuals to reduce their disposition to perform extreme sacrifices for the group.

As Table 1 shows, the first chapter included two packages of studies to understand why people fuse with normalized and radicalized groups (Package 1), or embrace violent groups (Package 2). In the second chapter, we tried to disentangle why people defuse from normalized and radicalized groups and abandon violent groups. In a third chapter, we tested if feeling anger toward ingroup members would reduce the characteristic strong willingness to display extreme pro-group behavior among fused people.

We combined different methodologies and performed both, inductive and deductive analyses, to achieve such goals. In Chapters 1 and 2, we conducted a content analysis on the reasons that laypeople argued for being more connected to, or stop feeling connected with a group, as well as the reasons of former terrorist for joining or abandoning a group. Quantitative analyses compared the categories of reasons depending on the nature of the group. Finally, in Chapter 3, an experimental design was used to test the causality of the processes.

Table 1*Summary of studies and main results*

Chapter	Package	Analysis	Categories	Studies	Sample/Group	Most important categories	Intergroups comparisons	
1.Causes of fusion and violent radicalization	1.The things that bind us: Why being fused -viscerally connected to-a group?	Content analysis	Shared relational ties	Study 1 n = 224	General/Local n = 106	Relational Ties & Personal Needs	Personal Need (More for local vs. extended groups)	
			Shared experiences		General/Extended n = 118	Relational Ties & Shared Values	Shared Values (More for extended vs. local groups)	
		McNemar test	Shared core values	Study 2 n = 296	General/Ascribed n = 295	Personal Needs & Relational Ties		
					General/Chosen n = 281	Relational Ties & Personal Needs	Relational Ties & Shared Exp. (More for chosen vs. ascribed groups)	
		Binomial logistic regressions	Satisfaction of personal needs	Study 3 n = 30	Extremist	Relational ties & Shared Values		
	Riazor Blues							
	2.Why people enter and embrace violent groups	Content analysis	Compliance <i>Charismatic agent</i> <i>Propaganda</i> <i>Coercion</i>	Study 1 n = 44	Ex-terrorist LTTE	Compliance = Internalization		Compliance & Coercion (More for LTTE vs. Islamic groups)
						<i>Coercion</i>	Personal = Relational = Collective	
		McNemar test	Internalization <i>Personal identity</i> <i>Relational identity</i> <i>Collective identity</i>	Study 2 n = 21	Ex-terrorist Islamist radicals	Internalization		Internalization <i>Charismatic Agent</i> <i>Relational Identity</i> (More for Islamic groups vs. LTTE)
<i>Charismatic Agent</i>						Personal = Relational = Collective		
2. Why people leave violent groups: From defusion to de-radicalization	Content analysis	Degrading Relational Ties	Study 1 n = 223	General/Local n = 117	Relational Ties	Relational Ties & Random Events (More for local vs. extended groups)		
				General/Extended n = 106	Relational Ties	Collective Ties (More for extended vs. local groups)		
				General/Ascribed n = 276	Relational Ties	Untenability of defusion (More for ascribed vs. chosen groups)		
				General/Chosen n = 292	Relational Ties			
				Binomial logistic regressions	Degrading Collective Ties	Study 3 n = 181	General population Past reasons	Relational Ties Random Events
	McNemar test	Random Events	Study 4 n = 30	Extremist Riazor Blues	Relational Ties			
					Study 5 n = 66	Ex-terrorist LTTE	Random Events	
3. .Anger toward ingroup member attenuates the effect of identity fusion through reducing feelings of personal agency	Correlations ANOVAs Linear regressions		Study 1 n = 454	General population	Ingroup Anger decreases the willingness to fight and die among strongly fused			
					Study 2 n = 811	General population	Ingroup Anger decreases the willingness to fight and die and personal agency among strongly fused	

Reasons of fusion

In the first package of studies of Chapter 1, we inductively explored the causes of feeling fusion with a group according to the spontaneous responses of individuals. The group could be local (e.g., family, friends) or extended (e.g., country) (Package 1, Study 1), ascribed (i.e., determined by birth) or chosen (i.e., freely chosen) (Package 1, Study 2) or a radicalized group of football fans (Package 1, Study 3). We discovered that people alluded to four mechanisms when reflecting about getting fused with a group: *shared relational ties* (i.e., existing strong and positive interpersonal bonds within the group), *shared experiences* (i.e., facing together positive or dysphoric practices with other members of the group), *satisfaction of personal needs* (i.e., emotional and belonging needs covered by the group and its members), and *shared core values* (i.e., sharing symbolic -non-physical- defining characteristics). These four categories seemed to be considered important reasons for developing and/or increasing a connection with a group according to the way of thinking of laypeople, that is, no academic experts on group dynamics.

As it was hypothesized, certain categories were brought up more often depending on the nature of the group. Satisfaction of personal needs was more referred when thinking in local groups such as family or friends. However, the category of shared core values was more often considered when thinking in extended groups such as the country. Like Easterbrook and Vignoles (2013) found when predicting feelings of belonging within groups perceived as social categories, shared core values was a more important reason for extended groups. On the contrary, the satisfaction of personal needs was more important in local groups.

Sharing both relational ties and experiences were the most named categories by those participants thinking in groups freely chosen such as friends. That is, having relationships of quality and sharing general, good, or dysphoric experiences were identified as common reasons for becoming fused with groups not ascribed by birth and easy to abandon. In these groups, interpersonal bonds and experiences seemed crucial, as belonging was a question of choice. However, these reasons were hypothetical motives that might increase connection with groups that were not so important by individuals at that moment.

In Study 3, we analyzed the reasons that justified fusion among strongly fused individuals. The same categories as previous studies were found among strongly fused

members of a football fan club, the Riazor Blues. They especially mentioned reasons related to sharing relational ties and core values. According to identity fusion theory (Swann et al., 2012), we can conclude that the Riazor Blues can extend familial ties to other group members, and this combination of strong relational ties with the idea of sharing symbolic defining characteristics related to the football team, can contribute to potentially extreme actions on behalf of the group.

Why joining a violent group

The second package of studies in Chapter 1 gave a further step and focused on why people join violent groups. To that end, former members of the Liberation Tigers of Tamil Eelam (LTTE) (Study 1) and Islamist radical groups (Study 2) were interviewed. Former LTTE members reported the main reason that explained how they or others came to join the group, whereas ex-members of Islamist radical groups talked about their life on a personal interview. Qualitative methods were used to extract (sub)categories and quantitative methods for comparing them.

The narratives were inductively analyzed in a first step. Based on the classic literature on attitude-change (Kelman, 1958), participants' responses fitted the distinction between *compliance* and *internalization* as mechanisms to join violent groups. Compliance occurs when individuals are coerced by powerful external agents of influence, whereas internalization occurs when individuals perceive convergence between the self and the group. Three different sub-pathways were identified for each category. Compliance can occur through a *charismatic agent* (i.e., being convinced by an individual group member), *propaganda* (i.e., being exposed to recruitment material such as videos on the Internet), and *coercion* (i.e., being taken into the group by force). Internalization can involve participants' *personal identity* (i.e., those aspects of the self-concept that make us unique), *relational identity* (i.e., connections with significant others in close relationships) and *collective identity* (i.e., cognitions, emotions, and values strongly linked to group membership).

Results revealed that former LTTE members mentioned reasons related to both, compliance and internalization, in a similar proportion. However, former members of Islamist radical groups reported primarily reasons associated with internalization. Interestingly, within the category of compliance, coercion was the main sub-category for former LTTE members, whereas charismatic persuasion agents was a more common

reason for former radical Islamists. These findings confirmed that the process of violent radicalization may be not necessarily the same for different types of terrorist groups, and that some members of terrorist groups can commit violent actions without being deeply ideologically radicalized (see also Borum, 2011).

Reasons of defusion from general groups and to abandon violent groups

Chapter 2 analyzed why people defuse from, or leave, important groups for them, and if such reasons might be different depending on the nature of the group. Given that there might be a contrast between what laypeople imagine which would be the possible reasons, and the reasons that had led them to get defused from important groups in the past, the temporal dimension (e.g., imagined reasons for the future vs. real reasons in the past) was considered.

Participants imagined the three main reasons for defusing from a local or an extended group (Study 1), and from an ascribed or a chosen group (Study 2), both in the future. In Study 3, participants justified why they had defused from a group in the past. In Study 4, a group of hooligans imagined reasons for defusing in the future. Finally, former members of LTTE reported the main reason why they, or other former members, had left the group.

As in Chapter 1, we conducted a content analysis to extract the categories, and quantitative analyses for testing differences among such categories depending on the group considered. Four main categories of defusion emerged: *degrading relational ties* (i.e., problematic interpersonal relationships within the group), *degrading collective ties* (i.e., discrepancies to the ideas that represent the group), *random events* (i.e., uncontrollable reasons not related to the group dynamics), and *untenability of defusion* (i.e., the impossibility for feeling less attached or bonded to the group). Degrading relational ties was subdivided into two different subcategories as two different pathways for demeaning such relational ties: *problems among group members* (e.g., bad atmosphere within the group, impossibility of communication or lack of commitment among members) and *problems between the individual and the group* (e.g., feelings of betrayal, lack of support, recognition, or consideration toward the individual).

Results showed that degrading relational ties was more common when imagining future defusion reasons than degrading collective ties. However, when recalling real examples of defusion from the past, people described random (out of control) events in

the same extent as problems within the group (i.e., degradations of relational ties). Results showed that reasons out of control of the participants were underestimated when participants imagined possible reasons of defusion in the future. However, they became crucial when real life examples were scrutinized. For instance, in Study 3 people wrote about “physical distance”, “lack of time”, or “becoming parents”, and in Study 5, former terrorist alluded to circumstances beyond people’s control and unpredictable.

Depending on the nature of the group, certain categories were brought up more often. In Study 1, degrading relational ties and random events were more mentioned by participants thinking in local groups, while the category of degradation of collective ties was more common when people thought in extended groups. In Study 2, the category of untenability of defusion was significantly more referred by participants when they thought in ascribed groups. Riazor Blues members (Study 4) mainly argued reasons related to the degradation of relational ties. This finding was coherent with the reasons argued by these participants when justifying their fusion with the group (see Package 1 in Chapter 1). For members of this hooligan group, family-like feelings, or healthy relationships among ingroup members were important reasons for fusion. Accordingly, the degradation of these ties was important for imaging defusion.

Reducing extreme behavior among fused individuals

The third chapter addressed how to reduce the willingness to fight and die for the group among fused individuals. We analyzed if feeling anger against members of the own country undermined the relationship between identity fusion and the willingness to perform extreme behavior for the country. To do that, an experimental design was employed. Participants were primed with feelings of anger towards ingroup members as compared to a condition where feelings were not activated.

Results showed that, in two studies, strongly fused participants decreased their willingness to fight and die for the country when they felt anger towards Spanish people something that did not happen with weakly fused participants, who expressed the same disposition to extreme behavior when they were angry or not.

There was also evidence that showed that strongly fused participants reduced their feelings of personal agency when anger was primed, but the manipulation of anger did not affect the feelings of personal agency of weakly fused participants. Interestingly, personal agency significantly predicted the willingness to fight and die in the control

condition, but it did not in the anger condition. This finding means that reducing feelings of anger broke the connection between identity fusion and personal agency, between personal agency and extreme behavior, and consequently between identity fusion and the disposition of fused people to fight and die for the group, which is a valuable contribution due to the negative repercussions that identity fusion could have given their relationship with extreme behavior (Wolfowicz et al., 2021).

4.2. Theoretical, methodological, and practical implications

Theoretical implications

The present dissertation aimed to offer an integrative theoretical contribution about the factors implicated in the process of identity (de)fusion with a group, and to explore the underlying mechanisms of identity fusion operating when embracing or abandoning violent groups. We consider that we can extract specific theoretical contributions from the findings of this dissertation.

The inductive analysis of the reasons for getting fused, or defused from a group, supported the group-specificity hypothesis, that is, the processes underlying (de)fusion were not identical for all groups, but showed a relative variation depending on the nature of the group considered. Whereas shared core values were a more important reason for getting fused with extended groups, satisfaction of personal needs was more relevant for fusion with local groups. In the case of defusion, degradation of collective ties was more related to defusion from extended groups whereas degradation of relational ties was more relevant for defusion from local groups. These group-specificity findings might be considered in future research that aims at explaining the causes of this strong alignment with a group or how fused individuals can stop feeling a deep connection with a group. The nature of the ties established with other group members (relational ties) or with the group as whole (collective ties) might be accounting for these differences. Accordingly, when promoting identity fusion or facilitating defusion, the nature of the group should be considered.

However, despite these group-specificity conclusions, the main finding was the consistent identification of relational ties as a mechanism present within both processes of fusion and defusion. This pattern empirically reinforces the theoretical assumption that establishing relational ties with group members is one of the most defining characteristics

of identity fusion. This mechanism was also behind the reasons for joining the group among former members of terrorist groups. In all the studies, our findings confirmed that ingroup-related issues and the typical relational alignment were crucial reasons for the process of identity fusion (see summary of main results in Table 1).

In the first package of Chapter 1, establishing relational ties with group members was referred as an important reason to become more attached to the group. That means that existing trust, honesty, respect, inclusion, and commitment among ingroup members is important for establishing the strong ties that characterized identity fusion. The existence of familial ties or brotherhood tells us about the deep value that ingroup members have for fused individuals. In the second package of Chapter 1, for all former members of terrorist groups, relational identity was an important subcategory within the category of internalization. This means that feelings of deep connection with significant others, or the loss of these bonds, and subsequently search for restoration or establishing new ones, are key factors in the process of radicalization. Specifically, in participants' narratives it was evident that they had lost their past relational ties (e.g., their relatives died) and they searched for new bonds. Additionally, for former Islamist members meeting a charismatic agent was the main reason within the compliance category. The category of relational ties was also remarkable within the process of defusion (Chapter 2). That implies a feeling of rupture with the group due to difficulties in the relationships within the group. Results consistently showed that healthy and strong relational ties with others were vital for embracing new groups, and for remaining in those they were already fused with. We can find examples about the extension of familial ties to extended groups, something characteristic of identity fusion (see Swann, Buhrmester et al., 2014) in hooligans who frequently referred to family-bonds for explaining why they were fused. Their arguments showed the strength and personal meaning that the group and their members had for them.

Other categories were also important but varied depending on the group. Reasons related to sharing symbolic defining characteristics such as ideas, interests, or ideologies were more common among participants thinking in extended groups and extremist or terrorist group members. These abstract bonds can connect people who do not know each other. In the case of terrorist groups, the ideals that connect the group are an essential part of the organization. When reporting real reasons that have led to leave the group, random events was a more common motive for leaving the group. Uncontrollable reasons related to work, lack of time or distance increased their frequency if participants thought in real

events. That means that people tended to overlook motives out of their control, but they are determinant, even for terrorist groups (i.e., LTTE). Finally, some individuals were quite reluctant to abandon groups (e.g., local, ascribed and extremist), they felt unable of even consider defusing. This small but noteworthy result may reflect one of the principles of identity fusion theory, the principle of irrevocability (Swann et al., 2012).

Methodological implications

One of the main contributions of this work was the methodology employed. In Chapters 1 and 2, qualitative and quantitative methods were combined to offer a global and clear vision of the antecedents of fusion, and the triggers of defusion (White, 2000). In Chapter 3, an experimental design was used to test the causality of the processes studied.

In the first two chapters, both, groups and reasons of (de)fusion were not pre-selected by researchers, but freely offered by participants. This approach allowed us to have access to the thoughts and real experiences of laypeople, to gain authenticity and connect with peoples' subjective reality, which was the foundation of our research. This inductive approach was reinforced by a deductive analysis taking as basis the theory of identity fusion, other intergroup theories, and attitude-change literature. Reasons and categories extracted were coherent with previous scientific literature.

Qualitative methods allowed us to learn about what people were thinking when facing the possibility of (de)fusion, whereas quantitative methods made possible to compare categories and to test differences depending on the group considered. The inclusion of different samples varying in extremism from normalized people to former terrorists and with different type of radicalization reinforced the evidence collected.

Practical implications

The psychosocial processes underlying the reasons extracted spontaneously from the participants might be useful for promoting social cohesion and well-being and for preventing radicalization in particular. Strengthening relational ties, promoting shared experiences, and guaranteeing the satisfaction of personal needs would be especially important for creating "healthy" groups where people know each other (i.e., local groups). However, standing out shared values will be the appropriate means for enhancing the

compromise with beneficial extended groups (e.g., a collective movement for rights). Some of the findings can also be useful as tools for deradicalization and diminishing violence. Making evident betrayal or doubts about questionable behaviors that might be infringing group principles might be a pathway to initiate the process of defusion (e.g., Yousef, 2011). Putting distance between the group and the individual can also contribute to the process, as random events seem to have a central role in real process of deradicalization (e.g., Cronin, 2009).

Many of these factors have been already implemented in government programs aimed to prevent radicalization or reintegrating former fighters. Social programs focused on different issues (i.e., inclusion, social cohesion, integration, or prevention) are implicitly composed of activities or workshops whose objectives are related to the categories found in these studies. For instance, in a rehabilitation program in Sri Lanka, the module “Psychosocial rehabilitation” focuses on enhancing interpersonal interaction to contribute to expanding participants’ skills in engaging with people at a social and community level (“6 + 1 model”, Hettiarachchi, 2013). We can infer that the underlying process of this practice might be increasing relational ties at a social and community level. The identification of these factors together allows us to design interventions where different strategies might work synergistically. Designing holistic programs that consider both, the specific nature of the groups, and the underlying processes that can increase and decrease fusion, can increase the effectiveness of such programs.

4.3. Limitations and future lines of research

The studies conducted in this dissertation are not free of limitations. The qualitative approach and the inductive process applied in the content analysis aimed at capturing how people think spontaneously about groups. However, we should clarify that this subjectivity might not be confused with reality. We found that reasons imagined for defusion in the future were different from those argued when talking about real experiences of defusion. People interpreted their own reasons and possibilities, and we should accept that these results reflect that subjectivity but not reality.

Another limitation was related to the interpretation of brief texts, and the difficulty of working with mutual exclusive categories. Sometimes, the text was not extensive enough and has limited content to adequately interpret the meaning of the category. The inter-rated judgment helped to solve some of these problems. However, future studies

should use deep interviews or focus groups to capture the authentic content and meaning of reasons for (de)fusion.

We also faced some specific difficulties in the studies carried out with former LTTE members and Islamist radical groups. On the one hand, the methodology employed was not identical for both groups. Accordingly, their responses could not be completely comparable. On the other hand, former terrorists may be concerned with presenting themselves in a favorable light, which raises doubts about the validity of their reports. Finally, results showed that the type of radicalization might be an important factor to understand the processes under study. Therefore, future studies should use the same methodology to collect data and find differences. Developing a validated scale based on previous categories would contribute comparing the responses of participant free of interpretations and subjectivity and regardless of the nature of the group, different temporal moments, or different radicalization levels.

Another set of limitations comprises the manipulation used in Chapter 3, which did not elicit only anger-specific feelings. Although the manipulation checks evidenced that participants felt angrier in the anger condition than in the control condition, we cannot be sure that the effect found was due exclusively to feelings of anger. In future studies, we should include experimental conditions with other emotions to compare the results.

4.4. Conclusions

This thesis provides a general and integral representation of why people might fuse with, and defuse from groups, and why people can embrace and abandon groups. Across the first two chapters, we showed different mechanisms for this. In addition, in the third chapter, we proposed a new way to diminish the harmful behavior that fused people are willing to display for their groups: feelings of anger towards ingroup members. Altogether, we consider that these findings are valuable and useful to advance our knowledge not only about identity fusion, but also about the processes of violent radicalization and de-radicalization. We have implemented a methodology able to capture people's voices, sensitive to the subjectivity of human beings. We hope that these findings could be implemented for promoting new models of social cohesion in a challenging age.

4.5. Conclusiones en castellano

Esta tesis ofrece una imagen general e integral de las razones que motivan a las personas a fusionarse y defusionarse de sus grupos, así como abrazar y abandonar determinados grupos extremistas. En los primeros dos capítulos se ponen de manifiesto diferentes mecanismos que facilitan estos procesos. En el tercer capítulo se propuso una nueva forma de disminuir el comportamiento extremo, en ocasiones perjudicial, que los fusionados están dispuestos a realizar en nombre de su grupo, a través de la inducción del sentimiento de ira hacia los miembros del endogrupo. En conjunto, consideramos que nuestros resultados son valiosos y útiles para avanzar el conocimiento, no solo sobre la fusión de la identidad, sino también sobre los procesos de radicalización y desradicalización violenta. Por otro lado, se utilizó una metodología capaz de captar la voz de las personas y sensible a la subjetividad del ser humano, no muy extendida en la literatura previa. Esperamos que estos hallazgos puedan contribuir a fines aplicados que persigan promover nuevos modelos de cohesión social en la desafiante era en la que vivimos.

References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
[https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Ali, R. B. M., Moss, S. A., Barrelle, K., & Lentini, P. (2017). Does the pursuit of meaning explain the initiation, escalation, and disengagement of violent extremists? *Aggression and Violent Behavior*, 34, 185-192.
<https://doi.org/10.1016/j.avb.2017.01.013>
- Altier, M. B., Thoroughgood, C. N., & Horgan, J. G. (2014). Turning away from terrorism: Lessons from psychology, sociology, and criminology. *Journal of Peace Research*, 51(5), 647-661. <https://doi.org/10.1177/0022343314535946>
- Atran, S. (2010). *Talking to the Enemy: Faith, Brotherhood and the (un)Making of Terrorists*. Harper Collins Publishers.
- Atran, S. (2020). Psychology of transnational terrorism and extreme political conflict. *Annual Review of Psychology*, 72, 471-501. [https://doi: 10.1146/annurev-psych-010419-050800](https://doi:10.1146/annurev-psych-010419-050800)
- Atran, S., Sheikh, H., & Gómez, Á. (2014). For cause and comrade: Devoted actors and willingness to fight. *Cliodynamics*, 5(1).
<https://doi.org/10.21237/C7clio5124900>
- Averill, J. R. (1983). Studies on anger and aggression: Implications for theories of emotion. *American Psychologist*, 38(11), 1145–1160.
<https://doi.org/10.1037/0003-066X.38.11.1145>.

- Bagozzi, R. P., & Lee, K. H. (2002). Multiple routes for social influence: The role of compliance, internalization, and social identity. *Social Psychology Quarterly*, 65(3), 226–247. [https://doi: 10.2307/3090121](https://doi.org/10.2307/3090121)
- Bakker, E. (2015). *Terrorism and Counterterrorism Studies. Comparing Theory and Practice*. Leiden University Press.
- Batson, C. D., Kennedy, C. L., Nord, L. A., Stocks, E. L., Fleming, D. Y. A., Marzette, C. M., ... & Zerger, T. (2007). Anger at unfairness: Is it moral outrage?. *European Journal of Social Psychology*, 37(6), 1272-1285. <https://doi.org/10.1002/ejsp.434>
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497-529. <https://doi.org/10.1016/j.avb.2017.01.013>
- Becker, J. (2010). Child recruitment in Burma, Sri Lanka, and Nepal. In S. Gates and S. Reich (Eds.), *Child soldiers in the age of fractured states* (pp. 108–120). University of Pittsburgh Press. [https://doi: 10.2307/j.ctt5vkgp3](https://doi.org/10.2307/j.ctt5vkgp3)
- Bélanger, J. J., Moyano, M., Muhammad, H., Richardson, L., Lafrenière, M. A. K., McCaffery, P., et al. (2019). Radicalization leading to violence: A test of the 3N model. *Frontiers in Psychiatry*, 10, 42. [https://doi: 10.3389/fpsyt.2019.00042](https://doi.org/10.3389/fpsyt.2019.00042)
- Bélanger, J. J., Nisa, C. F., Schumpe, B. M., Gurmu, T., Williams, M. J., & Putra, I. E. (2020). Do counter-narratives reduce support for ISIS? Yes, but not for their target audience. *Frontiers in Psychology*, 11, 1059. [https://doi: 10.3389/fpsyg.2020.01059](https://doi.org/10.3389/fpsyg.2020.01059)
- Berger, J. M. (2015). Tailored online interventions: the Islamic State's recruitment strategy. *CTC Sentinel* 10(8), 19–23.

- Besta, T., Kaźmierczak, M., & Błażek, M. (2013). Identity fusion and status of the evaluator as moderators of self-enhancement and self-verification at the group level of self-description. *Polish Psychological Bulletin, 44*(4), 371-378. yada: bwmeta1.element.desklight-c2a7aa97-1d85-43c1-963d-d4bb4398d646
- Besta, T., Mattingly, B., & Błażek, M. (2016). When membership gives strength to act: Inclusion of the group into the self and feeling of personal agency. *The Journal of Social Psychology, 156*(1), 56-73.
<https://doi.org/10.1080/00224545.2015.1053838>
- Bjørgero, T. (2011). Dreams and disillusionment: Engagement in and disengagement from militant extremist groups. *Crime, Law and Social Change, 55*(4), 277-285. <https://doi:10.1007/s10611-011-9282-9>
- Bjørgero, T., & Horgan, J. (Eds.). (2009). *Leaving terrorism behind: Individual and collective disengagement*. Routledge.
- Borum, R. (2011). Radicalization into violent extremism I: A review of social science theories. *Journal of Strategic Security, 4*(4), 7-36. <https://doi: 10.5038/1944-0472.4.4.1>
- Buhrmester, M. D., Fraser, W. T., Lanman, J. A., Whitehouse, H., & Swann, W. B. (2015). When terror hits home: Identity fused Americans who saw Boston bombing victims as “family” provided aid. *Self and Identity, 14*(3), 253-270.
<https://doi.org/10.1080/15298868.2014.992465>
- Byrne, D., Gouaux, C., Griffitt, W., Lamberth, J., Murakawa, N. B. P. M., Prasad, M., ... & Ramirez III, M. (1971). The ubiquitous relationship: Attitude similarity and attraction: A cross-cultural study. *Human Relations, 24*(3), 201-207.
<https://doi.org/10.1177/001872677102400302>

- Campana, A., & Lapointe, L. (2012). The structural “root” causes of non-suicide terrorism: A systematic scoping review. *Terrorism and Political Violence, 24*(1), 79-104. <https://doi: 10.1080/09546553.2011.611547>
- Carver, C. S., & Harmon-Jones, E. (2009). Anger is an approach-related affect: Evidence and implications. *Psychological Bulletin, 135*, 183–204. <https://doi:10.1037/a0013965>
- CISAC (n.d.) *Center for International Security and Cooperation*. Available online at: <https://cisac.fsi.stanford.edu/mappingmilitants/profiles/liberation-tigers-tamil-elam>
- Chernov-Hwang, J., & Schulze, K. E. (2018). Why they join: Pathways into Indonesian Jihadist organizations. *Terrorism and Political Violence, 30*, 911–932. <https://doi: 10.1080/09546553.2018.1481309>
- Christensen, J. F., Di Costa, S., Beck, B., & Haggard, P. (2019). I just lost it! Fear and anger reduce the sense of agency: A study using intentional binding. *Experimental Brain Research, 237*(5), 1205-1212. <https://doi.org/10.1007/s00221-018-5461-6>
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98*(2), 310. <https://doi.org/10.1037/0033-2909.98.2.310>
- Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology, 58*(4), 644-663. <https://doi.org/10.1037/0022-3514.58.4.644>
- Correll, J., & Park, B. (2005). A model of the ingroup as a social resource. *Personality and Social Psychology Review, 9*(4), 341-359. https://doi.org/10.1207/s15327957pspr0904_4

- Cottee, S., & Hayward, K. (2011). Terrorist (e)motives: The existential attractions of terrorism. *Studies in Conflict & Terrorism*, 34(12), 963-986. [https://doi: 10.1080/1057610X.2011.621116](https://doi.org/10.1080/1057610X.2011.621116)
- Cronin, A. K. (2009). *How terrorism ends*. Princeton University Press.
- Dawson, L. L. (2019). Taking terrorist accounts of their motivation seriously: An exploration of the hermeneutics of suspicion. *Perspectives in Terrorism*, 13(5), 74–89. [https://doi: 10.2307/26798579](https://doi.org/10.2307/26798579)
- Dawson, L. L., & Amarasingam, A. (2017). Talking to foreign fighters: Insights into the motivations for Hijrah to Syria and Iraq. *Studies in Conflict & Terrorism*, 40(3), 191-210. [https://doi: 10.1080/1057610X.2016.1274216](https://doi.org/10.1080/1057610X.2016.1274216)
- Deaux, K., & Martin, D. (2003). Interpersonal networks and social categories: Specifying levels of context in identity processes. *Social Psychology Quarterly*, 66(2)101-117. <https://doi.org/10.2307/1519842>
- Decker, S. H., & Pyrooz, D. C. (2011). Gangs, terrorism, and radicalization. *Journal of Strategic Security*, 4(4), 151-166 [https://doi: 10.5038/1944-0472.4.4.7](https://doi.org/10.5038/1944-0472.4.4.7)
- Denson, T. F., Lickel, B., Curtis, M., Stenstrom, D. M., & Ames, D. R. (2006). The roles of entitativity and essentiality in judgments of collective responsibility. *Group Processes & Intergroup Relations*, 9(1), 43-61. <https://doi.org/10.1177/1368430206059857>
- Dukes, D., Abrams, K., Adolphs, R., Ahmed, M. E., Beatty, A., Berridge, K. C., ... & Sander, D. (2021). The rise of affectivism. *Nature Human Behaviour*. 1(5), 816-820. <https://doi.org/10.1038/s41562-021-01130-8>
- Easterbrook, M., & Vignoles, V. L. (2013). What does it mean to belong? Interpersonal bonds and intragroup similarities as predictors of felt belonging in different

- types of groups. *European Journal of Social Psychology*, 43(6), 455-462.
<https://doi.org/10.1002/ejsp.1972>
- Ebaugh, H. R., & Ebaugh, H. R. F. (1988). *Becoming an ex: The process of role exit*. Chicago University of Chicago Press.
- Ferguson, N., & McAuley, J. W. (2020). Staying engaged in terrorism: Narrative accounts of sustaining participation in violent extremism. *Frontiers in Psychology*, 11, 1338. <https://doi.org/10.3389/fpsyg.2020.01338>
- Fischer, A., & Roseman, I. J. (2007). Beat them or ban them: The characteristics and social functions of anger and contempt. *Journal of Personality and Social Psychology*, 93(1), 103–115. doi:10.1037/0022-3514.93.1.103
- Forsyth, D. R. (2006). *Group Dynamics* (5th ed.). Wadsworth Cengage Learning Belmont.
- Gaviria, E., Ferreira, C., Martínez, M., & Whitehouse, H. (2015). Identity and the developmental origins of fusion: An exploratory approach. *International Journal of Social Psychology*, 30(3), 531–562.
<https://doi.org/10.1080/02134748.2015.10650088>
- Gendron, A. (2017). The call to Jihad: Charismatic leaders and the Internet. *Studies in Conflict & Terrorism*, 40(1), 44-61. <https://doi.org/10.1080/1057610X.2016.1157046>
- Ginges, J., Hansen, I., & Norenzayan, A. (2009). Religion and support for suicide attacks. *Psychological Science*, 20(2), 224-230. <https://doi.org/10.1111/j.1467-9280.2009.02270.x>
- Global Counterterrorism Forum, (n.d.). *GTCTF Portal*. Available online at:
<http://www.thegctf.org/>

- Gómez, Á., Bélanger, J. J., Chinchilla, J., Vázquez, A., Schumpe, B. M., Nisa, C. F., & Chiclana, S. (2021). Admiration for Islamist groups encourages self-sacrifice through identity fusion. *Humanities and Social Sciences Communications*, 8(1), 1-12. <https://doi.org/10.1057/s41599-021-00734-9>
- Gómez, A., Brooks, M. L., Buhrmester, M. D., Vázquez, A., Jetten, J., & Swann Jr, W. B. (2011). On the nature of identity fusion: Insights into the construct and a new measure. *Journal of Personality and Social Psychology*, 100(5), 918-933. <https://doi.org/10.1037/a0022642>
- Gómez, A., Chinchilla, J., Vázquez, A., López-Rodríguez, L., Paredes, B., & Martínez, M. (2020). Recent advances, misconceptions, untested assumptions, and future research agenda for identity fusion theory. *Social and Personality Psychology Compass*, 14(6), e12531. <https://doi.org/10.1111/spc3.12531>
- Gómez, Á., López-Rodríguez, L., Sheikh, H., Ginges, J., Wilson, L., Waziri, H., ... & Atran, S. (2017). The devoted actor's will to fight and the spiritual dimension of human conflict. *Nature Human Behaviour*, 1(9), 673-679. <https://doi.org/10.1038/s41562-017-0193-3>
- Gómez, Á., Martínez, M., Martel, F. A., López-Rodríguez, L., Vázquez, A., Chinchilla, J., ... & Swann, W. B. (2021). Why people enter and embrace violent groups. *Frontiers in Psychology*, 11, 3823. <https://doi.org/10.3389/fpsyg.2020.614657>
- Gómez Á, Morales JF, Hart S, Vázquez A, Swann WB (2011) Rejected and excluded forevermore, but even more devoted. *Personality and Social Psychology Bulletin*, 37(12), 1574–1586. <https://doi.org/10.1177/0146167211424580>

- Gómez, A., & Vázquez, A. (2015). The power of 'feeling one' with a group: Identity fusion and extreme pro-group behaviors. *International Journal of Social Psychology, 30*(3), 481–511. <https://doi.org/10.1080/02134748.2015.1065089>
- Gómez, A., Vázquez, A., López-Rodríguez, L., Talaifar, S., Martínez, M., Buhrmester, M. D., & Swann, W. B., Jr. (2019). Why people abandon groups: Degrading relational vs. collective ties uniquely impacts identity fusion and identification. *Journal of Experimental Social Psychology, 85*, 103853. <https://doi.org/10.1016/j.jesp.2019.103853>
- GTI (2017) *Global Terrorism Index* . Available online at: <https://reliefweb.int/sites/reliefweb.int/files/resources/Global%20Terrorism%20Index%202017%20%284%29.pdf>
- 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:10.1080/1057610X.2015.1051375>
- Halperin, E. (2015). *Emotions in conflict: Inhibitors and facilitators of peace making*. Routledge.
- Hamid, N., Pretus, C., Atran, S., Crockett, M. J., Ginges, J., Sheikh, H., et al. (2019). Neuroimaging 'will to fight' for sacred values: An empirical case study with supporters of an Al Qaeda associate. *Royal Society Open Science, 6*(6), 181585. <https://doi:10.1098/rsos.181585>
- Hardin, C. D., & Higgins, E. T. (1996). Shared reality: How social verification makes the subjective objective. In R. M. Sorrentino and E. T. Higgins (Eds.), *Handbook of motivation and cognition* (pp. 28–84) Guilford Press.

- Hayes, A. F. (2018). Partial, conditional, and moderated mediation: Quantification, inference, and interpretation. *Communication Monographs*, 85(1), 4-40.
<https://doi.org/10.1080/03637751.2017.1352100>
- Hettiarachchi, M. (2015). Sri Lanka's rehabilitation program: The humanitarian mission two. In R. Gunaratna, & M. Bin Ali (Eds.) *Terrorist rehabilitation: A new frontier in counterterrorism* (pp. 103-131). Imperial College Press
- Holmes, J. G., & Rempel, J. K. (1989). Trust in close relationships. In C. Hendrick (Ed.), *Close relationships* (pp. 187–220). Sage Publications, Inc.
- Hopgood, S. (2005). Tamil Tigers, 1987–2002, In D. Gambeta (Ed.), *Making sense of suicide missions*, (pp. 43-77) Oxford University Press.
- Horgan, J. (2005). The social and psychological characteristics of terrorism and terrorists. In T Bjorgo (Ed.), *Root causes of terrorism: Myths, reality and ways forward* (pp. 44–53). Routledge.
https://doi:10.4324/9780203337653_chapter_4
- Horgan, J. (2008). Deradicalization or disengagement? *Perspectives on Terrorism*, 2(4), 3-8. <http://www.jstor.org/stable/26298340>.
- Horgan, J. (2012). Interviewing the terrorists: Reflections on fieldwork and implications for psychological research. *Sciences of Terrorism and Political Aggression*, 4(3), 195-211. <https://doi:10.1080/19434472.2011.594620>
- Horgan, J. (2014). *The Psychology of Terrorism*. Routledge.
- Horowitz, M. (2015). The rise and spread of suicide bombing. *Annual Review of Political Science*, 18, 69-84. [https://doi: 10.1146/annurev-polisci-062813-051049](https://doi:10.1146/annurev-polisci-062813-051049)

- Hwang, J. C., & Schulze, K. E. (2018). Why they join: Pathways into Indonesian Jihadist organizations. *Terrorism and Political Violence*, 30(6), 911-932.
<https://doi:10.1080/09546553.2018.1481309>
- Jong, J., Whitehouse, H., Kavanagh, C., & Lane, J. (2015). Shared negative experiences lead to identity fusion via reflection. *PLoS One*, 10(12), e0145611.
<https://doi.org/10.1371/journal.pone.0145611>
- Kavanagh, C. M., Kapitány, R., Putra, I. E., & Whitehouse, H. (2020). Exploring the pathways between transformative group experiences and identity fusion. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.01172>
- Kelman, H. C. (1952). Two phases of behavior change. *Journal of Social Issues*, 8(2), 81–88 <https://doi:10.1111/j.1540-4560.1952.tb01607.x>
- Kelman, H. C. (1958). Compliance, identification, and internalization: Three processes of attitude change. *Journal of Conflict Resolution* 2(1), 51–60.
<https://doi:10.1177/002200275800200106>
- Knijnik, & Newson, (2020). ‘Tribalism’, identity fusion and football fandom in Australia: The case of Western Sydney. *Soccer & Society*, 3(22) 248-265.
<https://doi.org/10.1080/14660970.2020.1802254>
- Kruglanski, A. W., Bélanger, J., & Gunaratna, R. (2019). The three pillars of radicalization: Needs, narratives and networks. Oxford University Press.
<https://doi.org/10.1093/oso/9780190851125.001.0001>
- Kruglanski, A. W., & Fishman, S. (2009). Psychological factors in terrorism and counterterrorism: Individual, group, and organizational levels of analysis. *Soc. Issues in Policy Review*, 3(1), 1–44. <https://doi:10.1111/j.1751-2409.2009.01009.x>

- Kruglanski, A. W., Jasko, K., Webber, D., Chernikova, M., & Molinario, E. (2018). The making of violent extremists. *Review in General Psychology*, 22(1), 107–120.
<https://doi:10.1037/gpr0000144>
- Kruglanski, A. W., & Orehek, E. (2011). The role of the quest for personal significance in motivating terrorism. In J. Forgas, A. Kruglanski, & K. Williams (Eds.), *The Psychology of social conflict and aggression*, (pp. 153–166) Psychology Press.
- Kruglova, A. (2020). I will tell you a story about Jihad”: ISIS’s propaganda and narrative advertising. *Studies in Conflict & Terrorism*, 44(2), 115-137.
[https://doi: 10.1080/1057610X.2020.1799519](https://doi:10.1080/1057610X.2020.1799519)
- Kunst, J. R., Boos, B., Kimel, S. Y., Obaidi, M., Shani, M., & Thomsen, L. (2018). Engaging in extreme activism in support of others’ political struggles: The role of politically motivated fusion with out-groups. *PLoS One*, 13, e0190639.
<https://doi:10.1371/journal.pone.0190639>
- Lazarus, R. S. (1991). Progress on a cognitive-motivational-relational theory of emotion. *American Psychologist*, 46(8), 819. <https://doi.org/10.1037/0003-066X.46.8.819>
- Leach, C. W., Iyer, A., & Pedersen, A. (2006). Anger and guilt about ingroup advantage explain the willingness for political action. *Personality and Social Psychology Bulletin*, 32(9), 1232-1245. <https://doi.org/10.1177/0146167206289729>
- Lerner, J. S., Li, Y., Valdesolo, P., & Kassam, K. S. (2015). Emotion and decision making. *Annual Review of Psychology*, 66, 799-823.
<https://doi.org/10.1146/annurev-psych-010213-115043>
- Lewin, K. (1948). *Resolving social conflicts*. Harper & Row

- Lobato, R. M., Moyano, M., Bélanger, J. J., & Trujillo, H. M. (2020). The role of vulnerable environments in support for homegrown terrorism: Fieldwork using the 3N model. *Aggressive Behavior*, *47*(1), 50-57. <https://doi.org/10.1002/ab.21933>
- Lott, A. J., & Lott, B. E. (1965). Group cohesiveness as interpersonal attraction: A review of relationships with antecedent and consequent variables. *Psychological Bulletin*, *64*(4), 259-309. <https://doi.org/10.1037/h0022386>
- 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>
- Mackie, D. M., Devos, T., & Smith, E. R. (2000). Intergroup emotions: Explaining offensive action tendencies in an intergroup context. *Journal of Personality and Social Psychology*, *79*(4), 602-616. doi.org/10.1037/0022-3514.79.4.602
- Marques, J. M., Yzerbyt, V. Y., & Leyens, J. P. (1988). The “black sheep effect”: Extremity of judgments towards ingroup members as a function of group identification. *European Journal of Social Psychology*, *18*(1), 1-16. <https://doi.org/10.1002/ejsp.2420180102>
- Maslow, A. (1968). Some educational implications of the humanistic psychologies. *Harvard Educational Review*, *38*(4), 685-696. <https://doi.org/10.17763/haer.38.4.j07288786v86w660>
- Miles, M. B., Huberman, M., & Saldaña, J. (2019). *Qualitative data analysis: A methods sourcebook*, Fourth Edn. Sage.
- Mischel, W. (1968). *Personality and Assessment*. Hoboken, NJ: Wiley.
- Moghaddam, F. M. (2005). The staircase to terrorism: A psychological exploration. *American Psychology* *60*(2), 161–169. <https://doi.org/10.1037/0003-066X.60.2.161>

- 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>
- Muzzulini, B.; van Mulukom, V.; Kapitany, R., & Whitehouse, H. (2021). Shared flashbulb memories lead to identity fusion: Recalling the defeat in the Brexit referendum produces strong psychological bonds among remain supporters. *PsyArXiv*. <https://doi.org/10.31234/osf.io/yc25g>
- National Academies of Sciences Engineering and Medicine (2017). Countering violent extremism through public health practice. *Proceedings of a workshop. National academies of sciences engineering and medicine, NASEM*, Washington, DC.
<https://doi:10.17226/24638>
- Neumann, P., & Kleinmann, S. (2013). How rigorous is radicalization research? *Democracy and Security* *9*(4), 360–382. <https://doi:10.1080/17419166.2013.802984>
- Newman, E. (2006). Exploring the “root causes” of terrorism. *Studies in Conflict & Terrorism*, *29*(8), 749–772. <https://doi:10.1080/10576100600704069>
- Newson, M., Buhrmester, M., & Whitehouse, H. (2021). United in defeat: Shared suffering and group bonding among football fans. *Managing Sport and Leisure*, 1-18. <https://doi.org/10.1080/23750472.2020.1866650>
- Newson, M., Shiramizu, V., Buhrmester, M., Hattori, W., Jong, J., Yamamoto, E., & Whitehouse, H. (2020). Devoted fans release more cortisol when watching live soccer matches. *Stress and Health*, *36*(2), 220-227.
<https://doi.org/10.1002/smi.2924>

- Nilsson, M. (2018). Interviewing Jihadists: On the importance of drinking tea and other methodological considerations. *Studies in Conflict & Terrorism*, *41*(6), 419–432. <https://doi:10.1080/1057610X.2017.1325649>
- Noricks, D. M. E. (2009). The root causes of terrorism, In P. K. Davis & K. Cragin (Eds.), *Social science for counterterrorism: Putting the pieces together*, (pp. 11–70) RAND Corporation.
- Oatley, K., & Jenkins, J. M. (1996). *Understanding emotions*. Blackwell Publishers.
- Sacchi, S., Castano, E., & Brauer, M. (2009). Perceiving one's nation: Entitativity, agency and security in the international arena. *International Journal of Psychology*, *44*(5), 321-332. <https://doi.org/10.1080/00207590802236233>
- Serpe, R. T., & Stryker, S. (2011). The symbolic interactionist perspective on identity theory. In S. J. Schwartz, K. Luyckx, & V. L. Vignoles (Eds.), *Handbook of identity theory and research* (pp. 225–248). Springer.
- Sinai, J. (2018). Global Terrorism Index 2017: Measuring and Understanding the Impact of Terrorism [IEP Report 55].
- Smith, E. R. (1993). Social identity and social emotions: Toward new conceptualizations of prejudice. In D. M. Mackie & D. L. Hamilton (Eds.), *Affect, cognition, and stereotyping: Interactive processes in group perception* (pp. 297–315). Academic Press
- Smith, E. R., Seger, C. R., & Mackie, D. M. (2007). Can emotions be truly group level? Evidence regarding four conceptual criteria. *Journal of Personality and Social Psychology*, *93*(3), 431-446. <https://doi.org/10.1037/0022-3514.93.3.431>
- Páez, D., Rimé, B., Basabe, N., Wlodarcsyk, A., & Zumeta, L. (2015). Psychological effects of perceived synchrony in collective gatherings. *Journal of Personality and Social Psychology*, *108*(5), 711–729. <https://doi.org/10.1037/pspi0000014>

- Paredes, B., Briñol, P., & Gómez, Á. (2018). Identity fusion leads to willingness to fight and die for the group: The moderating impact of being informed of the reasons behind other members' sacrifice. *Self and Identity, 17*(5), 517-530.
<https://doi.org/10.1080/15298868.2017.1419503>
- Pisoui, D., & Ahmed, R. (2016). *Radicalisation Research-gap Analysis. Radicalization Awareness Network, RAN*. Available online at: https://ec.europa.eu/home-affairs/sites/homeaffairs/files/docs/pages/201612_radicalisation_research_gap_analysis_en.pdf (accessed November 26, 2020).
- Prentice, D. A., Miller, D. T., & Lightdale, J. R. (1994). Asymmetries in attachments to groups and to their members: Distinguishing between common-identity and common-bond groups. *Personality and Social Psychology Bulletin, 20*(5), 484-493. <https://doi.org/10.1177/0146167294205005>
- Pretus, C., Hamid, N., Sheikh, H., Gómez, Á, Ginges, J., Tobeña, A., et al. (2019). Ventromedial and dorsolateral prefrontal interactions underlie will to fight and die for a cause. *Social Cognitive and Affective Neuroscience, 14*(6), 569–577.
<https://doi:10.1093/scan/nsz034>
- Price, B. C. (2012). Targeting top terrorists. How leadership decapitation contributes to counterterrorism. *International Security, 36*(4), 9–46. https://doi:10.1162/isec_a_00075
- Ramesh, R. (2004). *Tamil Tigers Still Enlisting Thousands of Child Soldiers. The Guardian*. Available online at: <https://www.theguardian.com/world/2004/nov/12/srilanka> (accessed November 12, 2004).
- RAND (2016) *Annual Report*. Available online at: https://www.rand.org/pubs/corporate_pubs/CP1-2016.html. (accessed December 28, 2021)

- RAN (2019). *Preventing Radicalisation to Terrorism and Violent Extremism. Delivering Counter or Alternative Narratives. Radicalisation Awareness Network, RAN*. Available online at: https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/networks/radicalisation_awareness_network/ran-best-practices/docs/delivering_alternative_narratives_en.pdf (accessed November 26, 2020).
- Rapoport, D. C. (2004). The four waves of modern terrorism. In A. K. Cronin (Ed.), *Attacking terrorism: Elements of a grand strategy* (pp. 46–73). Georgetown University Press.
- Reese, E., & Whitehouse, H. (2021). The development of identity fusion. *Perspectives on Psychological Science, 16*(6), 1398-1411.
<https://doi.org/10.1177/1745691620968761>
- Rokeach, M. (1960). *The open and closed mind*. Basic Books.
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology, 25*(1), 54-67. <https://doi.org/10.1006/ceps.1999.1020>
- Saarni, C., Campos, J. J., Camras, L. A., & Witherington, D. (2006). Emotional development: Action, communication, and understanding. In N. Eisenberg, W. Damon, & R. M. Lerner (Eds.), *Handbook of child psychology: Social, emotional, and personality development* (pp. 226–299). John Wiley & Sons, Inc.
- Sageman, M. (2004). *Understanding Terrorist Networks*. University of Philadelphia Press.
- Sageman, M. (2008). The next generation of terror. *Foreign Policy 165*, 37–42.
- Saldaña, J. (2013). *The Coding Manual for Qualitative Researcher*, 2nd Edn. Sage.

- Sánchez-Cuenca, I., & de la Calle, L. (2009). Domestic terrorism: The hidden side of political violence. *Annual Review in Political Sciences*, 12, 31–49. [https://doi: 10.1146/annurev.polisci.12.031607.094133](https://doi.org/10.1146/annurev.polisci.12.031607.094133)
- Schuurman, B. (2018). Research on terrorism, 2007-2016: A review of data, methods, and authorship. *Terrorism Political Violence*, 32(5), 1011–1026. [https://doi: 10.1080/09546553.2018.1439023](https://doi.org/10.1080/09546553.2018.1439023)
- Scull, N. C., Alkhadher, O., & Alawadi, S. (2020). Why people join terrorist groups in Kuwait: A qualitative examination. *Political Psychology*, 2(41), 231–247. [https://doi:10.1111/pops.12622](https://doi.org/10.1111/pops.12622)
- Shuman, E., Halperin, E., & Reifen Tagar, M. (2018). Anger as a catalyst for change? Incremental beliefs and anger's constructive effects in conflict. *Group Processes & Intergroup Relations*, 21(7), 1092-1106. <https://doi.org/10.1177/1368430217695442>
- Silva, J. R., Da Silva, R., Fernández-Navarro, P., Rosa, C., & Gonçalves, M. M. (2020). Understanding Extreme Violent Behavior in Ultra Firms: Exploring Identity Fusion from a Dialogical Perspective. *Journal of Constructivist Psychology*, 33(3), 263-278. <https://doi.org/10.1080/10720537.2019.1676342>
- Spaaij, R., & Viñas, C. (2005). Passion, politics and violence: A socio-historical analysis of Spanish ultras. *Soccer & Society*, 6(1), 79-96. <https://doi.org/10.1080/1466097052000337034>
- Speckhard, A. (2015). Female Terrorists in ISIS, al Qaeda and 21rst Century Terrorism. Trends Research: Inside the Mind of a Jihadist. Available online at: <https://trendsresearch.org/wp-content/uploads/2020/01/Female-Terrorists-in-ISISal-Qaeda-and-21rst-Century-Terrorism-Dr.-Anne-Speckhard.pdf>

- Swann, W. B., Buhrmester, M. D., Gómez, A., Jetten, J., Bastian, B., Vázquez, A., ... & Zhang, A. (2014). What makes a group worth dying for? Identity fusion fosters perception of familial ties, promoting self-sacrifice. *Journal of Personality and Social Psychology, 106*(6), 912-926. <https://doi.org/10.1037/a0036089>
- Swann, W. B., Gómez, A., Buhrmester, M. D., López-Rodríguez, L., Jiménez, J., & Vázquez, A. (2014). Contemplating the ultimate sacrifice: Identity fusion channels pro-group affect, cognition, and moral decision making. *Journal of Personality and Social Psychology, 106*(5), 713-727. <https://doi.org/10.1037/a0035809>
- Swann, W. B., Gómez, A., Huici, C., Morales, J., & Hixon, J. G. (2010). Identity fusion and self-sacrifice: Arousal as a catalyst of pro-group fighting, dying, and helping behavior. *Journal of Personality and Social Psychology, 99*(5), 824-841. <https://doi.org/10.1037/a0020014>
- Swann, W. B., Gómez, A., Seyle, D. C., Morales, J. F., & Huici, C. (2009). Identity fusion: The interplay of personal and social identities in extreme group behavior. *Journal of Personality and Social Psychology, 96*(5), 995-1011. <https://doi.org/10.1037/a0013668>
- Swann, W. B., Jetten, J., Gómez, A., Whitehouse, H., & Bastian, B. (2012). When group membership gets personal: A theory of identity fusion. *Psychological Review, 119*(3), 441-456. <https://doi.org/10.1037/a0028589>
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33-47). Brooks-Cole.

- Tasuji, T., Reese, E., van Mulukom, V., & Whitehouse, H. (2020). Band of mothers: Childbirth as a female bonding experience. *PloS one*, *15*(10), e0240175.
<https://doi.org/10.1371/journal.pone.0240175>
- The Guardian (2014, December 1). *Death of Jimmy Romero shows Spanish football still fighting to end fan violence*.
<https://www.theguardian.com/football/blog/2014/dec/01/death-jimmy-romero-spanish-football-violence>
- Turner, J. C. (1982). Towards a cognitive redefinition of the social group. In H. Tajfel (Ed.), *Social identity and intergroup relations* (pp. 15–40). Cambridge University Press.
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. Blackwell.
- United Nations (2006). UN Global Counter-Terrorism Strategy, Available online at:
https://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/60/288
(accessed June 10, 2021).
- United Nations (2021). UN Global Counter-Terrorism Strategy, Available online at:
https://www.un.org/counterterrorism/sites/www.un.org.counterterrorism/files/2021/04/2021_usg_remarks_osce_ct_conference.pdf (accessed April 20, 2021).
- United Nations (2021). UN Global Counter-Terrorism Strategy, Available online at:
<https://undocs.org/pdf?symbol=en/A/RES/75/291> (accessed December 28, 2021)
- United Nations (n. d.). *Peace, dignity and equality on a healthy planet*. Available online at: <https://www.un.org/en/global-issues> (accessed December, 28, 2021)
- UNODC (2018). *Global Report on Trafficking in Persons in the Context of Armed Conflict*. United Nations.

- Vázquez, A., Gómez, Á., Ordoñana, J. R., & Paredes, B. (2015). From interpersonal to extended fusion: Relationships between fusion with siblings and fusion with the country/Desde la fusión interpersonal a la fusión extendida: Relaciones entre la fusión con los hermanos y la fusión con el país. *Revista de Psicología Social, 30*(3), 512-530. <https://doi.org/10.1080/02134748.2015.1093755>
- Vázquez, A., Gómez, Á., Ordoñana, J. R., Swann, W. B., & Whitehouse, H. (2017). Sharing genes fosters identity fusion and altruism. *Self and Identity, 16*(6), 684-702. <https://doi.org/10.1080/15298868.2017.1296887>
- Vergani, M., Iqbal, M., Ilbahar, E., & Barton, G. (2018). The three Ps of radicalization: Push, pull and personal. A systematic scoping review of the scientific evidence about radicalization into violent extremism. *Studies in Conflict & Terrorism 43*(10), 1–32. <https://doi:10.1080/1057610X.2018.1505686>
- Vlahos, M. (2008). Public diplomacy as loss of world authority. In *Routledge handbook of public diplomacy* (pp. 44-58). Routledge.
- Weine, S. (2013). Building Community Resilience to Violent Extremism. *Georgetown Journal of International Affairs, 14*(2), 81-89
- White, R. W. (2000). Issues in the study of political violence: Understanding the motives of participants in small group political violence. *Terrorism and Political Violence, 12*(1), 95-108. <https://doi:10.1080/09546650008427552>
- Whitehouse, H., Jong, J., Buhrmester, M. D., Gómez, A., Bastian, B., Kavanagh, C. M., ... Gavrillets, S. (2017). The evolution of extreme cooperation via shared dysphoric experiences. *Scientific Reports, 7*, 44292. <https://doi.org/10.1038/srep44292>

- Whitehouse, H., & Lanman, J. A. (2014). The ties that bind us: Ritual, fusion, and identification. *Current Anthropology*, *55*(6), 674-695.
<https://doi.org/10.1086/678698>
- Whitehouse, H., McQuinn, B., Buhrmester, M., & Swann, W. B. (2014). Brothers in arms: Libyan revolutionaries bond like family. *Proceeding of the National Academy of Sciences of the United States of America*, *111*(50), 17783–17785.
[https://doi: 10.1073/pnas.1416284111](https://doi:10.1073/pnas.1416284111)
- Whitton, S. W., & Kuryluk, A. D. (2012). Relationship satisfaction and depressive symptoms in emerging adults: Cross-sectional associations and moderating effects of relationship characteristics. *Journal of Family Psychology*, *26*(2), 226-235.
- Whitaker, R. M., Colombo, G. B., & Dunham, Y. (2021). The evolution of strongly-held group identities through agent-based cooperation. *Scientific Reports*, *11*(1), 1-16. <https://doi.org/10.1038/s41598-021-91333-w>
- Wiktorowicz, Q. (2005). A genealogy of radical Islam. *Studies in Conflict & Terrorism*, *28*(2), 75–97. <https://doi:10.1080/10576100590905057>
- Wolfowicz, M., Litmanovitz, Y., Weisburd, D., & Hasisi, B. (2021). Cognitive and behavioral radicalization: A systematic review of the putative risk and protective factors. *Campbell Systematic Reviews*, *17*(3), e1174.
<https://doi.org/10.1002/cl2.1174>
- Yoshie, M., & Haggard, P. (2013). Negative emotional outcomes attenuate sense of agency over voluntary actions. *Current Biology*, *23*(20), 2028-2032.
<https://doi.org/10.1016/j.cub.2013.08.034>

- Yoshie, M., & Haggard, P. (2017). Effects of emotional valence on sense of agency require a predictive model. *Scientific Reports*, 7(1), 1-8.
<https://doi.org/10.1038/s41598-017-08803-3>
- Yousef, M. H. (2011). *Son of Hamas: A gripping account of terror, betrayal, political intrigue, and unthinkable choices*. Tyndale House Publishers, Inc.
- Yzerbyt, V., & Demoulin, S. (2010). Intergroup relations. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), *Handbook of social psychology* (5th ed., pp. 1024 – 1083). Wiley