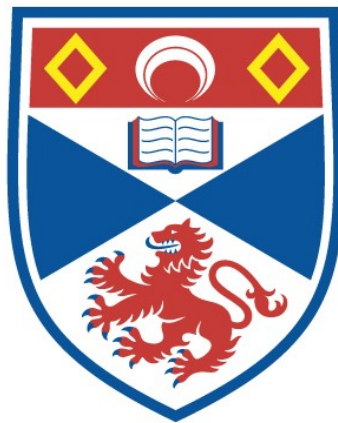# THE EXPERIENCE OF PARTICIPATING IN CROWDS: SHARED IDENTITY, RELATEDNESS AND EMOTIONALITY

Fergus Gilmour Neville

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The Experience of Participating in Crowds:

Shared Identity, Relatedness and Emotionality

Fergus Gilmour Neville
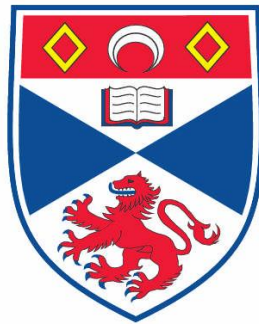
This thesis is submitted in fulfilment

of the degree of Doctor of Philosophy

School of Psychology

University of St Andrews

31.09.11

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ACKNOWLEDGEMENTS

In a famous episode of Father Ted the lead character thanks only himself in his acknowledgements - and savagely attacks everyone else – because he considers his achievements the product of his own hard work in the face of outsider hindrance. As fun as it might be to write a page of self-congratulation, in my case it would be completely disingenuous. I could not possibly have completed this thesis without the help of numerous others.

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Fergus Neville, September 2011

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ABSTRACT

The aim of this thesis is to extend the social identity model of crowd behaviour (Reicher, 1984, 1987, 1996) by exploring the experience of collective participation, with an emphasis upon quality of within-crowd social relations ('relatedness') and collective emotionality. A multi-method research strategy is employed to study these topics at a variety of crowd events. Studies 1 and 2 use ethnography and retrospective interviews at a student protest and public screenings of football matches to generate hypotheses for subsequent testing. Study 3 then tests these hypotheses by means of questionnaire data collected during Study 2. Using an experimental 'visualisation' paradigm, Study 4 demonstrates the role of shared identity (and not simply self-categorization) in generating relatedness. Studies 5 and 6 present evidence that groups of high relatedness participants experience identity-relevant stimuli as more emotionally intense than low relatedness groups. Study 7 concludes the empirical work by using questionnaire data collected at political protests to test a model of collective experience based upon the findings of the previous studies. The thesis argues that a perception of shared identity with co-present others can positively transform social relations towards relatedness (connectedness, validation and recognition). Relatedness may then be experienced emotionally, and facilitate the realisation of group goals which may also have emotional consequences. Strength of social identity is also noted as an antecedent to group-based emotion. In this way the analysis offers three ways in which social identity may lead to emotionality of collective experience, contradicting 'classic' crowd psychology in which crowd emotion was rooted in a loss of identity. Preliminary evidence is also presented suggesting that the experience of collective participation may have a role to play in determining future social identification and participation in co-action.

PREFACE

I am writing this preface in my underground windowless office, seemingly the only person in Britain at work this morning. It is a public holiday to celebrate the Royal wedding between Prince William and Kate Middleton, and BBC News beams images of crowds lining the streets of London. A village of tents - with bunting for guy-ropes – has appeared as people secure the best spots outside Westminster Abbey and Buckingham Palace. One is struck with the emotionality and communality of the event; people weep and cheer as the happy couple pass in their carriage, crowd members hug strangers wearing inflatable tiaras, and (remember this is Britain) cups of tea and sandwiches are shared liberally.

I am not in that particular crowd today (thankfully), but from a young age[1] I have been attracted to the emotionality and intimacy of mass events. For those of us who follow a football team there is little to compare with the ecstasy of celebrating a cup win with thousands of your fellow supporters, hugging strangers as tears wash away your tangerine face-paint. Nor can one adequately describe the collective 'rollercoaster of experience' of watching your national team play in their biggest match for a generation (see Chapter IV, Studies 2 and 3). These experiences have not been restricted to football. I used to spend a weekend every summer dancing in muddy fields with strangers at music festivals, the pleasurable intensity of the experience outliving any recollections of the actual music. As an undergraduate student I was also moved by the experience of my first big demonstration; the Make Poverty History march in Edinburgh. I can vividly recall the feeling of being surrounded by thousands of others who shared my views, and having the sense that together we were going to shape the world to reflect these views.

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[1] My Dad took me to my first football match as a new-born baby. My Mum is yet to forgive him.

However, I often felt that my personal experiences at collective events were at odds with the portrayal of crowds in the media, popular discourse, and psychological theory. Football crowds are groups of violent young men. Festival-goers are drug-addled reprobates who rob each others' tents. Political protests are riots waiting to happen as mysterious 'outside agitators' manipulate the puppet-like masses. We are told that the emotionality of crowds renders them irrational and meaningless, if not inherently dangerous. The object of this thesis is to refute this position. Research conducted at a variety of crowd events will outline a social identity model of collective experience that rejects out-dated notions of deindividuation, contagion and irrationality. These studies shall demonstrate that crowd events can not only be both meaningful and emotional, but that it is precisely because they are meaningful that they may be experienced as emotional.

The introductory chapters are designed to review the relevant research literature, and set up the questions that shall be explored in the empirical chapters. Chapter I firstly discusses the 'classic' crowd psychology theories with particular attention paid to their emphasis upon collective emotion (in lieu of individual reason), and the enduring legacy of this work. Next, normative explanations of collective action – including the social identity approach – are considered with a focus upon the rejection of crowd irrationality, and the importance they place upon the meaningfulness of collective action. Drawing from anecdotal, psychological and sociological sources, the group emotions literature is reviewed in Chapter II to illustrate the integral role that collective emotions play in crowd events. Chapter III then delineates the importance of studying the *collective experience* of participating in crowd events, before outlining how the empirical work within this thesis.

I. A REVIEW OF CROWD PSYCHOLOGY:

IDENTITY, REASON AND EMOTION

1.1 CHAPTER OVERVIEW

After first defining what we mean by 'crowds' (1.2), this chapter shall review the dominant theories within the discipline of crowd psychology with a focus upon their conceptions of collective identity, reason and emotion (1.3). We shall begin by outlining the origins and biases of 'classic' crowd psychology (transformation and dispositional theories) in which identity was lost and collective emotion stymied reasoned action. This body of work is then critiqued with evidence demonstrating the patterned and meaningfulness of crowd behaviour (1.4). Alternative theories of collection action (rationalist and normative approaches) are then briefly discussed. It shall then be argued that the social identity model (SIM) of crowd behaviour - which stipulates that crowd members act collectively within a framework of (shared) social identification – provides the most convincing theoretical account of collective action. The chapter concludes by noting that through its emphasis on the reasoned nature of crowd behaviour, the SIM has somewhat underemphasised the importance of emotional experience in understanding collective action.

1.2 WHAT IS A CROWD?

Before reviewing the research literature, it is necessary to first define what we actually mean when referring to 'crowds'. This is important, because previous bodies of work have used purposefully vague definitions in order to conflate crowds with all forms of group and mass

action (e.g. Le Bon, 1895/2002). In this way the pathologisation of (poorly defined) crowds has led to the pathologisation of groups in general. [2] This thesis shall adopt the definition offered by Reicher (1984), which contends that crowds are groups of co-present (i.e. face to face) people acting in an ambiguous or non-routinized social context, without any formal means of decision making (e.g. hierarchical decision making in an army regiment). The terms 'crowd behaviour', 'collective action' and 'collective participation' are used interchangeably throughout this thesis.

1.3 CLASSIC CROWD PSYCHOLOGY

Classic crowd psychology refers to the incipient attempts at developing a psychology of crowd behaviour which emerged at the end of the 19th century.[3] These approaches broadly fall into two categories; transformation theories (1.3.2) in which crowd members are transformed to act differently to how they would in isolation, and dispositional theories (1.3.3) in which crowd behaviour is a reflection of the individual predispositions of group members. There are a number of detailed and entertaining reviews of the historical origins, authors and theories of classic crowd psychology (e.g. Barrows, 1981; Jonsson, 2006; McPhail, 1991; Moscovivi, 1981/1985; Nye, 1975; Reicher, 2001; Reicher, 2010a; 2010b; Rogers, 1998). Due to the depth of this previous work and the space constraints of this thesis, this chapter shall not attempt to repeat the task. Instead, the aim of this section is to examine the literature with a specific focus upon the interplay between identity, reason and emotion.

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[2] See Harrison (2002, Chapter 3) and Reicher and Potter (1985) for a discussion of how different crowd definitions have been used for political ends.

[3] Various scholars and social thinkers (including Plato, Aristotle, Kierkegaard, Malthus, Luther, Nietzsche; see Carey, 1992; Reicher, 2010a for reviews) had commented upon the nature of crowds before this time, but had not set out specifically to study the science of collective behaviour.

The classic theories were universal in emphasising the passionate nature of collective behaviour, juxtaposing emotionality with a loss of identity and reason. In a review of this work, Harold Walsby (1947/2009) noted that "all, almost without exception, place great stress on these two dominating and complementary characteristics of such groups: (a), the patent lack of intellectuality and (b), the high degree of mass emotional suggestibility or contagion of feeling" (p36). It shall be argued in the introductory chapters that this dichotomy between reason and emotion has continued to permeate crowd theory, with detrimental consequences for our understanding of collective behaviour and experience. In order to understand the origins of this position and its subsequent remanifestations, it is necessary to briefly discuss the social and historical context within which the discipline of crowd psychology was conceived (Reicher, 1984).

1.3.1 Socio-Historical Context

The classic crowd psychology texts were not written within an intellectual vacuum, but were rather an elite reaction to burgeoning class conflict and popular militancy in the wake of the 1871 Paris Commune (Nye, 1975; Reicher, 1984, 2001). Various conservative scholars and social commentators equated crowds with the seeming collapse of social order - including the feared onset of socialism throughout Europe - and published critiques of crowd behaviour to express their distrust of democratic politics (McPhail, 1991; Rogers, 1998).[4] Of particular alarm was the concern that reasoned action was the sole property of the isolated individual, and yet Europe was entering into what Moscovici (1981/1985) coined the "Age of the Crowd", meaning that politics was considered to be increasingly dominated by collective irrationality (Le Bon, 1895/2002; y Gasset, 1930/1932; see Nye, 1975). Gustave Le Bon (1895/2002) summarised this position,

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[4] Although this body of work fails to shed much light on the nature of collective behaviour, it does illuminate the social context in which the texts was written, acting as "distorting mirrors" to the historical period (Barrows, 1981; Cross & Walton, 2005; Goodwin, Jasper, & Polletta, 2001a).

stating that the "unconscious action of crowds substituting itself for the conscious activity of individuals is one of the principle characteristics of the present age" (p iii). It was within this political climate that crowd psychology became an elite reaction to popular struggle. The term 'crowd' was frequently conflated with 'mass', 'people', 'group' and so forth, such that the apparent irrationality of crowds became the irrationality of mass politics in general. This bias served to purposefully "discredit both the motives and legitimacy of left-wing movements" (Rogers, 1998, p3). By a priori pathologising alternative visions of society as irrational, any challenge to the hierarchical social and political status quo was rendered mindless, and the rejection of identities in traditional (unequal) systems was treated as a lack of identity per se (Reicher, 1987, 2001, Reicher, 2010a).

A key tool in the pathologisation of crowds was to decontextualize collective action at both distal and proximal levels.[5] No attention was given either to the motivating forces that led crowds to assemble, or to the role in which other groups (namely the security forces) played in intergroup collective conflict (Reicher, 2001).[6] Violent interactions between groups were consequently seen as having their origins solely within the crowd, and changes in collective behaviour and emotion seemed random and unpredictable when considered in isolation. This decontextualisation engendered a reification of crowd behaviour, such that the brutality and

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[5] This decontextualisation had methodological in addition to ideological origins. Crowd psychologists of the time typically practiced "armchair theory" (McCarthy, 1991, pp xv-xvi), being neither physical nor psychological members of the crowds they claimed to study. This point is further discussed in the methods section of Chapter III.

[6] Historical evidence from 19th century Europe suggests that crowd violence was more often instigated by security forces than by the crowd itself (Gould, 1995). Furthermore, in British riots between 1730-1848 the security forces killed many more people than the crowd (Rudé, 1970).

emotionality of specific crowds acting in particular settings were used to pathologise collective behaviour in general (Carey, 1992; Moscovici, 1981/1985; Reicher, 2001).[7]

Although several social commentators wrote during this period of the dangers of the crowd (e.g. Fournial, 1892; Sighele, 1892; Tarde, 1892; 1901), it is undoubtedly Gustave Le Bon who is most commonly associated with the origins of crowd psychology. Switching trades from a medical physician to popular science writer, Le Bon tried to link individual psychopathology to social questions (Moscovici, 1981/1985; van Ginneken, 1985). First published in 1895, *The Crowd: A Study of the Popular Mind* certainly succeeded in popularising his subject matter, being described by Gordon Allport as the most read and influential psychology text of all time (Barrows, 1981; McPhail, 1991; Reicher & Potter, 1985). Although the originality of Le Bon's work is disputed[8], his ability to synthesise other's work - accurately referenced or not - does provide a succinct summary of classic transformation theories (Moscovici, 1981/1985; Nye, 1975; Reicher & Potter, 1985). As such, Le Bon shall be our central source in examining this body of work.

1.3.2 Transformation Theories

Transformation theories argued that crowds fundamentally alter the character of their members. As Le Bon (1895/2002) explained, "Whoever be the individuals that compose it, however like or unlike be their mode of life, their occupations, their character, or their intelligence, the fact that they have been transformed into a crowd puts them in possession of a sort of collective mind

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[7] See for example the description of crowd behaviour offered by Guy de Maupassant (1882): "Swept up by an irresistible common impulse, everyone – regardless of their different social positions, opinions, beliefs, and mores – will attack and massacre a man without reason, almost without pretext." (cited in Meyers, 2006, pp 114-115).

[8] Sighele described it as "piracy which is the utmost of its kind" (*La scuola positiva* 5, 1895, pp 171-173, cited in van Ginneken, 1985, p375).

which makes them feel, think, and act in a manner quite different from that in which each individual of them would feel, think, and act were he in a state of isolation" (p4). For Le Bon and his peers, such transformations were almost always pernicious.[9]

Central to the transformative nature of the crowd was the 'submergence' of identity. Le Bon (1895/2002) argued that due to the "disappearance of the conscious personality" an individual in the crowd "is no longer himself, but has become an automaton who has ceased to be guided by his will" (p8). As a crowd member's identity became submerged they ceased to have an identity at all, since the isolated individual was considered the sovereign location of selfhood (Reicher, Spears & Postmes, 1995). A loss of self was accompanied by a gain in power ("solely through numerical considerations" [Le Bon, 1895/2002, p6]), creating what Le Bon considered to be the great promise of crowd psychology; that the crowd's immense power could be harnessed by a hypnotist-leader and used for positive ends.[10] However, because crowd members had no identity (individually or collectively), their power lacked agency and purpose, leading Ortega y Gasset (1925/1968) to describe masses as the "inert matter of the historical process" (y Gasset, 1925/1968, p5-8, as cited in Carey, 1992, p17).[11]

It is worth noting that Le Bon's concept of submergence was the inspiration for the deindividuation literature, which perpetuated the argument that identity is lost as individuals

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[9] See for example Huneker, who noted that en mass "humanity sheds its civilisation and becomes half child, half savage" (Huneker, 1915, p156, as cited in Cross & Walton, 2005, p102).

[10] Le Bon (1895/2002) devoted the second half of *The Crowd: A Study of the Popular Mind* to this cause. It is perhaps because of the applied nature of his work that Le Bon's text has been so widely read (cited as influential by Hitler, Goebbles and Mussolini amongst others), and led Moscovisi (1981/1985) to suggest that the text created modern mass politics (Reicher, 2001).

[11] y Gasset was concerned that increased wages and greater leisure time for the masses led them to inflict "its own desires and tastes by means of material pressure" upon the civilised few (y Gasset, 1930, pp 7-8, as cited in Cross & Walton, 2005, p99).

enter into crowds, thereby causing them to act pathologically (Cannavale, Scar, & Pepitone, 1970). For example, Festinger and colleagues (Festinger, Pepitone, & Newcombe, 1952) claimed that individual anonymity within groups led to anti-social behaviour, Diener (1980) and Duvel and Wicklund (1972) suggested that deindividuation caused a loss of objective (individual) self-awareness preventing reliance upon individual standards, whilst Zimbardo (1969) proposed that deindividuation led to a "lower threshold of normally restrained behaviour" (p251) (for reviews see Postmes & Spears, 1998; Reicher et al., 1995). However, whilst Le Bon's submergence combined a loss of self with a gain in power, the deindividuation literature focussed solely upon the loss of identity (and therefore the meaninglessness of collective behaviour), whilst ignoring the issue of power and therefore the experience of empowerment (Reicher, 2001).[12]

For Le Bon, submergence was the starting point for the irrationality of crowds. As individual identity was submerged and therefore behavioural constraint lost, the vacuum was filled with the 'suggestion' of a primordial racial unconscious (McPhail, 1991; Reicher, 1987), an irrational "atavistic residuum of the instincts of the primitive man" (Le Bon, 1895/2002, p22).[13] As Blumer (1939) remarked, "That many of these impulses should have an atavistic character is not strange nor, consequently, is it surprising that much of the actual behaviour should be violent, cruel, destructive" (Blumer, 1939, p181, cited McPhail, 1989, p411). Following submergence, suggestion therefore caused crowd members to act irrationally upon animalistic impulses, and facilitated the perpetuation of acts of which they were incapable as isolated, reasoned individuals.

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[12] The deindividuation literature is critiqued in 1.4.3 by reviewing evidence that identity is not lost within groups, but rather shifts from a personal to social level.

[13] This argument attracted particular praise from Freud (1921/1922). He likened Le Bon's racial unconscious to the id which dominates an individual's behaviour after the crowd has negated the superego (McPhail, 1991).

For transformation theorists, a key element to the crowd's irrationality was its overwhelming emotionality. In addition to attacking collective action as mindless and barbaric, transformation theories pathologised collective action by equating the emotionality of crowds with an inability to reason. Having lost their identities as individuals, crowd members would unconsciously and automatically echo the emotions of those around them through the hypnotic process of 'contagion', further diminishing the crowd's ability to reason.[14] As McDougall (1920/1939) explained, "The diminution or abolition of the sense of personal responsibility, which results from membership in a crowd and which, as we have seen, favours the display of its emotions, tends also to lower the level of its intellectual processes…It is a familiar fact that correct observation and reasoning are hampered by emotion" (p42). By divorcing emotion and reason in this way, crowds came to further symbolise irrationality. The treatment of emotion and reason as mutually exclusive entities was central to the classic crowd literature, and has continued to permeate the discipline.

The characterisation of crowds as lacking in reason and dominated by emotion resonated with subsequent theorists. Freud (1921/1922) praised "the most important of Le Bon's opinions, those touching upon the collective inhibition of intellectual functioning and the heightening of affectivity in groups" (p23), whilst Chakotin (1939/1940) concurred that "A thing that is very characteristic of the crowd…is the preponderance of any emotional over intellectual appeal". McDougall (1920/1939) elaborated upon Le Bon's contagion by introducing the concept of 'sympathetic induction', an automatic circular process of emotional intensification. As he described, "the expressions of each member of the crowd work upon all other members within

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[14] The conflation of the terms 'contagion' and 'imitation' is relevant here. Le Bon did not respect the distinct derivations of the two concepts, leading to their being used interchangeably in his writing. Imitation involves the communication of either healthy or unhealthy effects between individuals. In contrast, the term 'contagion' comes from clinical psychology where it refers to the spread of pathological psychological symptoms (Edney, 1977; McPhail, 1991; Nye, 1975).

sight and hearing of him to intensify their excitement; and the accentuated expressions of the emotion, so intensified, react upon him to raise his own excitement to a still higher pitch; until in all individuals the instinct is excited in the highest possible degree" (p25). For McDougall, such emotionality was once again at the expense of reason, such that crowds were characterised as "excessively emotional, impulsive, violent…lacking in self-consciousness, devoid of self-respect and of sense of responsibility…hence its behaviour is like that of any unruly child or an untutored passionate savage" (p45).

Whilst Park (1904/1982; Park & Burgess, 1921) and Blumer (1939) rejected the racial undertones of their peers, they proposed a similar process to McDougall's sympathetic induction termed 'circular reaction' (or 'psychic reciprocity'). This involved a "type of interstimulation wherein the response of one individual reproduces the stimulation that has come from another individual and in being reflected back to this individual reinforces the stimulation" (*ibid*, p170-1, cited McPhail, 1989, p409). Circular reaction was said to lead to 'collective excitement', a state in which individual crowd members were unable to cognitively deviate from the rest of the crowd. For Blumer, the mutual exclusivity of reason and emotion was self-evident; "An individual loses ordinary critical understanding and self-control as he enters into rapport with other crowd members and becomes infused by the collective excitement that dominates them" (Blumer, 1939, p180, as cited in McPhail, 1989, p413). The common narrative between these pieces of work is clear. Emotion was transferred automatically between deindividuated crowd members resulting in continual emotional intensification and loss of reason.

1.3.3 Dispositional Theories

Dispositional theories of the crowd evolved in direct opposition to the transformation literature. Floyd Allport was the central figure in this movement, and just as Le Bon's work may function as a template for the transformation theories, so we may use Allport as our primary source in summarising the disposition literature (for reviews see McPhail, 1991; Reicher, 2001). The 'group mind' of Le Bon's transformation hypothesis was rejected by Allport as "a babble of tongues" (Allport, 1933, as cited in Reicher, 2001, p189), who instead asserted that collective behaviour was determined by the predispositions of group members Allport (1924).[15] Groups were made up of individuals who shared common traits and characteristics which were amplified through social facilitation as similar individuals converged together. As Allport described, "[crowd members who] stimulate their neighbors see or hear the *intensified* response which their behavior has produced in the latter, and are in turn restimulated to a higher level of activity. This effect is again felt by their fellows. Thus the effects of social stimulation increase themselves by a kind of circular 'reverberation' until an unprecedented violence of response is developed" (Allport, 1924, p300, emphasis in original).

Allport's group psychology was reflected in subsequent individualistic accounts of crowd behaviour that explained the emotionality of crowds as a consequence of individual (Freudian) personality conflicts (see Goodwin et al., 2001a, pp2-3). Kornhauser (1959) suggested that crowd members were alienated individuals, whilst Lasswell (1930), Hoffer (1951) and Klapp (1969) characterised political 'types' who engaged in collective behaviour to fulfil inner needs. Describing the individuals characterised in these models, Goodwin et al., (2001a) noted that the "emotions they had were inevitably negative or troubled rather than positive and joyful; they

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[15] There is often confusion between Allport's group and crowd psychologies. What developed into the individualistic 'Allportian tradition' of crowd psychology was actually based upon his group psychology. For Allport, as the size of the group increased to form a crowd, learned responses were said to fail, and group members regressed to following instinctual motivations for shelter, food and sex (Allport, 1924). At this point, the distinction between Le Bon and Allport's crowds becomes less obvious. In both accounts crowd members lost their individual identities and acted in terms of animalistic instincts (albeit these urges were biological in Allport's case and not the product of an atavistic racial unconscious) which underwent circular amplification (Reicher, 2001).

reflected a psychological problem, albeit one that might go away with maturity. Participants did not choose or enjoy protest, but were compelled to it by their inner demons." (p4).[16]

Empirically, the dispositional approach finds little support. Numerous studies have failed to find common traits (including emotionality) that predict participation in collective behaviour (e.g. McPhail, 1971; Rogers, 1998; Rudé, 1959; Stott & Adang, 2004). Despite being a response to transformation theories, the dispositional account shares many of its criticisms (Reicher, 1984). Both traditions rely upon a unitary notion of identity, such that the isolated individual is considered the only locus of self and reason (see McPhail, 1991; Reicher, 2001).[17] Furthermore, by detaching collective action from its social context, crowd behaviour again appears meaningless and is explicable only by invoking some hidden factor. The difference between transformation and disposition theories is merely whether this factor is the predisposition of individual crowd members, or a metaphysical group mind. Decontextualized, the pathologised behaviour of particular crowds are reified and generalised to all collective contexts such that participation in crowd action becomes in itself a sign of individual pathology (Reicher, 2001).

1.4 THE MEANINGFULNESS OF CROWD BEHAVIOUR

Although strong in their convictions, classic crowd psychologists rarely provided detailed descriptions of the collective events upon which they based their conclusions. When one does systematically examine crowd action, including the violent incidences of collective behaviour that dominated the classic theories, one finds order in place of chaos. Rather than finding evidence of

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[16] The pathologisation of individual crowd members was not restricted to their emotionality, but included elitist overtones. Explaining complex collective behaviour in terms of the violent disposition of individuals made the assumption that civilised persons in the same context would act differently (Edney, 1977; Holton, 1978; Milgrim & Toch, 1969).

[17] It shall be argued in 1.4.3 that identity is not lost in crowds, but rather shifts from the personal to the social. In this way, identity should be considered a multiple construct, such that one has as many selves as social group memberships (Reicher et al., 1995; Tajfel & Turner, 1979; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987).

collective irrationality, crowd behaviour appears grounded in shared systems of belief and identification, and to operate in relation to social context. For example, in his seminal essay *The Moral Economy of the English Crowd in the Eighteenth Century*, E.P. Thompson (1971) presented evidence outlining the patterned and meaningful nature of 'food riots'. As Thompson argued, incidences of collective violence could not be explained as either an explosion of atavistic mob violence, or the convergence of a number of violent individuals. Instead, mass action was based upon collective belief systems, such that the riots coincided with the perceived illegitimacy of grain exportation away from local markets, and only those traders deemed guilty of such unscrupulous behaviour were targeted. Grain confiscated by the crowd was typically sold at the locally accepted price, before the money (and even the grain sacks) were returned to the merchants (Reicher, 2001). Far from representing a breakdown of law and order, the 'rioting' crowds therefore paradoxically acted as an "extra-legal enforcer of community norms" (Rogers, 1998, p13). [18]

A similar picture emerges when one studies the brutality of 16th century French religious rioting, often considered a classic example of the madness of crowds.[19] Davis (1973) and Diefendorf (1991) argued that the murderous actions of Hugenots and Catholics – whilst undoubtedly horrific - were reflections of group identity and ideology. The Hugenots targeted heretical relics (crucifixes, holy water etc.), and generally only massacred religious figures. For Catholics however, all Protestants were heretics and thus deemed legitimate targets in the cleansing of society (Holton, 1978; Reicher, 2001; 2010a). The "procedures" that Estèbe referred to (including the desecration of Hugenot corpses through fire and water) did not spring forth

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[18] Reddy (1977) reached comparable conclusions in his examination of French foods riots.

[19] See for example Estèbe's depiction of the rioters; "The procedures used by the killers of Saint Bartholomew's Day came back from the dawn of time; the collective unconscious had buried them within itself, they sprang up again in the month of August I572" (Estèbe, 1968, pp194, 197, as cited in Davis, 1973, p90).

from an atavistic unconscious, but were rather symbols of group ideology and an attempt to impose a collective identity upon the world (Davis, 1973; Diefendorf, 1991).

It is important to note that arguing for the meaningfulness of collective action is not to condone all crowd behaviour; many of history's worst atrocities have been at the hands of crowds. Instead, Davis (1973) contends that "[collective religious] violence is intense because it connects intimately with the fundamental values and self-definition of a community" (p90). Although one may pathologise individual incidences of crowd behaviour, pathologisation at a psychological level fails to explain that behaviour, and therefore precludes appropriate interventions to prevent it (Reicher, 2001; 2010a). Collective action may only be understood through knowledge of the identity, ideology and norms of the relevant group(s), and the social and historical context in which they act. To again quote Davis (1973), "[collective religious] violence is related here less to the pathological than to the normal" (p90). In this way, rather than crowds extinguishing identity, they are perhaps the ideal venue in which to examine collective identification (Reicher, 2001; Reicher et al., 1995).[20]

1.4.1 Resource Mobilization Theory

The historical evidence that crowd behaviour reflected collective belief systems, coupled with theorists' personal experiences and sympathies with protest movements, led to the emergence of sociological models in the early 1970s that rejected the irrationalism of classic psychological theories (Goodwin et al., 2001a; McPhail, 1991; Yang, 2000). Collectively termed 'Resource Mobilization Theories' (RMT; e.g. Gamson, 1975; McCarty & Zald, 1977; Olson, 1965), this work argued that the success in organising individuals to take part in collective action was

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[20] Reicher (2001) consequently argues that crowd psychology should no longer be considered peripheral, but ought to be returned "to its rightful place at the centre of social scientific enquiry and, more specifically, of social psychological thought" (p182).

dependent upon the costs and benefits of participation for those individuals, and the available resources for the movement (Melucci & Avritzer, 2000). However, a focus upon the individual rational actor was unable to explain 'selfless' acts for the benefit of the group, or the patterned nature of crowd behaviour. Furthermore, whilst the attack upon the irrationalism of early psychological models was welcomed, RMT was criticised for its 'over-rationalisation' of social movements, and its representation of participants as "homo economicus" (Melucci & Avritzer, 2000, p515; Morris & Mueller, 1992). In this sense, RMT perpetuated the reason-emotion dichotomy found in the classic work but reversed its direction; by focussing solely upon the reasoned nature of collective behaviour, the emotional experience of participation was neglected (Goodwin, Jasper, & Polletta, 2000; Jasper, 1998, 2011; Yang, 2000). As described by Collins (2001, p48), with "the bathwater of some very serious biases, the baby of emotions was commonly thrown out".

1.4.2 Emergent Norm Theory

Emergent Norm Theory (ENT; Turner & Killian, 1987; for summaries see Hogg & Vaughan, 2008, pp 424-6; Reicher, 2001, pp192-4) also rejected psychology's depiction of crowds as irrational and pathological, but instead of reducing collective action to the 'rational' actions of individuals, contended that emergent norms shaped crowd behaviour. ENT fused symbolic interactionism (the process whereby meanings materialize from micro-social relations [Blumer, 1969]) with social psychological research into group norm formation (Asch, 1952; Sherif, 1936; see Reicher, 2001). It was argued that collective action was preceded by an episode of 'milling' during which time group members exchanged views and discussed advisable courses of action through interpersonal interaction. Some individuals - 'keynoters' - had particular influence during this period through their forceful delivery and resolve of opinion. Gradually there emerged an 'illusion of unanimity' as keynoters' positions were adopted by the crowd.

ENT made an important move away from the irrationalist crowd models, and restored "the link between the self-understandings of the subject and actions in the crowd" (Reicher 2001, p193). However, ENT was vulnerable to several criticisms. Firstly, whilst collective action does often follow a period of mingling and discussion, this process is unable to account for the coherence of crowd action throughout rapid changes in social context (McPhail, 1991; Reicher, 1996, 2001). Also, by focussing upon interindividual interactions without grounding norm formation in wider issues of group and societal identification, ENT cannot explain how the emerging norms of collective behaviour come to echo shared understandings, or predict who or what becomes influential. Stripped of the context in which the crowd has gathered, ENT thereby seeks "the explanation for collective behaviour solely within the crowd itself" (Drury & Stott, 2001, p49). Furthermore, by stressing processes solely between rather than within participants, the possibility of psychological change (including identification with the relevant social group) through the experience of collective participation is also neglected (Drury, 1996; Edney, 1977). Finally, as noted by Reicher (1984, 2001), by claiming that crowd behaviour is governed by a small collection of 'keynoters', at its extreme ENT becomes "an elitist version of Allportian individualism; instead of crowd behaviour being explained in terms of the personalities of all participants it is tied to the personality of a dominant few" (1984, p4).

1.4.3 The Social Identity Approach

Reicher's (1984, 1987, 1996) social identity model (SIM) of crowd behaviour critiqued decontextualised accounts that examined either the individual or the crowd in isolation, and instead argued that to understand collective co-action one needs "a social psychology that places the individual in society, and relates conduct to context" (*ibid*, 1987, p171). The model claimed

that the social identity approach[21] (Tajfel & Turner, 1979; Turner et al., 1987) to group behaviour provides such a social psychology.

Instead of a loss of identity in groups, the social identity approach argues that as one's membership with a relevant social category becomes salient, there is a shift from personal to social level identification. Personal identity refers to 'I', or how one's characteristics and qualities are distinct to other individuals, whilst social identity refers to 'we', or how group members understand their membership in a social category, such that they are unique in comparison to members of other social groups (Reicher et al., 2010; Tajfel, 1978; Turner, 1982). In this sense, when one's group identity becomes salient, the "social collectivity becomes self" (Turner, 1999, p12)[22]. For example, in his study of the St Paul's riot in Bristol, Reicher (1984) noted how crowd members' identification with the St Paul's community determined the limits of their behaviour. Conflict with the police, who were perceived as an illegitimate presence within the community space, was deemed appropriate such that throwing stones at police cars became normative behaviour.[23] However, when a crowd member threw a stone at a passing bus the behaviour did not generalise due to the illegitimacy of the target in relation to the community identity.[24]

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[21] By the 'social identity approach' we refer to Social Identity Theory (SIT; Tajfel & Turner, 1979; Tajfel, 1978), Self-Categorization Theory (SCT; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987; Turner, Oakes, Haslam, & McGarty, 1994), and the Elaborated Social Identity Model (ESIM; Drury & Reicher, 2000; Reicher, 1996, 2001; Stott & Reicher, 1998). For a review see Reicher, Spears, and Haslam (2010).

[22] The shift from personal to social identification is termed 'depersonalisation', to distinguish it from the loss of identity inherent in the deindividuation literature (see 1.3.2).

[23] The dependence of collective action upon group norms and social context gives crowds the capability to act coherently in rapidly changing non-routenized situations without the 'milling' process required by ENT (Reicher, 2001).

[24] Aggressive behaviour towards non-outgroup targets was 'self-policed' such that the offending participants were "told off and forcibly stopped from doing it" (Reicher, 1984, p11).

SCT contends that the categorisation of others into groups depends upon both perceiver readiness (the extent to which particular social categories are available to us and how familiar we are in applying them), and the comparative and normative components of category fit (Turner et al., 1987). Comparative fit is a function of the meta-contrast ratio (the ratio of intragroup to intergroup differences), such that an aggregate of people will be categorised as a group when the differences between them are less than the differences with a comparator aggregate. In this way the categorisation of self and others is inherently contextual because comparative fit will always depend upon one's relative frame of reference (Turner et al., 1994). Normative fit refers to the congruence between perceived social stimuli and normative expectations about different social groups, such that one is more likely to be classed as a member of a group when one's behaviour matches that group's norms (Turner et al., 1987).

The social identity approach argues that one is in possession of multiple social identities, the salience of which changes as a function of social context. As different identities become relevant, behaviour is shaped by the norms associated with that identity. For instance, my identity as an academic might be most prominent whilst attending a conference, compared to my identity as a Dundee United supporter when I am attending a football match. As one defines or 'self-categorises' oneself in terms of these different group memberships, one self-stereotypes and adopts the norms and behaviours associated with that relevant identity. At the conference I would hope to embody norms of objectivity and evidence-based decision-making, contrary to my behaviour inside the stadium where norms of loyalty might lead me to applaud a particularly murderous challenge (by a player from my team) as a fair tackle. Whilst these identities are of real importance to me as an individual, they cannot be reduced to an individual level because they are collective constructs. In this way, Reicher (2004) describes social identity as the "pivot between

the individual and the social [such that] through social identity, the subject is defined in social terms" (p929).

Self-categorisation therefore becomes the psychological basis for crowd behaviour, such that group members are able to act collectively towards common goals because they possess a shared social identity (Drury, Cocking, & Reicher, 2009a; Reicher, 1982, 1987; Turner, 1982; Turner et al., 1987). This point is worth emphasising; identity is not lost in groups, but is the very foundation of collectivity. When group objectives are achieved – a process named collective self-realisation (CSR)[25] – participants can feel empowered and efficacious (Drury & Reicher, 1999, 2005, 2009; van Zomeren, Drury, & Van der Staaij, 2011), leading to positive affect and a willingness to participate in future group action.[26] The power of crowds is not therefore due to a loss of identity (Le Bon, 1895/2002), but is rather a consequence of shared identification and co-action.

This is a very different picture of collective behaviour to that painted in the deindividuation literature, which argued that identity is lost in groups as individuals become anonymised, causing them to act pathologically. In a meta-analysis of 60 independent studies examining the issue, Postmes and Spears (1998) found evidence in favour of the social identity approach, and not the deindividuation account. Participants who had their anonymity, self-awareness and group size manipulated did not act pathologically, but rather conformed to situation specific social norms. For example, Johnson and Downing (1979) anonymised participants by either dressing them in masks and overalls resembling members of the Ku Klux

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[25] Alternately referred to as collective self-objectification (CSO).

[26] The experience of collective empowerment is discussed further in Chapter II.

Klan (as in Zimbardo et al.'s [1969] deindividuation study), or by dressing them as nurses. As found by Zimbardo et al., (1969), there was a trend for participants in the first condition to display higher levels of anti-social behaviour (through the administration of electrical shocks to strangers) than those in an individuated control condition. However, participants dressed as nurses (i.e. provided with positive cues) actually provided *fewer* shocks than those in the control condition, suggesting that behaviour was not governed by a loss of identity and constraint, but was rather dependent upon the interpretation of situation-specific norms.

The social identity tradition (based upon SIT/SCT) successfully argued for the meaningfulness of collective behaviour by presenting evidence that crowd action was a product of (shared) social identification. However, the approach is vulnerable to over-simplifying collective behaviour as an automatic reflection of social identities within a static social context.[27] At its extreme, crowd action could be characterised as the inevitable result of fixed social identities, much like Allport's individualistic account, albeit at a group level. Such a reading of SIT/SCT precludes examination of how collective behaviour changes (e.g. why violent resistance to the police might become normative at some times but not others), and of the paradox whereby collective behaviour is both socially determined and a determinant of social change (Reicher, 2001). Furthermore, without an historical understanding of the narrative of collective events, unintended outcomes of crowd action threaten a regression to the irrationalism of classic models (Reicher, 1996).

The Elaborated Social Identity Model (ESIM; Drury & Reicher, 2000; Reicher, 1996, 2001; Stott & Reicher, 1998) was developed to address these concerns by approaching

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[27] SCT's analysis of category but neglect of context is in part a consequence of the fetishisation of experimental method within social psychology in which context cannot be contested (Drury, 1996).

intergroup conflict as an emergent and dynamic process. The ESIM reconceptualised social identity as a model of social relations, such that identities changed as a function of comparative social context, which was in part determined by the agency of others. Contextualising social identity processes in this way helped to restore the relationship between social context and crowd behaviour (Reicher, 2010a). This provided a richer understanding of collective action that has seen the model applied to various aspects of public order policing that facilitate the prevention and de-escalation of collective conflict (Drury, Stott, & Farsides, 2003; Reicher, Adang, Cronin, & Stott, 2004; Stott, Hutchison, & Drury, 2001; Stott & Reicher, 1998).

The social identity approach has become the dominant framework for crowd research. A burgeoning body of work has explored various antecedents to collective action, including social identification (e.g. Klandermans, Sabucedo, Rodriguez, & de Weerd, 2002; McGarty, Bluic, Thomas, & Bongiorno, 2009; Simon & Klandermans, 2001; Simon, Stürmer, Loewy, Weber, Freytag, Habig, Kampmeir, & Spahlinger, 1998), empowerment (e.g. Drury & Reicher, 2009, Schmitt, Danyluck, Inzuzza, & Tafreshi, 2010; van Zomeren et al., 2011), efficacy (e.g. van Zomeren, Postmes, & Spears, 2008), moral convictions (van Zomeren, Postmes, Spears, & Bettache, 2011; van Zomeren, Postmes, & Spears, in press) and collective emotion including anger (Livingstone, Spears, Manstead, Bruder, & Shepherd, in press; van Zomeren, Spears, Fischer, & Leach, 2004; van Zomeren et al, 2008), contempt (Tausch, Becker, Spears, Christ, Saab, Singh, & Siddiqui, 2011), guilt and shame (Iyer, Schmader, & Lickel, 2007).

Furthermore, several studies have used the social identity framework to explore the role that (shared) social identity plays in transforming intragroup social relations ('relatedness') (for

reviews see Ellemers, Spears, & Doosje, 1999; Haslam, 2001; Tyler & Blader, 2000)[28]. For example, Haslam and colleagues (Haslam, Turner, Oakes, McGarty, & Reynolds, 1998) reported that ingroup members expected to agree with one another during conversations, and in so doing picked up upon common points of agreement that led to consensualisation. In a quasi-experimental field study (BBC Prison Experiment; Haslam & Reicher, 2006; Reicher & Haslam, 2006, in press), Reicher and Haslam also noted how shared identity could encourage intragroup trust, respect, cooperation and a decrease in stress. Novelli and colleagues (Novelli, Drury, & Reicher, 2010) built upon these findings by using a minimal group paradigm (Tajfel, Billig, Bundy, & Flament, 1971) to demonstrate that ingroup members were more comfortable in close physical proximity to one another than both control participants, and those in an intergroup context. Outside of the laboratory, a number of fieldwork studies have likewise found evidence for a positive transformation of social relations in groups of common identity (e.g. Barr & Drury, 2009; Drury, Reicher, & Stott, 2003; Prayag Magh Mela Resarch Group, (PMMRG) 2007a). As a heterogeneous crowd unites to form a homogeneous group (perhaps in response to a shared outgroup), interpersonal relationships with strangers often become characterised by trust and support, rather than threat and misunderstanding. Importantly, these transformed social relations can have behavioural manifestations, exemplified in the positive impact that shared identity has upon resilience and willingness to help strangers in both emergency and mundane situations (Drury, Cocking, & Reicher, 2009a, b; Cocking, Drury, & Reicher, 2009).

The social identity approach to crowds has therefore moved contemporary social psychology away from the classic portrayal of crowds as irrational explosions of emotion, and

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[28] We argue that 'shared identity' remains implicit in this body of work. An emergent finding from this thesis suggests that two or more participants who identify with the same social category will not necessarily feel a sense of shared identity with each other. Consequently, we contend that the interplay between shared identity and relatedness remains under-researched (see Chapter III; Neville & Reicher, in press). We refer to 'shared identity' in the current review as it is in the literature i.e. the mutual self-categorisation of two or more participants.

instead focuses upon the meaningfulness of crowd behaviour. However, it has given comparatively little attention to the experience of participating in mass events, and thus to the potential consequences of such experience including group attachment and commitment to future co-action.29 This includes examination of the experience of within-crowd relatedness. Whilst the group emotions literature has explored emotional appraisals of specific events on behalf of groups, the emotional appraisal of quality of social relations remains under-researched. Despite the social identity approach having always rejected a reason-emotion dichotomy (Tajfel, 1978; Reicher, 2001), there is therefore a risk that by emphasising the reasoned nature of collective action it has underemphasised the role that emotion plays in crowd action, preserving the dichotomy but reversing its direction (Reicher, 2001, in press).30 Benford's critique of contemporary sociological models of collective behaviour can perhaps equally be applied to social psychology; "we continue to write as though our movement actors (when we actually acknowledge humans in our texts) are Spock-like beings, devoid of passion and other human emotions" (Benford, 1997, p419, as cited in Goodwin et al., 2001, p7). Chapter II shall highlight the inadequacy of this position by presenting evidence for the emotional nature of crowd participation, and will argue that emotional experience must be further incorporated into the social identity approach to crowds in order to achieve a comprehensive psychology of collective action.

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[29] For exceptions within the empowerment literature see Drury, Cocking, Beale, Hanson, and Rapley, 2005; Drury and Reicher, 2009; Schmitt et al., 2010.

[30] As noted previously (1.4.1), this criticism also applies to rationalist sociological models.

II. COLLECTIVE EXPERIENCE

2.1 CHAPTER OVERVIEW

This chapter shall argue for the importance of studying collective experience. Our definition of 'experience' in this context incorporates the construal of one's social reality (in particular the quality of social relations with co-present others) and how one feels about this reality. In this sense experience is a combination of both perception and emotion; it is how one understands and feels about a given collective context. Changes in social relations as a function of (shared) group membership were outlined in Chapter I. The current chapter shall instead focus upon the emotionality of crowd participation.

The previous chapter reviewed the classic crowd psychology literature which equated the emotionality of crowds with irrationality. It was then noted that in its quest to highlight the reasoned nature of collective behaviour, the social identity approach had relatively neglected the role of emotional experience in collective participation. This chapter shall begin by presenting some anecdotal evidence of the emotional nature of collective experience in order to argue for its incorporation into models of crowd action (2.2). Next, relevant literature from sociology (2.3) and social psychology (2.4) shall be reviewed. The chapter concludes by summarising this work, and identifying the research gap to be explored within this thesis (2.5).

2.2 ANECDOTAL EVIDENCE

One is spoilt for choice when examining anecdotal evidence of emotional crowd experience. Rich material is available from diverse sources including autobiographies, diaries, newspaper articles and films, and more recently from online blogs and social networking websites. Furthermore, this evidence is not restricted to one specific type of crowd event, but spans various forms of collective behaviour.

To take one example, in John Lewis' (1998) account of the student wing of the American civil rights movement, he wrote powerfully about the positive emotional experience of participating in collective action. He recalled that "there was a rising sense of exhilaration among these students, a feeling we in the movement called freedom high – almost an altered state of jubilation, a sense of being swept beyond yourself by the righteous zeal of the moment, whether it was a march or a sit-in or an arrest…a feeling of intimacy" (*ibid*, p257). Fifty years after the civil rights movement, protestors in Egypt's Tahir Square likewise reported feeling intense positivity and intimacy towards fellow group members as crowds celebrated the departure of President Mubarak. Crowd members within the square wrote on Twitter.com that "In Liberation [Tahir] Square. Words cannot describe the raw emotion" (BrettMason10, 2011), and "Delerium, strangers hugging, men crying at Tahir" (Anand_Gopal, 2011). Accounts of other forms of political collective behaviour likewise regularly contain reference to the emotional intensity of participation. For example, in a paper by Hercus (1999), participants in a feminist march recollected the action as feeling intensely positive. One crowd member described the experience as "sort of an incredible feeling just being part of a group of people losing the feeling of being in a minority group and having so much support around you", whilst another recalled that "It was brilliant. It was very liberating. I just felt so good afterwards" (*ibid*, p49).

The emotionality of participating in effective socio-political campaigns is perhaps unsurprising. Let us then turn to less outwardly remarkable forms of crowd event. In his paper *Crowd Joys*, Lofland (1982) described the collective experiences of participants in the San Francisco 'Bay to Breakers' road race. As one runner recalled, "it's hard to explain the degree of excitement in the air…it's like the air is crackling with static electricity" (*ibid*, pp375-6). Similar experiences are reported at other forms of collective leisure activity. In his analysis of rave participation, Olaveson (2004) drew out the relationship between within-crowd social relations and collective emotionality, noting that "the experience of unity in rave is also an intensely emotional one" (p91). The positivity of such crowd experience was even used in an advertisement for Blackpool's Pleasure beach in 1897, which proudly stated that "It is possible to be carried along by the merry crowd and to be infected by the contagious joviality" (Blackpool: Corporation, 1897, p29, as cited in Cross & Walton, 2005, p107).

Our final example of the potentially emotional nature of collective experience comes from a sporting context. The 'atmosphere' inside football stadiums has long been recognised as a key attraction for attending matches (Charleston, 2008). The experience of being part of a football crowd has been described by Buruma (2011) as "the thrill of roaring in one voice with thousands of others", by Edge (1997, p149) as "truly exhilarating…everyone as one with the crowd; complete strangers as close to each other as it is possible to get – physically and emotionally", and by Sheard[31] as "exciting to be standing amongst people and to be a part of that huge humanity…You're almost swept away into a different world for that hour and a half" (Kelly, 2009). This third quote is reminiscent of Durkheim's depiction of the man whose "daily life drags wearily along" before "entering into relations [in the crowd]…that excite him to the

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[31] Join architect of the new Wembley Stadium.

point of frenzy" (Durkheim, 1915, p218, as cited in Lofland, 1982, p362). From briefly presenting these few anecdotal examples it is clear that crowds can be experienced as sites of passion, and that within-crowd social relationships may play a role in their emotionality.

2.3 SOCIOLOGICAL CONTRIBUTIONS

Emile Durkheim - one of the founders of sociology - was interested in the collective experience of religious ritual and pilgrimage. Durkheim coined the term 'collective effervescence' (Durkheim, 1912/2001), an emotional experience "characterized by intimacy [and] intensity" (Olaveson, 2001, p101). As Durkheim (1912/2001) explained, "every festival, even one purely secular in origin, has certain features of the religious ceremony, for it always has the effect of bringing individuals together, setting the masses in motion, and so inducing that state of effervescence, sometimes even delirium, that is not unrelated to the religious state" (p285, as cited in PMMRG, 2007b, p294). In this sense, God came to represent the intensified emotional experience of collective solidarity (Collins, 2001). However, as noted by Durkheim in the previous quote, collective effervescence was not restricted to religious gatherings, but could be induced in various forms of crowd event.

Regrettably, the following decades saw sociology largely follow psychology's lead in pathologising emotion – particularly collective emotion – as irrational and dangerous.[32] In recent years however there has been a movement within sociology to restore emotions to the heart of the study of protest. This approach emphasises the socially-constructed nature of emotions and their relationship with cognitive appraisals, instead of treating emotions as mindless somatic

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[32] As claimed by Weber (1922/1978): "it is convenient to treat all irrationally, affectually detrimental elements of behaviour as factors of deviation from a conceptually pure type of rational action" (p6, as cited in Goodwin et al., 2001, p2).

reactions (Goodwin, 1997; Jasper, 1998; Polletta, 1998; Polletta & Jasper, 2001; for reviews see Goodwin et al., 2001; Jasper, 2011). However, whilst this sociological work focuses upon the impact of structural and ideological factors upon behaviour, it does not examine the psychological mechanisms through which these act. For this, we must turn to social psychology.

2.4 GROUP-EMOTIONS IN CONTEMPORARY SOCIAL PSYCHOLOGY

The emotional experience of participating in collective events has been almost completely neglected within contemporary social psychology, despite the "highly emotional" nature of crowds often being included in their very definition (e.g. Hogg & Vaughn, 2008, p419). We may however draw from the group emotions literature within the social identity tradition, particularly Intergroup Emotions Theory (IET: Mackie, Devos, & Smith, 2000; Smith, 1993, 1999; Smith, Seger, & Mackie, 2007). IET built upon appraisal theories of emotion (e.g. Arnold, 1960; Frijda, 1986; Frijda, Kuipers, & ter Schure, 1989; Lazrus & Folkman, 1984) which conceptualised emotions as a function of an individual's appraisal of an event in terms of its personal significance. This work was limited to a unitary conception of the self, such that "To arouse an emotion, the object must be appraised as affecting me in some way, affecting me personally as an individual" (Arnold, 1960, p171, as cited in Smith, 1999, p185). Fusing appraisal theories with the social identity approach to group behaviour (Tajfel & Turner, 1979; Turner et al., 1987), IET argued that "emotions can be based on appraisals that refer to the socially extended self (i.e. an ingroup) as well as the individual self" (Smith, 1999, p184). To be more specific, when one's group membership with a given social category is made salient, then events affecting the ingroup will be appraised and experienced emotionally on behalf of the group (Seger, Smith, & Mackie,

2009; Yzerbyt, Dumont, Gordijn, & Wigboldus, 2002; Yzerbyt, Dumont, Wigboldus, & Gordijn, 2003).

IET was originally applied to the study of intergroup prejudice. Emotional reactions as a function of group membership were said to shape action tendencies, such that anger (if the ingroup was in a powerful position relative to the outgroup) would lead to approach, and fear and disgust to avoidance behaviours (Mackie et al., 2000; Smith, 1999). IET therefore argued implicitly for the interdependence of reason and emotion, since reasoned action depended upon an appraisal of events with regards one's emotional reactions (Mackie, Silver, & Smith, 2004).

There is substantial evidence from psychological research that emotions can operate as a function of group membership. For example, in a number of experimental studies the impact of social identity upon emotional experience has been demonstrated by manipulating self-categorisations, and noting changes in participants' emotions and resultant action-tendencies in the same objective situations (e.g. Yzerbyt et al., 2002, 2003). Experimental findings have been complemented by results from the field. In their classic study, Cialdini and colleagues (Cialdini, Borden, Thorne, Walker, Freeman, & Sloan, 1976) noted that students 'basked in the reflected glory' of their university's (American) football team after a victory. In subsequent studies, football (soccer) supporters were seen to react emotionally – with anger and sadness – following a defeat (Crisp, Heuston, Farr, & Turner, 2007)[33], whilst complimentary research has noted that basketball fans' post-match moods were determined by their strength of team identification (Hirt, Zillman, Erickson, & Kennedy, 1992; Wann, 1994). These findings are not restricted to

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[33] See also McIlroy's (1993) description of the emotional impact that a football team's results can have upon its supporters: "A football team has such a monumental effect on the lives of those who follow it…most fans measure the quality of their lives by success or failure on the pitch and, for them, the almost innocuous acts of putting the ball in the back of the net and preventing others from doing likewise are synonymous with happiness" (p28).

sporting contexts. A number of papers have presented evidence that group members can experience collective guilt as a function of their salient social identity, even if these individual group members have not personally committed culpable acts (Branscombe, Doosje, & McGarty, 2002; Branscombe & Doosje, 2004; Doosje, Branscombe, Spears, & Manstead, 1998, 2006). For example, a German citizen who was not alive during the Second World War may still feel guilt on behalf of their group membership at the German population's support of the Nazi regime (Doosje et al., 1998).

Whilst IET's examination of emotion at a group level is welcomed, it is vulnerable to three criticisms. Firstly, thus far IET research has focussed almost exclusively upon negative emotions, particularly anger (e.g. Mackie et al., 2000), sadness (e.g. Crisp et al., 2007), guilt (e.g. Branscombe et al., 2002; Branscombe & Doosje, 2004; Doosje, Branscombe, Spears, & Manstead, 1998, 2006), fear and disgust (e.g. Smith et al., 1999).[34] This position is a consequence of IET's roots as a theory of social prejudice and discrimination, and psychology's broader occlusion of positivity.[35] However, perhaps the most problematic aspect of IET is the treatment of emotion as somewhat automatic and static, such that specific emotions will necessarily result from particular self-categorisations and social contexts. Although this may be the case in some routinized situations, at certain times social categories may be actively (re)constructed, such that group leaders become 'entrepreneurs of emotion' (Reicher et al., 2010). Furthermore, as Jasper (1998) notes, "if emotions are tied to beliefs and contexts, they are also partly open to debate as to whether they are appropriate or not at a given time" (p401). The fast nature of appraisal conceptualised within IET leaves little possibility for the contestation of group identity, or debate as to groups' appropriate emotional responses in a given social context.

[34] In fact, despite recognising the positive emotions experienced by football fans following a victory, Crisp et al., (2007) noted that "Happiness is not, however, relevant to the theoretical aims of the current research" (p24).

[35] Indeed, as Seligman & Csikszentmihalyi (2000) dryly observe, "psychologists have scant knowledge of what makes life worth living" (p5).

Related to this point is the tendency of IET – and indeed much of social psychology – to treat emotion almost as a type of cognition, rather than as an embodied form of social communication (Carney & Colvin, 2010; Parkinson, 1996, 2011). Parkinson (1996, 2011) instead argues that the causes, consequences and forms of emotions are social, and that emotion is a fundamental form of communication between individuals and within groups. There is evidence for some automatic or pre-cognitive forms of emotional communication and mimicry (Hatfield, Cacioppo, Rapson & Clark, 1994; Hatfield & Rapson, 1998). However, there is also a growing research literature which examines the conscious appraisal of others' emotional experiences, and the role of social identity in shaping emotional communication (Parkinson, 1996; Parkinson & Simons, 2009).

Rather than 'catching' others' emotions such that they are automatically experienced and expressed, Lang & Lang (1961) argued that "the display of emotion often evokes emotion that is the direct opposite of the original one" (p220). This was demonstrated experimentally by Lundquist & Dimberg (1995) who found that whilst a happy emotional expression on a display face resulted in a happy perceiver, an angry display face evoked fear. Differences between the emotional experiences of perceivers and expressers may easily be witnessed outside of the laboratory by comparing opposing football supporters' divergent emotional reactions to a goal; fans of the scoring team cheer ecstatically whilst those of the conceding side sit silently in dejection.[36] Emotional communication and experience are therefore in part a function of social context, such that emotional expression is modulated by the (shared) social identities of the

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[36] See for example Mauvignier's (2006/2008) vivid description of football supporters following a goal: "The rupture begun when faces explode with uncontrollable happiness, bodies leaping for joy, and the others are the reverse, suddenly aged and soft, bleak, defeated faces, arms dangling, pennants carried like ropes to hang themselves with. Flags as white as the faces beneath the make-up, bitter tears ready to wash away the face paint and the last illusions" (p23).

displayer and receiver (Young & Hegenberg, 2010), and appraisal and subsequent emotional experience are likewise a function of social relationships (Averill, 1980; Cwir, Carr, Walton, & Spencer, 2011; Jakobs, Fischer, & Manstead, 1997; Manstead, 1991; Parkinson, 1996; Thompson & Hampton, 2011). As Jakobs et al. (1997) note, "it is not the mere presence of others that affects one's emotions, but rather the other person's role, and by implication the relationship with this other person" (p123).

Within the collective action literature emotion as become a 'hot' topic. This work may broadly be divided into two strands. The first of these examines the emotional consequences of specific events, particularly the emotional experience of empowerment following CSR. Whilst a number of authors have discussed crowds and power (Canetti, 1960/1984; Le Bon, 1895/2002), the conceptualisation of empowerment within the ESIM (Drury & Reicher, 2000; Reicher, 1996, 2001; Stott & Reicher, 1998) framework has come to dominate social psychological research into the topic. As discussed briefly in the previous chapter, John Drury and colleagues (Drury et al., 2005; Drury & Reicher, 2005, 2009) argue that action which realises the social identity of participants over dominant groups can lead to collective empowerment, such that group members feel capable of shaping the world rather than being shaped by it. There is evidence from a variety of social contexts (including environmental protests, prisons, and mass participation cycling) that such empowerment can consequently be experienced with intensity and positivity (Drury et al., 2005; Drury & Reicher, 2005; Reicher & Haslam, 2006a; Schmitt, 2010). Furthermore, Drury and colleagues have presented evidence that the experience of empowerment can strengthen social identification and increase willingness to participate in future group action (Drury et al., 2005; Drury & Reicher, 2005, 2009). This brings us onto the second strand of collective action literature emotion research: emotion as an antecedent to collective participation.

A number of studies have explored the ability of various emotions to predict participation in political collective action. Of these emotions, anger has emerged as the most consistent antecedent of 'normative' collective action (attending protests, signing petitions etc.) (Tausch et al., 2011; van Zomeren et al., 2004, 2008; Yang, 2000), although Iyer et al (2007) also note the roles of shame and guilt in certain contexts. For 'non-normative' action (violent attacks upon police, sabotage etc.), Tausch et al (2011) identify contempt, and not anger, as the primary predictor. In an experimental study, Livingstone et al. (in press) reported that a perception of shared emotion (anger) predicted self-categorisation, which in turn predicted willingness to participate in 'normative' collective action on behalf of the group. This finding is important because it suggests that the role of emotion in determining group behaviour does not depend merely upon the appraisals of each individual group member, but upon the degree to which group members perceive each other to *share* their emotions.

Whilst research into these areas has made important contributions to our understanding of collective behaviour, it has not directly investigated the inherent emotional *experience* of collective participation. Put differently, very little research has examined what it is about being in a crowd per se that can have emotional outcomes i.e. the emotionality of 'groupness'. As a corollary, the potential antecedents and consequences of this emotionality have likewise been overlooked. One exception to this neglect has been the study of Hindu pilgrims' collective experiences at the Magh Mela festival in India (PMMRG, 2007a, b). The event is attended by many millions of people, creating an environment which is noisy, limited in sanitation, and lacking in personal space. Nevertheless, participants report their experiences in the crowd as positive ("We enjoy the large crowd" [PMMRG, 2007a, p314]), in part due to within-crowd relatedness which enables the achievement of group goals ("The presence of others comes as a

support. Even a stranger here is of help and even you can trust them" [*ibid*, p314]).[37] Preliminary analysis has revealed that collective experience at the Mela can have a positive impact upon pilgrims' strength of social identity, commitment to Hindu practices (including participating in future Melas), and even physical and mental well-being (PMMRG, 2007a, b; Stevenson, Khan, Pandey, Shankar, Singh & Tewari, 2010).

This research has strong parallels with the work in this thesis, but there are some differences of emphasis. The most obvious is social context. Whilst the Mela research focuses solely upon collective experience at an Indian religious festival, the current research shall examine a variety of forms of collective gathering including sporting contests, public transport, and political demonstrations. Secondly, whilst the Mela project is most interested in forms of relatedness and identity-enactment, the work within this thesis places a greater emphasis upon the emotional dimensions of collective experience and its antecedents and consequences. Thirdly, in addition to the ethnographic and questionnaire methods employed in the Mela project, the current research shall employ laboratory-based experiments to systematically interrogate the nature of collective experience under controlled conditions.

2.5 CONCLUSION

The classic crowd psychology literature equated collective emotion with irrationality. The social identity approach to collective behaviour rejected the irrationality of crowds, but has neglected the emotional experience of collective participation. This chapter briefly presented a selection of anecdotal evidence outlining the potentially emotional nature of crowds, and the possible

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[37] CSR is more broadly operationalized here as enacting one's social identity (in this case living the life of a good Hindu), rather than Drury et al.'s (2005) narrower definition which specified "action that actualizes participants' social identity *against the power of dominant social groups*" (italics added for emphasis, p309). This thesis shall utilise the broad definition, i.e. the one offered by the PMMRG (2007a).

relationship of collective emotionality with the quality of within-crowd social relations. The shift within sociology from an irrationalist to socially-constructed conceptualisation of emotions was also briefly noted.

Group emotions research was identified as a burgeoning topic within contemporary social psychology. Following the social identity approach, IET explains how discrete emotions may be experienced on behalf of the socially-extended self when an event is appraised as relevant to one's salient social category. It was then noted that emotional reactions should not be considered purely automatic and pre-cognitive, but that (group) emotions can function as a form of social communication. The study of emotion within the collective action literature was then outlined. Firstly, the function of various emotions as antecedents to collective action was noted, as was the sense of empowerment following the successful realisation of group goals. The review finished by explaining that whilst emotions have been examined as antecedents and consequences of collective action, very little research has looked at the nature of emotional experience per se, and consequently the role that within-crowd social relations may play in generating such emotionality. The next introductory chapter shall elaborate upon this point, before providing a methodological and empirical overview of how we shall examine the topic.

III. EMPIRICAL OVERVIEW

3.1 CHAPTER OVERVIEW

This chapter provides an empirical overview of the thesis. The opening section (3.2) briefly recalls the gaps in the research literature that were outlined in Chapters I and II. Next, our broad methodological approach is discussed (3.3) which argues for the utilisation of both qualitative (3.3.1) and quantitative research methods (3.3.2). The chapter concludes by outlining the empirical studies included in this thesis (3.4).

3.2 GAPS IN THE LITERATURE

As noted in Chapters I and II, there has been limited research into the experience of collective participation. This includes an absence of work examining the experience of within-crowd social relations, and its antecedents and consequences. There has been some research within the social identity tradition examining the positive transformation of social relationships within psychological groups. However, these studies are limited in a number of ways. Firstly, almost all of this research has examined interpersonal relatedness within dyads and not in intra*group* contexts, let alone within large-scale collective gatherings. Furthermore, whilst various papers have conjectured a relational shift within crowds, they have either been theoretical overviews without empirical evidence (e.g. PMMRG, 2007a), or have rather examined the behavioural manifestations of relatedness e.g. intragroup helping (e.g. Drury et al., 2009a, 2009b).

The relationship between relatedness and shared identity has also not been thoroughly scrutinised. This is in part due to a conflation in the literature between social identity ('*I* am a member of this group') and shared identity ('*We* are members of this group'). This thesis shall suggest that social identity is necessary, but not sufficient for a positive transformation of social relations. If one is a member of a social category but does not appraise co-present others as *sharing* this membership, then one's intragroup relations are unlikely to be transformed towards intimacy; in fact a negative transformation seems more likely. A lack of explicit examination of shared identity has inevitably meant that how people come to appraise shared identity in others has likewise been overlooked. The empirical studies within this thesis shall examine such forms of appraisal, and explore the role of shared identity as an antecedent to relatedness.

If there is limited research investigating the relationship between relatedness and shared identity, then there is almost nothing at all on how relatedness relates to emotionality of experience. Thus far the group emotions literature – when crowd emotion is acknowledged at all – has examined the cognitive appraisal of collective events, rather than the appraisal of social relations. Our empirical research shall therefore study the emotionality of being in crowds per se, and the potential role of relatedness in generating such emotion. An overview of these studies shall be outlined in 3.4. However, before outlining the specifics of the empirical work, the next section shall briefly discuss the broader methodological strategy to be employed by this thesis.

3.3 METHODOLOGICAL STRATEGY

This thesis is a project in both hypothesis-generation and testing. These dual goals necessitate the utilisation of a range of research methods, drawing from both qualitative and quantitative techniques; as Zlutnick & Altman (1972, p55) note, "there is no single ideal methodological

approach for studying a phenomenon as complex as that of crowding" (see also Fontana & Frey, 2005; Milgram & Toch, 1969). The present research is interested in both exploring the nature of collective experience, and conducting a more systematic examination of the emergent variables. Accordingly, this thesis employs a multi-method research strategy by using different methods appropriate to different types of research question. The following sections shall discuss the necessity of qualitative methods for our exploratory research (3.3.1), and the importance of quantitative methods to systematically examine the themes identified in the qualitative phase (3.3.2).

3.3.1 Qualitative research

Before being able to systematically test hypotheses regarding the experience of collective participation under controlled conditions, we must first explore the phenomenon in situ. A full discussion of the merits and pitfalls of exploratory qualitative research have been adequately outlined elsewhere (see Denzin & Lincoln, 2005; Flick, 2006; Silverman, 2000) and so are unnecessary here. In addition, qualitative researchers are no longer required to continually introduce and defend their methods (and their epistemological underpinnings) due to the general acceptance of the approach within the social sciences (Wolcott, 1990, as cited in Silverman, 2000). Nonetheless, social psychology does retain some mistrust of qualitative research, fuelled in part by an insecurity of the subject's status as a science (Reicher, 2000).[38] However, as Moscovici (1972, as cited in Reicher, 2000) argues, a healthy discipline must prioritise the way it asks questions over the way in which they are investigated.

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[38] As Lang & Lang (1961) note, this point also applies to sociology; "The sociologist seeking recognition for his discipline as a science dealing only with hard facts finds that the collective dynamics of mass society are not particularly amenable to research, so that results of his work may not justify the effort and the expenditure" (pp546-7).

An ethnographic[39] approach is used as the primary data source in Studies 1 & 2 (Chapter IV), and to supplement questionnaire data in Chapter VII. The present research adopts the working definition of ethnography provided by Hammersley & Atkinson (1995), such that it involves "participating, overtly or covertly, in people's daily lives for an extended period of time, watching what happens, listening to what is said, asking questions – in fact, collecting whatever data are available to throw light on the issues that are the focus of the research" (p1). This approach to the study of crowds was advocated by Milgram and Toch (1969, p603, as cited in Drury & Stott, 2001, p50) who noted that "the surest road to theoretical advance in the field is…participant observation by social psychologists of collective outbursts." This is primarily because the uniquely opportunistic and flexible nature of ethnography is necessary when collecting contemporaneous data on unpredictable and 'messy' topics such as collective action (Drury, 1996; Stott & Pearson, 2007). A number of data sources may be used within this approach including onsite interviews, field notes and media coverage, which can then be used to triangulate the topic of interest.

One of the most attractive elements of an ethnographic approach is that it allows one to study 'in the field'. Not only can this yield rich data, but it is particularly critical for examining a topic such as collective experience which is so embedded in the context of the event. As Yang (2007) notes, "The texture of emotional events consists of fleeting and ephemeral details such as gestures, voices, and smiles, yet these details do not often leave concrete records…[a] possible corrective is to rely more on ethnography" (p1391). The need for an accurate description of a phenomenon prior to making theoretical claims was discussed in in Chapter I. The classic crowd psychologists were typically 'armchair' observers who were removed (both physically and ideologically) from the complex social events they purported to explain (Edney 1977; McPhail,

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[39] The term 'ethnography' is often used interchangeably with 'participant observation' within the research literature (Hammersley & Atkinson, 1995), as it is in the present work.

1991; Reicher, 2001). As Milgram & Toch (1969) drolly described, "Le Bon's generalizations are based largely on anecdotal and unsystematic evidence. One senses that, at best, he drew the drapes of his apartment window enough to peek at the rabble below, then closed the velour, ran tremulously to his desk, and dashed off his classic" (p545).[40] This thesis instead takes the approach prescribed by Robert Park, such that one should "Go get the seats of your pants dirty in *real* research" (as cited in Drury & Stott, 2001, p63, emphasis in original). In order to understand the nature of crowd experience, one needs to conduct research within crowds.

Unlike other forms of scientific enquiry which strive to distance the researcher from the researched, the ethnographer must participate in the lives of the people being studied (Hammersley & Atkinson, 1995), and take on the "dual role of outsider and insider" (Burgess, 1982, p48). A reflexive understanding of where the researcher is positioned socially to the researched is crucial to the process of representation and its impact upon power relations (Flick, 2006; Henry, 2003)[41]. Instead of trying to place oneself outside of the social relations one is trying to study[42], by 'taking sides' the researcher may be able to observe changes in the consciousness of participants instead of merely collecting descriptive data (Drury & Stott, 2001; Hammersley, 2000). Additionally, as noted by Green (1993), it may be necessary to show sympathy with a minority group to gain any kind of access to them (e.g. through 'gatekeepers' [c.f. Whyte, 1984]), particularly in a conflictual setting (Drury & Stott, 2001; Fantasia, 1988; Hammersley, 2000). Furthermore, when crowd behaviour is viewed by outsiders it is almost

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[40] Le Bon (1895/2002) himself admitted that "We have a very slight knowledge of these crowds which are beginning to be the object of so much discussion" (p xiii).

[41] Or as Bell and colleagues put it, "Who are we for them? Who are they for us?" (Bell, Caplan & Karim, 1993, p178).

[42] Which, as noted by Parker (1993, as cited in Drury & Stott, 2001, p52), may in itself cause participant responses to become artificial.

invariably misunderstood or at least simplified.[43] When the often complex contextual meaning of collective action is hidden, behaviour can only be explained by the internal traits of participants, or by some transformative magic of the crowd (Reicher & Potter, 1985).

Although the ethnographer could perhaps conduct their research clandestinely, this has practical implications in addition to clearly being ethically questionable (Whyte, 1984). One would firstly be unable to record contemporaneous notes which would somewhat defeat the purpose of participant observation. Secondly, if one is a 'hidden observer' then many of the important questions required for one's investigation will remain unasked due to fears of being 'discovered'. If this were to happen then the research would be essentially doomed due to the devastating effect upon the trusting relationship with the researched population. The research methods used in this thesis are therefore strictly overt, and rely on an honest and trusting relationship between the researcher and the researched.

In addition to employing ethnographic methods, retrospective semi-structured interviews are used in Chapters IV and VI. This involves participants being interviewed about their experiences sometime after their participation in a collective event. Such interviews allow for in-depth discussions that are rarely possible during the ethnographic stage of research. Where possible, participants are interviewed in the groups in which they attended the collective event so as to help reconstruct their collective experiences (Burgess, 1982; Fontana & Frey, 2005). Furthermore, during the Chapter IV retrospective interviews, participants are shown video clips of the original crowd event in order to facilitate recall and articulation of participant experiences (Drury & Reicher, 1999; Reicher, 1996).

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[43] See Harrison (2002, p5); "When thousands of people present themselves on the street, their individual value systems are reduced, condensed, filtered and reinterpreted by those who comment upon them."

3.3.1.1 Interview Analysis

Onsite interviews conducted during the ethnographic phases of data collection, and retrospective interviews performed afterwards, are analysed using procedures based upon Thematic Analysis (Braun & Clarke, 2006) in order to disentangle themes as they emerge from the data. The analysis is shaped by dual goals; the first is to accurately represent participant experiences without imposing a priori categories upon their responses, whilst the second is to approach the material in terms of specific research questions. The analysis therefore functions as a compromise between the bottom-up approach of Grounded Theory and the top-down approach of Content Analysis. Transcription and systematic readings are used to first familiarise the researcher with the data, before initial codes are generated relating to its salient features. The codes are then collated into potential themes, and the data re-checked for instances of these themes.[44] These are next examined to see how they function in relation to the data, before further analysis refines the specifics of each theme. Names and definitions are then given to each theme, and a selection of extracts chosen to exemplify each one. Finally, the act of writing is in itself a form of analysis as themes and extracts are reinterpreted (Drury & Reicher, 2000). Thematic Analysis is therefore highly iterative such that initial coding is regularly reformulated as a consequence of subsequent analysis.

3.3.2 Quantitative research

The previous section argued that an explorative qualitative approach is vital in order to examine the complexity of collective experience first-hand, and to further scrutinise participants' experiences after the event. However, in order to systematically analyse the antecedents and

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[44] This process is aided by using the qualitative analysis software N*Vivo 7.

consequences of collective experience, one needs to supplement this work by using questionnaire and experimental methods. Two questionnaire studies within this thesis quantify our variables of interest and examine how they relate to one another. The primary advantage of using questionnaires in this way is to quantify participant experiences at 'real' crowd events. This includes an 'onsite' questionnaire completed during a crowd event (Chapter IV, Study 3), and a retrospective online questionnaire used to test a model of collective experience (Chapter VII).

Chapters V and VI use experimental methods to investigate systematically emergent themes from the qualitative research by manipulating independent variables, and examine their impact upon dependent variables. Whilst qualitative research (and to some extent the questionnaires) tries to capture the dynamic social context in which participants act, our experimental paradigms conversely strip back this context in order to isolate the variables of interest. By conducting studies within the controlled confines of the laboratory one is able to triangulate dependent measures using diverse techniques. For example, in Chapter VI emotional intensity of experience is quantified using a real-time self-report measure, a psychophysiological measure of arousal, and a post-event questionnaire.

Finally, it is worth noting that experimentation within social psychology has classically focused upon isolated individuals rather than interacting groups, in part due to the problems non-independence creates for parametric statistical analysis (Haslam & McGarty, 2001). However, because the nature of collectivity is so central to our research, the experiments within Chapter VI examine groups of interacting participants. Various methods of dealing with the issue of data interdependence are discussed in Chapter VI.

3.4 EMPIRICAL CHAPTERS OVERVIEW

Chapter IV (Studies 1-3) will be an exercise in generating hypotheses regarding the nature of collective experience. Study 1 will use ethnography and retrospective interviews to explore protestors' experiences at a student demonstration. Study 2 will then use the same methodologies at a different form of crowd event; collective screenings of international football matches. These studies will identify the importance of shared identity with co-present others for collective experience, and suggest various ways in which shared identity may be appraised. Shared identity will also be noted as an antecedent to various forms of within-crowd relatedness (connectedness, validation and recognition). Furthermore, analysis will reveal that if participants have a sense of shared identity and relatedness with one another, then they may experience their collective participation as positive and emotionally intense. Study 3 is a questionnaire study that is used to confirm the findings from the first two studies. During the public screenings of Study 2, football supporters will complete questionnaires (designed in response to analysis of Study 1) that interrogate the nature of their collective experiences. The results from these three studies are used to form hypotheses which are tested in the subsequent empirical chapters.

Chapter V (Study 4) will use a 'visualisation paradigm' (based upon a series of experiments devised by Garcia, Weaver, Moskowitz, & Darley, 2002) to examine the role of shared identity as antecedent to relatedness. Participants are asked to imagine themselves aboard a train crowded with strangers, and answer a number of questionnaire items regarding their sense of shared identity, relatedness, and likelihood of engaging in solidarity behaviours (e.g. helping other passengers with heavy luggage). Shared identity will then be manipulated by telling passengers that the train has broken down, and that they are being poorly treated by the train company. This manipulation has a positive effect upon shared identity such that participants come to imagine other passengers as part of their group who share their fate, rather than as

atomised individuals. Mediation analysis will then demonstrate that an increase in shared identity leads to an increase in quality of within-crowd social relations (relatedness), which in turn encourages solidarity behaviours.

Chapter VI (Studies 5 and 6) presents two laboratory studies that investigate the emotional intensity of collective experience. Scottish football fans (Study 5) and European students (Study 6) will watch an identity-relevant film either alone or in groups with others who share this identity. In a within-subject design participants will complete questionnaires examining their strength of identification with the relevant social category, sense of relatedness with other participants (in the group condition), and how emotionally intense they find their participation. Throughout the stimuli participants will also record the emotional intensity of their experience in real-time using an interactive 'slider', and have their heart rates recorded as a psychophysiological measure of arousal. Retrospective interviews will be used to further explore participants' experiences. The analysis shall reveal that participants who feel that co-present others share their social identity have a sense of relatedness with them, which may then amplify the emotional intensity of their experience (through reciprocal validation). However, instead of a universal group effect, participants who feel that others within the physical group do not share their salient social identity score low on both relatedness and emotional intensity measures. In addition to relatedness, strength of social identity will also predict emotional intensity of experience. Furthermore, participants whose collective experience is characterised by relatedness and emotional intensity will record a relative strengthening of their social identity, in contrast to those without relatedness and emotional intensity in which it is weakened.

To conclude the empirical work, Chapter VII (Study 7) will propose and test a preliminary model of collective experience using Structural Equation Modelling (SEM). The predicted model shall be based upon the analysis of our previous studies. The data for Study 7 shall come from an online questionnaire examining demonstrators' experiences at three political protests. This quantitative data shall also be supplemented with onsite semi-structured interviews. Our analysis will conclude that shared identity leads to relatedness which may be experienced positively and with emotional intensity. A sense of shared identity and relatedness with other group members will also predict perceived CSR, which in turn will contribute to the emotionality (positivity and intensity) of participant experience. The results finally suggest that the emotional nature of participants' collective experiences may play a role in shaping commitment to future group action.

IV. THE EXPERIENCE OF

COLLECTIVE PARTICIPATION:

HYPOTHESIS GENERATION AND TESTING

4.1 INTRODUCTION

The current chapter is devoted to exploring the nature of collective experience. Broadly speaking, this falls into two related categories. Firstly, the chapter studies the emotional experience of participating in crowd events. Secondly, the social relations between crowd members are examined, including how these may fluctuate between anomie and intimacy. This is done in three studies. Study 1 (4.2) is a qualitative examination of protestors' experiences at a student demonstration. Study 2 (4.3) then uses similar methods to examine the themes identified in Study 1 at collective screenings of international football matches. Study 3 (4.4) uses questionnaire data collected during Study 2 to test the hypotheses generated in the first two studies. These hypotheses are then tested in subsequent chapters. The chapter concludes by briefly discussing the key themes to emerge from the three studies (4.5).

4.2 STUDY 1

4.2.1 INTRODUCTION

Study 1 is a qualitative examination of demonstrators' experiences at a student protest. The aim of the study is to identify dimensions of collective experience which will form hypotheses for

subsequent studies. The decision to examine the student protest was largely opportunistic. The author was known to the protest organisers, and was already planning to participate in the collective action. Also, the demonstration route serendipitously went past the author's home and culminated in a rally outside of the School of Psychology, providing a unique opportunity for diverse data collection (including aerial observation) throughout the event.

4.2.1.1 Overview of Event

In April 2008 the Lower Rents Now! Coalition (LRNC) was formed by University of St Andrews students in response to proposed changes to the university's student accommodation. The coalition claimed that the university was using Multiple Occupancy regulations as an excuse to replace basic student housing with high-end apartments which would approximately double the minimum cost of university accommodation (Nicol, 2008; Shippen, 2008). At the time of the dispute, the average weekly student rent within St Andrews was the highest within Scotland ("Conflicting Verdicts on Student's Rent Protest", 2008), and the proposed rents would cost more than the maximum available student loan, proving essentially unaffordable for students from lower income backgrounds. Elements of the student population accused the University of taking the position that "what does it matter if poorer students can't afford to study in St. Andrews when there are plenty of richer students who are queuing up to come here and are able to pay high rents" (O'Hare, 2008). The contested accommodation policy was thus framed politically by the LRNC as part of a wider debate regarding the accessibility of the University, and the equality within it.

After petitioning against the proposed accommodation plans, the LRNC organised a demonstration for 2nd May 2008 to coincide with a meeting of the University Court. Protest

flyers advertised gathering outside of the Student Union, before marching the short distance through town to St Mary's Quadrangle.[45] Participant turnout at the demonstration was estimated by the LRNC to be 150, but only 70 by the Police ("Conflicting Verdicts on Student's Rent Protest", 2008). It is important to place this attendance within the political context of the University more generally. As one protestor explained, St Andrews students are generally seen as politically apathetic, and reluctant to participate in collective action:

> Pt7MP[46]: How many students demonstrate, and how many students demonstrate in St Andrews? So I think it was quite a good turnout. Because even in Glasgow and stuff there's not really big mass student demonstrations these days. [47]

Crucially then, despite the relatively small size of the demonstration, participation in the protest was a unique and meaningful experience for many of the student protesters (Harrison, 2002).[48]

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[45] The University Court met in St Mary's Quadrangle in the building adjacent to the School of Psychology.

[46] Qualitative codes are outlined in 4.2.3.

[47] This research was conducted in 2008, two years before mass student action against the raising of tuition fees.

[48] Organisers of the demonstration blamed low turnout on political apathy due the socioeconomic background of the student population; a situation they claimed would be exacerbated by the proposed changes in student accommodation.

4.2.2 METHODS [49]

4.2.2.1 Data Gathering

In consultation with prominent members of the LRNC, a variety of data-gathering strategies were used to triangulate evidence (for triangulation see Drury & Stott, 2001; Hammersley & Atkinson, 1995; Denzin, 1989). Ethnographic research at the demonstration (including semi-structured interviews, the collection of audiovisual data, and the recording of research field notes) was supplemented by retrospective semi-structured group interviews in which participants reviewed video footage of the protest. In addition to the methods and analysis presented in this chapter, within-subject questionnaire data was also collected during and after the protest. This data is excluded from the current analysis due to low participant numbers, unreliable scales, and a high attrition rate between the two parts of the questionnaire.

4.2.2.2 Semi-Structured Interview Themes

Onsite and retrospective interviews were concerned with (shared) social identity ('To what extent do you share an identity with other people in the crowd? What word or phrase would you use to describe this identity?'), relatedness ('How would you describe your relationship with other people in the crowd?' Can you describe any interactions that you have had with other people in the crowd?'), CSR ('Did the protest achieve its objectives?'), collective experience ('Can you describe how it feels to be in the crowd today?'), and intention of future participation ('Do you intend to take part in future LRNC events? Has this been influenced by your experience at today's protest?'). Participant responses to these broad questions were then probed to yield more detailed answers. Although these themes were the primary focus of the interviews, participants were invited to raise additional topics of relevance.

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[49] The study received ethical approval from the University Teaching and Research Ethics Committee (UTREC) (See Appendix IVa).

4.2.2.3 Participants

Onsite Interviews

Opportunistic semi-structured interviews were conducted with 9 participants (4 males and 5 females) during the protest. All participants were students at the University of St Andrews aged between 18 and 21.

Retrospective Interviews

Four retrospective group semi-structured interviews were conducted with a total of 14 participants (6 males and 8 females).[50] Again, all interviewees were students at the University of St Andrews aged between 18 and 21.

4.2.2.4 Procedure

Participant Recruitment

Recruitment for the onsite interviews was done opportunistically by approaching demonstrators at appropriate moments of the protest (e.g. at the assembly before the march and between speakers at the rally). Retrospective interview recruitment was primarily done using pre-event questionnaires in which participants indicated their willingness to be contacted for interview. A notice inviting protestors to take part in the research was also placed on the LRNC's social networking website. Finally, participants were asked in advance of the retrospective interviews to bring along others with whom they had attended the demonstration. All participants were

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[50] One of the protestors interviewed retrospectively also took part in an onsite interview.

included in a prize draw for one week's rent, and retrospective interviewees were additionally given £4 as compensation for their time.

Ethnography

The author attended LRNC meetings from the organisation's inception, and acted as both a protestor and researcher during the collective action. This facilitated trust and access to participants, and helped to uncover dynamics that might have been hidden to an 'outsider' (Drury & Stott, 2001; Fontana & Frey, 2005; Hammersley, 2000). Concurrently however, as recommended by Hammersley and Atkinson (1995, p112) an effort was made to avoid the "dangers of over-rapport" such that the researcher remained "intellectually poised between familiarity and strangeness". Opportunistic onsite semi-structured interviews were conducted during the demonstration by the author and a research assistant. The mean interview length was approximately five minutes. The general themes for these interviews were outlined in 4.2.2.2. All interviews were recorded using a digital dictaphone with participant consent.

During the march and rally the author recorded field notes relating to the timeline of events, the 'atmosphere' at the protest, and any additional observations or thoughts regarding the event. These notes were subsequently used to inform themes for the retrospective interviews and the final data analysis. In addition to field notes, a body of photographs and video footage was collected during the demonstration. Throughout the event a digital video camera filmed within the crowd in order to capture evidence of emotional expression and experience. A second camera was able to aerially film a section of the march which fortuitously passed beneath the home of the author, and the entire rally which was held outside the School of Psychology.

Retrospective Interviews

Retrospective semi-structured interviews were conducted between two and three weeks after the demonstration. The mean interview length was approximately 70 minutes. Where practical, participants were interviewed with others with whom they had attended the protest. After completion of consent forms, a 20 minute edited film of the demonstration (using the footage recorded during the ethnographic research) was shown to participants. This was designed to facilitate recall and articulation of participant experiences (see Drury & Reicher, 1999; Reicher, 1996), and due to the small scale of the protest, allowed interviewees to identify themselves within the film. This provided the opportunity for participants to comment precisely upon, for example, their physical position within the crowd. For spells in these interviewers the author functioned more as a group moderator than interviewer, such was the enthusiasm with which participants discussed their experiences.

The themes for the retrospective interviews were generated from the research literature, onsite interviews and other forms of ethnography conducted during the demonstration, and from retrospective interviews which had previously taken place. In this sense data collection and analysis were not treated as independent moments, but were rather fed back into one another in a reflexive manner (Bryman, 2001). In general terms however, the discussion topics were the same as those in the onsite interviews, but with additional questions drawing upon specific events during the protest, and a greater emphasis placed upon the role of collective experience in shaping commitment to future group action. Participants gave their written consent before taking part in the interviews, and were debriefed upon completion of the interview.

Interview Analysis

The interviews were fully transcribed and analysed using procedures based on Thematic Analysis (Braun & Clarke, 2006) (see Chapter III). Essentially this process involved drawing novel themes from the data in an inductive manner, whilst testing the relationships previously identified in the research literature.

4.2.3 ANALYSIS

Each extract of qualitative data is coded as follows:

Pt#   Participant number

M/F   Participant gender (male/female)

O   Participants interviewed onsite during the demonstration

R   Participants interviewed retrospectively in the laboratory

Re1   Author

Re2   Research assistant

e.g. Pt8FR = Female participant interviewed retrospectively in the laboratory.

See Appendix IVb for transcription conventions.

The analysis section shall outline various dimensions of participants' collective experiences. These include participants' self-categorisations and appraisals of shared identity with other protestors (4.2.3.1), relatedness with other crowd members (4.2.3.2), issues of group power (4.2.3.3), emotional experience of the demonstration (4.2.3.4), and consequences of their collective participation (4.2.3.5).

4.2.3.1 Self-Categorisation and Shared Identity

Interviewees recalled self-categorising themselves in terms of their salient social identity during the demonstration. Two key issues emerged regarding the nature of these identities. Firstly, the forms that social identity took could differ between participants. For some, political forms of identity were most salient, such as for Pt11MR:

> Pt11MR: for me it was more as a Socialist. [ ] And for me it was just that part of
>
> my identity that generally…when I have a demonstration that is the main thing.

Whilst others felt that a student category best captured their social identity during the protest:

> Re1: did you feel like you were there as a student?
>
> Pt14FR: Yes, definitely.
>
> Pt15FR: Yeah.
>
> Pt14FR: I think it was very…it was very much defined as kind of student
>
> identity.

Secondly, although some demonstrators were able to label their social identity in these ways, it was clear that a number of participants experienced problems in describing the nature of their salient social category. This was the case for Pt6MR, who recalled difficulty in answering a

questionnaire item in which participants were invited to provide the label that best defined their social identity:

> Pt6MR: I identify with the cause completely. I identify with the group [ ] Going back to the question about how you identified yourself, I struggled with that question because I didn't really see a word that, erm, fitted. I didn't really know how to describe "identify" on my part.

Furthermore, other participants at the protest explained that whilst they had a strong sense of social identity, they did not feel that they shared this identity with others within the crowd. This was apparent in the following interview extract in which the difference between self-categorisation and shared identity was made explicit:

> Pt1FR: I didn't quite fit in with that sort of crowd, I wasn't used to it so much. But I mean that doesn't mean I didn't feel strongly about it [ ]
>
> Re1: Do you draw a distinction between your identification with the group and your identification with the cause?
>
> Pt1FR: Yeah, yeah.
>
> Pt2MR: Yeah I would, they're two different things certainly.

Retrospective interviews revealed that appraisals of shared identity were dynamic, and subject to change throughout the demonstration. The categorisation of co-present others as members of

one's social group was consistent with the principles of comparative and normative fit. Shared identification was only possible where perceived differences between one's personal self and others were less than differences with a comparative frame of reference, and other group members and oneself embodied the norms congruent with one's salient social category. For example, during the rally protestors were invited to speak to the group about their personal experiences regarding university accommodation. At this point, some participants felt that the group's identity shifted to exclude those not personally vulnerable to the accommodation change. For these people, the change in category definition diminished their feeling of shared identity with others in the crowd:

Pt2MR: I think the crowd defined itself in a more specific way when they got to the Quad and everyone sat down and people began to speak. [ ]

Pt1FR: I think you're [Pt2MR] right in this subgroup type thing in that it was almost divided into people who were really directly affected and perhaps people who were more indirectly affected. [ ] Yeah, I would say I didn't quite feel like I fitted in with everybody else.

This shift in shared identity was made clear by Pt2MR. Whilst reviewing video footage of the demonstration he noted that he was at the physical centre of the crowd during the march ("I liked being in the middle, which is where I was"), but that he moved to the periphery of the group when he experienced doubts over his shared identity with others at the rally:

Pt2MR: I think I'm showing physically that I'm not as part of the group here because I'm not sitting down [with the other protestors], I'm standing right over there in the corner [points]. So it's actually a very different situation from when we were actually marching for me I think. And that's partly to do with people speaking about their own personal experiences and the fact that…it's not that I feel I can't be part of the group, it's just that I maybe ought not to pretend that I am.

Participants appraised their shared identity with others in a number of ways. As noted in the previous two extracts, the realisation that one was not vulnerable to the same fate as others could diminish one's sense of shared identity with them. In addition, Pt6MR noted during a discussion of the chanting at the protest that this shared action functioned as an indicator of common group membership:

Pt6MR: If you're all saying the same thing then you're part of the same group.

Embodied emotion emerged as a further indicator of participants' shared identity. Protestors recalled how embodied expression of emotion could be used to appraise whether co-present others were members (or not) of one's social group:

Pt7MR: And just like you can see by their body language and by their facial expression that they are making themselves not part of it.

As noted previously in the analysis, participants' shared identity with other crowd members had a number of consequences. In physical terms, Pt2MR explained how a shift in shared identity corresponded with a change in his desired physical proximity to other protestors. In addition to this physical dimension, our data pointed to within-crowd relational changes.

4.2.3.2 Relatedness

Three forms of relatedness were identified in the data; connectedness, recognition and validation.

Connectedness

When participants did feel a sense of shared identity with each other, they described a positive transformation in social relations (relatedness) with others within the crowd. For example, some participants noted a sense of connectedness to strangers such that their within-crowd social relations became characterised by intimacy and ease.:

> Pt2MR: I found myself speaking naturally to people I had never met before in my life. [ ] So you did find that it was very easy because everybody was kind of connected by this group identity that you could suddenly speak to people quite easily [ ] it wasn't even as though it registered that I didn't know them at the time. It was just, "Oh, yeah, we're in the same group" kind of thing, so the unity kind of made it a lot easier actually for me.

The impact of shared identity upon connectedness was made particularly clear as participants compared their intragroup interactions at the demonstration, with experiences of anomie and isolation "in the street":

Pt14FR: if you just walk up to someone in the street or something it wouldn't go the same way, but like everybody was there [at the demonstration] for the same reason. I think you could have just turned to someone.

Re1: Okay. Is that quite a nice thing?

Pt14FR: Yeah. I think it's unusual particularly like because you [Pt12FR] were saying a lot about how society these days is very kind of…like you don't do these things, you're so separate from everybody else, it's all about you, yourself, that this seemed like something where you kind of broke down like social barriers that would ordinarily exist.

The experience of connectedness also had a physical element which we refer to as physicality. The experience of physicality was noted by interviewees such that the physical density of the crowd could be experienced as a pleasurable dimension of participation:

Re1: Was it uncomfortable to be in the middle of a crowd like that?

Pt4FR: No.

Pt5MR: It was great fun.

Pt3FR: No. I would have said it was dense but not like overcrowded, like you didn't feel claustrophobic or anything.

The experience of physicality also appeared contingent upon shared social identity. This was evident from the same participants' references to solidarity and shared goals when asked to compare their positive experiences of physicality at the demonstration, with those on a hypothetical crowded train carriage. Pt3FR explained that the experience of physicality would be different on the train due to a lack of unity, before Pt5MR noted that physical density could be positively experienced in that setting if his fellow passengers were on route to a common venue:

Pt4FR: it does depend on the context I guess.

Pt3FR: But maybe cos when you're on the train or something I guess like you're going somewhere, you're not really doing anything to like unite everybody on the train.

Pt5MR: [ ] but if you're on your way to a concert or a peace festival you'd love to be crammed in with all these other happy people.

In addition to physical proximity, the importance of physical co-action for collective experience emerged from participant interviews. This was evident when demonstrators recalled the marching phase of the protest, and described how shared movement could engenderer unity and purpose within the group:

Pt2MR: when we were all moving together we were all kind of a unit. And there is a strange kind of military metaphor going on there I think, if everyone is marching together we're kind of crusading, we're kind of, "We're going to get this thing".

This experience of physical co-action was recalled as pleasurable and emotionally intense for some participants:

Pt12FR: the marching was just so intense. The marching, hearing all these people shouting, that was the best, [mimes marching] it felt so good doing that.

Recognition

Intragroup interactions could also provide participants with a sense of recognition, such that others accepted and valued their participation and group membership. In the following extract, Pt3FR and Pt4FR recalled feeling as if they belonged in the group after having been greeted by others within the crowd:

Pt4FR: Cos even people who I didn't know very well, maybe acquaintances, maybe hadn't spoken to many times would come up to me and be like, "Hey, yeah, good to see you. Meet my friend".

Re1: Okay. So you were sort of noticed and acknowledged in the crowd?

Pt4FR: Yeah, it was good.

Re1: Why is that a positive thing do you think?

Pt3FR: It makes you…I don't know. It just made me feel more comfortable and I guess just accepted, yeah.

Pt4FR: You feel more part of the group as opposed to someone who's just tagging along.

Validation

A further form of relatedness experienced by participants at the LRNC demonstration was the validation of their opinions, emotions and actions by other group members. Compared to experiences outside of the crowd, being surrounded by others who shared his opinions alleviated Pt1MO's doubts about his views, and strengthened his resolve and commitment to those beliefs:

Pt1MO: Because [normally] you're like, "Am I doing something stupid here or am I not getting something?", and yet when you've got this number of people out there who also want exactly the same thing then you realise to yourself, "Yes, I probably am actually right!".

Re2: So they support your belief or view for what the demo is about?

Pt1MO: Precisely yeah, it sort of cements them, and it sort of gives foundation to the beliefs that you may have had questions about in the past. It finally makes them really concrete.

Interview data also suggested that one's emotional experience could be validated, and subsequently amplified, by co-present others. A reciprocal relationship where one's emotional excitation validated and augmented that of fellow group members, who in turn re-validated and amplified one's own emotional experience, was described by Pt4FR when he recalled his experience at the protest:

> Pt4FR: And the sort of enthusiasm caught on I guess.
>
> Re1: How do you mean it "caught on"?
>
> Pt4FR: I mean it sort of like spread; once you saw other people being enthusiastic it made me want to be more enthusiastic, and then I'm sure every other person then became more enthusiastic. It just increased it I felt like.

In addition to opinions and emotions, there was also preliminary evidence that participants' behaviour could be validated and encouraged when surrounded by co-acting group members. This experience was noted by Pt1FR, who contrasted the discomfort she felt whilst chanting at the periphery of the crowd, with behavioural amplification ("you can sort of say it louder") at its centre:

> Pt1FR: you feel a bit sort of self-conscious if you're sort of on the edge chanting. If you're all together saying it together you feel more like…you know what I mean…I don't know, if you're on the edge it just…if you're in the middle you can sort of say it louder along with everyone else

4.2.3.3 Power

Participants who defined the group and the goals of the protest as having an immediate impact upon university policy did not achieve their collective aim. For these demonstrators, a perceived lack of influence was experienced negatively:

> Pt1FR: I think I didn't feel so proud really [ ] Because I felt a bit like, "I did come along but I haven't really made that much difference".

However, other interviewees defined the aim of the group and protest as simply highlighting their campaign for affordable accommodation. The experience of these participants was markedly different. In place of negativity and disempowerment, they described a realisation of their collective goal which was experienced with strong positive affect:

> Pt2MR: All I thought the point of it was to make a stand and to get noticed and to make the issue…to get it reported on, to make the issue relevant, and to make people talk about it, and clearly we did that. [ ] So it achieved the goal that I put down. If I had said "I believe we're going to change everything, they're going to change the decision right there and then in the room because they're going to be so inspired by us", then I would have been disappointed but I never thought that would happen so easily so I wasn't disillusioned at all. [ ] I left feeling very optimistic actually. I felt like I'd done something really really important.

Furthermore, as Pt2MR went on to explain, an experience of CSR at the demonstration could be an empowering experience, and reinforce his intention to participate in future group events:

> Pt2MR: I mean if I had gone there and it hadn't gone as well or had been a failure then it might have diminished my wanting to do it again, but because it went well and it seemed to make a difference, um, I would do it again I think. [ ] It was just the idea that I was part of a group which could do something, and could change something at some level to some degree.

4.2.3.4 Emotional Experience of Collective Participation

Participants in Study 1 experienced various aspects of the demonstration as emotional. This was particularly evident for protestors who felt a sense of shared identity, and subsequent relatedness with one another. As touched upon in 4.2.3.2 the sense of relatedness with other protestors could contribute to the intensity of collective experience. When asked to describe her experience at the protest, Pt14FR noted that it was "emotional", in part due to the sense of togetherness with fellow crowd members:

> Pt14FR: I think "emotional" would be an appropriate word about it. Especially because of like the noise and the being together with other people.

However, contrary to classic accounts of crowd psychology where emotional intensity was assumed to usurp reasoned action, interviewees argued fervently that the two co-existed during the demonstration:

Pt2MR: we were still there at the same time for the same reason because of the reason for it. So to suggest that it was all emotional and not cerebral at all would undermine the whole structure of the group I think, because I think it was mainly connected by ideas and not by emotions so much, although emotions were there and they were very passionate

As noted previously with regards group power (4.2.3.3) and relatedness (4.2.3.2), various participants described their emotional experiences at the demonstration as positive. The combination of these elements resulted in a holistically pleasurable experience for some participants:

Pt10FR: It felt really good being out there on the day. [ ] Um, I mean there was definitely some positive feeling from the protest itself.

4.2.3.5 Outcomes of Collective Experience

Intention of Future Participation

Throughout the corpus of interview data there were references to how the experience of participating in the protest shaped demonstrators' willingness to take part in future group activities. This point is illustrated by the following extract in which Pt2MR lamented the fact that without experiencing the demonstration, other students would lack the desire for future collective action; the implication being that his experience provided him with the motivation for future participation:

> Pt2MR: you hear people talk about the protest who weren't there, and you think [holds head], "If only you'd been there! If you'd been there you would know where I'm coming from!" And it's frustrating that people didn't experience that first protest and therefore there isn't that motivation for more.

Interview data from other participants elaborated on the forms of experience Pt2MR may have been referring to. For Pt14FR, her experience of shared identity and connectedness with fellow crowd members created the conditions for future co-action:

> Pt14FR: I think that's almost why people want to take it further, because having kind of seen everybody as a kind of unified group it makes you feel like you have something in common with people. And like before you went it was all a little bit disparate, but now there is a core group of people.

Furthermore, other interviewees made a positive link between their emotional experience at the demonstration, and their commitment to participate future group action. Pt13FSR noted how the exciting experience of the protest encouraged her to devote further effort and time to the group:

> Pt13FSR: I want to get more involved. Like even after the demonstration itself we came back and were like, "Right, we're going to write articles and send them

off to papers" and stuff, obviously like with the excitement built up through that.

Social Identity

There was also preliminary evidence that taking part in the collective action could impact upon participants' social identities. Two interview extracts are used to illustrate this point. The first passage was previously presented as an example of validation of opinions. For Pt1MO, the confirmation of his political perspective through his co-participation with fellow group members served to strengthen his views. Because the group was mobilised around these same beliefs, it is likely that his identity with the group was likewise strengthened:

> Pt1MO: when you've got this number of people out there who also want exactly the same thing then [ ] it sort of cements them [beliefs and views], and it sort of gives foundation to the beliefs that you may have had questions about in the past. It finally makes them really concrete.

The second extract confirms the role of collective participation in shaping social identity by noting that group attachment could also diminish through collective experience. As noted earlier in the analysis, Pt1FR experienced a lack of shared identity with other crowd members, partly due to her privileged personal circumstances regarding accommodation. This resulted in intragroup comparisons that served to weaken her strength of identity with the group. When asked if her identity had changed through participation in the protest she replied:

Pt1FR: I would say perhaps less[end] because I wasn't like, um, because there weren't enough people there I didn't feel like I was one of the people who were really passionate about it, really extreme about it. So I suppose I felt more…and it [accommodation policy] didn't affect me immediately so I suppose I felt a bit more like, "Oh well, I suppose I don't really…I can't contribute as much as I thought, I thought there'd be more people here". And I thought because I'm not directly affected I can't…I'm not so much a part of what's going on.

4.2.4 DISCUSSION

Study 1 examined protestors' collective experiences at a student demonstration. Participants used different forms of social identity to frame their participation in the collective action, and some experienced difficulty in providing a label for their salient social identity. Nonetheless, participants were clearer about their sense of shared identity with co-present others, and it was this which appeared critical in shaping their collective experience. Knowledge of one's shared identity (or lack thereof) with others was interpreted through embodied signals (e.g. facial expressions), action (e.g. shared chanting and marching), and shared fate (e.g. vulnerability to rent increases). Shared identity was not static during the event, but was subject to change with the dynamics of social context.

When participants did feel that co-present others shared their social identity, they described a breakdown of social barriers with strangers within the crowd. This allowed them to interact with ease and comfort (connectedness), and feel that their participation was acknowledged by others (recognition) (see Neville, 2007; PMMRG, 2007b). In addition to connectedness and recognition, protestors at the LRNC demonstration reported experiencing a

validation of their beliefs, emotions and behaviours, a process that augmented the strength of all three. This transformation of social relations was pleasurable for participants, in part due to contrasting the experience with that of 'everyday' society. It is important to stress however that shared identity and relatedness were not experienced by all participants. Without shared identity, the experience of collective participation could instead be characterised by isolation and insecurity. Results from this study do therefore suggest a process in which relatedness was dependent upon shared identity. A positive experience of physicality (the physical dimension of relatedness) was also discussed by interviewees. Confirming the results of previous fieldwork (Novelli, 2010, Study 7), pleasure in physical density again appeared to be dependent upon shared identity. Furthermore, in line with recent research, physical co-action could engender unity within the group, and was experienced with strong positive affect (see Novelli, 2010, Study 8; Wiltermuth & Heath, 2009).

In addition to relatedness, issues of group power shaped participants' experiences of the demonstration. Perception of the achievement or failure of the protest's goals produced very different experiences for demonstrators. As established in previous research (Drury & Reicher, 2005, 2009), CSR - the imposition of self upon the world through collective action - may be experienced with a sense of empowerment and intense positive affect. When participants at the demonstration felt that their group goals had been realised, the protest was recalled as empowering and positive, in contrast to those who experienced the event as ineffectual. Furthermore, a positive and empowering experience of CSR was reported by participants to encourage future commitment to group action (Drury & Reicher, 2009).

There was also preliminary evidence that protestors' strength of social identification with the group could be shaped by their emotional experience of collective participation. In conjunction with evidence elsewhere that collective action is predicted by strength of social identity (e.g. Simon & Klandermans, 2001; Klandermans, et al., 2002) and shaped by its norms (e.g. Reicher, 1987; 1996), it is therefore plausible that social identity was both an input and output of protestors' collective participation (Drury & Reicher, 2000; Tajfel, 1978).

Limitations

Although the study provides an incipient base from which to explore collective experience, it did have several weaknesses. The study relied upon a limited number of respondents, running the risk that our sample was not representative of the population who participated in the protest. However, a limited sample size was a necessary sacrifice in order to conduct the in-depth interviews that were required to generate hypotheses. The methodology could also be criticised for a lack of objectivity because of the dual role of the author as both researcher and actor in the crowd events. However, as explained in Chapter III, being an ingroup member had various advantages including gaining trust and access to participants (Fontana & Frey, 2005; Green, 1993). Moreover, because the research did not focus upon the politics of the demonstration, there was little opportunity for researcher bias along ideological grounds.

There are more general issues concerning the generalizability of findings from this particular event to other social contexts. Previous empirical work has demonstrated the role of emotion in political action by noting participants' positive feelings of empowerment at achieving collective goals (Drury & Reicher, 2005, 2009). It is possible that there is something specific about this form of crowd action that generates emotionality which is not relevant in other

collective events. Individual level variables may also have contributed to the results in this study, such that participants' collective experiences were due to the type of people who take part in student politics, rather than the consequence of general group processes. Furthermore, the dynamic nature of shared identity at the protest may have affected the dimensions of collective experience in different ways than in social contexts where shared identity is a supposition. Study 2 examines the experience of collective participation at a very different social context in which social identity is assumed. This allows us to assess the validity of the emergent themes from Study 1, and to generate further hypotheses to examine in subsequent chapters.

4.3 STUDY 2

"This is a day to remember. To be proud. To wear your colours. To let your heart beat fast. Passion!"

- Introduction to Scotland -v- Italy match highlights (Harrison, 2007b)

4.3.1 INTRODUCTION

Study 1 established that collective participation in a group with shared identity could positively transform social relations between strangers, and be experienced with positivity and emotional intensity. There was also preliminary evidence that such collective experience could have consequences for strength of social identity and intention of future participation. Study 2 examines the generalizability of these themes in a very different social context: collective screenings of football matches. A sporting context was chosen in order to provide the necessary contrast with Study 1 in terms of likely social identities, behaviours, experiences, and motivations for participation.

The availability of live matches on television and online gives fans the option of viewing games without the potential discomfort of participating in a crowded environment. Despite this, many supporters actively seek out collective contexts in which to watch football, including attending games live in stadiums, or going to crowded bars and public screenings. Although fans rarely attend such sporting events alone (Aveni, 1977), the majority of crowd members are likely to be strangers to one another. Using qualitative methods, the current study builds upon the analysis of Study 1 to explore the apparent appeal of participating with others, and examines potential antecedents and consequences of such collective experience.

4.3.1.1 Overview of Events

International football matches between Scotland and Italy, and England and Croatia (played on the 17th and 21st of November, 2007 respectively) were chosen for the study. The games suited our research aims in a number of ways. Firstly, the Scotland match was screened at a large collective event in Glasgow. This provided an opportunity to investigate why supporters might pay to participate in a crowded environment, rather than watching the same footage for free in the comfort of their homes.[51] Attendance at the screening cost £12 per person, and all seven thousand tickets were reportedly sold out within just three minutes ("Italy party tickets gone in 3 minutes", 2007). The Scotland and England matches were also shown on a large projector screen in the University of St Andrews Student Union Bar, allowing further access to fans' collective experiences.[52]

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[51] This approach was preferred to data collection within the actual stadia. An analysis of football fans' collective experiences at live matches may be found in Neville (2007). Originally we had intended to compare the experiences of fans watching collectively in public settings with supporters viewing the same matches at home. Due to limited participant numbers from the second source, this was not possible. However, at times in the analysis we do draw upon interview extracts from participants who watched at home in the company of others.

[52] Participants estimated the size of the crowd at the Student Union Bar to be approximately 220 for the Scotland match, and 60 for the England match. Examination of photographs and videos taken at the events suggests that these estimates were reasonably accurate.

The games were additionally attractive because they were the final qualifying matches for the Euro 2008 tournament, and were thus expected to be exciting games. It is worth briefly outlining the contexts in which the games were played in order to understand supporters' experiences of them. Scotland had not qualified for a major international competition since 1998, but would do so if they beat Italy (the reigning world champions) in their final match. The game received a large quantity of media coverage, and the country came to a virtual standstill for the match.[53] Italy scored very early in the match and the predicted slaughter of the Scottish team seemed inevitable. However, Scotland played well and equalised midway through the second half. Scotland spurned several chances to win the game, only to concede an Italian goal in the final minute. This meant that Italy, and not Scotland, would qualify for Euro 2008. The English team similarly needed a victory to qualify, but unlike Scotland, were expected to easily beat their Croatian opposition. England played very poorly in the match, and were losing 0-2 at half-time after a serious of defensive errors. The English team fought back to score two goals in the second half and seemed certain to win the match, only for a late Croatian goal to hand them defeat. The result meant that England failed to qualify for an international tournament for the first time since 1994, and their manager resigned in shame the next morning.

4.3.2 METHODS [54]

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[53] As described by one Scottish supporter (Pt2MSR): "it was on the news all week and people who would never really like talk about football were talking about football. Wee old ladies were being asked in the streets of Coatbridge what was going to happen in the game, you know?!"

[54] The study received ethical approval from the UTREC (See Appendix IVc).

4.3.2.1 Data Gathering

Ethnographic research was carried out at the public screening in Glasgow for the Scotland match, and in the University of St Andrews Student Union Bar for the Scotland and England matches. Onsite interviews were only conducted at the event in Glasgow.[55] Supporters in the Student Union Bar were instead invited to participate in a retrospective interview, which entailed an in-depth semi-structured discussion of their experiences.

4.3.2.2 Semi-Structured Interview Themes

Onsite and retrospective semi-structured interview themes were similar to those in Study 1 (4.2.2.2). Participants were asked about their (shared) social identity ('To what extent do you share an identity with other people in the crowd? What word or phrase would you use to describe this identity?'), relatedness ('How would you describe your relationship with other people in the crowd?' Can you describe any interactions that you have had with other people in the crowd?'), collective experience ('Can you describe how it feels to be in the crowd today?'), and intention of future participation ('Do you intend to watch future Scotland/England (as appropriate) matches in the future? Has this been influenced by your experience of watching today's match?'). If onsite interviewees were wearing nationalistic paraphernalia then they were asked to explain their choice of clothing. Further details of the onsite interviews are included in the ethnography section of the procedure (4.3.2.2)

4.3.2.3 Participants

Onsite Interviews

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[55] At the Student Union Bar the researchers' priority was to disseminate and collect questionnaires for Study 3.

Semi-structured interviews were conducted with 18 Scotland fans (12 males and 6 females) and one female Italian supporter at the public screening in Glasgow.

Retrospective Interviews

Retrospective semi-structured interviews were conducted with 10 Scotland fans (7 males and 3 females), and 10 England supporters (5 males and 5 females), all of whom were either students or staff at the University of St Andrews.

4.3.2.4 Procedure

Participant Recruitment

Researchers approached participants for interview at the Glasgow public screening either before the match, at half-time, or after full-time. No one who was approached refused to take part in the study.[56] Participants were recruited for retrospective interview through the questionnaire analysed in Study 3. Additional participants were recruited by asking interviewees to pass on the researcher's contact details to other supporters who had watched one of the matches. Although an effort was made in all forms of participant recruitment to obtain a diverse sample (Mason, 1996), this was not always possible due to the somewhat homogenous populations watching the matches.

Ethnography

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[56] It is likely that the author's ingroup identity as a Scotland football supporter helped in this regard. Anecdotally, recruitment was much easier in this context when the author, like the participants, was drinking lager and wearing a Scotland shirt and kilt, compared to previous and subsequent experiences of ethnographic data collection which were more often characterised by participant suspicion and unease.

The flexible and opportunistic nature of ethnographic research 'in the field' made data collection possible from a number of different sources (see Denzin, 1998; Drury & Reicher, 2005; Drury & Stott, 2001; Hammersley & Atkinson, 1995; Stott, Hutchison, & Drury, 2001). Ethnographic data was collected by the author and a research assistant at the public screening in Glasgow, two research assistants at the Student Union Bar for the Scotland game, and the author and a research assistant at the Student Union Bar for the England match. Observational field notes were recorded that included how the researchers themselves felt as participants immersed in the crowd experience (Caughey, 1982; Hedican, 2006). Video and photographic footage were also recorded at the Glasgow public screening and at the England match in the Student Union, allowing closer examination of the nature of the events at a later date.

Fourteen opportunistic semi-structured interviews explored fans' experiences at the public screening event in Glasgow. Nineteen participants took part in these interviews. Each interview lasted for approximately five minutes. The themes discussed in the interviews were outlined in 4.3.3.2. When deemed appropriate, the interviewer also asked 'devil's advocate' questions, designed to uncover a participant's view through presenting them with an opposing perspective (Strauss, Schatzman, Butcher, Ehrlich, & Sabshin, 1964, as cited in Burgess, 1982, p108). Throughout the interviews participants had the opportunity to introduce additional relevant themes and construct novel interpretations of their participation (Flick, 2006). Participants gave their written consent to be interviewed, and were debriefed upon its completion.

Retrospective Semi-Structured Interviews

A more detailed examination of participant experiences was possible during the retrospective interviews. There were 16 interviews in total, each of which lasted approximately 45 minutes. Where practical, supporters were interviewed with others with whom they had watched their match live. So, for instance, if three friends had gone to the Student Union Bar together to watch a game, then they were interviewed together. This was to facilitate reconstruction of participant experience, and to encourage group discussion of the relevant topics (Burgess, 1982; Fontana & Frey, 2005). Fans who had watched their match alone were interviewed alone. The themes discussed in the interviews were outlined in 4.3.3.2, but were also augmented by emergent themes from the ethnographic stage of research, and retrospective interviews which had already taken place. Echoing the methodology of Study 1 then, data and analyses were not treated independently, but were used reflexively (Bryman, 2001). The pre-determined topics for discussion were not raised in a rigid structure, but were introduced when deemed appropriate throughout the course of the interview. Participants had the freedom to introduce and discuss novel issues relevant to the research, thereby encouraging a dialogical, not interrogational feel to the interviews (Flick, 2006).

Because the interviews took place after the games (between one and three months), television highlights of the Scotland -v- Italy (27 minutes and 27 seconds) (Harrison, 2007b) or England -v- Croatia match (14 minutes and 20 seconds) (Harrison, 2007a) were shown during the interviews. This was designed to encourage participants to recall and articulate their experiences (see Drury & Reicher, 1999; Reicher, 1996). A second version of the England highlights included spliced video footage from the screening at the Student Union (20 minutes and 45 seconds), allowing participants to visually and audibly relive their collective experiences. This version was only shown to participants who had watched the match in that venue. Many interviewees described the process of re-watching the games as emotive, and reacted with

passion to the material presented to them. The interviews were filmed in order to capture such reactions, and interview dialogue was recorded using non-obtrusive radio microphones. All participants gave their consent to being interviewed, and were debriefed afterwards.

The researcher-participant relationship was utilised in different ways depending upon whether the participants were Scottish (like the interviewer), or English. When interviewing fellow Scotland supporters, the researcher's ingroup identity helped foster open discussions in which the interviewer was able to probe responses with reference to his own experiences. This was not possible during the interviews with England fans, where the interviewer's naivety was instead used to facilitate participant responses. This alternative approach encouraged explanation of experiences and behaviour which might otherwise have been 'taken as read'.

Interview Analysis

The interview data was again analysed using procedures based upon Thematic Analysis (Braun & Clarke, 2006) (see Chapter III).

4.3.3 ANALYSIS

Each extract of qualitative data is coded as follows:

Pt#   Participant number

M/F   Participant gender (male/female)

S/E   Scotland/England supporter

O	Participants interviewed onsite at the Glasgow public screening
R	Participants interviewed retrospectively in the laboratory
Re1	Author
Re2	Research assistant

e.g. Pt3MSO = Male Scotland supporter interviewed during the public screening in Glasgow.

Where participants referred in name to non-participants these are replaced with pseudonyms. The results section shall outline various dimensions of fans' collective participation. These include the roles of self-categorization and shared identity for emotional experience and behaviour (4.3.3.1), forms of relatedness and how these functioned in relation to shared identity (4.3.3.2), the emotional experience of relatedness (4.3.3.3), and the impact of collective experience upon social identity and intention of future participation (4.3.3.4).

4.3.3.1 Self-Categorization and Shared Identity

All of the participants who took part in the study described themselves as supporters of their national football team. Because the games were international, identity with the team was bound up with identity with the nation. Self-categorisation with these identities is clear in the first extract in which Pt10MSR recollected the pride he felt during the match for his Scottish identity, and his affiliation with the Scottish team:

Pt10MSR: I always feel very proud when I wear my Scotland top. And especially at occasions such as that where there was a huge game and Scotland had got themselves into such a great position that you did feel proud, you felt really proud to be Scottish. [ ] you were wearing it for Scotland, and you were wearing it for yourself that way.

Self-categorization was seen to shape participants' experiences of the matches. This was illustrated by Pt11MER, who used the following metaphor to articulate how his self-categorization as an England supporter meant that the England match had intense emotional meaning for him. Responding to a suggestion that it was "just a game" he stated that:

Pt11MER: It's like someone saying to you…like say you've just lost a grandparent or something, "Oh it's just your Grandma". [laughs] And that's probably not a very good example to say it, but it means something to you! I mean to them your Grandma, they might not know them, not care that your Grandma's died or not. But it's your Grandma, so it means something to you.

In addition to the relationship between self-categorization and emotional experience, participants described their behaviour at the collective events as consistent with the norms of their salient social identity. This was particularly clear in Scottish fans' refutation of the possibility of crowd violence during the public screening in Glasgow. [57] Pt13MSO explained that

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[57] Scottish supporters' positive behaviour at the event was later confirmed by a spokesman for Strathclyde Police, who stated that "fans showed their behaviour to be excellent once again" (Deal, 2007).

as Scotland supporters they "don't fight", and instead engage in positive carnivalesque behaviour:

> Pt13MSO: We don't fight.
>
> Re2: Why do you think that is?
>
> Pt13MSO: We're out for a good time. It doesnae matter if we win, lose, or draw. We're here for a good time.

Scottish interviewees also stressed the group norm of interacting positively with fans of opposing teams.[58] For example, when asked whether an Italy supporter at the public screening was at risk, Pt17MSO described how Scotland supporters would behave towards her:

> Pt17MSO: If she's Italian and she's out anywhere in Glasgow they'll respect her, they'll give her all the fun, the partying. In fact I think most of the guys will try to pick her up! [laughs]

All interviewees stated their intention to watch their national team again in the future. However, it was evident during the interviews that a desire for future participation was particularly strong for participants who highly identified with their team, such as for Pt5FSR:

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[58] Except, as Pt13MSO pointed out, if these opposing fans were English; "Scotland versus England there's always going to be trouble".

Pt5FSR: I mean you know their next match I wouldn't hesitate about not going
to see them, you know in some way I would show my support, watching it in a
pub or attempting to go and see them play.

As noted in Study 1, it was not merely participants' self-categorisation, but the perception of
shared identity with co-present others which shaped collective experience. The importance of
being in the presence of other Scotland supporters for the experience of watching Scotland
matches was noted by Pt6MSR:

Pt6MSR: If it was just myself then I don't really tend to watch the Scotland
games.

Re1: Oh really?

Pt6MSR: I think it is in a sense…a big part of it is the communal experience of
the whole thing. It's supposed to be the whole country I guess, like you feel like
you want to be with people. I guess that's maybe in some ways, for me, that's
the main appeal of it perhaps.

Moreover, there was some data to suggest that a lack of shared identity could diminish the desire
for collective participation. As Pt27FSR explained, doubts about her authenticity as a Scotland
supporter (she was born in Northern Ireland) were instrumental in her choice to watch the
match at home, rather than in the company of Scotland supporters:

Pt27FSR: I'm happier making a fool of myself at home I think than going out [ ] I'd feel like an intruder sort of thing, cos I know it's like [makes circle shape with hands] a club of supporters. A group of supporters. Real supporters. I don't feel like a real…you know?

As the extracts above suggest, the social identity of other crowd members, and thus the opportunity for shared identity with them, was influential in determining supporters' desire for collective participation. The importance of shared identity with co-present others' was particularly evident during interviews with England supporters who experienced their match in the presence of Scots supporting Croatia in the Student Union Bar.

Pt12FER: Everyone around us was either Scotland fans who were rooting against England or…

Pt13FER: Yeah, I think we were in the wrong part of the Union.

Pt12FER: Yeah, we were up at the very front. So it was hard to not want to punch everyone else in the face. [59]

These same supporters were able to compare this experience with anecdotes of viewing matches in England where they were surrounded by fellow England fans:

[59] Being members of different social categories did not automatically lead to conflictual relations. This was apparent when attempting to interview an Italian supporter during the public screening in Glasgow. The discussion was interrupted multiple times with Scottish supporters approaching to wish her and her team luck, and to have their photographs taken together.

Pt12FER: It's different back home. It does depend on where I watch it, like if I go to the pub or whatever then everyone's in their shirts. It makes you feel so much better, because I felt a bit out of place here.

Pt11MER: Back in England everyone in the pub is wanting the same thing aren't they, whereas here it was split.

Participants described using various methods to determine others' social identities, and thus whether they shared a social identity with them. For example, as was noted in the previous passage, display of ingroup symbols ("everyone's in their shirts") could impact on comparative and normative fit, and shared group membership:

Pt2MSR: It's [wearing a Scotland shirt and kilt] so that you can sort of easily identify who somebody is supporting.

Pt3MSR: Yeah it's more as well you can instantly recognise who all like…

Pt2MSR: Yeah, you can cheer with someone.

Pt3MSR: Like "He's a fan as well" sort of thing, you know?

4.3.3.2 Relatedness

Participants described a transformation of social relations with strangers within the crowd compared to other social contexts. Three dimensions of such relatedness (connectedness, recognition and validation) are outlined below.

Connectedness

Connectedness refers to a sense of closeness and intimacy between strangers. [60] In comparison to "the street" where such relationships could be ambiguous or even hostile, participants at the public screening described an ease of interaction with other crowd members:

Pt9MSO: It's like you could go up and speak to anybody and they'll chat away you know? They won't look at you like you're a dong like they would in the street you know?

Participant interviews suggested that connectedness was underpinned by shared social identity. As Pt3MSR explained in the following extract, his ability to talk to strangers within the crowd was a consequence of his shared identity with them as a Scotland supporter:

Pt3MSR: You were talking to people beside you that you didn't know, that sort of thing. [ ] just the fact that everyone was there for the same purpose, you know everyone was there to watch the Scotland game, everyone there was supporting Scotland. You know I think it was maybe that there was that in common.

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[60] Before kick-off at the public screening in Glasgow the author filmed a teenage Scotland supporter waltzing with a middle-aged fan to traditional Scottish music. When the song finished the author approached them and asked if they were father and son. "We've just met mate", replied the young fan, before turning to his dancing partner and introducing himself.

The experience of connectedness also had a physical dimension. For football supporters interviewed in this study, physical immersion in a high density crowd could be a pleasurable experience, and even a motivation for participating collectively:

Re1: So you were quite packed in?

Pt7MSR: Yeah, I'd say so.

Re1: Was that an unpleasant feeling? I mean were you claustrophobic or anything like that?

Pt7MSR: No, not at all. I mean it was better that the Union was like that. Definitely. That's one of the attractions of going to somewhere like the Union.

However, as with other aspects of relatedness, physicality appeared dependent upon an appraisal of shared identity. This was noted by Pt18MSO, who compared his enjoyment at being in the dense crowd of Scotland fans, with hypothetical collective contexts without shared identity:

Pt18MSO: It is an enjoyable thing, especially on an occasion like this because everybody's all together. You know there's no dispute, everybody's all together for one thing. Maybe if it was a party or maybe at the dancing I'd feel uncomfortable with this amount of people. But here, we're all here for one reason; in a different scenario you'll be here for a different reason than me.

Recognition

Having one's existence and participation recognised by strangers within the collective could be a positive experience. Participants again explained this experience by comparing the quality of social relations within the crowd to other contexts. For example, Pt18MSO compared his experience of being acknowledged and greeted by fellow Scotland supporters at the public screening in Glasgow, with being ignored "in the street":

> Pt18MSO: I mean people will talk to you here but go by you in the street tomorrow and not crack a smile. [ ] Oh there have been loads of people, loads of people. Folk you don't even know. "Hey! What's up?!", that kind of stuff [ ] it's good, most definitely.

Such recognition was also a pleasurable experience for the researchers who, without revealing the investigative purpose of their attendance, were approached by many different supporters throughout the public screening in Glasgow. The interactions were consistently positive and ranged from chatting informally about the match, to simpler gestures including exchanging smiles, or creating space for one another within the densely packed crowd.

Validation

A further dimension of relatedness experienced by participants was the validation of their opinions and emotions. In different social contexts other people may express competing views or emotional experiences, but at the events examined in this study, supporters perceived others

as reflecting and therefore validating their perspective on the world.[61] For example, Pt4MSR noted that other crowd members shared his opinions of the Scotland match:

> Pt4MSR: Definitely when you go to a match the entire section supporting your team [ ] is of a very similar opinion, very similar reactions to the situations.

The perception of sharing one's emotions with others could be a powerful experience and, as will be noted later in the analysis (4.3.3.3), could amplify the intensity of this emotional experience. Validation of emotion was noted in the following extract by Pt10MSR, who recalled sharing an intense emotional experience with other Scotland supporters within the crowd. It is worth highlighting the participant's assertion that their intimate interaction was because they "had an interest in common", such that his sense of relatedness was underpinned by shared social identification:

> Pt10MSR: They'd [Scotland supporters] be coming up to you with a smile on their face and they'd be maybe giving you a bit of chat about the game, or they'd be giving you a hug about the game, and you'd be returning it because it'd be *exactly* how you felt. You were gutted and…well you didn't need that hug, but it was kind of you were helping them, they were helping you. It was just all about you had an interest in common and you were feeling *exactly* the same, and words cannot express how you were feeling.[62]

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61 With the exception, as noted previously, of English fans surrounded by Scots in the Student Union Bar.

As indicated by Pt10MSR's description of embracing strangers, others' emotions (and thus the knowledge of shared emotional experience) could be expressed physically. This was clear when interviewing a Scotland supporter who had watched the match with her American husband. She interpreted his dispassionate embodied emotional cues as an indication of divergent emotional experience, which served to negate her own experience to the extent that she would have preferred to watch the game alone:

> Pt8FSR: [When Scotland scored] I think I did that same sort of thing; "Yes!" [clenches fists]. And I remember Craig was just like [slumps into chair]. You know he wasn't…so that was like, "How can you not get excited?!". So in a way I would have been better off watching it on my own! You know in a way because he was so [makes nonchalant face].

4.3.3.3 Emotional Experience of Collective Participation

Positivity

Although this study was designed to examine the experience of collective participation, one cannot divorce the experiences of football supporters from the context of the football match. The experiences of Scotland and England supporters were different despite both teams losing their crucial games. Scotland fans generally reported feeling positive about a good performance:

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62 It is worth noting the opportunity that the collective experience of football provided men in which to express their emotional experiences and intimacy with others. This may be contrasted to other social contexts in which emotional expression of this kind might be deemed incongruent with traditional masculinity. As Pt10MSR himself noted, "if you're walking down the street [and] you hugged the person near you you'd be lynched!"

Pt2MSR: They [Scotland] pass it about the whole team, and you just feel like they're playing so well.

Whilst English participants negatively appraised the performance of their team:

Re1: Do you remember it positively or negatively?

Pt11MER: Negatively. It was a disaster. Do you [Pt13FER] agree?

Pt13FER: Yeah. Actually words just fail me how ashamed I am about it. It makes me so angry.

For some Scotland supporters the simultaneous negative experience of watching their team lose, and positive experience of collective participation, created difficulties in articulating the overall valence of their experience:

Pt9MSR: Erm…it's not too negative, I don't know. It's not too negative now. I mean it was just…I suppose yeah the occasion, it was such a big deal it's still got a positive thing for me sort of. Not obviously with the end result, I don't know.

Re1: Did you enjoy the day?

Pt9MSR: Well the end was disappointing, but yeah, I enjoyed it. But yeah, it was disappointing at the end.

Furthermore, for some supporters interviewed in this study, the intensely negative experience of watching the match could actually be experienced positively. This apparent contradiction was explained by Pt12FER:

> Pt12FER: So even though I was really pissed off, like I came out of the game being like, "Rubbish! Everyone played like shit!"…but it's something I would do again, because it's an experience where I just like the passion that comes with it, whether it's negative passion or positive passion. You know it's being *so* pissed off that they're playing horribly or you know, "We're tied, we've just got to hold this and we'll go through to the next round". I think that all…it makes me want to do it again because I like that emotion. Even though I came out pissed off, I like that passion that comes with it.

As this passage suggests, for some participants an emotionally intense experience (even a negative one) may have functioned as an antecedent to future participation in the group. This relationship shall be discussed further in 4.3.3.4.

Emotional Intensity

Whilst supporters struggled to disentangle the positive and negative dimensions of their experience, they were clearer about the emotionally intense nature of their participation:

> Pt6MSR: It's exciting. It's like one of these things, it's not fun but it is! It is but it isn't I would say. The tension is there.

Pt5FSR: Yeah. I'm sure I kind of sat from here on in leaning forwards on my seat going [leans forward and covers her hand with her mouth]. [laughs]

Re1: So I mean was it an exciting experience to watch it do you think?

Pt5FSR: Yeah.

Pt6MSR: Absolutely.

In addition to the excitement generated from the matches, participant interviews revealed how a sense of intimacy with others could amplify the intensity of emotional experience:

Pt12FER: I think I got even more emotional and more into the game as I saw Pt13FER especially.

Pt13FER: How crushed we were.

Pt12FER: And Laura was so upset. You know the people around me were all watching the same thing and supporting the same thing

For Pt12FER then, the fact that co-present friends were experiencing (and expressing) the same emotions as her but at a higher intensity served to magnify her own experience. As the following passage suggests however, such emotional amplification was not restricted to interactions between friends, but was noted by Pt1FSR after she specifically sought out a venue containing fellow Scotland supporters:

Pt1FSR: We wanted to watch it with…like to get the atmosphere. St Andrews isn't the best place because so many people aren't actually Scottish. But when we were there at the game and Scotland scored, like even not watching the game but watching the response of the crowd, you could feel it, you know you could feel it in yourself, it's great.

Re1: How do you mean "feel it in yourself"?

PtFSP: Like…everybody's cheering and jumping up and down, and it gets you much more excited. [ ] When you're feeling the same emotions as somebody in a crowd…like if there's something that you're watching which is positive, then it spreads, it spreads.

It worth noting that Pt1FSR determined that she was "feeling the same emotions" as others due to the public signal of their embodied emotional experience ("everybody's cheering and jumping up and down"). The importance of embodied emotional cues was previously touched upon in the analysis by Pt8FSR (4.3.3.2), who interpreted the expressions of her husband as an indication of divergent emotional experience, which ultimately diminished her experience of watching the match.

4.3.3.4 Outcomes of Collective Experience

Intention of Future Participation

It was noted previously in the analysis that the desire to watch future matches was likely greatest for highly identifying supporters (4.3.3.1). However, there was evidence in the participant interviews that strength of identity was not the only antecedent of intended future

participation. As described in 4.3.3.3, emotional intensity of collective experience was declared by some participants to encourage future participation in the group. This process was unpacked by Pt10MSR who explained how it was not positivity per se, but a holistic enjoyment of a passionate experience which motivated him to attend future matches:

> Pt10MSR: [The Scotland match was] such a rollercoaster of an experience that it was fantastic because it was…you were everything, you were through the mill, and although you were annoyed and disappointed after it, it was still…it was a full spectrum.
>
> Re1: And that's a good thing, to have that full spectrum?
>
> Pt10MSR: Yeah! I mean that's what makes people go to football games every week. Although obviously you're not wanting to go every week and lose, but that's what makes you keep going.

Social Identity

Analysis in 4.3.3.1 indicated that social identity could be an antecedent to emotional intensity of experience. However, evidence from participant interviews suggested that this relationship could be bidirectional. Retrospective interview data revealed that participants' emotionally intense collective experiences could strengthen attachment to the social group, which could consequently increase intention of future participation with that group. This process is illustrated by Pt12FER in the following interview extract. She explained that her initially weak identification with the England team was strengthened through her intensely emotional collective experience, which resulted in a stronger desire to watch future England matches:

Pt12FER: I mean I went in going, "Alright I'll watch", you know, "Pt13FER and Laura are both from England, I'll support England, whatever". And I came out and I was like, "You know what, I could do that again!". You know even though I was disappointed and I was like, "That was awful", but there's a lot of emotion behind it, and I like that kind of emotion and I think that's kind of why I get into sports because there's that kind of emotion.

Re1: You like negative emotions?

Pt12FER: Not necessarily negative emotions but like the crowd emotion, and I like feeling like I'm part of something. So I think I would definitely go and watch an England game again, support England, and probably be even more into it the next time.

4.3.4 DISCUSSION

As participants self-categorised (Turner, 1982; Turner et al., 1987) themselves as supporters of their national football team, there were cognitive, emotional, and behavioural consequences. In cognitive terms, participants' sense of self shifted from the individual to the social. The matches were then experienced emotionally as a consequence of this social identity, and participants behaved congruently with the norms of the salient social identity. This evidence supports the social identity approach to crowds (Reicher, 1984; 1987; 1996), and IET (Smith, 1993; Smith et al., 2007) which contends that emotions may be felt on behalf of the socially extended self.

However, it was not self-categorisation but shared identity which emerged as critical for collective experience. When participants appraised that co-present others shared their identity (predominantly through the display of ingroup symbols), social relations could be positively transformed in a number of ways (Reicher, in press). In line with other recent findings (Neville, 2007; PMMRG, 2007), participants could experience a sense of intimacy and ease with strangers, have their opinions and emotional experiences validated by others, and feel recognised instead of ignored. The physical dimension of connectedness – physicality - also appeared contingent upon shared identity, such that supporters positively experienced (and sought out) environments that were densely packed with fellow ingroup members, corroborating recent experimental results (Novelli et al., 2010). It is important to emphasise that shared identity and relatedness were not universal for the participants in this study. This was particularly evident for English fans watching their match surrounded by Scots who were supporting Croatia. A lack of shared identity with other crowd members in this instance created the conditions for isolation and even hostility.

In emotional terms, supporters struggled to disentangle positive experiences of relatedness from the anguish of watching their teams lose. Instead, the importance of emotional intensity emerged from the data, with evidence that both strength of social identity with the relevant group (Smith 1993; Smith et al, 2007), and relatedness could provide the bases for collective emotional intensity. An emotionally intense experience was not the only outcome of collective participation for football supporters in Study 2. There was some evidence that fans' strength of social identity with their national team was affected by their collective experience, corroborating research examining how social identities may be shaped through collective

participation (e.g. Drury & Reicher, 2000; Drury & Reicher, 2005).[63] Both strength of social identity and emotionality were subsequently noted as impacting upon supporters' intentions of participating in future group events. The importance of social identity for participation in collective action has been well documented (e.g. Simon et al., 1998) and the role that group-based emotions (albeit discreet emotions and not collective emotional *experience*) may play in encouraging future co-action has become a burgeoning research area collective action literature (see e.g. Tausch et al., 2011; van Zomeren et al., 2004).

Limitations

The studies relied upon a limited number of respondents, running the risk that our samples were not representative of the populations who participated in the crowd events. However, a limited sample size was a necessary sacrifice in order to conduct the in-depth interviews. There is also a danger that the two most prominent themes identified in this study - relatedness and emotional intensity - are specific to sporting events (in particular football). With regards relatedness, Pt9MSR pointed out that intimacy between strangers was part of the "culture" of watching football matches in British bars:

> Pt9MSR: I was like hugging some guy I didn't know at the bar. [ ] everyone knows we're in Scotland, everyone knows we're in a pub. So everyone knows that having been in pubs a lot in those situations that sort of thing goes on, you know? [ ] it's part of the culture I suppose.

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[63] Anecdotal evidence also suggests that negative emotional experiences may be a pre-cursor for some forms of group membership e.g. McIlroy's (1993, p28) assertion that for football supporters, "To feel part of a club you have to suffer for it".

In addition, because attendance at sporting events is to some extent a pursuit of entertainment (Sloan, 1989, as cited in Fagan, 2011, p202), it is possible that emotional intensity of experience is only an important factor in this particular social context. Furthermore, both interpersonal intimacy and intensity of emotional experience were also likely affected by the alcohol intake which is normative for British football fans watching their teams:

> Pt1FSR: it's a kind of a big event in the Scottish football calendar, and obviously you associate Scotland you associate with alcohol and football. [ ] [with alcohol] you would experience the same emotions and behaviours, but they would be more…they would be greater.

Although these contextual factors plausibly shaped fans' experiences and behaviour, the similarity of findings to Study 1 suggests a generality of process, if not the forms that this process took.

4.3.4.1 Hypotheses

Despite analysing collective events which differed substantially in their goals, forms and participant behaviours, there were striking similarities between the findings of Studies 1 and 2. These commonalities allow us to draw out preliminary hypotheses for examination in subsequent studies. Firstly, there was evidence that as participants self-categorized themselves as members of a social group, identity-relevant collective events could be experienced emotionally on behalf of the socially extended self. It is therefore hypothesised that strength of social identity will predict the emotional intensity of collective experience. Results from both studies in this chapter also suggest that strength of social identity encouraged participation in future group activities. Our

second hypothesis therefore states that strength of social identity can predict the intention to participate in future group activities.

Perhaps more contentious was the preliminary evidence that intended future co-action could also be influenced by participants' collective emotional experiences. Our third hypothesis therefore tentatively suggests that intention of future participation may also be predicted by the emotional experience of collective participation. Whilst self-categorisation determines the cognitive shift from personal to social level identity (Turner et al., 1987), analyses of Studies 1 and 2 suggest that the relational transformation experienced within the crowds was a consequence of shared identity between group members. The fourth hypothesis thus predicts that relatedness shall be dependent upon a perception of shared identity with co-present others.

Results from our two exploratory studies further suggest that as emotional experience was reflected between members of the same social group, it could be amplified through a process of reciprocal validation. It is therefore hypothesised that relatedness will predict emotional intensity of collective experience. The next hypothesis concerns the impact of the achievement (or failure) of group goals upon the experience of collective participation. In conjunction with previous research, analysis of Study 1 suggested that CSR can also predict group members' collective emotional experiences. Finally, whilst the first hypothesis predicted the role that strength of social identity is expected to play in generating emotional intensity of experience, analysis of Studies 1 and 2 suggested that the emotional experience of collective participation may in turn have shaped participants' social identities.

To summarise then, the following seven hypotheses have been generated from the analyses of Studies 1 and 2:

H1: Strength of social identity will predict emotional intensity of experience

H2: Strength of social identity will predict intention of participation in future group events

H3: The emotional experience of collective action will predict intention of participation in future group events

H4: Perception of shared identity will determine relatedness with co-present others

H5: Relatedness will predict emotionality of experience (positivity and intensity)

H6: Collective self-realisation of group goals will predict emotionality of experience (positivity and intensity)

H7: The experience of collective participation can shape participants' strength of social identity with the relevant group

Study 3 shall examine five of these hypotheses (H1, H2, H3, H5, and H7) by analysing questionnaire data collected during Study 2.

4.4 STUDY 3

4.4.1 INTRODUCTION

Study 3 analyses questionnaire data exploring the collective experiences of football supporters. The questionnaires were completed during Study 2 by fans in the University of St Andrews Student Union Bar. It was originally intended to compare the experiences of these supporters with fans watching the same matches at home. However, due to limited participant numbers from the second source, only data from those in the collective environment are included in the current study. Additionally, because the studies in this chapter were conducted concurrently, the questionnaire does not include items examining the emergent findings from Studies 1 and 2 (including shared identity, relatedness[64], and CSR). Furthermore, many of the scales used in the questionnaire were preliminary (due to an absence of suitable scales in the research literature), and as shall be explained in the materials section (4.4.2.2), are analysed as single-item scales due to their poor reliability. Despite these shortcomings, the questionnaire data does provide an opportunity to confirm the qualitative analyses from Studies 1 and 2 using quantitative data. Specifically, Study 3 examines the following hypotheses:[65]

H1:   Strength of social identity will predict emotional intensity of experience

H2:   Strength of social identity will predict intention of participation in future
        group events

H3:   The emotional experience of collective action will predict intention of
        participation in future group events

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[64] Relatedness is cautiously operationalized using a single item taken from the strength of social identity scale.

[65] H4 and H6 are not included in this study because the questionnaire, which was constructed before analysis of Study 2, did not include measures of shared identity or CSR.

H5:   Relatedness will predict emotionality of experience (positivity and intensity)

H7:   The experience of collective participation can shape participants' strength of

social identity with the relevant group

4.4.2 METHODS [66]

4.4.2.1 Participants

The final questionnaire sample consisted of 41 Scotland, and 19 England supporters ($N = 60$),

48 of whom were male and 10 female, with 2 participants failing to disclose their gender.[67]

Participants were aged between 17 and 64, with a mean of 22.52 ($SD = 6.43$). All participants

were either students or staff at the University of St Andrews. Participants who were not

supporting their own national team (n = 32) were excluded from the dataset due to potential

differences in motivation and experiences of their attendance compared to other fans e.g.

Scottish nationals supporting Croatia against England. Four participants arrived at the Student

Union Bar just after the Scotland match kicked-off, and so only completed the second section of

the questionnaire. Their data is included in the analysis since responses to the first section were

considered unlikely to influence those in the second. In addition, one Scottish participant did

not realise that the questionnaire was double-sided, whilst another failed to complete the final

page of the questionnaire.

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[66] The study received ethical approval from UTREC (See Appendix IVc).

[67] This asymmetry is broadly representative of the composition of Scottish football crowds (Waddington et al., 1998).

4.4.2.2 Materials

The questionnaire (see Appendix IVd) was divided into two sections. The first section was completed just prior to kick-off, and the second answered during the half-time break. Because of the limited time in which participants had to complete both sections, the questionnaire was kept as short as possible. The first section contained demographic items (age, gender, nationality, and which team the participant was supporting), and the second examined participants' experiences and their potential correlates. The second section also asked participants where they were watching the match, and to estimate how many other people were present.[68] All questionnaire items used nine-point Likert Scales (1-9) unless otherwise stated. A summary of the questionnaire scale reliabilities can be found in Table 4.1.

Strength of Social Identity

Strength of social identity with one's national football team was measured using four items adapted from Cameron (2004); "In general, how important is being a supporter of your national football team to your self-image?" (*Not at all Important/Extremely Important*), "How often do you think about the fact that you are a supporter of your national football team?" (*Never/Often*), "How much do you have in common with other supporters of your national team?" (*Nothing at all/A Great Deal*), and "Generally, how good do you feel about yourself when you think of yourself as a supporter of your national football team?" (*Not at all Good/Extremely Good*). One additional item was removed to create a measure of relatedness (see below), and a second item,

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[68] The questionnaire also contained items examining strength of national identification, importance of team success, preference for collective participation, whether participants felt distracted during the match, and an open question in which participants suggested differences in experience between watching matches at home with public places. These are not included in the current analysis.

"How often do you regret that you are a supporter of your national football team?" [reverse coded] (*Never/Often*), was removed to improve the scale reliability from α = .59 to α = .85.

Relatedness

Participants' sense of relatedness to other supporters was measured using one item adapted from Cameron's (2004) strength of social identity scale; "I feel a sense of being 'connected' with other supporters of my national team." (*Totally Disagree/Totally Agree*). [69]

Positivity

Positivity of experience was assessed by combining a one-item measure of enjoyment, "How much are you enjoying watching the match so far?" (*Not at all Enjoying/Very Much Enjoying*), with a one-item measure of mood, "How would you rate your current mood?" (*Very Negative/Very Positive*). The two items scaled together reliably ($r = .72$), and were combined to form an aggregate measure of positivity.

Emotional Intensity

The two-item emotional intensity scale did not achieve an acceptable level of reliability ($r = .33$). The first item, "How intense have you found the experience of watching the match so far?" (*Not at all Intense/Very Much Intense*), was excluded from the analysis because without explicitly referring to emotion the question was potentially ambiguous. As such, the emotional intensity

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[69] This item is a measure of connectedness which we argue is a form of relatedness. To provide consistency with subsequent chapters, the scale shall be referred to as relatedness in this study.

scale only used the second item; "How emotional have you found the experience of watching the match so far?" (*Not at all Emotional/Very Emotional*).

Intention of Future Participation

The two-item intention of future participation scale did not achieve an acceptable level of reliability ($r = .13$), possibly due to ceiling effects with the second item, "I am not going to watch my national team's matches in the future" [reverse coded] (*Totally Disagree/Totally Agree*) ($M = 7.97$, $SD = 2.15$, Skewness $= 2.13$). Consequently only the first item, "How important is it for you to watch your national team's matches in the future?" (*Not at all Important/Extremely Important*), is included in the current analysis.[70]

Quality of Football

Participants' evaluation of the quality of football in their match was measured using two items: "What has the quality of football been like in today's match so far?" (*Poor/Excellent*), and "How well do you think that your national team has played so far today?" (*Not at all Well/Very Well*). The two items scaled together reliably ($r = .81$), and were combined to form an aggregate measure.[71]

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[70] Whilst a behavioural measure of future participation would be preferable, intention of future participation may be a reliable predictor for actual behaviour (Armitage & Connor, 2001). Furthermore, as van Zomeren, Leach & Spears (2010, p1059) note, "using action tendencies as a proxy for behaviour might overestimate the size of any obtained effect but does not invalidate its interpretation".

[71] Although no reference is made to quality of football in the hypotheses, the variable in included in the analysis because it helps to disentangle emotional experience of the matches from emotional experience of collective participation.

4.4.2.3 Procedure

Participants were recruited by approaching supporters in the Student Union Bar from half an hour prior to kick-off. All participants reported being in the location with the prior intention of watching the matches. It was explained that the questionnaire was in two parts; the first section to be filled out before kick-off, and the second at half-time. Participants were requested to leave their completed questionnaires on a table in the bar where they were collected by the researchers after full-time. As an incentive to participate, all supporters who completed a questionnaire were entered into a prize draw to win an international football shirt of their choice.

4.4.3 ANALYSIS

After preliminary analysis (4.4.3.1), the main analysis section shall examine five of the hypotheses generated from Studies 1 and 2 using linear regression and mediation analysis (4.4.3.2). Two-tailed statistical tests with an alpha value of .05 are used in all analyses unless otherwise stated.

4.4.3.1 Preliminary Analysis

Control Variables

There were no significant effects of participant gender, age, or the numbers of others present upon any of the other questionnaire variables. There were however significant differences in experience for supporters of different teams. Positivity of experience was significantly higher for Scotland fans ($M = 5.70$, $SD = 1.60$) than England fans ($M = 2.50$, $SD = 1.56$), $t(53) = 6.48$, $p < .01$. Scotland fans ($M = 6.21$, $SD = 1.45$) also rated the quality of football in their match significantly higher than England fans ($M = 2.14$, $SD = 1.08$), $t(53) = 9.60$, $p < .01$. All analyses

involving positivity and quality of football therefore control for participant team where appropriate.

Reliability Analysis

A summary of the reliability of questionnaire scales is presented in Table 4.1. There are no reliability statistics for the three scales which contained only one item.

Table 4.1

Study 3 Scale Reliabilities

Variables	n	Reliability
Strength of Social Identity	56	$\alpha = .85$
Relatedness	55	-
Positivity	59	$r = .72$
Emotional Intensity	59	-
Quality of Football	59	$r = .81$
Intention of Future Participation	58	-

4.4.3.2 Main Analysis

Table 4.2 provides the descriptive statistics for each of the questionnaire variables, and Table 4.3 presents their zero-order correlations.

Table 4.2

Study 3 Descriptive Statistics

Variables	*n*	*M*	*SD*
Strength of Social Identity	56	5.00	1.80
Relatedness	55	5.75	2.31
Positivity	59	4.99	2.14
Emotional Intensity	59	6.00	2.29
Intention of Future Participation	58	6.55	2.03
Quality of Football	59	5.19	2.25

Table 4.3

Study 3 Zero-Order Correlation Matrix

Variables	a)	b)	c)	d)	e)	f)
a) Strength of Social Identity	-	.77*	-.21	.60*	.74*	-.07
b) Relatedness		-	-.25	48*	.65*	-.09
c) Positivity			-	-.25	-.17	.74*
d) Emotional Intensity				-	.62*	-.25
e) Intention of Future Participation					-	-.17
f) Quality of Football						-

Note. All *p-values* are two-tailed. * *p* < .01

Hypothesis 1

Hypothesis 1 stated that strength of social identity would predict emotional intensity of experience. Using linear regression, strength of social identity significantly predicted emotional intensity of experience, $b = 0.76$, $SE = 0.14$, $t(52) = 5.36$, $p < .01$, $R^2 = .36$. It is worth noting

that the relationship between strength of identity and positivity of experience was very different. Controlling for which team the participants supported (b = -0.50, SE = 0.36, $t(51)$ = -1.39, p = .17), and perceived quality of football (b = 0.53, SE = 0.14, $t(51)$ = 3.73, p < .01), strength of social identity had a negative, but non-significant, effect upon positivity of experience, b = -.18, SE = 0.11, $t(51)$ = -1.63, p = .11, R^2 = .58.

Hypothesis 2

Hypothesis 2 stated that strength of social identity would predict participants' intentions of participating in future group events. Using linear regression, strength of social identity significantly predicted intention of future participation, b = 0.82, SE = 0.10, $t(52)$ = 7.87, p < .01, R^2 = .54.

Hypothesis 3

Hypothesis 3 proposed that emotionality (positivity and intensity) of collective participation could impact upon the intention of participants to take part in future group events.

Positivity

Controlling for which team the participants supported (b = 0.03, SE = 0.48, $t(50)$ = 0.05, p = .96), and perceived quality of football (b = 0.39, SE = 0.21, $t(50)$ = 1.89, p = .06), positivity of experience significantly (negatively) predicted intention of future participation, b = -0.46, SE = 0.18, $t(50)$ = -2.58, p < =.01, R^2 = .13. However, when controlling for strength of social identity, this relationship became non-significant; Controlling for which team the participants supported (b = 0.84, SE = 0.33, $t(49)$ = 0.26, p = .80), perceived quality of football (b = 0.31, SE = 0.14,

$t(49) = 0.26$, $p = .80$), and strength of social identity ($b = 0.78$, $SE = 0.11$, $t(49) = 7.53$, $p < .01$), positivity of experience did not significantly predict intention of future participation, $b = -0.22$, $SE = 0.13$, $t(49) = -1.73$, $p = .09$, $R^2 = .56$.

Emotional Intensity

Linear regression analysis demonstrated that emotional intensity of experience significantly predicted intention of future participation, $b = 0.55$, $SE = 0.09$, $t(56) = 5.98$, $p < .01$, $R^2 = .39$. Furthermore, in conjunction with the acceptance of Hypotheses 1 and 2, simple mediation analysis tested whether emotional intensity of experience mediated the effect of strength of social identity upon intention of future participation.

All simple mediation analyses in this thesis are tested using the guidelines and SPSS macro provided by Preacher and Hayes (2004, 2008). This non-parametric approach is favoured over the traditional Baron and Kenny (1986) and Sobel (1982) methods.[72] The Baron and Kenny (1986) method does not provide a formal significance test of mediation, but rather states that if the direct effect of the predicator variable upon the dependent variable is reduced to zero when the formula includes the mediator, then full mediation has occurred. However, it is difficult to demonstrate partial mediation without a formal significance test. Although the Sobel (1982) method could test for partial mediation using the Baron and Kenny (1986) method, it is unreliable when using small sample sizes because it assumes that all variables have normal distributions, has low power, and increases the risk of both Type I and Type II errors (Preacher & Hayes, 2004; Preacher, Rucker, & Hayes, 2007). The Preacher and Hayes (2004) method is

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[72] Results using the Sobel test are additionally provided as footnotes where appropriate.

preferred since it is non-parametric, does not make assumptions about normality of variance, and delivers a more powerful test than the more traditional methods.

Results based on 5000 bootstrapped samples indicated partial mediation such that whilst both the total effect of strength of social identity (Total Effect (TE) = .82, SE = .10, $p < .01$), and the direct effect of strength of social identity (Direct Effect (DE) = .63, SE = 0.12, $p < .01$) on intention of future participation were significant, the indirect effect (IE) (IE = .19, SE = .08, p = .02) was also significant. Because zero is not in the 95% confidence interval (CI), (IE lower 95% CI = .03, upper 95% CI = .38) the indirect effect is significantly different from zero at $p <$ .05 (two tailed) (see Figure 4.1).[73]
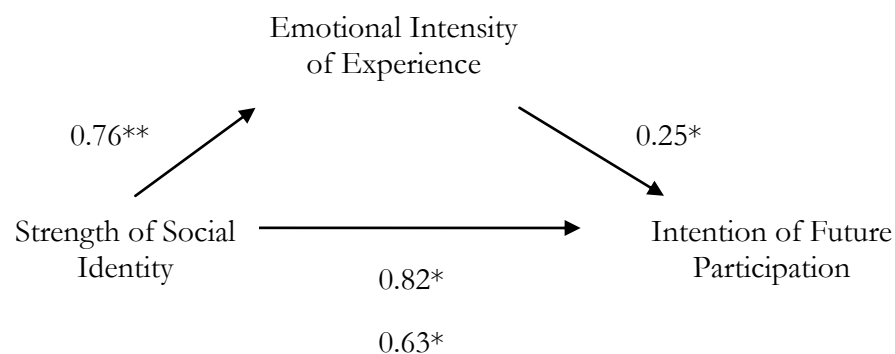
Figure 4.1. Emotional intensity of experience as a partial mediator of the relationship between strength of social identity and intention of future participation. Values represent unstandardized regression weights. * p < .01

Hypothesis 5

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[73] Analysis using a Sobel Test yielded an equivalent result, Z = 2.38, p = .02.

Following qualitative analysis from Studies 1 and 2 it was hypothesised that relatedness would predict emotionality of collective experience (positivity and intensity). Although the relatedness measure used in this study was taken from the strength of identity scale, the qualitative evidence does suggest a distinct path to emotionality.

Controlling for which team the participants supported (b = -0.54, SE = 0.35, $t(51)$ = -1.54, p = .13), and perceived quality of football (b = 0.52, SE = 0.14, $t(51)$ = 3.79, p < .01), relatedness significantly (but negatively) predicted positivity of experience, b = -.21, SE = 0.10, $t(51)$ = -2.25, p = .03, R^2 = .60. However, as was the case when positivity negatively predicted intention of future participation, this relationship became non-significant when controlling for strength of social identity; Controlling for which team the participants supported (b = -0.57, SE = 0.36, $t(50)$ = -1.62, p = .11), perceived quality of football (b = 0.52, SE = 0.14, $t(50)$ = 3.76, p < .01), and strength of social identity (b = 0.13, SE = 0.22, $t(50)$ = 0.59, p = .56), relatedness did not significantly predict positivity of experience , b = -0.32, SE = 0.20, $t(50)$ = -1.62, p = .11, R^2 = .60.

Relatedness did however significantly predict emotional intensity of experience, b = 0.46, SE = 0.12, $t(54)$ = 3.70, p < .01, R^2 = .32. In conjunction with Hypothesis 3, this relationship was further corroborated by testing emotional intensity as a mediator between relatedness and intention of future participation. Results based on 5000 bootstrapped samples indicated partial mediation such that whilst both the total effect of relatedness (b = .54, SE = .09, p < .01), and the direct effect of emotional intensity (b = 0.38, SE = 0.09, p < .01) on intention of future participation were significant, the IE (b = .16, SE = .06, p < .01) was also significant. Because

zero is not in the 99% confidence interval, (b = lower 99% CI = 0.04, upper 99% CI = 0.39), the indirect effect is significantly different from zero at $p < .01$ (two tailed) (see Figure 4.2).[74]

Emotional Intensity
of Experience

0.46*   0.35*

Relatedness   Intention of Future
                                                       Participation
0.54*

0.38*
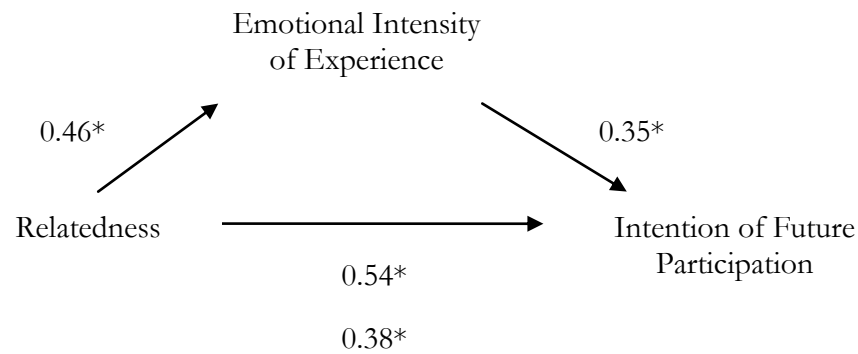
Figure 4.2. Emotional intensity of experience as a partial mediator of the relationship between relatedness and intention of future participation. Values represent unstandardized regression weights. * $p < .01$.

Hypothesis 7

Interview data from Studies 1 and 2 provided preliminary evidence that strength of social identity could be both an input and output of an emotionally intense collective experience. This relationship was examined using simple mediation analysis. In conjunction with Hypothesis 5 which stated that relatedness predicted emotional intensity of experience, emotional intensity was tested as a mediator of the relationship between relatedness and strength of social identity. Results based on 5000 bootstrapped samples indicated partial mediation such that whilst both the total effect of relatedness ($b = .57$, $SE = .07$, $p <. 01$), and the direct effect of relatedness ($b = .46$, $SE = .07$, $p <. 01$) on strength of social identity were significant, the IE ($b = .11$, $SE =$

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[74] Analysis using a Sobel Test yielded an equivalent result, $Z = 2.78$, $p < 0.01$.

.04, *p* = .01) was significant. Because zero is not in the 99% confidence interval (IE lower 99% CI = .03, upper 99% CI = .24), the indirect effect is significantly different from zero at *p* < .01 (two tailed) (see Figure 4.3). [75]
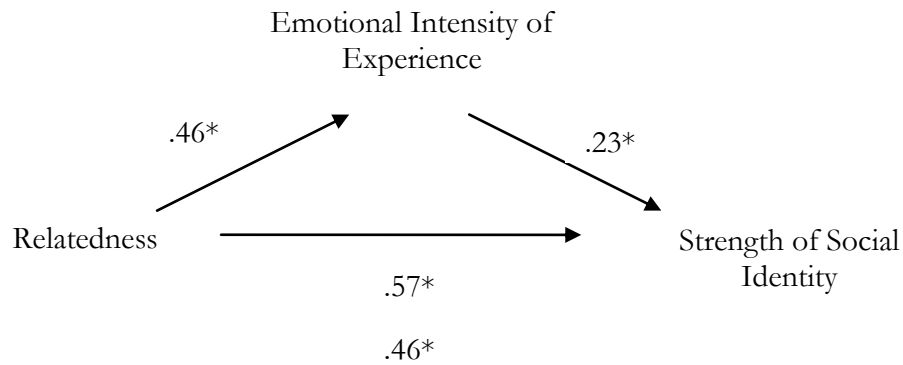
Figure 4.3. Strength of social identity as a partial mediator of the relationship between emotional intensity of experience and intention of future participation. Values represent unstandardized regression weights. * *p* < .01

4.4.4 DISCUSSION

Study 3 was designed to explore the plausibility of the hypotheses which emerged from the qualitative analyses of Studies 1 and 2, by subjecting them to quantitative analysis. Five of the hypotheses were tested using a questionnaire study conducted at collective screenings of international football matches. Strength of social identity was seen to significantly predict emotional intensity of experience (H1) and intention of future participation (H2). Relatedness unexpectedly negatively predicted positivity of experience and intention to future participation, although these relationships became non-significant when controlling for strength of social

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[75] Analysis using a Sobel Test yielded an equivalent result, *Z* = 2.51, *p* < 0.05.

identity.[76] Relatedness to other crowd members significantly predicted emotional intensity of experience (H5), which in turn encouraged intention of future participation (H3). There was also preliminary evidence that strength of social identity could be shaped by the experience of collective participation (H7).

Limitations

As noted in the introduction (4.4.1), the questionnaire had several weaknesses. The conclusions from Study 3 must be treated as tentative because our data were correlational and not causational. Furthermore, the scales used in the questionnaire were preliminary, since they had not been used previously in the research literature (with the exception of social identity scale [Cameron, 2004]). Due to the limited time in which participants had to complete the second section, several of these scales contained only one item.[77] Moreover, because Study 3 was conducted simultaneously with the hypothesis-generation phase of research, some of the emergent findings from Studies 1 and 2 were not included in the questionnaire. As a consequence, relatedness was operationalized by taking a single item from the social identity measure (Cameron, 2004), and shared identity and CSR were not measured at all. Improved questionnaire measures are developed in subsequent studies.

The participant sample was male-dominated (83% of questionnaires were completed by men). The gendered nature of this sample was representative of those watching the matches, and of football fans within Scotland more generally ([Waddington, Malcolm & Horak, 1998]). Although it is

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[76] It is likely that the negative relationships between relatedness and positivity, and positivity and intention of future participation, were epiphenomenal such that both negative relationships were driven by correlation with strength of social identity.

[77] Single-items scales have been used successfully in other research contexts (e.g. Robins, Hendin, & Trzesniewski, 2001).

possible that participant gender affected the results of both Studies 2 and 3, the common pattern of results with Study 1 (which had fewer male than female participants) and the lack of significant gender effects in the questionnaire (see 4.4.2.1) suggest that the impact of gender was negligible.

Finally, when designing this study it was hoped that the data would enable a systematic comparison of experience between those watching in a crowded environment with others viewing the matches at home. Unfortunately, despite extensive efforts at participant recruitment[78], the small proportion of the sample who watched the matches at home made this comparison unfeasible. Although disappointing, it was nonetheless striking that the vast proportion of fans preferred to view the games collectively, despite the costs incurred and the dreadful weather on each of the match days.[79]

4.5 CHAPTER IV DISCUSSION

The psychological collective action literature has examined various antecedents to collective participation, including strength of social identity (e.g. Kelly & Breinlinger, 1995; Simon et al., 1998), empowerment and efficacy (e.g. Drury & Reicher, 2009; van Zomeren et al., 2010), collective emotion (e.g. Livingstone et al., in press; Tausch et al, 2011; van Zomeren et al., 2004; van Zomeren, et al., 2008), and moral conviction (van Zomeren, Postmes, & Spears, 2011; van Zomeren, Postmes, Spears, R., & Bettach, 2011). However, comparatively little attention has been given to the nature of collective experience, and its potential consequences for the

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[78] Including national press coverage (e.g. "Support for Euro Study", 14.11.07; "Scotland Fans Asked to Help Researcher", 15.11.07; "Home Fixture Shunned for a Pub Crowd", 15.11.07)

[79] Several Scotland supporters who had initially planned to watch the game alone returned their questionnaires uncompleted after opting to experience the match in crowded bars.

outcomes of collective participation, including commitment to future group action. The three studies in this first empirical chapter explored these themes by collecting ethnographic and retrospective interview data at a student demonstration (Study 1) and screenings of international football matches (Study 2). Questionnaire data was collected at the same football matches for analysis in Study 3. The opening two studies generated hypotheses which the third study confirmed using linear regression and mediation analysis. Taken together, the three studies identified commonalities in collective experience across two very different social contexts.

Our analysis revealed that when participants appraised co-present others as sharing their social identity (e.g. through shared ingroup symbols, action, or embodied emotion), then social relations between crowd members could be positively transformed in a number of ways. Positive relational transformations included a sense of connectedness or intimacy, and recognition such that one's presence in the crowd was noted and valued by others. Relatedness could further extend to the validation of one's beliefs, emotions and behaviours. In contrast to 'everyday' life which may be filled with doubt and insecurity, within the crowd participants described an alleviation of personal uncertainty as their perspective on the world was reflected back at them by fellow group members. These findings were in line with Hindu pilgrims' accounts of collective relatedness at the Magh Mela festival (PRMMRG, 2007; Stevenson et al., 2010).

The analysis also noted instances when participants experienced a diminution of shared identity with co-present others, such as when more affluent participants listened to speeches from students unable to afford their rents, or the Northern Irish participant watched a Scotland football match. This shift in shared identification was likely caused by a change in self-categorisation. As the comparative and normative fit of categories changed in those contexts,

different social identities may have become salient to the relevant participants such as being a richer student, or an inauthentic Scotland fan. It is important to emphasise that not all participants felt that they shared a social identity with one another, and thus did not experience a positive transformation of social relations. These deviant cases contribute to the strength of the analysis, because rather than merely highlighting incidences of shared identity, we are making claims of process. Whilst crowd members with shared identity could experience the crowds as supportive and nurturant, several participants without shared identity reported experiencing isolation, detachment and hostility.

Participation in both collective events could be experienced with emotional intensity. Three routes to such collective passion emerged through data analysis. Firstly, participants described experiencing the events emotionally as a function of their salient social identity. This finding is consistent with IET (Smith, 1993; Smith et al, 2007) which contends that group emotions may be felt on behalf of the socially extended self. Protestors in Study 1 also described how the realisation of their group goals (CSR) could be an empowering experience leading to intense positive affect. This finding confirms the analysis of Drury and Reicher (Drury and Reicher, 2001, 2005). Furthermore, a the reciprocal validation of participants' group-based emotions (a form of relatedness) appeared to have an amplifying effect upon emotional intensity of experience. This process is reminiscent of circular reaction explanations of collective emotion (e.g. Blumer, 1939; Park and Burgess, 1921). However, contrary to these early accounts, issues of identity were critical in our data because relatedness was dependent upon shared identity.

This evidence further contradicts classic crowd psychology (e.g. Le Bon, 1895/2002; McDougal, 1939; Freud, 1921) which argued that a loss of identity was the root of crowd

emotionality. Since the individual self was seen as the only basis of reason, crowd members would thus have their reasoned faculties extinguished within the collective, rendering people defenceless against, and dominated by, any passing emotions within the crowd. Contrary to this perspective, analysis from the current chapter supports the social identity approach to crowds which contends that identity is not lost in the crowd, but rather shifts from the personal to the social (Postmes & Spears, 1998; Reicher, 1984, 1987, 1996, 2001; Reicher et al., 1995).

Furthermore, not only was identity not lost, but there was preliminary evidence that identity could be a product of collective participation. In conjunction with research elsewhere (e.g. Drury & Reicher, 2000, 2005; Tajfel, 1978), social identity may therefore both shape, and be shaped by, the experience of collective action. Finally, there was evidence from all three studies that the experience of collective participation could impact upon intention to take part in future group events. Various potential antecedents were identified, including strengthened identity with the group, emotionality of collective experience, and the realisation of collective group goals.

It is acknowledged that the exploratory nature of the methodologies necessarily limit the conclusions which can drawn from them. Subsequent research will use the results from this chapter to interrogate the hypotheses in various ways. Chapter V experimentally investigates the role of shared identity as antecedent to relatedness (H4), before Chapter VI systematically examines the impact of strength of social identity and relatedness upon emotionality of experience (H1 and H5). Chapter VII then uses questionnaire data to tie all the themes and hypotheses together by presenting and testing a preliminary model of collective experience.

4.5.1 Summary

Chapter IV was a project of hypothesis generation and testing. Three studies explored participant experiences in two different forms of crowd event. Study 1 examined participation in a student demonstration, whilst Studies 2 and 3 investigated football fans" experiences of watching matches collectively. Despite the differences between the two social contexts, several common threads of experience emerged from the data. Collective participation could be experienced with emotional intensity through identification with the salient social group, within-crowd relatedness, and the collective realisation of group goals. Collective experience then appeared to shape group commitment. Shared identity with co-present others was seen to positively transform within-crowd social relations. Finally, social identity with the group was noted as having a bidirectional relationship with emotional experience such that it could shape, and be shaped by, the experience of collective participation.

V. MANIPULATING SHARED IDENTITY:

CONSEQUENCES FOR RELATEDNESS AND

SOLIDARITY BEHAVIOURS

5.1 INTRODUCTION

The previous empirical chapter used field studies and a questionnaire to explore changing social relations within crowds. The analysis concluded that in certain collective contexts, social relations could be transformed to create intimacy, trust and a sense of shared experience, replacing the otherness and anomie perhaps more commonly felt between strangers. The current chapter shall examine the role of shared identity as an antecedent to such relatedness, and relatedness as an antecedent to solidarity behaviours.

Veteran Labour MP Tony Benn once recalled the following anecdote to the House of Commons (HC Deb., 22.11.90, 181, col. 486):

I do not know how many honourable members travel, as I do, on trains. I travel regularly on them and I see all the little business men with their calculators working out their cash flow forecasts and I see frowning people glaring at each other. They are Thatcherite trains - the trains of the competitive society. On the way from Chesterfield the other day the train broke down and suddenly everything seemed to change. Somebody came into the carriage and said, "Would you like a cup of tea from my thermos?" People looked after each other's children, and after a young couple had been speaking to me for perhaps half an hour, I asked them, "Have you been married long?" They replied, "We met on the train." Another woman asked

somebody, "Will you get off at Derby and phone my son in Swansea, because he will be

worried?" By the time we got to London we were a socialist train.

For Benn, the breakdown of the train caused a shift in interpersonal relations from frosty division, to intimacy and ease. As the anecdote describes, changes then went beyond the relational to have behavioural consequences, including incidences of interpersonal helping and support, examples of what we define in this study as solidarity behaviours. So not only did the relationships between passengers change, but their actual behaviours towards one another were positively transformed. We propose that these changes have their roots in the perception of shared identity.

Self-categorization with a social identity can lead to a cognitive redefinition of the self, such that particular norms, values and goals become salient (Reicher, Spears, and Haslam, 2010; Tajfel and Turner, 1979; Turner, et al., 1987). However, whilst a cognitive transformation depends upon self-categorization, it is logical to suggest that a relational transformation depends additionally upon shared identity. If one were to identify with a salient social category but find oneself within a group of others who lack this identity, then there is unlikely to be a positive transformation of social relations. The distinction between self-categorization and shared identity has remained implicit in the social identity literature, but shall be empirically demonstrated throughout this thesis. So far, analysis from Chapter IV has suggested that the perception of sharing one's social identity can make one feel connected to, and able to act with, others within the collective. Football supporters described an intimacy with strangers within crowds due to their shared identity as Scottish fans, and student demonstrators recalled similar ease with strangers when they appraised one another as members of the same protest group. We define

shared identity as perceived shared self-categorisation with physically co-present others, and relatedness as the positively transformed social relations which may follow. More specifically, we operationalize relatedness in this study as a combination of connectedness to strangers, validation such that others share and therefore validate one's experiences, recognition such that one's existence is recognised and acknowledged, the inclination to trust others, and general positivity of social relations.

Previous research has demonstrated the positive role of commonality of fate in encouraging helping behaviours (e.g. Batson, Pate, Lawless, Sparkman, Lambers, & Worman, 1979; Dovidio & Morris, 1975; Hayden, Jackson, & Guydish, 1984). Findings from within the social identity literature suggest that this relationship may be mediated by the shared categorisation of others as ingroup members. Viewing one's relationship to others through the lens of shared social identity can have positive behavioural outcomes, with shared ingroup status identified as a consistently key predictor of solidarity (helping) behaviours (e.g. Levine, Cassidy, Brazier, and Reicher, 2002; Levine and Crowther, 2008; Neville, 2005; Reicher, Cassidy, Hopkins, and Levine, 2006). We expect the relationship between shared identity and solidarity behaviours to be mediated by relatedness in the current study. Solidarity behaviours towards others are likely to emanate from a sense of being intimate and close to those who are sharing one's experience, a sensation that is predicted to follow shared identity.

In order to explore these processes, the present study employs an experimental paradigm loosely based upon Benn's experience. Using an adaptation of the priming technique developed by Garcia et al. (2002), participants are asked to imagine that they were travelling on a crowded train. Shared identity is then manipulated by informing participants that their train had broken

down. This manipulation is consistent with previous research identifying shared fate as an antecedent to shared self-categorization, and the formation of psychological groups from co-present individuals (Drury, et al. 2009; Turner, 1982; Turner et al., 1987). It is then predicted that such shared identity will have relational consequences (including increases in intimacy, trust etc.), which will in turn increase the likelihood of solidarity behaviours between passengers.

5.1.1 Research Hypotheses

In more concrete terms, we hypothesise the following:

Hi: Shared identity with other passengers will be greater in the breakdown condition than in the non-breakdown condition.

Hii: Higher shared identity in the breakdown condition will increase imagined relatedness with other passengers.

Hiii: An increased sense of relatedness will in turn have a positive impact upon imagined solidarity behaviours towards other passengers.

5.2 METHODS[80]

5.2.1 Participants

One hundred first year psychology undergraduate students at the University of St Andrews participated in the study for course credit. There were 22 males and 78 females, aged between 17

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[80] The study received ethical approval from UTREC (see Appendix Va).

and 29 with a mean age of 19.10. Fifty participants (11 males and 39 females) took part in each of the counterbalance orders (see 5.2.2).

5.2.2 Design and Materials

The study used a counterbalanced within-subject design such that 50 participants experienced the train breaking down in the first half of the study, whilst the remaining 50 participants experienced it in the second. Participants completed the study online using a questionnaire designed and hosted on surveygizmo.com. (see Appendix Vb).

5.2.2.1 Questionnaire Items and Scale Reliability

All questionnaire items used seven-point Likert scales ranging from *Disagree* (1) to *Agree* (7) unless otherwise stated. Reliability measures are provided for both the breakdown (b) and non-breakdown (nb) experimental conditions.[81]

Shared Identity

The shared identity scale had the following two items[82]; "I feel a sense of 'shared identity' with the other people on the train", and "Other people on the train feel a sense of 'shared identity' with one another". Aggregating these items produced a reliable shared identity scale (b: r = .60, nb: r = .46).

---

[81] A seven-item scale examining imagined comfort in a number of situations aboard the train was excluded from the analysis due to its similarity to the relatedness measure. All significant results for the relatedness scale also held for the comfort scale. A four-item strength of social identity scale (as passengers) was also included in the questionnaire, but is excluded from the current analysis because it is not considered central to our hypotheses.

[82] Originally shared identity was measured using six items, but four of these were excluded due to potential overlap with the relatedness scale; "I have <u>no</u> sense of 'we-ness' with other people on the train" [reverse coded], "The other people on the train have similar norms, principles, and goals as me", "There is <u>no</u> shared understanding between myself and other people on the train", and "All the passengers feel 'in it together'". All analyses using the two-item scale were replicated using the six-item scale.

Relatedness

The relatedness scale was constructed by combining the connectedness, validation, recognition, trust, and positivity of relations subscales. The twelve items were as follows; connectedness (two items), "I feel a sense of intimacy with the other people on the train", and "I have <u>no</u> sense of ease interacting with the other passengers" [reverse coded]; validation (two items), "The other passengers are experiencing the journey in the same way as me", and "The other passengers are on the 'same wavelength' as me"; recognition (three items), "I feel ignored by the other passengers" [reverse coded], "The other passengers notice and acknowledge my presence", and "I feel invisible to the other passengers" [reverse coded]; trust (two items), "I feel <u>no</u> sense of trust with the other passengers" [reverse coded], and "The other passengers strike me as trustworthy"; and positivity of relations (three items), "My interactions with the other passengers are negative" [reverse coded], "My relationship with the other passengers is positive", and "I am enjoying my interactions with the other people on the train".[83] These 12 relatedness items scaled together reliably in both experimental conditions (b α = .81, nb α = .82).

Solidarity Behaviours

Four scenarios examined participants' likelihood of performing imaginary solidarity behaviours towards other passengers, with possible responses ranging from *Not At All Likely* (1) to *Very Likely* (7); "A passenger asks to borrow your mobile phone to telephone a friend. How likely are you to lend your phone to this person?"; "A passenger asks to borrow some money to buy a

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[83] Two additional connectedness items ("I feel <u>no</u> sense of connection with the other passengers" [reverse coded], and "I feel a sense of 'oneness' with the other people on the train"), and one validation item ("The other passengers do <u>not</u> share my views and opinions") were removed due to their perceived closeness to the shared identity items. One trust item ("How much do you trust the passenger next to you to look after [your] bag [containing money and a laptop]" was also removed due to potential overlap with the solidarity behaviour items.

sandwich from the buffet car. How likely are you to lend money to this person?", "You see another passenger struggling to lift their heavy bag onto the luggage rack. How likely are you to help this person?", and "You have brought a bar of chocolate with you for the journey. How likely are you to offer some of it to the other passengers?". The scale had a relatively poor level of reliability (b α = .62, nb α = .56), although part-whole correlations between each item and the aggregate score all had $r > .50$. The low reliability was likely due to normative differences in the behavioural scenarios. Removing individual items failed to improve the reliability of the scale. Consequently, the four-item scale is included in the analysis, but should be treated with a degree of caution.

5.2.3 Procedure

All participants completed two scenarios, one in which they were aboard a crowded train, and one in which they were aboard a crowded train which broke down. This was counterbalanced such that half of the participants experienced the breakdown in their first journey, whilst the other half experienced the breakdown in their second journey. Participant allocation to either half of the counterbalanced design was randomised. This section shall describe the procedure for participants whose train broke down in their first journey.

After consenting to take part in the study, participants read the following instructions;

This study requires you to imagine that you are taking a train journey. Please try to picture yourself in the scene, and think carefully about how you would act and feel at each stage. We are particularly interested in how you imagine yourself relating to the other passengers on the train.

> *You are taking a train journey that requires you to change trains at a station about halfway*
>
> *through the trip. During the first leg of the journey the train is very crowded with other*
>
> *passengers, and you are forced to stand in the aisle. You do not know or recognise any of the*
>
> *other passengers on the train.*

This second passage was accompanied by a photograph from the perspective of someone standing in a crowded train carriage to help participants imagine themselves in the situation.[84]

At this point participants in the breakdown condition were presented with the following information;

> *Halfway through the first part of your journey the train unexpectedly slows down and stops in the*
>
> *countryside. There are no stations nearby. After a few minutes there is an announcement by the*
>
> *train company that the train has broken down, and that a replacement service will be provided*
>
> *within 15 minutes. However, it takes over an hour for the replacement train to arrive. At this*
>
> *point all the passengers (including yourself) change trains.*

This was the experimental manipulation, and was designed to engender a sense of shared identity between passengers. Participants in both conditions were then given the following instruction;

> *Please spend approximately 2 minutes describing how you are experiencing the train journey*
>
> *e.g. how/if the other passengers are interacting with yourself or each other, how comfortable*
>
> *you are finding it on the train, what sort of mood you are in, what you are thinking about etc.*

Following Garcia et al. (2002) and Levine and Crowther (2008), this task functioned to enhance the imagined nature of the paradigm. Upon completion of this exercise participants answered the questionnaire items relating to their imagined experiences in the first condition of the study,

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[84] An equivalent but different photograph was used in the second condition, emphasising the fact that the participant was the only passenger from the first train to take the second, and thereby preventing any residual shared identity from the first journey applying to the second.

before being shown a photograph of passengers waiting at a station, accompanied by the following information;

> *You reach the station where you have to change trains. After a short wait your next train*
>
> *arrives at the correct time and you get on. You are the only passenger from the first train to*
>
> *take the second. During the second leg of the journey the train is again very crowded with*
>
> *other passengers, and you are forced to stand in the aisle. You do not know or recognise any*
>
> *of the other passengers on the train.*

Participants then began their second scenario. This was essentially the same as the first (all written tasks and questionnaire items were identical), except that participants changed experimental conditions (breakdown/non-breakdown).

5.3 ANALYSIS

Two-tailed statistical tests with an alpha value of .05 were used for all analyses unless otherwise stated.

5.3.1 Preliminary Analysis

Skewness and kurtosis values for all variables were within recommended ranges (Kline, 2005). Results from a confirmatory factor analysis failed to separate the shared identity and related items[85]. Although we argue that the constructs are analytically distinct, empirically they can be challenging to separate. As such, the shared identity and relatedness scales should be treated with a degree of caution in this study.

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[85] *Non-breakdown condition*: Principal components analysis using varimax rotation extracted four factors with eigenvalues greater than 1, accounting for 63% of variance. The shared identity and relatedness items did not load onto distinct factors.
Breakdown condition: Principal components analysis using varimax rotation extracted four factors with eigenvalues greater than 1, accounting for 64% of variance. The shared identity and relatedness items did not load onto distinct factors.

Control Variables

Gender and Age Effects

There was a significant effect of gender upon relatedness, with females ($M = 4.19$, $SD = 0.66$) scoring significantly higher than males ($M = 3.83$, $SD = 0.66$), $t(98) = 2.26$, $p = .03$, $d = .46$. As such, all analyses involving relatedness control for gender where possible. There were no significant gender effects upon shared identity or solidarity behaviours. There were no significant effects of age upon shared identity, relatedness or solidarity behaviours.

Photograph Order

Participants were shown different photographs portraying their crowded train carriage at the start of both experimental conditions. The order of these two images was randomised. There were no significant effects of photograph order upon shared identity, relatedness or solidarity behaviours.

Scenario Order

There was a significant effect of scenario order upon shared identity, with participants who completed the breakdown condition first ($M = 3.81$, $SD = 1.13$) scoring lower than those who completed the breakdown condition second ($M = 4.54$, $SD = 0.83$), $t(98) = 3.65$, $p < .01$, $d = .74$. There was also a significant effect of condition order upon relatedness, with participants who completed the breakdown condition first ($M = 3.93$, $SD = .67$) also scoring lower than those who completed the breakdown condition second ($M = 4.30$, $SD = 0.63$), $t(98) = 2.86$, $p <$

.01, $d = .58$. All analyses involving shared identity and relatedness control for condition order where possible. There was no significant effect of scenario order upon solidarity behaviours.

5.3.3.2 Descriptive Statistics

Table 5.1 provides the descriptive statistics for each of the questionnaire variables in both experimental conditions.

Table 5.1

Study 4 Descriptive Statistics

| Variables | Experimental Condition | | | | | |
| | Non-Breakdown | | | Breakdown | | |
	n	Mean	SD	n	Mean	SD
Shared Identity	100	3.85	1.29	100	4.50	1.22
Relatedness	100	3.95	0.77	100	4.28	0.75
Solidarity Behaviours	100	3.55	1.15	100	3.96	1.15

5.3.2 Main Analysis

Effect of condition upon shared identity

As predicted by Hi, perceived shared identity with other passengers was significantly higher in the breakdown ($M = 4.50$, $SD = 1.22$) than the non-breakdown condition ($M = 3.85$, $SD = 1.29$), $t(99) = 4.70$, $p < .01$ (one-tailed), $d = .52$. Relatedness was also significantly higher in the breakdown ($M = 4.28$, $SD = 0.75$) than the non-breakdown condition ($M = 3.95$, $SD = 0.77$), $t(99) = 4.63$, $p < .01$ (one-tailed), $d = .43$. Finally, imagined solidarity behaviours were also

significantly more likely in the breakdown ($M = 3.96$, $SD = 1.15$) than the non-breakdown condition ($M = 3.55$, $SD = 1.15$), $t(99) = 4.68$, $p < .01$ (one-tailed), $d = .36$.[86]

Shared identity as a mediator between experimental condition and relatedness

Hii predicted that an increase in shared identity would positively impact upon the sense of relatedness felt towards other passengers. This was tested by examining shared identity as a mediator between experimental condition and relatedness. Due to the within-subject design of the study, the data was analysed using Judd, Kenny, and McClelland's (2001) procedure for testing mediation with OLS regression in within-subject designs. When considering the effect of an experimental condition (C) on an outcome variable (Y) via mediator (X), Judd et al. state that "assuming that there is an overall treatment effect on X and that the X difference predicts the Y difference, mediation of the treatment effect in Y by X is indicated (assuming that X and Y are scaled to have a positive relationship and the treatment effects in Y and X are in the same direction)" (*ibid.*, p 131).

As described in 5.3.2.1*,* there were significant between-subject differences between the two experimental conditions for mean scores of both shared identity and relatedness. The differences were in the same direction i.e. on average participants scored higher on both measures in the breakdown condition. To determine if shared identity mediated the relationship between experimental condition and relatedness, the difference in relatedness scores between experimental conditions was predicted by the difference in shared identity scores between experimental conditions, whilst controlling for scenario order ($b = .19$, $SE = .13$, $p = .13$) and gender ($b = -.05$, $SE = .15$, $p = .73$). This regression was significant, $b = .26$, $t(96) = 5.68$, $p < .01$,

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[86] When each counterbalance order was considered separately all within-subjects t-tests remained significant at $p < .05$.

$R^2 = .27$, confirming shared identity as a mediator between experimental condition and relatedness.

Relatedness as a mediator between shared identity and solidarity behaviours

Hiii stated that the positive effect of shared identity upon relatedness would in turn encourage solidarity behaviours towards other passengers. This hypothesis was tested by examining relatedness as a mediator of the relationship between shared identity and solidarity behaviours. Unlike the within-subjects mediation conducted in 5.3.2.2, between-subjects mediation was tested using nonparametric bootstrapping analyses as recommended for small sample sizes (see Preacher & Hayes, 2004; Preacher, Rucker, & Hayes, 2007).

Controlling for the effects of counterbalance order ($b = -.18$, $SE = .17$, $p = .30$) and gender ($b = -.57$, $SE = .21$, $p = .01$), results based on 5000 bootstrapped samples indicated that whilst the total effect of shared identity on solidarity behaviours was significant ($b = .33$, $SE = .10$, $p < .01$), the direct effect was not ($b = .00$, $SE = .10$, $p = .96$). Because zero was not in the 99% confidence interval (lower 99% CI = .12, upper 99% CI = .60), the indirect effect ($b = .32$, $SE = .09$, $p < .01$) was significantly different from zero at $p < .01$ (two tailed) (see Figure 5.1).[87]

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[87] Sobel Test $Z = 4.25$, $SE = .08$, $p < .01$

Relatedness

0.30*   1.08*

Shared Identity ⟶ Solidarity Behaviours

0.33*

(0.00)
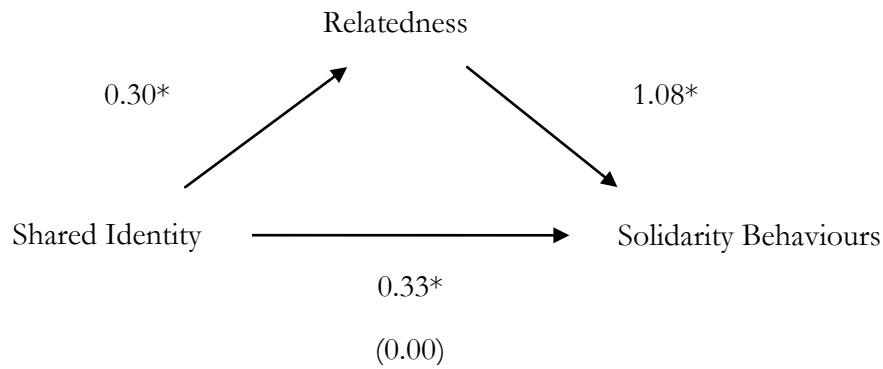
Figure 5.1 Relatedness as a full mediator of the relationship between shared identity and solidarity behaviours. Values represent unstandardized regression weights. *p < .01.

5.4 DISCUSSION

The results of the study provide support for all three hypotheses. The experimental manipulation (train breaking down) had a significant positive effect upon perceived shared identity with other passengers. Mediation analyses then confirmed our expectation that enhanced shared identity would in turn increase participants' imagined sense of relatedness with other passengers, which would consequently encourage imagined solidarity behaviours towards them.

The written responses of participants when asked to describe their imagined relationships with other passengers corroborated the quantitative findings. The following extracts from Pt77 are emblematic of these processes, and representative of the participant sample. During her first journey (non-breakdown condition) she did not visualise within-crowd relatedness with other passengers; "I would probably be quite uncomfortable if I didn't recognize anyone. I guess everyone would be like looking elsewhere –not directly into people's eyes [ ] I would probably take my ipod out to cut the awkwardness that you sometimes feel in those kinds of situation."

However, when the train broke down during her second journey, Pt77 described the construction of a shared identity which positively transformed her imagined social relations; "we feel an important shared identity with the people that are in the same place at the same time with us. […] people would start interacting more with each other, even though they don't know each other because of the train breaking down. People would identify themselves more with the rest of the people because we would all be going through the same situation."

An alternative explanation for the results might be that changes in relatedness and solidarity behaviours were due to differences in participants' strength of social identity as passengers, and not their shared identity with others. However, further analysis refuted this possibility by demonstrating that the effects of social identity upon both relatedness and solidarity behaviours were fully mediated by shared identity.[88]

The results from this study confirm arguments from elsewhere that shared fate (Batson et al., 1979; Dovidio et al., 1975; Hayden et al., 1984) and social identity (Haslam and Reicher, 2006; Levine et al., 2002) can shape interpersonal interactions and helping behaviours. However, our analysis suggests that the perception of *sharing* social identity with co-present others (generated through a perception of common fate) has a critical role to play in transforming social relations and behaviours within collective contexts. The study further contributes to the field by measuring both shared identity and relatedness for the first time, and empirically demonstrating the role that these two continuous variables have for solidarity behaviours.[89]

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[88] Although not considered central enough to include in the Chapter V Analysis, the relationships between strength of social identity, shared identity and relatedness will be explored in more detail in Chapter VII.

[89] It is accepted that relatedness will not be relevant in helping scenarios where the quality of social relations with co-present others are precluded e.g. when donating to an international aid campaign.

Limitations

Although it was clear that the experimental manipulation had significant effects upon shared identity, relatedness and solidarity behaviours, our conclusions about the relationships between these variables must be treated as tentative, because our data were correlational and not causational. Furthermore, as was the case in Chapter IV (Study 3), the scales used in the questionnaire were preliminary since they had not been used previously in the research literature. Whilst we argue that shared identity and relatedness are conceptually distinct, analytically we do expect the two variables to correlate strongly due to the former determining the later. Items from both scales which were not unambiguously classed as shared identity or relatedness were dropped from the analysis in an effort to improve the distinctiveness of the scales.

Moreover, it is acknowledged that the paradigm potentially lacks external validity due to the possible discrepancy between imagining oneself in a situation, and participating in a real social context (Jakobs, et al., 1997). As Parkinson and Manstead (1992) note, the nature of authentic emotional experiences may not be captured in the narrative representations provided by vignette studies. Whilst individuals are participating actors in social reality, they are reduced to somewhat neutral spectators when following an imagined experimental storyline. Although the applicability of these critiques to this study are noted, it should be recalled that the hypotheses upon which the study were based were generated from live collective events studied in Chapter IV. Secondly, participant responses to the qualitative sections of the questionnaire at times showed remarkable imagination and detail, and indicated participation and immersion in the paradigm. Furthermore, the results from this study are replicated in Chapter VII using

questionnaire data collected during a 'real' collective event, confirming the validity of the analysis presented in this chapter.

There were significant effects of the order in which the two scenarios were presented to participants. These results were likely due to contrast effects. Participants who completed the non-breakdown condition first may have felt some degree of shared identity (and consequently relatedness) with others through being crowded on the same train, which would increase relative to these initial values in the second condition. However, for participants completing the breakdown condition first, their initial scores were low due to a lack of available comparison. When these participants subsequently completed the breakdown condition, changes in shared identity and relatedness were relative to the initially low levels in their first condition. Importantly however, there were no significant effects of counterbalance order upon variable differences between conditions i.e. despite different absolute scores, variable differences between experimental conditions remained constant.

5.4.1 Summary

Using an online visualisation paradigm, participants' shared identity with other passengers was increased by informing them that their train had broken down. Increased shared identity (and not strength of social identity) then positively transformed imagined social relations aboard the train, which consequently encouraged imaginary solidarity behaviours towards other passengers. The experimental demonstration of shared identity as an antecedent to relatedness has important theoretical implications for our understandings of how crowd members interact, and therefore experience being in crowds. The next chapter shall build upon this analysis by examining in more

detail the relationship between relatedness and emotional intensity of collective experience that was identified in Chapter IV.

VI. AN EXPERIMENTAL EXAMINATION OF

COLLECTIVE EMOTION

6.1 INTRODUCTION

"Exaltation or intensification of emotion is the most striking result of the formation of a crowd" (McDougal,

1920/1939, p24)

Analysis from Chapter IV confirmed that crowd members could experience their collective participation with emotional intensity. The notion that crowds may be emotional is not novel; the emotionality of collective behaviour was one of the key elements of 'classic' crowd psychology (e.g. Freud, 1921/1922; Le Bon, 1895/2002; McDougal, 1920/1939). However, contrary to these early accounts in which collective emotionality was a consequence of lost identity, analysis so far in this thesis has suggested that social identity is integral to crowd emotion.

Firstly, in line with IET (Smith, 1993; Smith et al., 2007), Chapter IV demonstrated that as participants self-categorised as members of a social group, they could experience emotions on behalf of that group as it came to form part of their socially extended self. This finding led to H1, which states that strength of social identity will predict emotional intensity of experience. Analysis from Chapters IV and V also showed that as participants considered co-present others

to share this social identity, their social relations with them could be positively transformed to create a sense of relatedness (H4), and Chapter IV identified a positive relationship between such relatedness (particularly validation of emotional experience) and emotionality (H5). Our data therefore indicate that through shared identity, relatedness may amplify emotional intensity of experience. Student protestors in Study 1 also noted the emotional experience of empowerment when they realised their identity-based group goals. In addition to collective emotion, analysis from Chapter IV suggested that strength of social identification with the salient group could be altered through the experience of collective emotion (H7). These hypotheses emerged from inductive field studies which, although strong in external validity, were somewhat unsystematic. At this stage of the research it is therefore necessary to examine collective emotion in the controlled environment of the laboratory.

6.1.1 The Present Research

The empirical studies in this chapter are designed to examine the emotional experience of collective participation in a systematic manner. Following the results from Chapters IV and V, our experimental hypothesis is that watching an identity-relevant stimulus with fellow group members will be a more emotionally intense experience than doing so alone. In Study 5 supporters of the Scottish international football team watch highlights of a Scotland match either alone or in a group of other Scotland fans. Due to limitations in the design and procedure of Study 5, the paradigm is adapted and repeated in Study 6 but with European participants watching a European sporting event (ten-pin bowling). In both studies participants' strength of social identity with the salient social category and their relatedness to other group members are examined using questionnaires. Emotional intensity of experience is triangulated using questionnaire items, a continuous self-report measure, a psychophysiological measure of arousal

(relative heart rate)[90], and post-event interview data. The methodology and results from each study are presented separately, before a general discussion considers the findings from both studies together.

Methodological Challenges

Although the design of the studies is relatively simple, the task of empirically testing the experimental hypothesis is more complex. The systematic examination and quantification of 'crowd' emotion within a laboratory is problematic for a number of reasons.[91] The first issue is a practical one. Working with large numbers of participants is organisationally challenging, and constrained by limited laboratory space and apparatus. We compromise in our studies by collecting data from small groups (2-5) of participants. Although not large in numbers, these groups do meet our crowd criteria of being a face-to-face social group in a non-routinized context in which there are no formal decision-making structures (see 1.2; Reicher, 1984, 1987), and provide the basis for the examination of collective experience, albeit at a micro level.[92] In addition to practical restrictions, researching groups presents statistical challenges. Independence of observations is a key assumption in common statistical techniques such as regression and analysis of variance. Without this assumption one cannot confidently specify degrees of freedom, and thus have faith in statistical inferences (Hoyle, Georgesen, & Webster, 2001; McGarty & Smithson, 2005). Since any effect that collective participation has upon emotional experience in our studies is expected to derive from participant interaction, analysis using these techniques is

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[90] Designed to function as an 'objective' and continuous measure of emotional arousal (Blascovich, 2000; Cacioppo, Berntson, Larsen, Poehlmann & Ito, 2000; Maughn & Gleeson, 2008).

[91] Indeed, over eighty years ago Ward (1924, pp276-7) noted problems in testing McDougal's (1920/1939) claim of universal crowd emotionality, stating that "he does not seem to see that this is a fact by no means easy of experimental verification…How can we safely assert that their emotions are stronger in the crowd than before they collected?".

[92] Swanson (1953, p523) defined a crowd as "an organizational form that might appear in populations of any size from two on up. [It is therefore] meaningful to think of producing crowd behaviour in small experimentally created populations."

problematic. There is little consensus within the research literature about how to analyse such data (see Hopkins, 1982; Hoyle et al, 2001; Levine & Crowther, 2008; McGarty & Smithson, 2005). Accordingly, we analyse our data in a number of different ways to converge upon our conclusions. These methods of analyses are explained in more detail in the results section.

6.1.1.1 Hypotheses

In both studies it is expected that participants' strength of identity with their salient social category will predict the intensity of their emotional experience (H1). In addition to being an input to collective experience, strength of social identity is also expected to be shaped through the experience of participation (H7). Furthermore, because participants in the group conditions all share a salient social identity, it is expected that they will have a sense of relatedness with one another (H4).[93] It is then expected that relatedness will amplify the emotional intensity of experience of participants in the group condition (H5). The experimental hypothesis is therefore that participation in the group condition will be a more emotionally intense experience than in the alone condition, due to the additional emotionality generated through relatedness.

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[93] Regrettably, shared identity is not measured in this chapter. The studies in this thesis are not presented chronologically, but are ordered to create a logical research narrative and the shared identity scale had not been developed when the Chapter V studies were designed. In addition, it was assumed that all group participants would feel a sense of shared identity with one another since they all self-categorised themselves as either Scotland supporters or Europeans. Reasons why shared identity may have been absent are discussed later in the chapter.

6.2 STUDY 5

6.2.1 METHODS [94]

6.2.1.1 Participants

Participants in Study 5 were self-identifying supporters of the Scottish national football team. Recruitment came primarily from students and staff at the University of St Andrews through an advert included in the University Memos, and posters displayed around campus (see Appendix VIb) . Due to a shortage of Scotland supporters from these sources, additional participants were recruited from a Scottish football online messageboard (pieandbovril.com), and through a national newspaper article in which the author was interviewed (Smyth, 2009). Sixty people participated in the study, 45 of whom were male (75%) and 15 were female (25%).[95] Participant ages ranged between 17 and 63 ($M = 29.60$, $SD = 14.18$), with two participants failing to disclose their age. Participants were given £5 for their one hour participation in the study.

6.2.1.2 Design

The study employed a one-way design with a total of 60 participants randomly allocated to either the alone condition (n = 15), or the group condition (n = 45). Participants in the group condition were divided into 13 groups.

6.2.1.3 Materials

Football Highlights

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[94] The study received ethical approval from UTREC (see Appendix VIa).

[95] Twelve (26.7%) males participated in the alone condition and 33 (73.3%) in the group condition, compared to 3 (20%) females in the alone condition, and 12 (80%) in the group condition. This gender asymmetry is broadly representative of the gender make-up of Scottish football supporters (Waddington et al., 1998).

Participants watched television highlights of the Scotland –v- Italy football match that was previously used in Study 1 (Harrison, 2007b). This was chosen due to the excitement of the game, and because participants were expected to be uniform in their familiarity with the match. The footage lasted for 27 minutes and 27 seconds.

Identity Salience Task

Participants completed an identity salience task adapted from Haslam and colleagues (Haslam, Oakes, Reynolds, & Turner, 1999) (See Appendix VIc). The task was designed to make each participant's social identity as a Scotland supporter salient, and because all participants were seen to complete this task, emphasise that all group members shared this same identity. Participants were invited to provide answers to the following statements; 1) "Three things that you and most other Scotland supporters do most often", 2) "Three things that you and most other Scotland supporters do relatively rarely", 3) "Three things that you and most other Scotland supporters generally do well", and 4) "Three things that you and most other Scotland supporters generally do badly". "SCOTLAND SUPPORTERS" was written in bold at the top of the page, above an image of the Scottish Saltire flag.

Continuous Measures of Emotional Intensity

A real-time self-report measure of emotional intensity was taken by giving each participant a handheld Interactive Participation device (Techrem Ltd.). This contained a 'slider' (ranging between 0 and 250) which was moved left or right to continuously record the emotional intensity of participants' experiences. Attached to this device was an infrared heart rate monitor (Nonin Medical) that clipped over the index finger of participants' non-writing hand. Data was sampled

and recorded from both pieces of hardware at approximately three times a second.[96] A continuous measure of relative heart rate was calculated by subtracting the mean value of each participant's base (resting) heart rate from their continuous heart rate scores recorded during the match.

Miscellaneous Hardware

Participant interactions and interviews were recorded using radio microphones which fed into a system of five hidden CCTV cameras monitoring the laboratory. These cameras provided the researcher with discrete observation of the participants during the study. Footage from the central camera (located above the screen and facing the participants) was recorded onto DVD for later analysis.

Questionnaire Items

The pre-stimulus questionnaire collected demographic information (gender and age), and contained items measuring strength of social identity. The post-stimulus questionnaire repeated the social identity items, and also included items measuring emotional intensity of experience, and relatedness for participants in the group condition (See Appendix VId).[97] All items used 9-point Likert scales (1 = *Totally Disagree*, 9 = *Totally Agree)* unless otherwise stated. A summary of Study 5 scale reliabilities is presented in Table 6.1 (see 6.2.3.1).[98]

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[96] Occasionally the heart rate monitor would slip producing erroneously high (>200 bpm) heart rate measures for approximately one second. These values were replaced by the reading immediately preceding the spike in scores.

[97] The questionnaires also included items measuring participant mood, enjoyment of the stimulus, intention of future participation, and preference for collective over individual participation. These variables are not included in the current analysis.

[98] Scale reliabilities are not included in the following section because of the multiple ways required to measure reliability i.e. in each experimental condition, and for both pre- and post-stimulus questionnaires.

Strength of Social Identity

Fourteen items were adapted from the hierarchical social identity scale designed by Leach, van Zomeren, Zebel, Vliek, Pennekamp, Doosje, Ouwerkerk, & Spears (2008). These contained two items for ingroup homogeneity: "Scotland supporters have a lot in common with each other" and "Scotland supporters are very similar to each other"; three items for identity centrality: "The fact that I am a Scotland supporter is an important part of my identity", "I often think about the fact that I am a Scotland supporter", and "Being a Scotland supporter is an important part of how I see myself"; two items for individual self-stereotyping: "I am similar to the average Scotland supporter", and "I have a lot in common with the average Scotland supporter"; four items for identity satisfaction: "Being a Scotland supporter gives me a good feeling", "I am glad to be a Scotland supporter", "I think that Scotland supporters have a lot to be proud of", and "It is pleasant to be a Scotland supporter"; and three items for identity solidarity: "I feel solidarity with Scotland supporters", "I feel a bond with Scotland supporters", and "I feel committed to being a Scotland supporter". The mean of the items was taken to form an aggregate strength of social identity scale. Change in strength of social identity was calculated by subtracting pre-stimulus from post-stimulus scores.

Relatedness

Two items were used to measure connectedness: "I had a sense of ease with other Scotland supporters watching the match today", and "I felt a sense of "oneness" with other fans of the Scottish national team watching the game today"; and two to measure validation: "The other Scotland supporters experienced the same emotions as I did today watching the match", and "I felt that the other Scottish fans watching the game today shared my thoughts regarding the match". The mean of the four items was taken to form an aggregate measure of relatedness.

Emotional Intensity

Three items measured participants' emotional intensity of experience: "Watching the highlights of the Scotland – Italy match today was an emotionally intense experience", "I found watching the match today a dull experience" [reverse coded], and "I found it exciting to watch highlights of the Scotland – Italy match today". The mean was taken of the three items to create an aggregate measure of emotional intensity of experience.

Semi-Structured Interviews

After completion of the post-stimulus questionnaire participants took part in a semi-structured interview. The following themes were discussed in all interviews, but were not always covered in the same order;

a) How exciting was it to watch the match today? Why?

b) How enjoyable was it to watch the match today? Why?

c) Would the experience of watching the match today have been different if you were alone/with other Scotland supporters? [as appropriate] Why?

d) Would the experience of watching the match today have been different if you were with supporters of the opposition team, or with disinterested others? Why?

Once these topics had been discussed, participants were invited to raise additional issues they felt were relevant to their experience during the study, or at other collective events. When appropriate the interviewer also questioned participants about their interactions and reactions during the match which had been observed using the CCTV cameras. The interviews were

transcribed, and then analysed using procedures based upon Thematic Analysis (Braun & Clarke, 2006) (see Chapter III).

6.2.1.4 Procedure

Allocation into condition and group was done at random, but care was taken to prevent participants who already knew one another from being in the same group. Each group was intended to contain five participants, but typically contained a lower number due to participant absences and asking people who knew someone else in the group to take part at a later date.

Participants arriving at the laboratory found the correct number of seats for the number of people in the group (i.e. there were no spare chairs) facing a large (2.6m by 3.7m) projector screen. The seats were in the centre of the room 5m from the screen, and in the group condition the seats were arranged in a horseshoe shape. After an introduction to the study (in which the use of CCTV cameras was made explicit), participants completed consent forms. The heart rate monitors were then fitted to each participant by clipping the monitor over the index finger of their non-writing hand.

Participants were then given ten minutes to complete both the identity salience task and the pre-stimulus questionnaire. Group condition participants were requested not to discuss their responses when completing these tasks. Because participants had walked to the laboratory, sitting down to complete this paperwork also served to lower heart rates to a base level with which to compare readings during the match. Base heart rates were calculated from the mean of

the final two minutes when readings had dropped to a resting level, and participants had finished writing.[99]

After completion of these written tasks, participants were fitted with radio microphones and introduced to the interactive sliding device. It was explained that they were to use the slider to record in real-time how emotionally intense they were finding the experience of watching the game, with the extreme left of the scale being "not at all emotionally intense" and the extreme right being "very emotionally intense". The difference between emotional intensity and positivity was emphasised by explaining that "being sacked from a job could be an emotionally intense experience without being a positive one".[100] Participants were then invited to practice using the device, before returning the sliders to the centre of the scale. Those in the group condition were also told that although they had been asked not to compare questionnaire responses, they were free to interact when watching the match should they wish.

Participants were then shown the match. The volume was kept constant between and within conditions, and was deemed loud enough to immerse participants in the footage, whilst allowing for (and recording) participant interaction. During this time the researcher observed the participants using the CCTV system, and noted relevant incidents and interactions for later discussion in the interviews. When the match ended, the researcher re-entered the room and removed the heart rate monitors and sliding response devices, before disseminating the post-stimulus questionnaire. Upon completion of the questionnaire, the researcher re-entered the

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[99] Taking a base reading of physiological measures before presentation of stimuli is standard practice in psychophysiology, and enables both within and between-subject comparisons (Blascovich, 2000).

[100] This was included in the procedure after the first two participants (both in the alone condition) reported mistakenly using the device to record their enjoyment of the stimulus. Their real-time recordings of emotional intensity are excluded from the analysis.

laboratory and conducted the semi-structured interview, before debriefing participants and compensating them (£5) for their time.

6.2.2 ANALYSIS

After preliminary analysis of the data (6.2.3.1), the effects of the experimental manipulation (participating alone or in a group) are examined using various analytic strategies (6.2.3.2). The relationship between strength of social identity and emotional intensity of experience is then interrogated using regression analysis (6.2.3.2). The impact of relatedness upon emotional experience is then examined in greater detail, after the data have been re-analysed with participants (and groups) coded as either high or low relatedness (6.2.3.3). Evidence suggesting that the experience of participation shaped participants' strength of identity is also presented (6.2.3.3). In addition, the contingency of relatedness upon shared identity is considered with reference to the interview data (6.2.3.4). Two-tailed statistical tests with an alpha value of .05 are used in all analyses unless otherwise stated.

6.2.2.1 Preliminary Analysis

Missing Data

Three participants in the alone condition failed to answer the pre-stimulus questionnaire (due to misunderstanding the requirement to complete it at the same time as the identity salience task), and two participants mistakenly used their interactive sliding devices to record enjoyment instead of emotional intensity. Due to technical difficulties emotional intensity slider scores were not recorded for two participants, and heart rate data for six participants. All group composite scores contain at least two participant scores.

Reliability Analysis

Because Cronbach Alpha analysis assumes that data are independent (Cronbach & Meehl, 1955), reliability statistics were calculated separately for participants in the alone condition (n = 15), and by using group means as the unit of analysis in the group condition (n = 13). Study 5 Cronbach Alpha scale reliabilities are presented in Table 6.1.

Table 6.1

Study 5 Cronbach Alpha Scale Reliabilities

Variables	Pre-stimulus Questionnaire		Post-Stimulus Questionnaire	
	Alone Condition	Group Condition	Alone Condition	Group Condition
Strength of Social Identity	.86	.94	.76	.96
Emotional Intensity	-	-	.59	.87
Relatedness	-	-	-	.84

All variables had acceptable levels of reliability except for the three-item emotional intensity in the alone condition (α = .59). Removing individual items failed to improve the scale's reliability and, in light of the acceptable reliability that the variable achieved in the group condition, the three-item scale was included in the analysis.[101]

Control Variables

For simplicity, the effects of gender and previous exposure to the match were analysed using independent samples t-tests, whilst noting the violation of the assumption of independence of

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[101] The same scale achieves a mean reliability of α = .93 in Study 6 (6.3.3.1).

observations. On the relatedness measure, females (M = 7.50, SD = 0.78) scored significantly higher than males (M = 6.67, SD = 1.29), t(42) = 2.08, p = 04, d = .64. Additionally, on the questionnaire measure of emotional intensity of experience, females (M = 7.82, SD = 0.76) also scored significantly higher than males (M = 6.89, SD = 1.47), t(58)= 2.35, p = .02, d = .62. Finally, the gender difference for mean emotional intensity slider scores approached significance, with females (M = 172.24, SD = 25.63) again scoring higher than males (M = 157.47, SD = 24.79), t(54) = .1.96, p = .06, d = .53. Accordingly, all analyses involving relatedness and emotional intensity (questionnaire and sliders) control for gender where possible. There were no effects of gender upon strength of social identity or relative heart rate.

Fifty-two of the sixty (86.7%) participants had previously seen the match. Participants who had already watched the game had a significantly higher pre-stimulus strength of social identity (M = 6.13, SD = 1.12) than those who had not (M = 5.23, SD = 1.28), t(55) = 2.06, p = .04, d = .56. All analyses involving strength of social identity therefore control for previous exposure to the match where possible. There were no further effects of previous exposure to the match, and no significant effects of age or group size upon any of the variables.

6.2.2.2 Manipulation Effects

Descriptive statistics for the alone and group experimental conditions are presented in Table 6.2. This includes group condition data at both individual and composite levels due to the non-independence of participants.

Table 6.2

Study 5 Descriptive Statistics for Alone and Group Experimental Conditions

Variables	Alone Participants			Group Participants			Group Composites		
	n	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*
Pre-Stimulus Strength of Social Identity	12	5.74	0.99	45	6.08	1.22	13	6.10	0.76
Post-Stimulus Strength of Social Identity	15	5.96	0.75	45	5.98	1.45	13	5.94	0.95
Change in Strength of Social Identity	12	0.19	0.78	45	-0.09	0.71	13	-0.12	0.45
Emotional Intensity (Questionnaire)	15	7.47	0.64	45	7.01	1.54	13	7.08	0.88
Emotional Intensity (Slider Mean)	13	161.22	22.61	43	161.49	26.74	13	159.58	14.07
Relative Heart Rate (bpm)	15	-1.71	3.85	39	-0.76	4.32	13	-0.88	2.53
Relatedness	-	-	-	44	6.90	1.22	13	6.93	0.82

Methods of Analysis

The data was analysed using Mann-Whitney U tests and an adaptation of the binomial test. The reasons for choosing these methods are explained below, before the analyses from both methods are presented thematically.

Mann-Whitney U Tests

This technique was chosen because mean scores in the group condition were being compared to individual scores in the alone condition due to the non-independence of the group data. As such, the variance in the group condition was a priori less than that in the alone condition, violating

the assumption of homogeneity of variance and thereby preventing the use of parametric analysis. A summary table of the Mann-Whitney U Test statistics is presented in Table 6.3.

Table 6.3

Study 5 Mann-Whitney U Test Statistics Comparing Alone Participants with Group Composites

Variables	Mann-Whitney U	Z	p
Pre-Stimulus Strength of Social Identity	61.00	-0.93	.38
Post-Stimulus Strength of Social Identity	97.00	-0.02	1.00
Change in Strength of Social Identity	61.00	-0.93	.38
Emotional Intensity (Questionnaire)	71.00	-1.23	.24
Emotional Intensity (Slider Mean)	71.00	-0.69	.51
Relative Heart Rate (bpm)	79.50	-0.83	.41

Note. Negative *Z* statistics indicate that alone condition scores were greater than group condition means. All *p-values* are two-tailed.

Adapted Binomial Test

Whilst using Mann-Whitney U tests solved the issue of nonindependence, it also removed intragroup variance from the analysis, and thus neglected much of the richness in the data set (Hoyle et al, 2001). The data was therefore also analysed using McGarty & Smithson's (2005) adaptation of the binomial test, a procedure designed for examining interacting groups.[102] This method allowed analysis of individual participant scores instead of group composites, thus retaining the intragroup diversity that was lost in the Mann-Whitney U tests. The adapted binomial method requires the creation of distributions of difference scores with the null hypothesis predicting symmetry of scores around zero. To compare the differences between participants in the alone and group conditions, for each variable the mean score of all

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[102] The following explanation of the adapted binomial test is based upon that given by Thomas & McGarty (2009, pp124-125).

participants in the alone condition was subtracted from each individual participant score in the group condition.[103] The null hypothesis may be rejected (as appraised using the binomial distribution) when the proportion of differences (either positive or negative) differs significantly from 0.5. For example, if one had an experimental condition of 100 participants then under the null hypothesis of no difference from the comparison condition, one would expect that 50 of the scores in the first condition would be larger, and 50 smaller, than the mean in the comparison condition. McGarty and colleagues (McGarty & Smithson, 2005; Thomas & McGarty, 2009) argue that the method does not depend on the nonindependence of observations within each condition, such that the expectation under the null hypothesis would be the same whether the hypothetical 100 participants were divided into 1 group of 100, 5 groups of 20, or from 100 independent individuals.[104] A summary of the adapted binomial test results is presented in Table 6.4.

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[103] Although it would be possible to compare the mean scores of the group condition with the individual scores in the alone condition, one is obligated to use the approach that yields the most power (largest number of comparisons) to avoid inflation of Type II error (C. McGarty, personal communication, August 6th, 2009).

[104] It should be noted that whether the adapted binomial method adequately addresses the issue of nonindependence is debatable, as the difference scores created with this method are dependent on group membership of the individual participant. As such, analyses using this method should be treated with a degree of caution.

Table 6.4

Study 5 Adapted Binomial Analysis Comparing Alone and Group Experimental Conditions

Variables	Proportion of comparisons where group participant scores > mean of alone participants	p
Pre-Stimulus Strength of Social Identity	.69*	.01
Post-Stimulus Strength of Social Identity	.51	.88
Change in Strength of Social Identity	.36	.05
Emotional Intensity (Questionnaire)	.40	.18
Emotional Intensity (Slider Mean)	.44	.45
Relative Heart Rate (bpm)	.54	.63

Note. If the proportion of comparisons is < .50 then the mean of alone participants was > group participant scores. All *p-values* are two-tailed. * p < .05.

Results from these two methods of analysis are presented thematically for the strength of identity variables and emotional intensity of experience.

Strength of Social Identity Variables

The Mann-Whitney U test found no significant difference in pre-stimulus strength of social identity between alone and group conditions. However, the adapted binomial test found that pre-stimulus strength of social identity scores of participants in the group condition were significantly higher than for those in the alone condition (proportion of comparisons where group participant scores > mean of alone participants = .69, *p* = .01). Neither the Mann-Whitney U test nor the adapted binomial test found significant differences between experimental conditions for post-stimulus strength of social identity scores. The Mann-Whitney U tests also failed to find a significant difference for the change in strength of social identity between alone and group conditions. However, the adapted binomial test did find a difference approaching significance between experimental conditions for change in strength of identity (proportion of comparisons where group participant scores > mean of alone participants = .36, *p* = .05), such that there was a positive change in identity strength in the alone condition (*M* = 0.19, *SD* = 0.78), but a decrease in identity strength in the group condition (*M* = -0.12, *SD* = 0.45).

Strength of Social Identity and Emotional Intensity

H1 stated that strength of social identity would predict emotional intensity of experience. This was examined using regression analysis.[105] Due to the non-independence of group observations, the analysis combined group composite scores with individual participant scores from the alone condition. Controlling for the effects of gender (*b* = 0.51, *SE* = 0.39, *p* = .20) and previous exposure to the match (*b* = 0.72, *SE* = 0.62, *p* = .26), strength of pre-stimulus social identity

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[105] The analysis is one-tailed following the results from Chapter IV, and the predictions of IET (Smith, 1993; Smith et al., 2007).

significantly predicted the questionnaire measure of emotional intensity of experience, $b = 0.37$, $SE = 0.18$, $t(21) = 2.12$, $p = .02$ (one-tailed), $R^2 = .23$. [106]

Emotional Intensity

Neither the Mann-Whitney U test nor the adapted binomial test found any significant differences between experimental conditions for emotional intensity of experience (questionnaire, sliders, and relative heart rate). It was predicted that participants in the group condition would experience the match with greater emotional intensity than those in the alone condition, due to their sense of relatedness within a group of shared social identity. The results do not warrant the acceptance of the experimental hypothesis because there were no significant differences in any of the measures of emotional intensity between experimental conditions. One possible explanation for this unexpected result concerns the nature of the stimulus. As explained by Pt18MA, the experience of watching a football match alone could be unfamiliar and counter-normative for some participants; "It's strange sitting on your own watching a football match. I don't know if I've ever watched a football match on my own before! [ ] it was weird." It is therefore possible that participation in the alone condition was emotionally intense for reasons not anticipated in the design of the study. Because of this potential confound with the alone condition, our analytic focus shifted from comparing differences between the experimental conditions, to examining emotional intensity as a function of relatedness variance.

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[106] Analysis using group composites satisfied the assumption of independence of observations, but violated the assumption of homogeneity of variance. Analysis examining each experimental condition independently to satisfy this assumption found equivalent results; *Alone Condition* (n = 12): Controlling for the effects of gender ($b = 0.13$, $SE = 0.41$, $p = .76$) and previous exposure to the stimulus ($b = 1.07$, $SE = 0.66$, $p = .15$), strength of pre-stimulus social identification significantly predicted emotional intensity of experience, $b = 0.36$, $SE = 0.19$, $t(8) = 1.86$, $p = .05$ (one-tailed), $R^2 = .37$. *Group Condition* (n = 13): Controlling for the effects of gender ($b = 1.55$, $SE = 0.74$, $p = .07$) and previous exposure to the stimulus ($b = -0.19$, $SE = 1.22$, $p = .88$), the relationship between strength of pre-stimulus social identification and emotional intensity of experience approached significance, $b = 0.49$, $SE = 0.31$, $t(9) = 1.59$, $p = .07$ (one-tailed), $R^2 = .49$.

6.2.2.3 Relatedness Analysis

It was apparent from observing participants interact that intragroup relatedness was not universal, but varied between groups. Whilst some groups interacted eagerly, others sat in awkward silence throughout the match. Questionnaire analysis confirmed the variation in relatedness, with mean group scores ranging between 5.06 and 8.00 (*M* = 6.93, *SD* = 0.83), and individual participant scores ranging between 3.25 and 8.75 (*M* = 6.90, *SD* = 1.22). Further analysis was therefore conducted to examine the relationship between relatedness and the various measures of emotional intensity, and between relatedness and the strength of social identity variables. Analysis using independent samples t-tests,[107] the adapted binomial test and linear regression, and are summarised in Table 6.7.

A median-split was used to categorise composite groups as either high or low relatedness in order to calculate the independent samples t-tests, and to plot the real-time (relative heart rate and emotional intensity sliders) data.[108] The group median was 7.13, so groups with a mean score above this value were coded as high relatedness, and below as low relatedness. Two groups that had a mean score of 7.13 were coded as high relatedness, after comparison with the overall group mean of 6.93. Coding groups in this way produced five low, and eight high relatedness groups. It was also necessary to code each individual participant in the group condition as either high or low relatedness for the adapted binomial analysis. The relatedness median for all individual participants was 7.25, so individuals with a mean score above this value were coded as high relatedness, and those below as low relatedness. Two participants with a mean score of 7.25

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[107] Because data from both quasi-conditions (high and low relatedness groups) used mean scores to maintain independence of observations, parametric tests were valid unlike when comparing data between experimental conditions (alone and group).

[108] It is acknowledged that the use of median-splits to dichotomize continuous data is controversial (see MacCallum, Zhang, Preacher, & Rucker, 2002). However, the linear regression analysis used the continuous relatedness data, and the results are broadly equivalent to analysis using the dichotomized data.

were coded as high relatedness after comparison with the overall group mean of 6.90. Coding in this way produced 22 low, and 22 high relatedness participants. A distribution of difference scores was constructed by subtracting the mean low relatedness scores for each variable from the individual high relatedness participant scores. Descriptive statistics for the low and high relatedness groups and participants are displayed in Table 6.5 and Table 6.6 respectively.

Table 6.5

Study 5 Descriptive Statistics for High and Low Relatedness Groups

Variables	Low Relatedness Groups			High Relatedness Groups		
	n	*M*	*SD*	*n*	*M*	*SD*
Pre-Stimulus Strength of Social Identity	5	5.46	0.58	8	6.50	0.57
Post-Stimulus Strength of Social Identity	5	5.20	0.87	8	6.41	0.68
Change in Strength of Social Identity	5	-0.17	0.46	8	-0.09	0.48
Emotional Intensity (Questionnaire)	5	6.22	0.41	8	7.62	0.62
Emotional Intensity (Slider Mean)	5	151.87	9.23	8	164.40	14.89
Relative Heart Rate (bpm)	5	-1.60	3.35	8	-0.42	1.98
Relatedness	5	6.12	0.77	8	7.43	0.30

Table 6.6

Study 5 Descriptive Statistics for High and Low Relatedness Participants

Variables		Low Relatedness Participants			High Relatedness Participants		
		n	*M*	*SD*	*n*	*M*	*SD*
Pre-Stimulus of Social Identity	Strength	22	5.75	1.20	22	6.45	1.17
Post-Stimulus of Social Identity	Strength	22	5.51	1.50	22	6.48	1.28
Change in of Social Identity	Strength	22	-0.25	0.75	22	0.02	0.64
Emotional (Questionnaire)	Intensity	22	6.41	1.85	22	7.62	0.87
Emotional (Slider Mean)	Intensity	21	157.68	29.93	21	166.67	29.83
Relative Rate (bpm)	Heart	19	-1.40	4.87	19	-0.12	3.84
Relatedness		22	6.01	1.12	22	7.78	0.38

Table 6.7

Study 5 Summary Table of Relatedness Analyses

Variables		T-Test			Binomial Test		Linear Regression	
		t	*p*	*d*	*Z*	*p*	*b*	*p*
Pre-Stimulus of Social Identity	Strength	3.18**	< .01	1.92	1.88	.06	-	-
Post-Stimulus of Social Identity	Strength	2.81*	.02	1.69	1.88	.06	0.79**	< .01
Change in of Social Identity	Strength	0.32	.75	0.19	1.88	.06	0.02	.92
Emotional (Questionnaire)	Intensity	4.43**	< .01	2.67	3.96**	.01	0.57*	.04
Emotional (Slider Mean)	Intensity	1.68	.12	1.01	0.43	.67	6.09	.26
Relative Rate (bpm)	Heart	0.81	.44	0.49	2.24*	.03	0.67	.52

Note. Positive *t-values* indicate that high relatedness group means were greater than low relatedness group means. Positive *Z-values* indicate that high relatedness group means were greater than that low relatedness individual participant scores. Relatedness was the predictor variable in all linear regression calculations. The regression equations control for gender and whether participants had previously seen the match as appropriate (see 6.2.3.1). There is no regression data for pre-stimulus strength of social identity because this measure chronologically preceded relatedness in the within-subject questionnaire. All *p-values* are two-tailed. * $p < .05$. ** $p < .01$.

Identity Variables

Strength of Social Identity

Pre-stimulus strength of social identity was greater for high than low relatedness groups and participants using all three statistical analyses. Independent samples t-tests revealed that high relatedness groups ($M = 6.50$, $SD = 0.57$) scored significantly higher than low relatedness groups ($M = 5.46$, $SD = 0.58$), $t(11) = 3.18$, $p = .01$, $d = 1.92$, for pre-stimulus strength of social identity. Similarly, controlling for gender ($b = .55$, $SE = .53$, $p = .33$) and previous exposure to

the match (b = 1.21, SE = .88, p = .20), pre-stimulus strength of social identity significantly predicted group relatedness, b = .91, SE = .22, $t(9)$ = 4.11, p < .01, R^2 = .70. Finally, the adapted binomial test found a difference approaching significance between high relatedness (M = 6.45, SD = 1.17) and low relatedness (M = 5.75, SD = 1.20) participants' pre-stimulus strength of social identity (proportion of comparisons where high relatedness participant scores > mean of low relatedness participants = .70, p = .06).

Post-stimulus strength of social identity was also greater for high than low relatedness groups and participants using all three statistical analyses. Independent samples t-tests revealed that high relatedness groups (M = 6.40, SD = 0.68) scored significantly higher than low relatedness groups (M = 5.20, SD = 0.87), $t(11)$ = 2.81, p = .02, d = 1.70, for post-stimulus strength of social identity. Controlling for gender (b = .86, SE = .56, p = .15) and previous exposure to the match (b = -2.18, SE = .80, p = .02), relatedness also significantly predicted group post-stimulus strength of social identity, b = .79, SE = .20, $t(9)$ = 4.01, p < .01, R^2 = .77. Finally, the adapted binomial test found a difference approaching significance between high relatedness (M = 6.48, SD = 1.28) and low relatedness (M = 5.51, SD = 1.50) participants' pre-stimulus strength of social identity (proportion of comparisons where high relatedness participant scores > mean of low relatedness participants = .70, p = .06).

Change in Strength of Social Identity

There were no significant differences in strength of social identity change between high and low relatedness groups using independent samples t-tests and linear regression. However, the adapted binomial test did identify a difference approaching significance, with high relatedness participants (M = 0.02, SD = 0.64) scoring higher than low relatedness participants (M = -0.25,

SD = 0.75) (proportion of comparisons where high relatedness participant scores > mean of low relatedness participants = .70, *p* = .06). This provides some support for H7 which states that strength of social identity may be shaped by the experience of collective participation.

Emotional Intensity

Following the analysis from Chapter IV, it was expected that relatedness would predict emotional intensity of experience (H5). Because of this prior expectation, the following analyses are one-tailed.

Questionnaire Measure of Emotional Intensity

Independent samples t-tests revealed that for the questionnaire measure of emotional intensity of experience, high relatedness groups (*M* = 7.62, *SD* = 0.62) scored significantly higher than low relatedness groups (*M* = 6.22, *SD* = 0.41), *t*(11) = 4.43, *p* < .01 (one-tailed), *d* = 2.67. Similarly, the adapted binomial test found a significant difference between high relatedness (*M* = 7.62, *SD* = 0.87) and low relatedness (*M* = 6.41, *SD* = 1.85) participants' scores on the questionnaire measure of emotional intensity of experience (proportion of comparisons where high relatedness participant scores > mean of low relatedness participants = .91, *p* < .01) (one-tailed). Finally, controlling for gender (*b* = 0.98, *SE* = .62, *p* = .14), relatedness significantly predicted the questionnaire measure of emotional intensity of experience using linear regression, *b* = .57, *SE* = .24, *t*(9) = 2.35, *p* = .02, R^2 = .55 (one-tailed).[109]

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[109] Controlling for pre-stimulus strength of social identity (*b* = -0.46, *SE* = .50, *p* = .93), previous exposure to the stimulus (*b* = -0.89, *SE* = 1.29, *p* = .51), and gender (*b* = 1.23, *SE* = .75, *p* = .14), relatedness no longer significantly predicted emotional intensity of experience, *b* = .58, *SE* = .44, *t*(9) = 1.17, *p* = .11 (one-tailed), R^2 = .58. However, further analysis suggested that this result was a consequence of the small data sample due to the use of mean group scores. When the analysis was repeated using each individual participant in the group condition (n = 44) as an independent data point, the regression equation was significant, despite a slight decrease in the relatedness beta-

Continuous Measures of Emotional Intensity

Independent samples t-tests and linear regression failed to find any significant differences in overall relative heart rate between high and low relatedness groups. However, the adapted binomial test did find a significant difference in overall relative heart rate between high and low relatedness participants (proportion of comparisons where high relatedness participant scores > mean of low relatedness participants = .75, p = .01 [one-tailed]). The adapted binomial test and linear regression failed to find any significant differences in overall emotional intensity slider scores between high and low relatedness groups or participants. However, the overall difference in mean emotional intensity slider scores between high relatedness (M = 164.40, SD = 14.89) and low relatedness (M = 151.87, SD = 9.23) groups approached significance using an independent t-test, $t(11)$ = 1.68, p = .06 (one-tailed), d = 1.01.

It was apparent after talking informally with participants that the major incidents in the match were the three goals (the match finished Scotland 1-2 Italy), and a missed chance for Scotland striker James McFadden with the score at 1-1. Interactive slider traces and relative heart rates are presented for the 20 seconds after each of these key incidents in Figures 6.1 to 6.8. The unit of analysis in the graphs is the group i.e. high relatedness group scores (n = 8) were aggregated to produce a mean high relatedness trace (red line), with the process repeated for low relatedness groups (n = 5) (black line).[110] Independent samples t-tests comparing the high

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weight; Controlling for pre-stimulus strength of identity (b = 0.18, SE = .21, p = .41), gender (b = 0.84, SE = .51, p = .10), and previous exposure to the stimulus (b = -0.70, SE = .63, p = .91), relatedness significantly predicted the questionnaire measure emotional intensity of experience, b = .45, SE = .21, $t(40)$ = 2.18, p = .02, R^2 = .32 (one-tailed).

[110] It should be noted that relative heart rate scores were likely influenced by movement during these key moments (Maughn & Gleeson, 2008). Participant movement was not restricted in this study due to concerns about the external validity of experience. However, the relative heart rate scores broadly match the self-report slider scores, suggesting that the physiological measure was recording variance in emotional arousal.

relatedness group means with the low relatedness group means following each incident are presented after each graph, and are summarised in Tables 6.8 and 6.9.[111] Finally, repeated-measures analyses compare high and low relatedness groups across all four key incidents.

Table 6.8

Study 5 T-Tests of Emotional Intensity Sliders (0 - 250) at Key Incidents

Incident	High Relatedness Groups			Low Relatedness Groups						
	n	*M*	*SD*	*n*	*M*	*SD*	*t*	*df*	*p*	*d*
0-1 (Italy goal)	8	166.21	24.13	5	152.86	10.49	1.16	11	.14	0.70
1-1 (Sco goal)	8	203.79	25.34	5	189.73	24.18	0.99	11	.17	0.60
Sco Chance	8	181.74	28.76	5	156.36	13.03	1.84	11	.05	1.11
1-2 (Italy goal)	8	190.64	33.06	5	151.89	40.53	1.89	11	.04	1.14

Note. All *p-values* are one-tailed.

Table 6.9

Study 5 T-Tests of Relative Heart Rates (bpm) at Key Incidents

Incident	High Relatedness Groups			Low Relatedness Groups						
	n	*M*	*SD*	*n*	*M*	*SD*	*t*	*df*	*p*	*d*
0-1 (Italy goal)	8	0.34	2.38	5	-1.71	4.80	1.04	11	.16	0.63
1-1 (Sco goal)	8	1.91	3.38	5	-1.86	5.37	1.57	11	.07	1.11
Sco Chance	8	2.69	3.15	5	-0.42	3.53	1.66	11	.06	1.00
1-2 (Italy goal)	8	-0.95	2.66	5	-2.79	5.02	0.88	11	.20	0.53

Note. All *p-values* are one-tailed.

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[111] Because the analyses use composite group scores as the unit of analysis (to satisfy the assumption of data independence), the sample size is small (n = 13) and thus the *p-values* are inflated due to a lack of statistical power. In addition, because using multiple comparisons requires the use of a Bonferroni correction (overall significance level/number of comparisons), *p-values* should be < .01 before being considered significant. For a more revealing measure of effect size, the reader should instead refer to the *Cohen's d* statistics, which are all at least 'medium' (≥ 0.50) in strength for each test (Cohen, 1988).
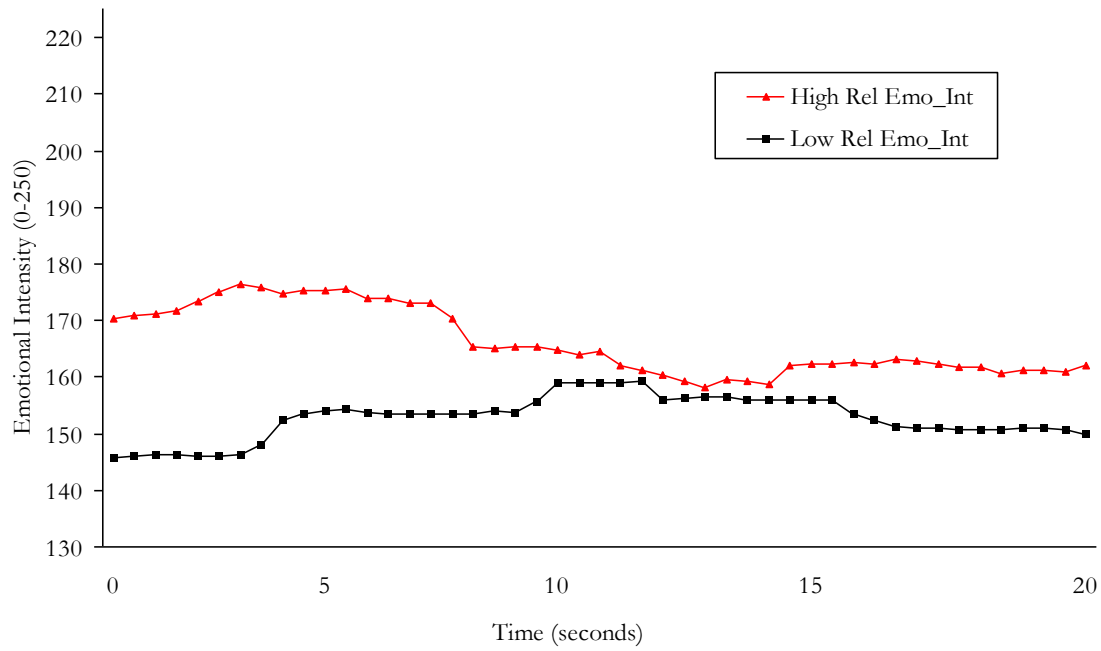
Figure 6.1. Emotional Intensity Slider Scores for High and Low Relatedness Groups for the 20 Seconds after Italy's first goal (0-1). High relatedness groups (M = 166.21, SD = 24.13) had greater emotional intensity slider scores than low relatedness groups (M = 152.86, SD = 24.13), $t(11)$ = 1.16, p = .14 (one-tailed), d = 0.70.
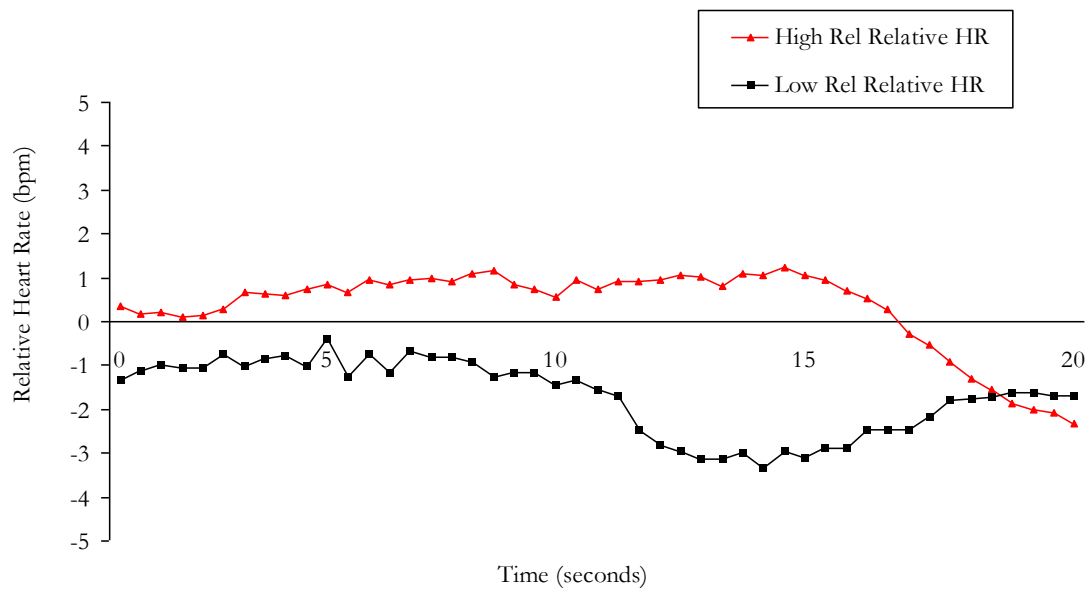
Figure 6.2. Relative Heart Rates for High and Low Relatedness Groups for the 20 Seconds after Italy's first goal (0-1). High relatedness groups (M = 0.34, SD = 2.38) had greater relative heart rate scores than low relatedness groups (M = -1.71, SD = 4.80), t(11) = 1.04, p = .16 (one-tailed), d = 0.63.
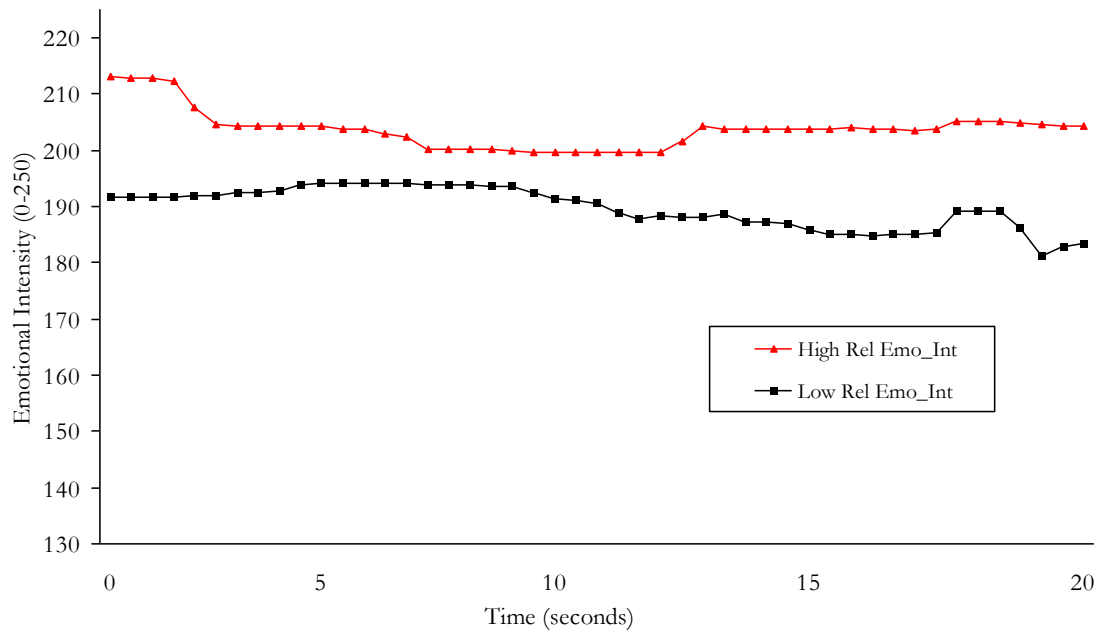
Figure 6.3. Emotional Intensity Slider Scores for High and Low Relatedness Groups for the 20 Seconds after Scotland's goal (1-1). High relatedness groups (*M* = 203.79, *SD* = 25.34) had greater emotional intensity slider scores than low relatedness groups (*M* = 189.73, *SD* = 24.18), *t*(11) = 0.99, *p* = .17 (one-tailed), *d* = 0.60.
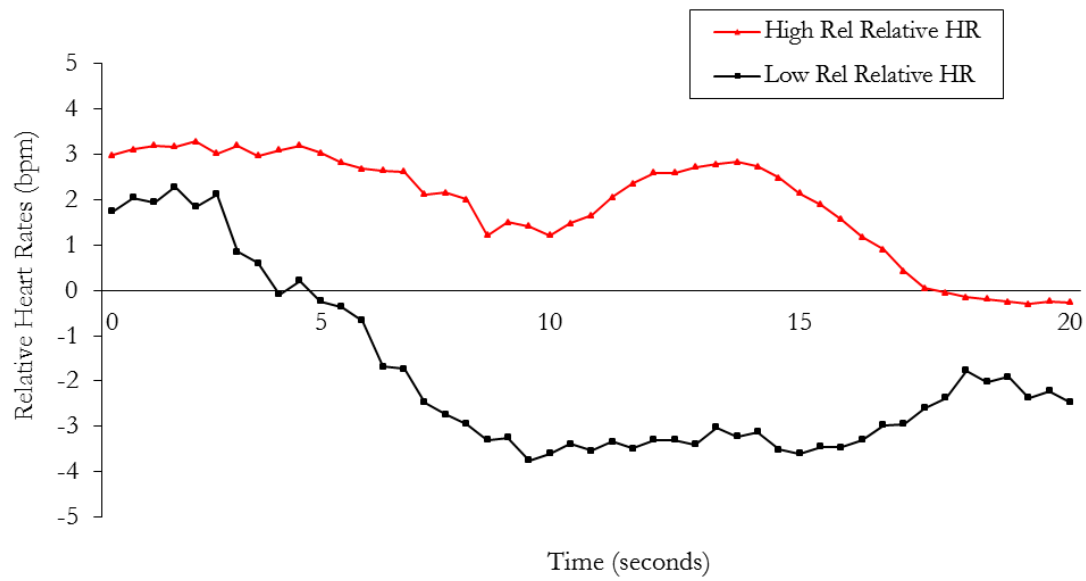
Figure 6.4. Relative Heart Rates for High and Low Relatedness Groups for the 20 Seconds after Scotland's goal (1-1). High relatedness groups ($M = 1.91$, $SD = 3.38$) had greater relative heart rate scores than low relatedness groups ($M = -1.86$, $SD = 5.37$), $t(11) = 1.57$, $p = .07$ (one-tailed), $d = 0.95$.
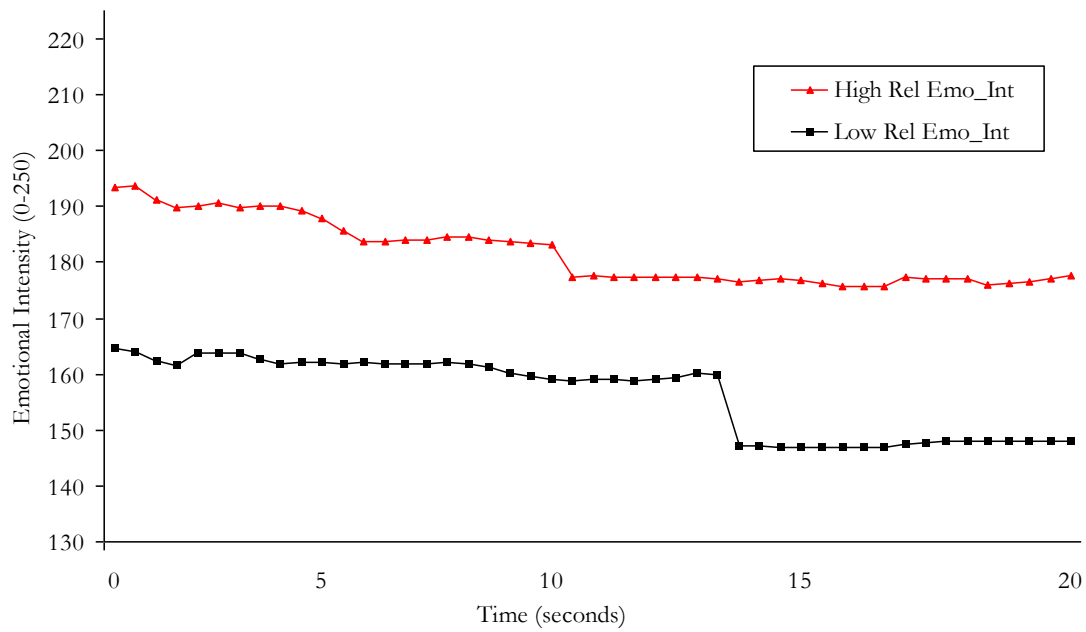
Figure 6.5. Emotional Intensity Slider Scores for High and Low Relatedness Groups for the 20 Seconds after McFadden's missed chance for Scotland. High relatedness groups ($M = 181.74$, $SD = 28.76$) had greater emotional intensity slider scores than low relatedness groups ($M = 156.31$, $SD = 13.03$), $t(11) = 1.84$, $p = .05$ (one-tailed), $d = 1.11$.
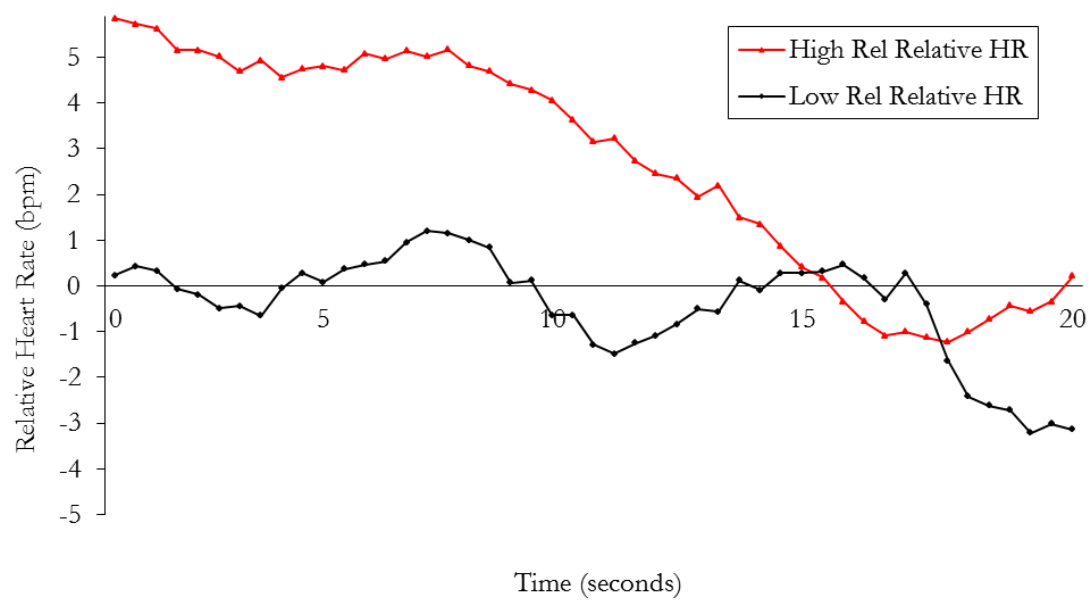
Figure 6.6. Relative Heart Rates for High and Low Relatedness Groups for the 20 Seconds after McFadden's missed chance for Scotland. High relatedness groups ($M = 2.69$, $SD = 3.15$) had greater relative heart rate scores than low relatedness groups ($M = -0.42$, $SD = 3.53$), $t(11) = 1.66$, $p = .06$ (one-tailed), $d = 1.00$.
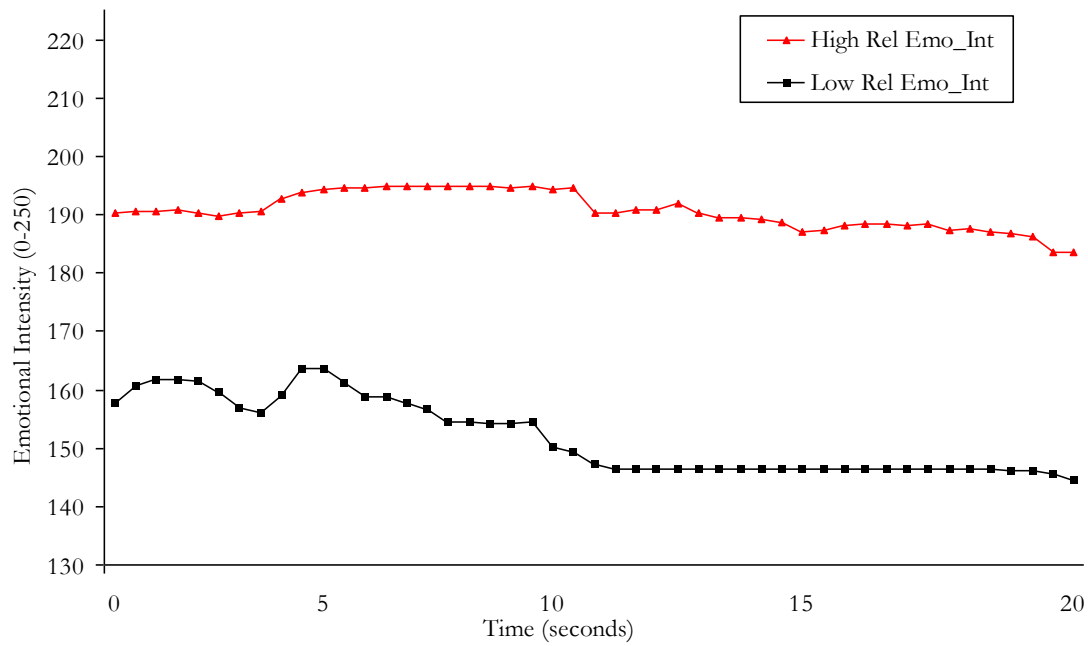
Figure 6.7. Emotional Intensity Slider Scores for High and Low Relatedness Groups for the 20

Seconds after Italy's second goal (1-2). High relatedness groups (M = 190.64, SD = 33.06) had

greater emotional intensity slider scores than low relatedness groups (M = 151.89, SD = 40.53),

t(11) = 1.89, p = .04 (one-tailed), d = 1.14.
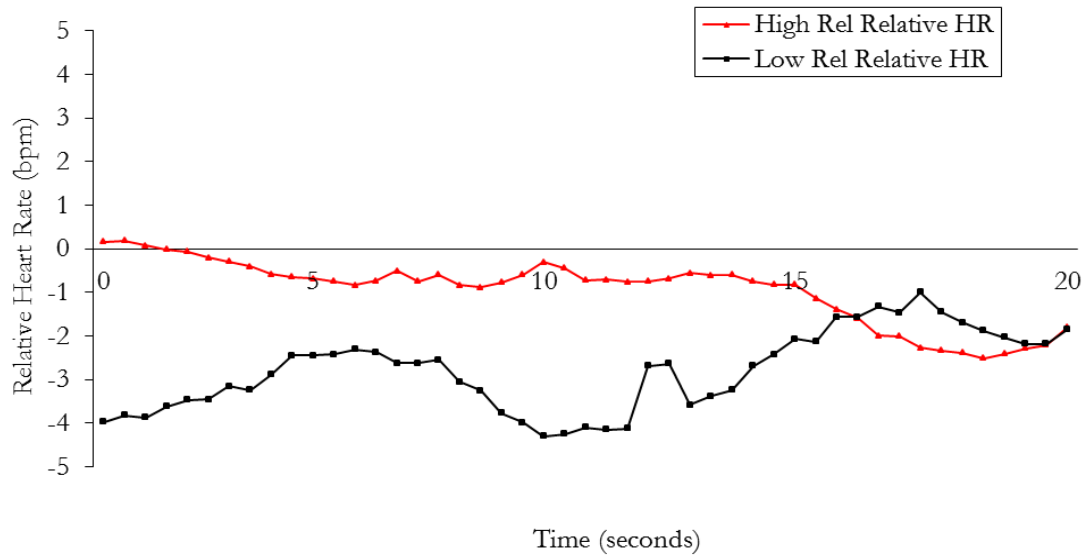
Figure 6.8. Relative Heart Rates for High and Low Relatedness Groups for the 20 Seconds after Italy's second goal (1-2). High relatedness groups (M = -0.95, SD = 2.66) had greater relative heart rate scores than low relatedness groups (M = -2.79, SD = 5.02), $t(11)$ = 0.88, p = .20 (one-tailed), d = 0.53.

The data were further examined using a 2 (high/low relatedness group) x 4 (key incident) repeated-measures ANOVA. The analysis revealed that for the 20 seconds following the four key incidents in the match, high relatedness groups had significantly higher emotional intensity slider scores than low relatedness groups, $F(1,11)$ = 9.94, p < .01 (one-tailed), η^2 = .48. Similarly, for the 20 seconds following the four key incidents, there was a strong trend for high relatedness groups to have higher relative heart rates than low relatedness groups, $F(1,11)$ = 2.43, p = .07 (one-tailed), η^2 = .18.

Qualitative Data[112]

Post-stimulus semi-structured interviews were used to further explore the relationship between relatedness and emotional intensity. Despite the small size of the groups in which participants experienced the match, when others within the group were seen to share one's social identity ("everybody's on the same side") and one's emotions ("everybody's more excited"), this could amplify the intensity of participants' emotional experience ("you're more excited"):

> Pt36FG: I think there's a difference even though it's only four people than being completely on your own.
>
> Re1: What do you think that difference is?
>
> Pt36FG: Well because everybody's on the same side, so when everybody's more excited, you're more excited.

Further analysis unpacked the relationship between shared identity, relatedness (shared emotions) and emotional experience. Pt19MG explained that his emotional expressiveness was dependent upon the closeness of social relations with other participants. He noted that participating in a group with others he did not know ("I don't know these two gents") inhibited the expression of his emotional experience ("I might have been a bit more animated [alone]").

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[112] Participants are coded as *M* for male and *F* for female, and *A* for participating in the alone condition and *G* in the group condition. *Re1* refers to the author and Pt# to participant number.

Pt19MG: I don't know these two gents [Pt20MG and Pt12MG] so [alone] I

might of, you know, said a couple of f-words when Italy scored. I might have

been a bit more animated.

FN: More animated?

Pt19MG: When Scotland scored, "Come on!" [clenches fist], you know?

However, Pt19MG qualified this point by explaining that if he were participating with friends then he would have been more expressive than watching alone or with strangers:

Pt19MG: If it was good friends, if I was with a group of friends we would be a

lot more animated I think.

This suggests that the relationships between participants may have impacted upon their willingness to communicate emotional experience. The next interview extract highlights the importance of this emotional communication. Through the interpretation of others' embodied emotions ("you can see their bewildered expression"), Pt41MG described how his own emotional experience was validated, a process which consequently intensified the emotionality of this experience ("it fuels your feelings"):

Pt41MG: It's just a communication thing, ken[113] what I mean? It's even just

like a glance round at each other [looks at Pt40MG] when we are watching it,

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[113] A Scot's term that may be read as "you know".

you can see their bewildered expression at the thing, [demonstrates turning to

face Pt40MG]; "Exactly!" Ken and it fuels your feelings, like that is how *I'm*

feeling!

This corroborates the positive relationship between relatedness and emotional intensity

identified in the questionnaire and continuous data. It is also worth noting the reciprocal

dimension of this collective emotional intensification. As Pt35MA described in the following

anecdote[114], when group members observe others' sharing their emotional experience this can

validate and amplify their own experience, which, through displays of emotional expression

("you give more off"), can in turn reciprocally amplify the experience of others:

Pt35MA: when people are getting excited about a match then you can kind of

feel that excitement, so it makes you more excited, and then you give more off

and then they get more excited until everyone's just fucking excited!

6.2.3 DISCUSSION

In Study 5 Scottish football supporters watched a Scotland match either alone, or with a small

group of other Scotland fans. Participants in the group condition were expected to have a sense

of shared identity with one another which would, as suggested by analyses from Chapters IV and

V, positively transform their social relations to engender intragroup relatedness (H4). According

to H5, such relatedness would then amplify the emotional intensity of group participants'

experiences. It was therefore predicted in the experimental hypothesis that participants in the

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[114] Pt35MA was referring to a past experience of being in a football crowd.

group condition would experience their participation with greater emotional intensity than those in the alone condition. The study additionally examined H1 in which it was expected that strength of identity with the Scotland team would predict emotional intensity of experience, and that this strength of social identity could in turn be shaped by the experience of participation (H7). The results did not support the experimental hypothesis, but did provide further evidence for H1, H4, H5 and H7.

Examination of relatedness variance elucidated the discrepancy between the experimental hypothesis and data. Although participants were informed that they shared a social identity with their fellow group members, relatedness was seen to vary both between and within groups, which in turn affected emotional intensity of experience. This suggests that whilst each individual considered themselves a Scotland supporter, they didn't necessarily have a sense of sharing this identity (and subsequent relatedness) with the other participants (H4). This was apparent when interviewing Pt19MG, who explained that he did not experience his participation with emotional intensity or interact with the other participants because; "I don't know how serious Scotland fans they are [points to Pt20MG and Pt2MG]".

The focus of the analysis therefore shifted from differences between individual and collective participation, to examining variation in experience as a consequence of relatedness. Using a combination of questionnaire, physiological, real-time self-report and interview methods, it was demonstrated that relatedness was positively linked to emotional intensity of experience, therefore providing support for H5. Evidence from post-event interviews additionally suggested that relatedness between participants was positively associated with their willingness to express their emotional experiences. When the embodied emotions of one participant validated those of

another, this could amplify the intensity of the second participants' emotional experience and expressions, thereby generating a reciprocal process of pluralistic confirmation and augmentation of emotion.

An alternative interpretation of the results might suggest that the relationship between relatedness and emotional intensity of experience was epiphenomenal, such that both variables were dependent upon strength of social identity. However, whilst strength of social identity with the Scotland team did significantly predict both emotional intensity of experience (H1) and relatedness, relatedness continued to predict emotional intensity when controlling for strength of identity.[115]

There was also some evidence to suggest that relatedness may have had an impact upon strength of social identity change. Whilst the strength of social identity of high relatedness participants' remained consistently high, low relatedness participants' scores decreased after their participation. This provisionally suggests that participating collectively with others with whom one feels unrelated can undermine one's strength of social identity with the shared social category. This provides further evidence for H7, which states that social identity may be shaped through the experience of collective participation.

Limitations

There were several methodological problems with Study 5. The criteria for the stimulus were that it should be both identity-relevant and have the potential to be experienced emotionally. A

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[115] Using individual participants as the unit of analysis to increase statistical power.

Scottish football match was chosen because public interest in the national team was high at the time of the study, and the Scotland –v- Italy game was the climax of the recent Euro2008 qualification campaign. However, what the match gained in excitement it lost in novelty, since most participants (86.7%) had previously watched the game. Participants explained that familiarity with the match curtailed the emotionality of the viewing experience, e.g. Pt19MG who stated that, "I didn't really find it exciting to watch, I knew what was coming."

There was also a gendering issue in the use of a football stimulus, with 75% of participants being male. This resulted in significant gender effects upon both relatedness and emotional intensity of experience. It is also worth noting that in addition to being underrepresented in the sample, females who did participate were generally dominated by their male counterparts both during the match highlights and subsequent interviews.

Participant recruitment was also a surprising challenge. Running the study in a university with a large proportion of foreign students limited the Scottish student participant pool, thereby requiring additional recruitment from other sources. For a study that was dependent upon a sense of shared identity between participants this was particularly problematic, because some groups contained a diverse mixture of students, businesspeople and elderly local residents. For participants in these groups, it is possible that the differences between them were more salient than their shared identity as Scotland fans (Oakes, Turner, & Haslam, 1991). In response to these limitations, the paradigm was repeated in Study 6 but with several methodological alterations.

6.3 STUDY 6

6.3.1 INTRODUCTION

Study 6 was designed to compliment and extend the analysis from Study 5. As such, the design and procedure of Study 5 were repeated, but with the following methodological changes. In an effort to augment shared identity, all participants were European students at the University of St Andrews. In addition, all participants wore t-shirts emblazoned with "Europe" to emphasise their shared identity as Europeans. The study required participants to watch a sporting event (ten-pin bowling) featuring a European team. This stimulus was chosen because it was relevant to the salient social identity, but was unlikely to have been seen previously by participants. By not informing participants about the nature of the film in advance of the study, it was also hoped to recruit a gender-balanced participant sample.

Hypotheses

The experimental hypothesis was the same as in Study 5 i.e. that the experience of participating in the group condition would be more emotionally intense than in the alone condition. This was because participants within groups of shared identity were expected to feel a sense of relatedness with one another (H4), which would in turn amplify the emotional intensity of group members' experiences (H5). Strength of social identity was again expected to predict emotional intensity of experience (H1), and the experience of collective participation to shape participants' strength of social identity with the European category (H7).

6.3.2 METHODS [116]

6.3.2.1 Participants

Participants were first year psychology undergraduates at the University of St Andrews who participated in the study for course credit. Only students who self-identified as European were eligible to participate. One group of three participants mistakenly contained an American student, and the whole group's data were consequently excluded from the analysis. Of the remaining 53 participants, 10 were male (18.9%) and 43 female (81.1%)[117], aged between 18 and 25 ($M = 19.29$, $SD = 1.35$). One participant failed to disclose their age.

6.3.2.2 Design

The study employed a one-way design with participants randomly assigned to either the alone condition (n = 14), or the group condition (n = 39). Participants in the group condition were divided into 15 groups.

6.3.2.3 Materials and Procedure

The materials and procedure were broadly the same as in Study 5 (see 6.2.1.3 and 6.2.1.4). Only changes to the materials and procedure are reported in this section. Participants watched video highlights of a European victory over the United States in a 2008 Weber Cup ten-pin bowling match (Francis, 2008). The film lasted for 9 minutes and 35 seconds. As participants entered the laboratory and completed their pre-stimulus written tasks (consent form, identity salience task, and pre-stimulus questionnaire), a projection displayed the words "Europe –v- United States"

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[116] The study received ethical approval from UTREC (see Appendix VIe).

[117] Two (20 %) males participated in the alone condition and 8 (80 %) in the group condition, compared to 12 (27%) females in the alone condition, and 31 (72.1 %) in the group condition.

with the accompanying flags of the European Union (EU) [118] and the United States of America (USA) to heighten identity salience. After completion of the consent forms the researcher asked each participant in turn if they were European or American. The researcher carried both blue and red t-shirts, and as each participant answered "European", they were given a blue t-shirt emblazoned with the yellow EU flag with "Europe" written above. The t-shirts were extra-large in order to fit over participants' clothes, and were worn for the duration of the study. The t-shirts were designed both to further augment identity salience, and to emphasise to participants that they shared a social identity with one another as Europeans.[119]

The identity salience task (adapted from Haslam et al., 1999) was altered by introducing an intergroup element, and asked participants to provide answers to the following statements; 1) Three things that you and most other Europeans do most often, 2) Three things Americans do relatively rarely, 3) Three things that you and most other Europeans generally do well, and 4) Three things that Americans generally do badly. Additionally, "EUROPEANS" was printed in bold at the top of the page, above an image of the EU flag (See Appendix VIf).

The pre- and post-stimulus questionnaires resembled those used in Study 5, but were reworded to apply to participants' European identities (See Appendix VIg). An additional relatedness item, "I had a sense of connection with the other participants watching the match

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[118] Although not all European countries are members of the EU, this flag was considered the most recognisable symbol of Europe.

[119] Shared clothing as an indicator of shared identification, particularly with regards audiences at sporting events, emerged from participant interviews in Chapter IV (see 4.3.3.1).

today" (*Totally Agree/Totally Disagree*), was also included.[120] All questionnaire items (except demographic questions) used a nine-point Likert scale (1-9).

6.3.3 ANALYSIS

After preliminary analysis of the data (6.3.3.1), the effects of the experimental manipulation are examined (6.3.3.2) including a test of the experimental hypothesis. Regression analysis then interrogates the relationship between strength of social identity and emotional intensity (6.3.3.2). The relationship between relatedness and emotional intensity of experience is then explored (6.3.3.3), before consideration of the impact of collective participation upon strength of social identity (6.3.3.3). Two-tailed statistical tests with an alpha value of .05 were used in all analyses unless otherwise stated.

6.3.3.1 Preliminary Analysis

Missing Data

Due to technical difficulties, emotional intensity slider scores were not recorded for three participants, and heart rate data not recorded for four participants. All of these participants were in the group condition.

Reliability Analysis

A summary of Study 6 scale reliabilities is presented in Table 6.10. All scales had acceptable reliability.

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[120] As in Study 5, the questionnaires also included items relating to participant mood, enjoyment of the stimulus, intention of future participation, and preference for collective over individual participation. These variables are not considered in the current analysis.

Table 6.10

Summary of Study 6 Cronbach Alpha Scale Reliabilities

Variables	Pre-stimulus Questionnaire		Post-Stimulus Questionnaire	
	Alone Condition	Group Condition	Alone Condition	Group Condition
Strength of Social Identity	.86	.94	.90	.96
Emotional Intensity	-	-	.92	.94
Relatedness	-	-	-	.84

Control Variables

There was a significant effect of gender upon the questionnaire measure of emotional intensity, with males (M = 6.13, SD = 1.79) scoring higher than females (M = 4.61, SD = 2.01), $t(51)$ = 2.19, p = .03, d = .61. All analyses involving the questionnaire measure of emotional intensity therefore control for gender where possible. There was a significant Spearman's correlation between age and the mean of the continuous self-report measure of emotional intensity (sliders), $r_s(47)$ = .30, p = .04. All analyses involving emotional intensity sliders therefore control for age where possible. There were no significant effects of group size, and none of the participants had previously seen the film.

6.3.3.2 Manipulation Effects

Descriptive statistics for alone and group experimental conditions (including data for each individual group participant and group composites) are presented in Table 6.11.

Table 6.11

Study 6 Descriptive Statistics for Alone and Group Experimental Conditions

Variables	Alone Participants			Group Participants			Group Composites		
	n	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*
Pre-Stimulus Strength of Social Identity	14	4.91	0.85	39	4.89	1.25	15	4.86	0.93
Post-Stimulus Strength of Social Identity	14	5.28	0.89	39	5.04	1.27	15	5.02	1.03
Change in Strength of Social Identity	14	0.37	0.44	39	0.14	0.54	15	0.16	0.38
Emotional Intensity (Questionnaire)	14	5.74	1.66	39	4.60	2.11	15	4.49	1.47
Emotional Intensity (Slider Mean)	14	158.74	37.12	36	123.86	41.53	15	121.64	39.48
Relative Heart Rate (bpm)	14	-5.07	4.06	35	-3.97	3.92	15	-4.23	2.74
Relatedness	-	-	-	39	5.44	1.41	15	5.47	1.11

Differences between experimental conditions were analysed using both non-parametric Mann-Whitney U tests, and McGarty & Smithson's (2005) adaptation of the binomial test,[121] summaries of which are presented in Table 6.12 and Table 6.13 respectively.[122] The results of both analyses are presented thematically.

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[121] A distribution of difference scores was again constructed by subtracting mean scores in the alone condition from individual participant scores in the group condition.

[122] The reasons for using these analytic techniques were outlined in 6.2.3.2.

Table 6.12

Study 6 Mann-Whitney U Test Statistics Comparing Alone Participants with Group Composites

Variables	Mann-Whitney U	Z	p
Pre-Stimulus Strength of Social Identity	102.00	-0.13	.91
Post-Stimulus Strength of Social Identity	83.50	-0.94	.35
Change in Strength of Social Identity	78.50	-1.16	.25
Emotional Intensity (Questionnaire)	58.00*	-2.05	.04
Emotional Intensity (Slider Mean)	54.00*	-2.02	.04
Relative Heart Rate (bpm)	89.00	-0.70	.51

Note. Negative *Z* statistics indicate that alone condition scores were greater than high relatedness means. All *p-values* are two-tailed. * *p* < .05.

Table 6.13

Study 6 Adapted Binomial Analysis Comparing Alone and Group Experimental Conditions

Variables	Proportion of comparisons where group participant scores > mean of alone participants	p
Pre-Stimulus Strength of Social Identity	.54	.63
Post-Stimulus Strength of Social Identity	.44	.42
Change in Strength of Social Identity	.36	.07
Emotional Intensity (Questionnaire)	.33*	.04
Emotional Intensity (Slider Mean)	.22**	.01
Relative Heart Rate (bpm)	0.73**	.01

Note. If the proportion of comparisons is < .50 then the mean of alone participants is > group participant scores. All

p-values are two-tailed. * *p* < .05. ** *p* < .01

Social Identity Variables

Mann-Whitney U and adapted binomial tests failed to find any significant differences between alone and group conditions for pre-, post-, and change in strength of social identity variables.

Emotional Intensity

Analysis using a Mann-Whitney U test found that emotional intensity of experience (questionnaire measure) was significantly higher in the alone (mean rank = 18.36) than the group condition (mean rank = 11.87), $U = 58$, $p = .04$. This relationship was corroborated by an

equivalent significant result using the adapted binomial test (proportion of comparisons where group participant scores > mean of alone participants = .33, p = .04).

Analysis of emotional intensity using the interactive sliding devices yielded similar results. Mean slider scores in the alone condition (mean rank = 17.64) were significantly higher than those in the group condition (mean rank = 11.36), U = 54, p = .04. The adapted binomial test found an equivalent significant result (proportion of comparisons where group participant scores > mean of alone participants = .22, p < .01). This finding is graphically presented in Figure 6.9 in which the mean trace of alone participants' emotional intensity of experience (blue line) is consistently above the mean trace of group composite scores (pink line). Results from the two self-report measures of emotional intensity do not therefore support the experimental hypothesis.
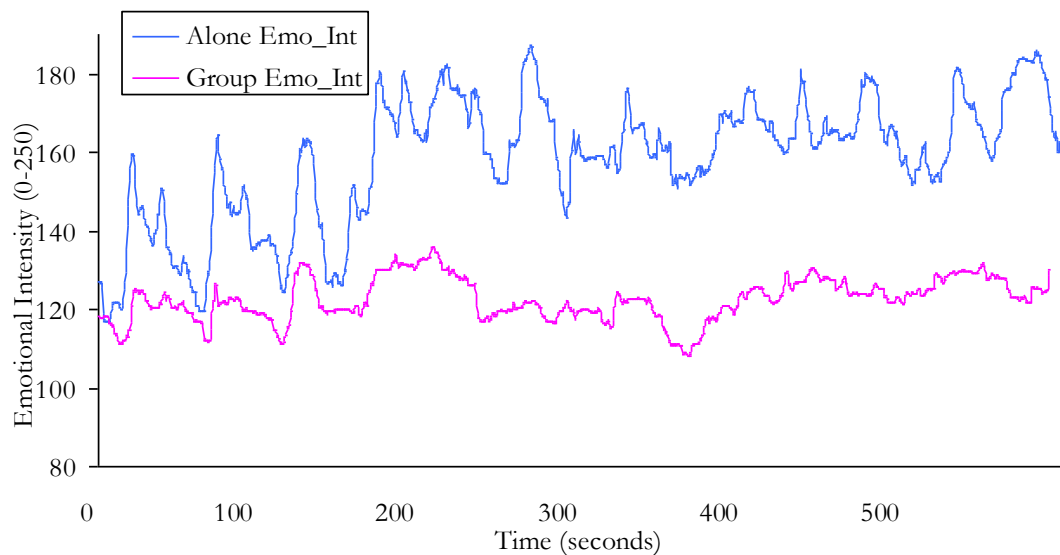
Figure 6.9. Study 6 Emotional Intensity Slider Scores for Alone and Group Conditions throughout the Bowling Match.

Analysis examining the third measure of emotional intensity of experience, relative heart rate, was inconsistent with these findings. The adapted binomial test found a significant proportion of comparisons where group participant scores > mean of alone participants = .73, p = .01. This is presented graphically in Figure 6.10 in which the mean of group composites' relative heart rates (purple line) remains marginally above the mean of alone participants' relative heart rates (navy line). A Mann-Whitney U test failed to identify a significant difference in relative heart rate between experimental conditions.
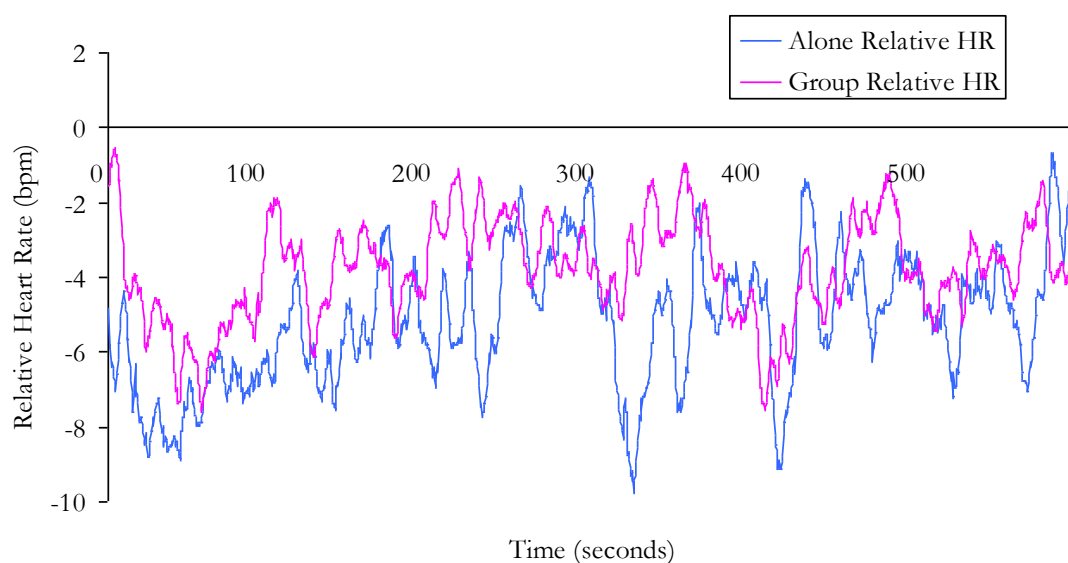
Figure 6.10. Study 6 Relative Heart Rates for Alone and Group Conditions throughout the Bowling Match.

Strength of Social Identity and Emotional Intensity

Regression analysis of the questionnaire data provided some support for the expected positive relationship between strength of social identity and emotional intensity of experience (H1).[123] There was no significant relationship between pre-stimulus strength of social identity and

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[123] The analysis is one-tailed following the results from Chapter IV, Study 5 (Chapter VI) and the predictions of IET (Smith, 1993; Smith et al., 2007).

emotional intensity.[124] However, controlling for gender (b = -0.85, SE = 0.93), post-stimulus strength of social identity, significantly predicted the questionnaire measure of emotional intensity of experience, b = 0.81, SE = 0.30, $t(26)$ = 2.73, $p < .01$ (one-tailed), R^2 = .24.

Interview data from Study 6 provided further support for the hypothesis, such that participants who strongly identified with being European found the experience of watching the film emotional e.g. Pt50MA who stated that "I found it exciting when the Europeans were getting strikes. When they were doing well I felt like I was doing well." However, this was not the case for participants who did not identify with the European category. This was apparent during an interview with Pt49FA, who explained that her experience would have been more emotionally intense if the film had involved a category with which she strongly identified:

> Pt49FA: I feel more Irish than I would European, like I'm more proud to be Irish than I would be proud to be European.
>
> Re1: Okay, what if you'd watched an Ireland - England bowling match?
>
> Pt49FA: Yeah I think it would definitely be more exciting.

6.3.3.3 Relatedness Analysis

The experimental hypothesis stated that participants in the group condition would experience the film with greater emotional intensity than those in the alone condition. This expectation was based upon H4, which predicted that group members would experience a sense of relatedness

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[124] Controlling for gender (b = -0.95, SE = 1.04), pre-stimulus strength of social identification failed to significantly predict the questionnaire measure of emotional intensity of experience, b = 0.42, SE = 0.36, $t(26)$ = 1.16, p = .13 (one-tailed), R^2 = .07.

with one another through their shared identity as Europeans. However, as was found in Study 5, not all groups experienced a strong sense of relatedness. Mean group relatedness scores ranged from 3.07 to 7.80 (M = 5.47, SD = 1.12), and individual participant scores in the group condition from 1.80 to 8.20 (M = 5.44, SD = 1.41).

The quantitative relationships between relatedness and strength of social identity, and relatedness and emotional intensity, were again analysed using a combination of independent samples t-tests, the adapted binomial test, and linear regression. These analyses are presented thematically, and are summarised in Table 6.16.

A median-split was used to categorise composite groups as either high or low relatedness in order to calculate the independent samples t-tests, and to plot the real-time (relative heart rate and emotional intensity sliders) data. The group median was 5.67, so groups with a mean score above this value were coded as high relatedness, and below as low relatedness. One group with a mean score of 5.67 was coded as high relatedness, after comparison with the overall group mean of 5.47. Coding groups in this way produced five low, and eight high relatedness groups. It was also necessary to code each individual participant in the group condition as either high or low relatedness for the adapted binomial analysis. The relatedness median for all individual participants was 5.40, so individuals with a mean score above this value were coded as high relatedness, and those below as low relatedness. Six participants with a mean score of 5.40 were coded as low relatedness after comparison with the overall group mean of 5.44. Coding in this way produced 21 low, and 18 high relatedness participants. Descriptive statistics for low and high relatedness groups and participants are presented in Table 6.14 and Table 6.15 respectively.

Table 6.14

Study 6 Descriptive Statistics for High and Low Relatedness Groups

Variables	Low Relatedness Groups			High Relatedness Groups		
	n	*M*	*SD*	*n*	*M*	*SD*
Pre-Stimulus Strength of Social Identity	7	4.69	0.93	8	5.02	0.96
Post-Stimulus Strength of Social Identity	7	4.76	0.81	8	5.25	1.20
Change in Strength of Social Identity	7	0.07	0.34	8	0.23	0.42
Emotional Intensity (Questionnaire)	7	3.96	1.01	8	4.96	1.71
Emotional Intensity (Slider Mean)	6	101.48	47.35	8	136.77	26.14
Relative Heart Rate (bpm)	7	-3.55	2.76	8	-4.82	2.77
Relatedness	7	4.55	0.72	8	6.29	0.66

Table 6.15

Study 6 Descriptive Statistics for High and Low Relatedness Participants

Variables	Low Relatedness Participants			High Relatedness Participants		
	n	*M*	*SD*	*n*	*M*	*SD*
Pre-Stimulus Strength of Social Identity	21	4.74	1.32	18	5.06	1.19
Post-Stimulus Strength of Social Identity	21	4.81	1.30	18	5.30	1.20
Change in Strength of Social Identity	21	0.07	0.50	18	0.23	0.59
Emotional Intensity (Questionnaire)	21	4.24	2.14	18	5.02	2.04
Emotional Intensity (Slider Mean)	19	109.20	45.26	17	140.25	30.46
Relative Heart Rate (bpm)	19	-3.49	3.95	16	-4.54	3.93
Relatedness	21	4.47	1.04	18	6.57	0.80

Table 6.16

Study 6 Summary Table of Relatedness Analyses

Variables	T-Test			Binomial Test		Linear Regression	
	t	*p*	*d*	*Z*	*p*	*b*	*p*
Pre-Stimulus Strength of Social Identity	0.68	.51	0.38	-0.22	.83	-	-
Post-Stimulus Strength of Social Identity	0.92	.38	0.51	-1.09	.28	0.28	.27
Change in Strength of Social Identity	0.81	.43	0.49	-3.27**	.01	0.20*	.02
Emotional Intensity (Questionnaire)	1.35	.20	0.75	-1.53	.13	0.79*	.02
Emotional Intensity (Slider Mean)	1.79	.10	1.03	-2.40*	.02	18.79	.07
Relative Heart Rate (bpm)	0.89	.39	0.49	0.65	.51	-0.20	.78

Note. Positive *t-values* indicate that high relatedness scores were > low relatedness scores. Negative *Z-values* indicate that high relatedness group means were > that low relatedness individual participant scores. Relatedness was the predictor variable in all linear regression calculations. There are no values for pre-stimulus strength of social identity as this measure chronologically preceded relatedness. All *p-values* are two-tailed. * $p < .05$. ** $p < .01$.

Social Identity Variables

There were no significant differences between high and low relatedness groups and participants on measures of pre- and post-stimulus strength of social identity. An independent samples t-test also found no significant difference between high and relatedness groups for change in strength of social identity. However, for change in strength of social identity the adapted binomial test did find a significant difference between high relatedness ($M = 0.23$, $SD = 0.59$) and low relatedness ($M = 0.07$, $SD = 0.50$) participants (proportion of comparisons where low relatedness participant scores > mean of high relatedness participants = .14, $p = .01$). Similarly, linear regression analysis found that relatedness significantly predicted participants' change in strength of social identity, $b = 0.20$, $SE = 0.08$, $t(13) = 2.70$, $p = 0.02$, $R^2 = .36$.

Emotional Intensity

Following the analysis from Chapter IV and the results from Study 5, it was expected that relatedness would predict emotional intensity of experience. As a consequence of this prior expectation, the following statistical analyses are one-tailed.

Questionnaire Measure of Emotional Intensity

Independent samples t-tests did not find a significant difference on the questionnaire measure of emotional intensity of experience between high relatedness groups (M = 4.96, SD = 1.71) and low relatedness groups (M = 3.96, SD = 1.10), t(13) = 1.35, p = .10 (one-tailed), d = 0.75, although the difference did approach significance with a medium effect size. Similarly, the adapted binomial test found a difference approaching significance between high relatedness (M = 5.02, SD = 2.04) and low relatedness participants (M = 4.24, SD = 2.14) (proportion of comparisons where low relatedness participant scores > mean of high relatedness participants = .33, p = .07 [one-tailed]). However, controlling for gender (b = -0.80, SE = 1.34, p = .56), relatedness did significantly predict the questionnaire measure of emotional intensity of experience using linear regression, b = 0.79, SE = 0.30, t(13) = 2.68, p = .01 (one-tailed), R^2 = .39.

Controlling for pre-stimulus strength of social identity (b = 0.27, SE = 0.37, p = .49) in addition to gender (b = -0.96, SE = 1.39, p = .50), relatedness continued to significantly predict emotional intensity of experience, b = 0.77, SE = 0.31, t(11) = 2.53, p = .01 (one-tailed), R^2 = .42.

Continuous Measures of Emotional Intensity

There were no significant differences in relative heart rate between high and low relatedness groups and participants using independent samples t-tests, the adapted binomial test, or linear regression. However, all three analytic methods found significant differences in mean emotional intensity slider scores between high and low relatedness groups and participants. An independent samples t-test found that mean emotional intensity slider scores were significantly higher for high relatedness groups (M = 136.77, SD = 26.14) than low relatedness groups (M =

101.48, SD = 47.35), $t(12)$ = 1.79, p = .05 (one-tailed), d = 1.03. Similarly, the adapted binomial test found a significant difference in mean emotional intensity slider scores between high relatedness (M = 140.25, SD = 30.46) and low relatedness participants (M = 109.20, SD = 45.26) (proportion of comparisons where low relatedness participant scores > mean of high relatedness participants = .24, p = .01 [one-tailed]). Finally, controlling for age (b = 17.64, SE = 10.64, p = .11), relatedness significantly predicted mean emotional intensity slider scores using linear regression, b = 18.79, SE = 9.31, $t(11)$ = 2.02, p = .03 (one-tailed), R^2 = .32.

The continuous self-report measures of emotional intensity of experience of high and low relatedness groups are presented below in Figure 6.11. The unit of analysis is the group i.e. high relatedness groups (n = 8) were aggregated to produce a mean high relatedness trace (red line), and low relatedness groups (n = 7) aggregated to produce a mean low relatedness trace (black line).
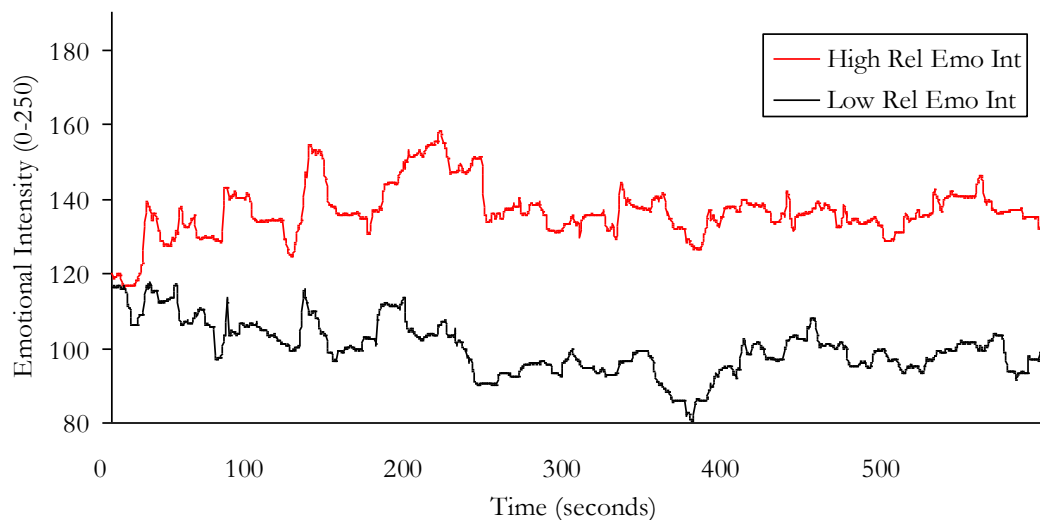
Figure 6.11. Study 6 Emotional Intensity Slider Scores for High and Low Relatedness Groups throughout the Bowling match.

Taken together, the quantitative data from the various methods provides further support for the positive relationship between relatedness and emotional intensity of experience (H5).

Qualitative Data

Participant interviews highlighted the roles of shared identity and relatedness in generating emotionality of collective experience. As Pt53MG and Pt54FG discussed in the following extract, within a group of shared identity ("everyone's together in it, everyone's rooting for the same people"), the embodied expression of emotion facilitated assessment of the emotional experience of other group members ("you were able to like see whether the other person was enjoying it or not"). Where there was validation of emotion within the group (a dimension of relatedness), the participants explained how it could then amplify the emotional intensity of participant experience ("it kind of intenses [sic] the feeling"):

> Pt54MG: I was gasping and she [Pt53FG] was doing similar things and you kind of feed off each other.

> Pt53MG: Yeah, and watching it together you were able to like see whether the other person was enjoying it or not, so if like you thought they were enjoying it, it kind of made you enjoy it a bit more. [ ] So like everyone's together in it, everyone's rooting for the same people, like in football stadiums, when you've got like a massive crowd and you just feel like you get their emotions as well so it kind of intenses [sic] the feeling.

The description of validation of experience as a consequence of group members being "together in it" provides further support for the relationship between relatedness and shared identity. The second interview extract presented in this section ties many of the key themes in this chapter together. Firstly, Pt36MG notes the importance of strength of social identity with the relevant social category ("if it's something you sort of have an interest in") as an antecedent to collective emotional intensification. Next, it is explained that when participants felt that others within the group validated their emotional experience then those emotions could be amplified ("if everyone else is feeling the same thing then your emotions are intensified"). Importantly the passage concludes with Pt35FG noting that a lack of shared emotional experience, and thus relatedness, could dull one's emotional experience ("if you have different emotions I think they are, erm, they are weakened"):

Pt36MG: I think if it's something you sort of have an interest in I think being in a group sort of emotionally intensifies it.

Re1: Okay, why does that happen?

Pt36MG: Erm, I guess probably solidarity with other people. [ ]

Re1: So your sense of solidarity with other people, that has an impact on how emotionally intense it is?

Pt36MG: Yeah, I think you feel if everyone else is feeling the same thing then your emotions are intensified. [ ]

Pt35FG: It kind of confirms your emotions. Or the opposite, like if you have different emotions I think they are, erm, they are weakened.

6.3.4 DISCUSSION

Study 6 was designed to build upon the analysis of Study 5 by improving the experimental paradigm. In addition to changing the relevant social identity, shared identity between participants in the group condition was made more explicit, and a film was selected which none of the participants had seen previously. Following analyses from Chapters IV and V, the experimental hypothesis stated that watching the identity-relevant stimulus in the group condition would be a more emotionally intense experience than in the alone condition due to shared identity leading to relatedness (H4), and consequently emotional intensification (H5). Strength of social identity in both conditions was expected to predict emotional intensity of experience (H1). It was also predicted that the experience of collective participation could shape participants' strength of social identity with salient social category (H7). As was the case in Study 5, results from Study 6 did not support the experimental hypothesis. In fact, self-report measures of emotional intensity were in the opposite direction to the hypothesis such that scores were higher in the alone than group condition. The results did however provide further evidence in support of H1, H4, H5 and H7.

Participant interviews suggested that participating alone could be an emotionally intense experience in ways not anticipated in the study design. For some, sitting alone in a darkened room without the social support of others could have been an anxious experience e.g. for Pt31FG who stated that her experience "would have been creepier if I had been alone". However, if participants in the alone condition were anxious, then one would have expected them to have had elevated relative heart rates, which was not the case (Epstein & Roupenian, 1970). A second possible explanation for the unexpected result was that participants were able to focus more fully upon the film when alone, instead of being distracted by others in a collective context. This position was explained by Pt35FG who speculated that her experience would have

been more emotional if she had participated alone "because your attention would be focussed on like the match more. [ ] other people are more interesting than the match I think".

Although there are reasons why participating individually may have been an intense experience, the analysis again suggested that a lack of relatedness in some groups was primarily responsible for the discrepancy between the experimental hypothesis and results. Questionnaire data and a real-time self-report measure of emotional intensity converged to demonstrate that relatedness with fellow group members could amplify the intensity of participant experience. Post-stimulus semi-structured interviews unpacked this relationship to reveal that when participants perceived a shared emotional experience with fellow group members (in part evaluated through embodied emotion), this could validate and amplify their own experience in a reciprocal manner. Conversely, when participants did not feel a strong sense of relatedness with one another, the intensity of their experience could be attenuated, providing a plausible explanation for the between-condition difference in emotionality.

In addition to being an input into collective experience, analysis from Study 6 again suggested that strength social identity may be shaped through collective participation. This was evident in the positive relationship between change in strength of social identity and relatedness, such that the social identity of high relatedness participants strengthened relative to that of low relatedness participants.

A positive relationship between strength of social identity and emotional intensity was clear in the participant interviews, such that identification with the salient social category could provide the basis for excitement in watching the identity-relevant stimulus. The questionnaire

data provided partial support for this result, revealing a positive relationship between post-stimulus strength of social identity and emotional intensity of experience. However, relatedness continued to predict emotional intensity of experience when controlling for strength of social identity, demonstrating that the relatedness-emotional intensity relationship was not merely an epiphenomenon of strength of social identity with the salient social category.

Limitations

A European identity was chosen to aid participant recruitment after difficulties in using a narrower social category in Study 5. However, the questionnaire data and interviews revealed that participants did not identify strongly with this European category with consequences for shared identity, relatedness and emotional intensity of experience. There were also problems with the stimulus used in Study 6. The video footage of the bowling match was considered to be potentially exciting, but was unlikely to have been seen previously by participants. Unfortunately, what the footage gained in novelty it lost in excitement, with participants failing to engage with the film as they did in Study 5. Combined with low levels of European identification, disinterest in ten-pin bowling contributed to relatively low levels of emotional intensity. This was candidly expressed by Pt46FA, who stated that, "I don't really care about Europe and America, or bowling". This lack of participant emotional engagement was reflected in low relative heart rate means compared to Study 5, suggesting generally low participant arousal. The ten-pin bowling contest was considered less traditionally gendered than the football match used in Study 5. However, due to the high female to male ratio of psychology undergraduates, the Study 6 sample was also unbalanced, but this time towards females and not males. This contributed to significant gender effects upon emotional intensity of experience.[125]

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[125] In contrast to Study 5, males in Study 6 experienced the stimulus as more emotionally intense than females.

6.4 CHAPTER VI DISCUSSION

In two studies participants watched a sporting contest relevant to their salient social identity either alone, or within a small group of others who shared this same identity. Following analyses from Chapters IV and V, it was expected that whilst strength of social identity would predict emotional intensity of experience, shared identity within the groups would transform social relations to create a sense of relatedness between participants, which would consequently amplify the intensity of these participants' emotional experiences. The experimental hypothesis was therefore that participants in the group conditions would experience the films with greater emotional intensity than those in the alone conditions. It was also predicted that strength of social identity with the social group could be shaped through the experience of collective participation. Results from the two studies supported these predictions, but not the experimental hypotheses.

Study 5 found no significant difference in emotional intensity between the experimental conditions, whilst in Study 6 participants' emotional experiences were actually more intense in the alone than the group condition. This makes the important point that contrary to classic accounts of collective passion (e.g. Freud, 1921/1922; Le Bon, 1895/2002; McDougal, 1920/1939), people will not *always* be more emotional in groups than if they were alone. Instead, collective emotionality appeared to be contingent upon several social factors. The experimental hypothesis relied upon participants feeling a sense of shared identity with others in their group, which would consequently lead to relatedness (notably a validation of emotion), and then emotional intensification. Despite all participants having the same social identity (Scottish football supporters in Study 5, and Europeans in Study 6), there was not universal relatedness in all groups, suggesting variance in perceived shared identity. This finding highlights the fallacy in presupposing the equivalence of mutual self-categorisation and shared identity. Whilst each

individual considered themselves a member of the salient social category, they did not necessarily see other participants as sharing this membership. This explanation received support from the semi-structured interviews in which participants noted that uncertainty about their shared identity with others could attenuate their emotional experience and behaviour.

In light of the failure to generate universal shared identity, our analytic focus shifted from comparing alone and group conditions to examining emotional experiences in different types of group. Analyses comparing experiences in high and low relatedness groups yielded results consistent with the hypotheses upon which the experimental hypothesis was based. Data from a variety of sources were triangulated to provide evidence that relatedness was positively associated with emotional intensity of experience. Semi-structured interviews were then used to explore this relationship.

Interview data revealed that the degree of relatedness felt between participants affected their willingness to verbally and physically express their emotional experience. These cues could then be interpreted by participants in high relatedness groups as evidence of shared emotional experience. Knowledge of shared emotionality appeared to validate and augment the intensity of these emotions in a reciprocal process of mutual confirmation and intensification. This account of emotional expression and intensification as dependent upon social relations fits with the embodied emotion literature. Firstly, there is evidence to suggest that emotional expression, and accuracy in interpreting this expression, are high when participants viewing a stimulus are ingroup members (Young & Hegenberg, 2010), "in rapport" (Lang & Lang, 1961, p220), or are friends (e.g. Buck, Savin, Miller, & Caul, 1972; Fischer, Rotteveel, Evers, & Manstead, 2004; Fridlund, 1991; Jakobs, Manstead, & Fischer, 1999, 2001; Wagner & Smith, 1991; Yamanoto &

Suzuki, 2005). Similarly, laboratory studies have suggested that emotional expression may be inhibited when participating in studies with strangers (Wagner & Lee, 1999; Yarczower & Daruns, 1982). Finally, the positive impact of sharing emotion (which we class as a facet of relatedness) upon emotional intensity of experience has been noted by Fischer et al. (2004), and Parkinson, Fisher and Manstead (2005).

There are obvious parallels between our conception of mutual emotional intensification through validation of emotion with the emotional amplification models discussed in classic crowd psychology texts. The similarity is particularly clear with McDougal's (1939) sympathetic induction, Blumer's (1939) circular reaction, and Allport's (1924) circular reverberation. However, what our results show clearly is that unlike these early models of crowd affect, emotional intensification in our groups was not universal and automatic (hence the rejection of the experimental hypothesis), but was rather dependent upon shared social identity and relatedness. The suggestion that emotional experience and expression are contingent upon social relations supports the argument that emotional 'contagion' is a function of social context (Fischer, et al., 2004; Lang & Lang, 1961; Manstead & Fischer, 2001), and not entirely driven by pre-cognitive automatic processes (Dimberg, Thunberg, & Elmehed, 2000; Hatfield, et al., 1992; Hatfield & Rapson, 1998; Le Bon, 1895/2002; Raafat et al, 2009).

Analyses from Studies 5 and 6 also suggest that emotional intensity of experience is positively associated with strength of social identity. This provides further evidence against the classic notion that collective emotion is generated through the loss of identity in a reason-emotion dichotomy (e.g. Freud, 1921/1922; Le Bon, 1895/2002). This finding makes sense for two theoretical reasons. Firstly, the group emotions literature and results from Chapter IV

suggest that social identity can provide the basis for group-based emotion (Smith, 1993; Smith et al., 2007), or as explained by Pt34FG in Study 6, "You have to choose someone to support to get the emotional experience". Secondly, one of the central arguments in this thesis contends that collective emotion may be amplified through relatedness, which in turn is a function of shared identity. Because relatedness is contingent upon shared identity, one can only experience relatedness (and emotional intensification) if one first identifies with the social category to be shared.[126]

Emotional experience was not the only consequence of collective participation that emerged in the analyses. The within-subject design of the paradigm allowed examination of changes in participants' strength of social identity with the salient social category. In both studies relatedness was positively associated with identity change. Analysis from Study 5 suggested that participants in low relatedness groups had a significant decrease in their strength of social identity as Scotland supporters, compared to participants in high relatedness groups whose strength of social identity remained high. This provides tentative evidence that being grouped with others with whom one is told one shares an identity, but with whom one actually feels little in common, may undermine identification with the salient social category. Study 6 found complimentary results, such that participants in high relatedness groups had a significant increase in their strength of social identity as Europeans, compared with those in low relatedness groups whose identity strengths remained unchanged. Taken together, these two results confirm H7, which, in conjunction with analysis supporting H1, suggest that social identity can be both an input and output of collective experience (Drury & Reicher, 2000; Kessler & Hollbach, 2005; PMMRG, 2007a, 2007b; Reicher et al., 2010).

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[126] It is important to note however that in both studies the relationship between relatedness and emotional intensity endured whilst controlling for strength of social identity.

Limitations

There were inevitable limitations in conducting 'crowd' studies within a laboratory. Due to practical constraints, the number of participants in each group was relatively small, raising concerns as to the external validity of the findings compared to participant experiences at larger collective events.[127] Although the groups did not include many people, they did allow for the systematic examination of the dimensions collective experience that were identified during fieldwork in Chapter IV.

The use of genuine participant identities, interactions, and emotional reactions created analytical problems with regards identity and emotional content, appraisal of shared emotion, and direction of causation between variables. A more controlled version of the paradigm could have employed a minimal group paradigm to create artificial identities (Tajfel, 1970; Tajfel et al., 1971), and manipulated the emotional experiences of other group members using confederates or imagined others (e.g. Livingstone et al., in press; Fischer et al., 2004; Lundquist & Dimberg, 1995). Testing participants individually in this way would also have overcome the statistical constraints inherent in analysing nonindependent groups. However, such a design would not have generated the spontaneous sociality witnessed in our studies which provided such rich, if sometimes messy, data. The use of multiple research methods helped to offset this complexity by triangulating the nature of participants' social relations and experiences.

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[127] The artificiality of the laboratory context was particularly noticeable in Study 5 because Scotland supporters were able to compare their experiences with memories of watching the team in larger groups.

The identities and corresponding stimuli that were used in both studies were problematic. In Study 5 participants were mostly highly identifying Scotland supporters who passionately engaged with the Scotland match. However, the majority of participants had seen the match previously which inevitably altered their experience of it. Study 6 was designed in part to rectify this issue. Although none of the participants had seen the bowling match before, this time participants did not identify strongly with their salient identity (European), or find the film particularly exciting. However, because the problems in each study were diametrically opposed, it is likely that the consistent results between the two studies were not due to issues of stimuli.

It is regrettable that shared identity items were not included in the questionnaire. Although a shared identity scale was used in Chapter V, the studies in this thesis are not presented chronologically, but in the order considered to tell the clearest narrative. When the Chapter IV studies were being designed, shared identity was operationalized as equivalent to mutual self-categorisation. The analysis from this chapter has demonstrated that this is not necessarily the case, and has informed subsequent lines of research (e.g. Blaylock et al., 2011; Neville & Reicher, in press; Reicher, in press). Nevertheless, when the interview data from this chapter is taken together with questionnaire analyses of shared identity from Chapters IV and V, we can have confidence that shared identity was again an antecedent to relatedness, and subsequent emotional intensity.

Participants' relative heart rates were recorded as an 'objective' measure of emotional intensity of experience (Blascovich, 2000; Cacioppo et al., 2000). Although the measure corroborated the questionnaire and interactive slider data in Study 5, it failed to do so in Study 6. Two possible explanations may account for this difference. Firstly, all participants' relative heart

rate scores were low in the second study, irrespective of their experimental condition or sense of relatedness with others. Coupled with the relatively low levels of emotional intensity reported by participants using the other measures, it is possible that the study failed to provide a base level of arousal to generate heart rate variance. In addition, participants who felt a low sense of relatedness with other group members described feeling socially anxious and embarrassed. An increase in relative heart rate for low relatedness participants through this source could have masked a difference in physiological arousal through excitement between the relatedness quasi-conditions. Nevertheless, the relative heart rate differences at key moments of Study 5 stimuli were clear, and if nothing else the process of taking a psychophysiological recording may have functioned as a 'bogus pipeline' to improve the truthfulness of participant responses in other measures (Jones & Sigall, 1971; Blascovich, 2000).

6.4.1 Summary

Two studies compared the emotional experience of watching an identity-relevant stimulus alone, with participating in a group of others who shared this same social identity. Instead of a universal group effect, participants' collective emotional experiences were shaped by both the degree of relatedness felt towards other group members (H5), and their strength of social identity with the salient social category (H1). The positive relationship between strength of social identity and emotional intensity in both studies provided further evidence against a reason-emotion dichotomy in groups. This finding supported the group emotions literature, but contradicted the classic crowd psychology notion that collective emotion is a consequence of lost identity. Qualitative evidence also indicated that relatedness to other participants was dependent upon shared social identity, confirming H4. A failure to generate shared identity and relatedness in all experimental groups highlighted the distinction between mutual self-categorisation and shared identity. In groups where there was a high degree of relatedness, a process of mutual validation

of emotion (through emotional expression) could amplify emotional experience (H5), and strengthen attachment to the social group (H7). Conversely, in low relatedness groups, participants generally experienced a diminishment of emotionality, and a weakened strength of social identity. The next chapter shall build upon these results by proposing a preliminary model of collective experience using questionnaire data collected 'in the field'.

VII. A MODEL OF COLLECTIVE

PARTICIPATION AND EXPERIENCE

7.1 INTRODUCTION

The aim of this final empirical chapter is to present a model of collective participation and experience that ties together the findings from previous studies. The analysis primarily focuses upon questionnaire data collected at three political demonstrations, but at times shall also draw upon interviews conducted at the same events. The analysis will provide a further test of the hypotheses outlined in Chapter IV (4.3.4.1), before SEM tests a hypothesised model informed by the results of previous chapters.

The experimental studies in Chapters V and VI built upon the fieldwork of Chapter IV by systematically examining collective experience in controlled settings. Although these studies provided detailed analysis of some aspects of collective experience (notably relatedness and emotional intensity), they were perhaps less successful at capturing the complex nature of social identity at crowd events. It was particularly clear in Chapter VI that simply putting participants into groups and imposing an identity upon them (as Scottish football supporters or Europeans) was ineffectual at generating identity with the social category, and shared identity with one another. This had consequences for the quality of participants' interpersonal social relations, and their emotional experience of collective participation. Chapter VII complements this analysis by returning to the field to examine collective experience and identity in a more 'natural' setting.

Political forms of collection action are examined in this chapter instead of the sporting audiences used in previous studies (see Studies 1, 3, 5 and 6). This change is important to test the applicability of our results across different types of event. Although we expect the processes of collective participation and experience to be comparable between contexts, the emotional and behavioural manifestations of these processes are likely to differ. For example, whilst relatedness in the sporting context of Study 1 was expressed in overt physical displays of intragroup intimacy (such as hugging strangers), relatedness in Study 7 is instead expected to take subtler forms, such as a sense of solidarity with others who are 'on the same wavelength'. With regards to the emotional experience of collective participation, our studies thus far have predominantly focused upon the emotionally intense nature of crowd action in order to comment upon the irrationality of classic crowd models, and relative neglect of affect in contemporary group research. In addition to emotional intensity, it was noted in Studies 1 and 2 that various aspects of collective participation may be experienced with positivity. Study 1 in particular complemented previous research exploring the positive experience of CSR (Drury & Reicher, 2005, 2009). In the current chapter, the success (or failure) of achieving collective aims is expected to shape participants' experiences, including the valence and emotional intensity of collective participation[128].

Following the analysis from previous chapters, shared identity is again expected to be critical for how participants relate to one another, and emotionally experience their collective participation. In addition to confirming these relationships, an examination of shared identity is hoped to further our understanding of CSR. Shared identity is likely to be a pre-condition of CSR, since one is unlikely to impose a collective identity upon the world unless co-present others share that same identity. The expected dependence of CSR upon shared identity forms an

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[128] CSR is related to the concept of efficacy (Bandura, 1982; 2000; van Zomeren et al., 2004) within the collective action literature. However, whilst this term refers to an estimation of effectiveness in *future* collective action, CSR is an appraisal of the extent to which one's group is enacting its norms and values, and whether it has achieved its pre-specified goal(s).

additional hypothesis (H8) to those outlined in Chapter IV (4.3.4.1). This interest in shared identity informed the selection of events examined in the current chapter; the three demonstrations were chosen because they were expected to contain 'uneasy alliances' of different groups with potentially conflicting identities and goals.

7.1.1 Overview of Events

G-20 Protests

The G-20[129] finance ministers met in the outskirts of St Andrews on the 6th and 7th of November 2009 to discuss coordination of fiscal policy and the policing of global banking systems (Fraser, 2009). A series of protests were organised to coincide with the meeting. On the 6th there was a small "Nae Tae G-20" protest in the centre of town attended by approximately 20 students from the University of St Andrews.[130] The following morning there was a larger demonstration organised by the pressure group Put People First (PPF) attended by approximately 300 people. The protest began with a rally and photo-shoot on the West Sands beach, before a march through St Andrews town centre concluded at the University's Student Union for an "Alternative G-20 Conference". The same afternoon a march was organised by the Stop The War (STW) and Scottish Socialist Party (SSP) organisations. After a rally in the centre of St Andrews, approximately 150 people marched the three miles to the Fairmont Hotel where the G-20 finance meeting was taking place, and held a static protest outside. Crucially, due to the variety of topics which were being discussed at the G-20 meeting, a similar variety of groups were present at the demonstrations. These included anti-war protestors calling for the

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[129] The G-20 is a collection of "important industrialized and developing economies [who] discuss key issues in the global economy" (G-20, 2011). The 2009 meeting was chaired by then UK Chancellor Alistair Darling, hence the location of the meeting within the UK.

[130] This event is not represented in the questionnaire data, but an extract from an interview conducted at this protest is included in the analysis.

withdrawal of UK forces from Iraq and Afghanistan, anarchists calling for the overthrow of the state, and libertarian economics students who objected to the recent banking system bail-outs. At times there was tension between various groups within the crowd, such as when anti-Israeli chanting during the march to the Fairmont Hotel provoked an angry response from other protestors, resulting in a minor confrontation.

NATO Protest

The following week (13th – 17th November), NATO[131] ministers held their annual parliamentary assembly in the Edinburgh International Conference Centre (EICC) to discuss international defence and security policy (McNabb, 2009). A demonstration was held on the 14th organised by STW, the Campaign for Nuclear Disarmament (CND), the Scottish Afghan Society (SAS) and Scotland against Criminalising Communities (SACC). Approximately 300 protestors assembled in central Edinburgh before marching towards the EICC where they halted for ten minutes to chant and whistle at the delegates in the meeting. The march then progressed to Princess Street Gardens where the crowd was addressed by members of the various organising groups. As was the case at the G-20 demonstrations, a variety of pressure groups, political parties and unaffiliated activists participated in the protest.

SDL Protest

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[131] The North Atlantic Treaty Organisation (NATO) is a military alliance of 28 countries from North America and Europe. At the time of the 2009 summit, NATO was in command of several military operations in Afghanistan (NATO, 2011).

On the same day as the anti-NATO demonstration (14th November), the SDL[132] attempted to hold their inaugural march in Glasgow. A counter-event was organised by Scotland United (SU), a broad coalition of political parties, pressure groups and unions, with substantial representation from Unite Against Fascism (UAF). This counter-demonstration was attended by approximately 1500 people ("Clashes After Rival City Marches", 2009). Importantly, the SU event planned to avoid direct confrontation with the SDL, and to instead celebrate Scotland's multiculturalism and act as a show of unity for the Muslim population of Glasgow. As an alternative to this non-confrontationist approach, an organisation named the Glasgow Anti-Fascist Alliance (GAFA) was founded including "members of some, but not all, socialist groups and 'a variety of non-aligned activists'" ("Anti-Fascists Surround Scottish Defence League", 2010). Contrary to the objectives of SU, the goal of this group was instead to take direct action to prevent the SDL march. This aim was succinctly described by one participant in our questionnaire as "to confront the SDL, stand put and tell them to fuck off" (Pt104SQ)[133]. As protestors from both anti-fascist groups marched past the pub where the SDL were congregating, there was a split in the crowd (amid heated exchanges) as SU left to attend their rally in Glasgow Green, leaving GAFA members to physically confront the SDL.[134]

These three collective events (anti-G-20, NATO and SDL demonstrations) suited the research aims of the current study due to the likelihood of variance in the shared identity felt between crowd members. Because of the potentially different goals of the various groups who attended each protest, perceived CSR of these goals was particularly interesting. As noted

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[132] The Scottish Defence League (SDL) are an offshoot of the English Defence League (EDL), a far-right group who protest against what they perceive as the spread of radical Islam across Britain.

[133] See 7.3.2.3 for qualitative data codes.

[134] The police handled the situation by preventing the SDL from marching, but allowing them to hold a short static demonstration. There were a number of skirmishes between SDL members and anti-fascists throughout the day.

previously, shared identity with co-present others was expected to underpin the ability to realise collective goals.

7.1.2 Hypotheses

The Study 7 hypotheses are based upon the findings from previous chapters. Following analyses from Chapters IV and VI, it is expected that participants' strength of social identity with their salient social category will predict their emotional intensity of collective experience (H1), and intention of participating in future group events (H2). Analysis from Chapter IV also suggests that intention of future participation will be shaped by the experience of collective participation (H3). The results from all of the previous empirical chapters (particularly Chapter V) lead us to expect that shared identity will positively transform social relations to create a sense of relatedness (H4). Following analyses from Chapters IV and VI, such relatedness is expected to be experienced with emotional intensity and positive affect (H5). Analysis from Chapter IV further suggests that CSR of group goals will be experienced with emotional intensity and positivity (H6). Finally, as noted above, shared identity is expected to predict CSR of group goals (H8). Due to the cross-sectional design of the study, the impact of collective experience upon social identity (H7) is not examined in the current chapter.

7.2 METHODS [135]

7.2.1 Participants

Questionnaires

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[135] The study received ethical approval from UTREC (see Appendix VIIa).

Questionnaires were completed by 66 participants who attended the G-20 demonstrations in St Andrews, 20 from the NATO demonstration in Edinburgh, and 38 from the anti-SDL demonstration in Glasgow. Four participants were excluded due to missing data in their questionnaires (see 7.3.1). This produced a final sample of 120 participants.

Onsite Interviews

Ten participants (five males and five females) were interviewed at the G-20 demonstrations in St Andrews. Two participants (one male and one female) were interviewed at the NATO demonstration in Edinburgh.

7.2.2 Materials

7.2.2.1 Questionnaire

The questionnaire (see Appendix VIIc) was designed and hosted online at surveygizmo.com. All questionnaire items used seven-point Likert scales ranging from (1) *Totally Disagree* to (7) *Totally Agree* unless otherwise stated. The questionnaire concluded with an open question inviting participants to provide further relevant information about their experience of the protest.[136] A summary of the questionnaire scale reliabilities are presented in Table 7.1. [137]

Strength of Social Identity

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[136] Extracts from these questionnaire responses are included in the qualitative analysis.

[137] There were also questionnaire items assessing expectation of shared identification and perceived (mis)representation of the group. These variables are not included in the current analysis.

Participants selected the demonstration which they had attended most recently from a multiple-choice list. The strength of social identity items referred to the identity associated with this event. For example, if the participant had taken part in a G-20 protest then they were informed that, "The following questions refer to your identity as a G20 Protestor". Strength of social identity was measured using three items ($\alpha = .72$): "This identity means very little to me" [reverse coded], "I often think of myself in terms of this identity", and "This identity is important to me". Participants were then invited to provide an alternative identity if they felt it better described their participation in the protest.

Shared Identity

Shared identity was measured using six items ($\alpha = .79$): "I felt a sense of 'shared identity' with the other people in the crowd", "I had <u>no</u> sense of 'we-ness' with other people in the crowd" [reverse coded], "The other people at the protest had similar values, principles, and goals as me", "There was <u>no</u> shared understanding between myself and other crowd members as to why we were protesting" [reverse coded], "Other people in the crowd felt a sense of 'shared identity' with one another", and "Everybody at the protest felt 'in it together'".

Relatedness

Relatedness was measured using five items ($\alpha = .76$): "I felt <u>no</u> sense of intimacy with the other people in the crowd during the protest" [reverse coded], "I felt a sense of 'oneness' with the other people at the demonstration", "I felt <u>no</u> sense of 'connection' with the other people at the demonstration" [reverse coded], "The other people in the crowd experienced the protest in the same way as me", and "I felt it easier to express myself to others in the crowd because I knew they'd be on the same wavelength".

Collective Self-Realisation

CSR was measured using three items (α = .76): "The protest accomplished what I hoped it would achieve", "The crowd's actions at the protest reflected my values, principles, and goals", and "The protest was a failure" [reverse coded].

Emotional Intensity

Emotional intensity of experience was measured using three items (α = .77): "Participating in the protest was an emotionally intense experience", "It was a dull experience being in the crowd during the protest" [reverse coded], and "It was exciting to be part of the crowd at the demonstration".

Positivity

Positivity of experience was measured using three items (α = .83): "My experiences in the crowd during the protest were positive", "I enjoyed being part of the crowd during the demonstration", and "My experiences in the crowd during the protest were negative" [reverse coded].

Intention of Future Participation

Intention of future participation was measured using three items (α = .87): "I am likely to participate in future demonstrations regarding this topic of protest", "I am not willing to give any more of my time to protesting on this issue" [reverse coded], and "I will attend another protest on this issue if one is organised".

7.2.2.2 Onsite Interviews

Although the researcher's time during the demonstrations was predominantly spent recruiting participants to complete the post-event questionnaire, a limited number of semi-structured interviews were conducted with crowd members. The protocol for these interviews was comparable to that used in previous studies (see 4.2.2.2). The interviews again began with broad questions regarding participants' experiences at the protest, before more specific questions probed interviewee responses.

7.2.3 Procedure

7.2.3.1 Participant Recruitment

During the G-20 and NATO demonstrations crowd members were approached by the author who explained the nature and purpose of the questionnaire, and invited them to participate in the study. If participants were willing to disclose their email address then the link to the online questionnaire was sent to them the same day. Participants were asked to forward details of the study to others who had also attended the demonstration. Those who wished to participate in the study but were hesitant about providing their email address were given a card with the researcher's contact details, and encouraged to email after the demonstration for a link to the questionnaire. Anti-SDL protestors were recruited by posting the questionnaire link on social networking websites run by the demonstration organisers (see Appendix VIIb). As an incentive to complete a questionnaire, all participants were given the option of entering into a prize draw to win £50. The author recruited participants for the semi-structured interviews during the G-20 protests and the NATO demonstration. The interviews typically evolved from conversations

between the author and protestors after they had been approached to participate in the questionnaire research.

7.2.3.2 Ethnography

Ethnographic data from a number of sources supplement the questionnaire analysis. In addition to onsite interviews, the author recorded field notes and collected video and photographic data at the G-20 and NATO demonstrations. Further field notes and audio-visual material from the NATO protest were provided by colleagues who were also undertaking fieldwork at the event.[138] Two colleagues who attended the anti-SDL protest provided the author with their video footage.[139] Post-event media reports and online participant accounts of the protests were also examined to provide further contextual information for our analysis.

7.3 ANALYSIS

After preliminary analysis of the questionnaire data (7.3.1), the main analysis (7.3.2) uses linear regression (7.3.2.1) to test the hypotheses generated from previous studies. SEM (7.3.2.2) then compares a model based upon these hypotheses to the observed dataset. The analysis concludes by examining qualitative data (7.3.2.3) to illustrate the quantitative results. Two-tailed statistical tests with an alpha value of .05 are used in all analyses unless otherwise stated.

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[138] With thanks to Dr Hugo Gorringe and Dr Michael Rosie at Edinburgh University, and Professor Dave Waddington at Sheffield Hallam University (see Gorringe, Rosie, & Waddington, 2010a, 2010b).

[139] With thanks for Dr Leda Blackwood and Dr Sam Pehrson.

7.3.1 Preliminary Results

Data Screening

Skewness and kurtosis values for all variables were within recommended ranges (Kline, 2005). Four participants had missing data in their questionnaires. There was less than 5% missing data in each variable, and Little's Missing Completely At Random (MCAR) test (Little, 1988) was non-significant; χ^2 (18) = 20.04, p = .33, indicating that the missing data pattern was not dependent upon the observed data (Rubin, 1976). The missing data may therefore be considered as MCAR (Tabachnick & Fidell, 2007; Byrne, 2010). The SEM software package AMOS 19.0 requires complete datasets in order to conduct SEM (Byrne, 2010). Due to the small number of cases with missing data and the fact that this data was MCAR, these participants were removed from the dataset using listwise deletion (Byrne, 2010; Carter, 2006). Summaries of the questionnaire scale reliabilities, descriptive statistics and zero-order correlations are presented in Tables 7.1, 7.2 and 7.3 respectively.[140]

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[140] Reliability, descriptive and correlation statistics are included for a composite Shared Identification/Relatedness variable that contains all of the items from both variables. This composite variable is used in the second SEM model (7.3.2.2) due to collinearity issues.

Table 7.1

Study 7 Cronbach Alpha Scale Reliabilities

Variables	*n*	α
Strength of Social Identity	120	.72
Shared Identity	120	.79
Relatedness	120	.76
Shared Identity/Relatedness Composite	120	.87
Collective Self-Realisation	120	.76
Emotional Intensity	120	.77
Positivity	120	.83
Intention of Future Participation	120	.87

Table 7.2

Study 7 Descriptive Statistics

Variables	*n*	*M*	*SD*
Strength of Social Identity	120	4.04	1.51
Shared Identity	120	4.67	1.06
Relatedness	120	4.82	1.03
Shared Identity/Relatedness Composite	120	4.84	0.98
Collective Self-Realisation	120	4.93	1.34
Emotional Intensity	120	5.14	1.21
Positivity	120	5.77	1.11
Intention of Future Participation	120	6.42	0.96

Table 7.3

Study 7 Zero-Order Correlation Matrix

Variables	a)	b)	c)	d)	e)	f)	g)	h)
a) Strength of Social Identity	-	.38*	.39*	.40*	.26*	.32*	.25*	.30*
b) Shared Identity		-	.76*	.94*	.66*	.59*	.69*	.53*
c) Relatedness			-	.93*	.57*	.64*	.66*	.49*
d) Shared ID / Relatedness				-	.66*	.66*	.73*	.55*
e) Collective Self-Realisation					-	.58*	.62*	.42*
f) Emotional Intensity						-	.59*	.39*
g) Positivity							-	.51*
h) Intention of Future Part								-

Note. All *p-values* are two-tailed. * *p* < .01

Between-Protest Differences

Between-protest differences were examined using a MANOVA. There were significant differences between protests on the following measures; shared identity, $F(2, 117) = 5.51$, $p < .01$, $\eta^2 = .09$; relatedness, $F(2, 117) = 3.14$, $p < .05$, $\eta^2 = .05$; the shared identity/relatedness composite, $F(2, 117) = 5.36$, $p < .01$, $\eta^2 = .09$; CSR, $F(2, 117) = 17.51$, $p < .01$, $\eta^2 = .23$, and emotional intensity of experience, $F(2, 117) = 6.57$, $p < .01$, $\eta^2 = .10$. Due to these significant differences, linear regression analyses involving these variables included two dummy variables

(attended G20 protest: 1= yes, 0 = no; attended NATO protest: 1 = yes, 0 = no)[141] as additional predictors to control for which protest participants had attended.

7.3.2 Main Analysis

7.3.2.1 Hypothesis Testing

Before modelling the data using SEM, linear regression was used to test the hypotheses outlined in 7.1.2. These analyses are one-tailed due to the prior prediction of the relationships.

H1

H1 stated that strength of social identity would predict emotional intensity of experience. Controlling for which protest participants attended, strength of social identity significantly predicted emotional intensity of experience, $b = 0.26$, $SE = 0.07$, $t(116) = 3.79$, $p < .01$, $R^2 = .20$.

H2

H2 stated that strength of social identity would predict intention of participation in future group events. Strength of social identity significantly predicted intention of future participation, $b = 0.19$, $SE = 0.06$, $t(118) = 3.35$, $p < .01$, $R^2 = .09$.

H3

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[141] Attendance at SDL protest specified by 0s for both dummy variables.

H3 stated that the emotional experience (emotional intensity and positivity) of collective participation would predict intention of participation in future group events. Controlling for which protest participants attended, emotional intensity of experience significantly predicted intention of future participation, $b = 0.27$, $SE = 0.07$, $t(116) = 3.93$, $p < .01$, $R^2 = .21$. Positivity of experience also significantly predicted intention of future participation, $b = 0.44$, $SE = 0.07$, $t(117) = 6.35$, $p < .01$, $R^2 = .26$. It is worth noting that when emotional intensity and positivity were entered into the regression equation together, only positivity remained a significant predictor of intended future participation; Controlling for which protest participants attended, positivity of experience significantly predicted intention of future participation, $b = 0.35$, $SE = 0.08$, $t(115) = 4.21$, $p < .01$, whilst emotional intensity of experience did not, $b = 0.08$, $SE = 0.08$, $t(115) = 1.07$, $p = .29$. The total variance in intention of future participation explained by both emotional experience variables was $R^2 = .56$.

H4

H4 stated that shared identity would predict relatedness. Controlling for which protest participants attended, shared identity significantly predicted relatedness, $b = 0.73$, $SE = 0.06$, $t(116) = 11.92$, $p < .01$, $R^2 = .57$.

H5

H5 stated that relatedness would be experienced with emotional intensity and positive affect. Controlling for which protest participants attended, relatedness significantly predicted emotional intensity of experience, $b = 0.72$, $SE = 0.08$, $t(116) = 8.48$, $p < .01$, $R^2 = .45$. Controlling for which protest participants attended, relatedness also significantly predicted positivity of experience, $b = 0.70$, $SE = 0.08$, $t(116) = 9.03$, $p < .01$, $R^2 = .44$.

H6

H6 stated that perceived CSR of group goals would predict the emotional experience (emotional intensity and positivity) of collective participation. Controlling for which protest participants attended, CSR significantly predicted emotional intensity of experience, $b = 0.50$, $SE = 0.08$, $t(116) = 6.41$, $p < .01$, $R^2 = .34$. Likewise, controlling for which protest participants attended, CSR significantly predicted positivity of experience, $b = 0.57$, $SE = 0.07$, $t(116) = 8.44$, $p < .01$, $R^2 = .41$.

H8

H8 stated that shared identity would predict CSR. Controlling for which protest participants attended, shared identity significantly predicted CSR, $b = 0.72$, $SE = 0.08$, $t(116) = 8.58$, $p < .01$, $R^2 = .53$.

7.3.2.2 Structural Equation Modelling

SEM is a method of analysis which allows the simultaneous and complete examination of complex relationships.[142] Essentially SEM functions by comparing one's observed sample covariance matrix with an estimated population covariance matrix. A good model is one in which the estimated matrix is close to the observed matrix (Tabachnick & Fidell, 2007).

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[142] The analysis in this chapter is Path Analysis (PA) which is a form of SEM. PA contains only observed variables, and assumes that these variables are measured without error. To avoid confusion between the terms, the analysis in this chapter shall simply be referred to as SEM.

SEM was conducted using AMOS 19.0 software. To control for which protest participants had attended, all variables were group-mean centred prior to analysis (i.e. the variable means for each protest were subtracted from the variable scores of the relevant participants).[143] Bootstrapping was used in all SEM regression analyses due to its superiority in estimating standard errors of indirect effects compared to other methods, and because it does not rely upon normality assumptions (Byrne, 2010; Preacher & Hayes, 2008; Shrout & Bolger, 2002). Bootstrap standard errors and bias corrected confidence intervals were based on 5000 re-samples for all parameter estimates. There is no formal rule for the required ratio of sample size to observed variables in SEM. However, Mitchell (1993) suggests that 10 to 20 cases are necessary for each observed variable, whilst Stevens (1996) recommends at least 15 cases. These criteria are met in our analyses.

Model 1

Our predictive model integrated the hypotheses presented in 7.1.2 such that strength of social identity predicted emotional intensity of experience and intention of future participation, emotional experience of collective participation (both emotional intensity and positivity) predicted intention of future participation, shared identity predicted relatedness, relatedness predicted emotional experience (both emotional intensity and positivity), shared identity predicted CSR, CSR predicted emotional experience (both emotional intensity and positivity), and emotional experience in turn predicted intention of future participation. Model 1 contains over 17 cases per observed variable. Model 1 is presented in Figure 7.1.

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[143] Although one could control for which protest participants attended by including the relevant dummy variables in the structural equation model, this would adversely affect model complexity and the ratio of estimated parameters to sample size.
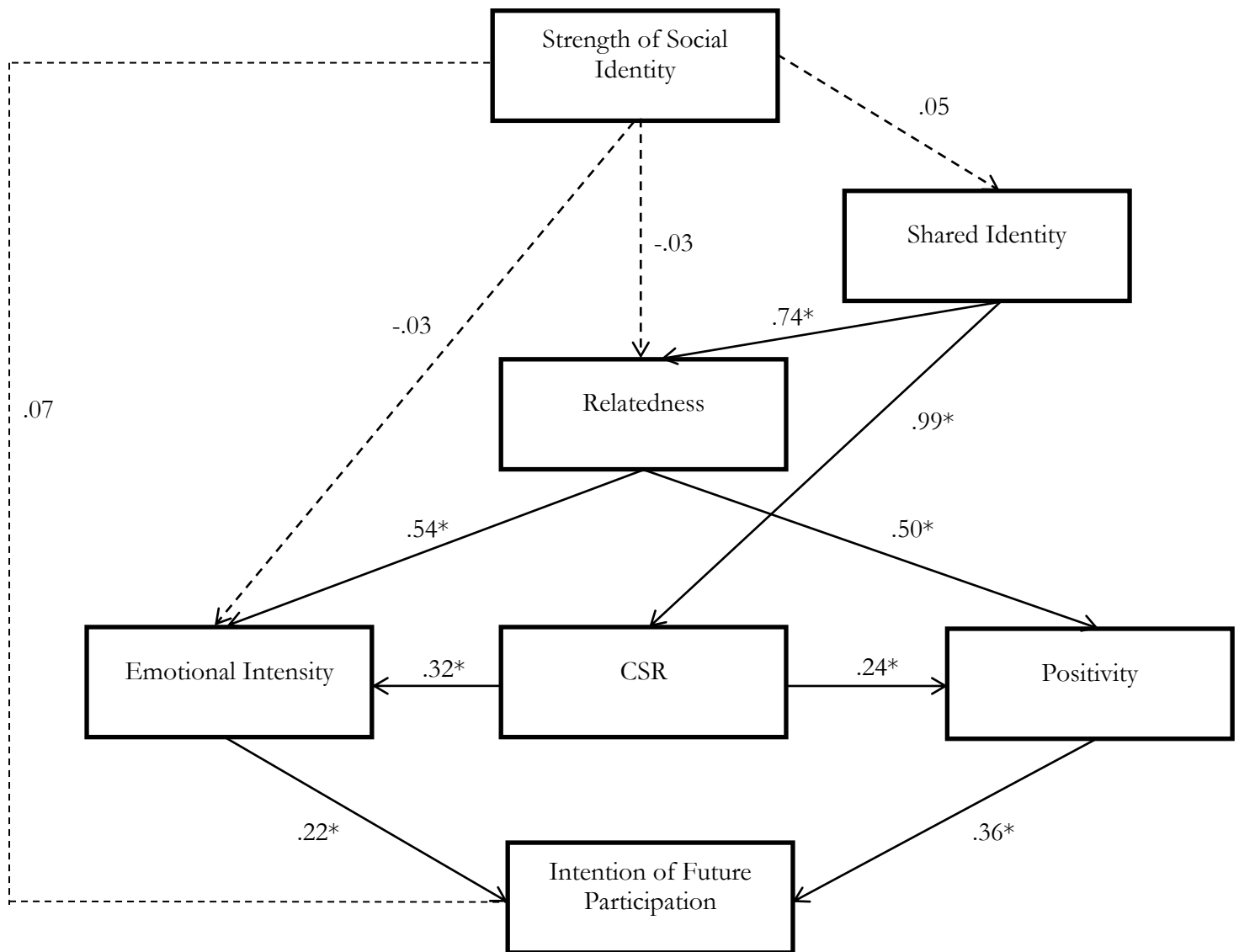
Figure 7.1. Study 7 Model 1. Path coefficients are standardised estimates. Solid paths indicate significant effects based on 95% bias-corrected bootstrapping confidence intervals. Dashed lines indicate non-significant pathways. The analysis controls for which protest participants attended. * *p* < .01

For a good model fit the chi-square goodness of fit test should be non-significant. This was not the case for Model 1, χ^2 (9) = 29.42, *p* = .001. However, although the chi-squared statistic was significant, with a sample of this size this does not necessarily mean that model should be rejected (e.g. Bentler, 1990; Tabachnick and Fidell, 2007). Furthermore, the chi-square statistic

divided by degrees of freedom (χ^2/df) may be used as an additional indicator that compensates for limited sample sizes. For Model 1, $\chi^2/df = 3.27$, with five being a recommended high cut-off (Kline, 2005). Whilst other fit indices indicated acceptable fit: comparative fit index (CFI) = .96, goodness-of-fit index (GFI) = .94, the root-mean-square error of approximation (RMSEA) = .14 was unacceptably high (good models < .06) (see Hu & Bentler, 1999), suggesting a misspecification of the model.

Model 2

Since the Model 1 fit was poor and the variables were highly correlated (creating problems of multicollinearity), it was decided to test a less complex model. Tabachnick and Fidell (2007) suggest that when two variables have a bivariate correlation of .70 or more it may be advantageous to combine them to form a composite variable. There was a strong correlation between shared identity and relatedness, $r(118) = .76$, $p < .01$. A shared identity/relatedness composite was therefore calculated by taking the mean of the six shared identity items and the five relatedness items ($\alpha = .87$). The SEM analysis was repeated but with the shared identity and relatedness variables substituted for their combined composite. Model 2 contains 20 cases for each observed variable. Model 2 is presented in Figure 7.2.
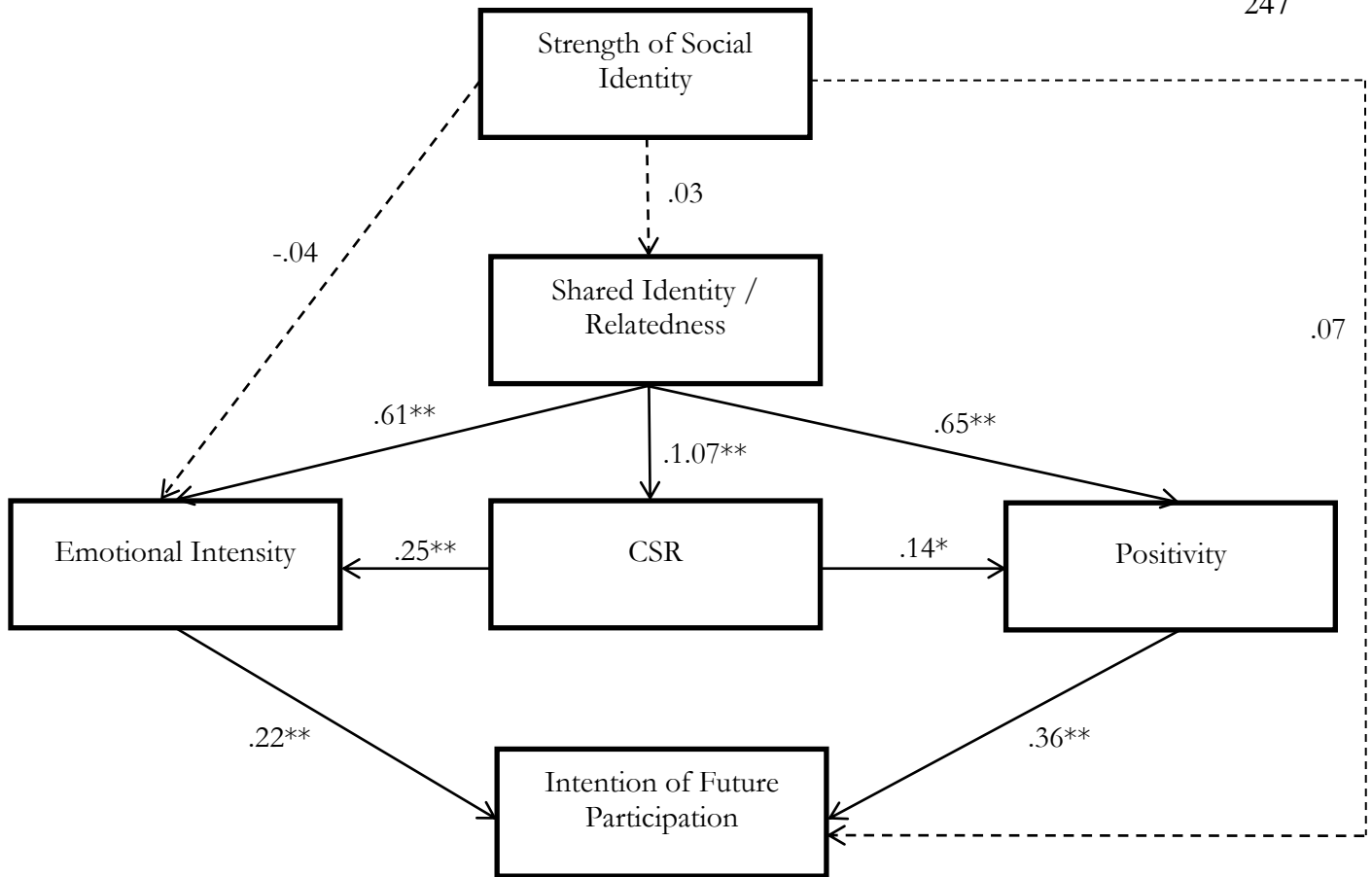
Figure 7.2 Study 7 Model 2. Path coefficients are standardised estimates. Solid paths indicate significant effects based on 95% bias-corrected bootstrapping confidence intervals. Dashed lines indicate nonsignificant pathways. The analysis controls for which protest participants attended.

* *p* < .05 ** *p* < .01

As with Model 1, the chi-square goodness-of-fit test was significant, χ^2 (5) = 18.04, *p* = .003, but the chi-square statistic divided by degrees of freedom (χ^2/df) – which compensates for limited sample size – was within the recommended range, χ^2/df = 3.61. Whilst other fit indices likewise indicated good fit; CFI = .96, GFI = .95, Model 2 also had poor parsimony, as indicated by RMSEA = .15.

Modification indices suggested that the model fit could be improved by including a path between the shared identity/relatedness composite and intention of future participation. The addition of this path makes theoretical sense, because the extent to which co-present others share one's social identity (and consequently the quality of within-crowd social relations) is expected to encourage willingness to participate in future collective action with these people. The SEM analysis was therefore repeated with the addition of a path between shared identity/relatedness and intention of future participation. Model 3 contains 20 cases for each observed variable. Model 3 is presented in Figure 7.3.

The chi-square goodness-of-fit test was nonsignificant, χ^2 (4) = 5.42, p = .25, and χ^2/df = 1.35. Other fit indices likewise indicated good fit; CFI = 1.00, GFI = .99, RMSEA = .06. The Akaike Information Criterion (AIC; Akaike, 1987) is used to compare the fits of competing models, with smaller values indicating a better-fitting and more parsimonious model (Hu & Bentler, 1995; Byrne, 2010).[144] Model 3 had an AIC of 39.42, compared to figures of 81.42 and 50.04 for Models 1 and 2 respectively. This further confirms the superiority of Model 3 over Models 1 and 2.

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[144] There is no recommended cut-off for the AIC. It is instead a relative index used for comparison between models (Tabachnick & Fidell, 2007).
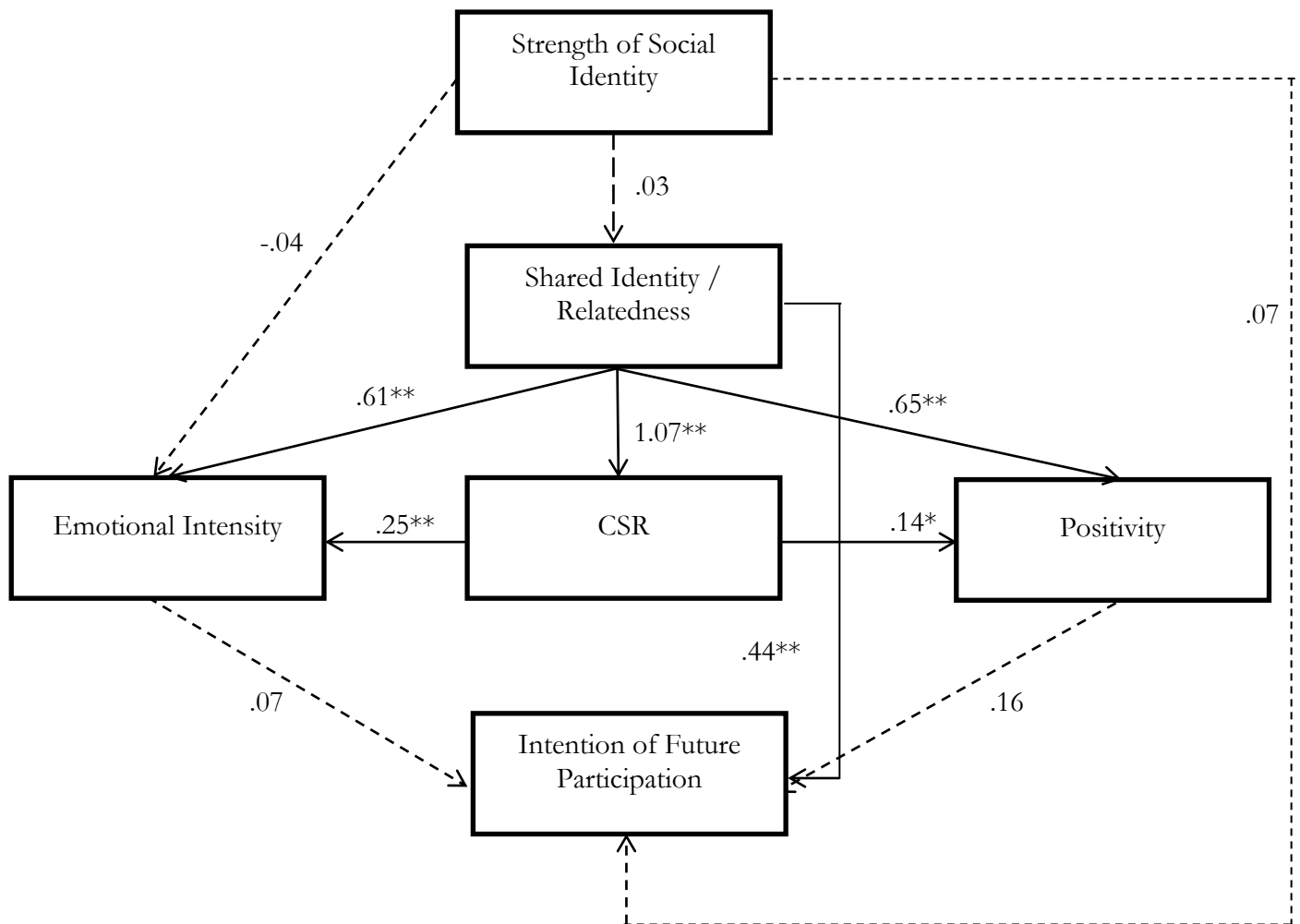
Figure 7.3 Study 7 Model 3. Path coefficients are standardised estimates. Solid paths indicate significant effects based on 95% bias-corrected bootstrapping confidence intervals. Dashed lines indicate nonsignificant pathways. The analysis controls for which protest participants attended.
* $p < .05$ ** $p < .01$.

Neither emotional intensity nor positivity of experience significantly predicted intention of future participation after the introduction of a path between shared identity/relatedness and intention of future participation. The significant relationship between both emotional experience

variables and the shared identity/relatedness composite, coupled with the significant relationship between shared identity/relatedness and intention of future participation, suggests that the emotional experience variables may be alternatively placed at an earlier stage of the model. In other words, it is possible that embodied displays of emotion led to a sense of shared identity/relatedness between participants[145] which in turn encouraged future participation. This possibility was examined in Model 4 (see Figure 7.4). Model 4 contains 30 cases for each observed variable.
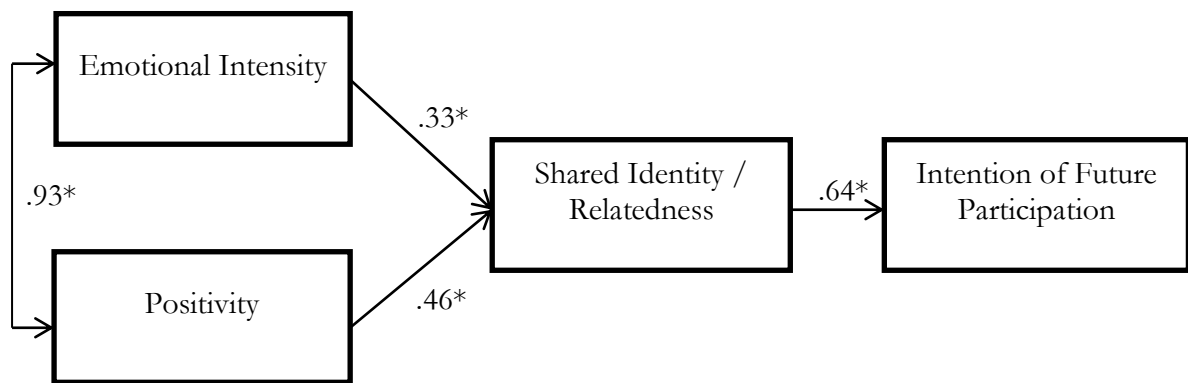
Figure 7.4 Study 7 Model 4. Path coefficients are standardised estimates. Solid paths indicate significant effects based on 95% bias-corrected bootstrapping confidence intervals. The analysis controls for which protest participants attended. * p < .01.

The chi-square goodness-of-fit test was nonsignificant, χ^2 (2) = 3.87, p = .14, and χ^2/df = 1.94. Other fit indices likewise indicated good fit; CFI = .99, GFI = .98, RMSEA = .09.[146]

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[145] Embodied emotion as an antecedent to shared identity was noted during Study 1.

[146] Although the RMSEA should ideally be approximately .06 or less, Hu and Bentler (1999) note this cut-off may be too strict when the sample size is small (n ≤ 250) as in the current analysis (n = 120).

7.3.2.3 Qualitative Analysis

Qualitative data from the onsite interviews and participant comments from the questionnaires supplement the quantitative analysis.[147] Despite the variety of social groups present at the demonstrations, participants could feel a sense of shared social identity with one another. This could then positively transform social relations to create relatedness, as described by Pt5GF at the PPF G-20 protest:

> Pt5GF: You feel like it's more than just part of a crowd, you feel like a connection with everybody there, like you're not just your own person, you're part of everyone, and everyone's kind of…not 'the same', but, you know, can share something, can have something in common. And it's just like this huge cooperation and you feel like there's no conflict between each other.

This sense of relatedness with other crowd members could be experienced with emotional intensity and positivity as recounted by Pt43GQ after the G-20 protests:

> Pt43GQ: I absolutely felt a sense of oneness and togetherness with the other protesters, and it was very exciting and inspiring.

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[147] Qualitative extracts are coded as follows; *Pt#* refers to participant number, *G/N/S* indicates whether the participant attended the anti-G-20/NATO/SDL protests respectively, M/F codes for participant gender, and *Q* denotes if the quote was left as a questionnaire comment.

However, not all crowd members felt a sense of shared identity and relatedness with one another. Some participants experienced their crowd as a fractured set of various identities, rather than a united group with a common message and goal. Such heterogeneity was described by Pt1GF after the morning G-20 demonstration in St Andrews:

> Pt1GF: It seems like there's sort of ten…ten clusters of ten sort of thing, and everyone seems fairly insular around their own little flag. [ ] there was a University one, there was the kind of, erm, People for Anti-Retro Viral Drugs, erm, Socialist Workers as seemed to be the 'professional protestors' in amongst the rest. And there were others who were sort of looking at them and kind of giggling a wee bit. It's like perhaps they're a little too radical for some of the other people in the crowd

It is worth noting the requirement of social identity for shared identity and ultimately relatedness. This was clear in Pt8GQ's comparison of the two 7th November G-20 protests. Although the participant described the second march as having greater unity than the first, the fact that Pt8GQ did not identify with the second group meant that they did not experience relatedness with others, and therefore felt "like an outsider":

> Pt8GQ: The second march [organised by the Socialist Worker's Party] contained more of a single message [than the PPF march] and therefore felt more united, but not sympathising entirely with their views I felt slightly like

an outsider. However this was more to do with my divergent political views

than the nature of the group which was fairly united.

This suggests that one has to self-categorise with a social identity before being able to share it with others, and experience a sense of relatedness with them. Relatedness was not the only consequence of shared identity noted in Study 7. Both quantitative and qualitative data indicated that shared identity with co-present others was necessary for CSR. This was particularly clear at the anti-SDL demonstration in Glasgow. Members of the GAFA movement felt that their goal of confronting the SDL was prevented by other anti-fascist groups in the demonstration, an experience which was characterised by negative affect:

Pt104SQ: Our march was more or less hijacked by the UAF, who took over

leadership and turned the whole march away from the SDL, to the other end

of Glasgow, for pointless speeches among the converted.

However, when participants did feel empowered to achieve their collective goal, this could be experienced with intense positive affect. Such an experience was noted by Pt2GM at the 6th November G-20 protest:

Pt2GM: It's always a really good feeling when you think that it might actually

work as well [ ] and you're going "You know what, we might actually pull this

one off!". And everyone sort of starts to think that way, and everyone just

has a massive smile on their face

7.4 DISCUSSION

The object of Study 7 was to test a hypothesised model of collective participation and experience that was built upon the findings from previous chapters. This was done by collecting questionnaire data examining protestors' experiences of collective participation at a number of political demonstrations, and using SEM to compare our hypothesised model to the observed data. The hypothesised model had good fit, providing further support for the arguments presented in this thesis.

As noted in each previous empirical chapter, a sense of shared identity with other crowd members could positively transform social relations to create relatedness. In fact, although we argue that shared identity and relatedness are conceptually distinct, analytically they were so closely related that they were ultimately aggregated to improve our model fit. As predicted, this composite variable significantly predicted the emotional intensity and positivity of participants' collective experiences. Whilst noting the critical role that shared identity played in facilitating relatedness, qualitative analysis highlighted the importance of self-categorization with that identity, such that one cannot share a social identity with others if one does not first identify with that social category. Strength of social identity was therefore positioned at the start of our model.

Relatedness was not the only consequence of shared identity. The extent to which participants considered their protest a success (such that they realised their group goals) was also dependent upon shared identity with other crowd members, such that one may only co-act to impose a social identity upon the world if others share that same identity. The crowd events examined in the current study were well suited to examining this relationship. Due to the variety

of issues that were being discussed at the G-20 and NATO meetings, the demonstrations attracted a variety of pressure and interest groups. Whilst some protestors saw other crowd members as allies in opposing the G-20 and NATO (despite perhaps differing on the finer points of this opposition),[148] others felt that their message was lost amid the diversity of group goals and identities. The importance of shared identity for CSR was particularly evident for anti-SDL protestors. The demonstrators broadly fell into two groups; those who wished to non-violently oppose the SDL through a celebration of multiculturalism, and those who wanted to physically confront the SDL to prevent them from marching. In this instance it was not merely that group messages were diluted by co-present others, but that different groups within the crowd were obstacles to the realisation of each other's goals. Because the achievement (or failure) of political goals is clearly a central factor in political protest, it is unsurprising that CSR, in addition to relatedness, predicted emotional experience in our model. Indeed, as Drury and Reicher (2009, p719) note, "the sense of being able to shape one's social world is necessarily a positive and exhilarating affair".

With regards participants' emotional experiences, it was additionally expected that strength of social identity would provide the basis for group-based emotion (Smith, 1993; Smith et al., 2007), and thus predict emotional intensity of experience. Although this relationship was significant using linear regression analysis, the path between strength of social identity and emotional intensity of experience was insignificant using SEM. Two possible explanations are offered for this unexpected result. Firstly, strength of social identity at an individual level (e.g. "I am a G-20 protestor") was perhaps less relevant at the collective events in this study compared to those examined in previous chapters. It is conceivable that a Scottish football supporter could experience Scotland matches as a function of their group membership, even if co-present others

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[148] Reminiscent of the famous Bolshevik slogan, "march apart, strike together".

did not share this same identity. However, it is perhaps less clear how this process would apply to the political protests examined in the current study. If nobody else in the crowd shares one's social identity then the protest is unlikely to embody that identity, making one's attachment to that social category largely irrelevant to one's collective experience. A second possible explanation for the lack of expected relationship concerns our operalisation of social identity in the questionnaire. This potential methodological limitation is discussed below in the limitations section. Despite these issues, the data clearly suggests that participants' emotional experiences were ultimately grounded in their self-categorization with their salient social identity. The proximal determinants of emotional intensity (relatedness and CSR) were both contingent upon shared identity, which must ultimately come from social identification.

Analysis of Study 7 provided partial evidence that the experience of collective participation, largely neglected in the research literature, may have a role to play in shaping commitment to future collective action, and therefore the ability to achieve social change (Drury & Reicher, 2009; Goodwin, et al., 2001b ; Reicher et al., 2010). Linear regression analysis demonstrated that both emotional intensity and positivity of experience significantly predicted intention of future participation, although when both variables were entered into the regression equation together, only positivity remained a significant predictor. It is worth highlighting the difference between this finding and the results from Study 3 (Chapter IV) in which emotional intensity, not positivity, predicted intention of future participation. Although there were problems with the operalisation of positivity in Study 3,[149] intensely 'negative' emotions could be reframed as part of a positive 'rollercoaster of experience' that made watching football fun. It is suggested that intensely negative experiences were harder to positively reconstitute in the current

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[149] Analysis indicated that participants were responding to their enjoyment of the football match, and not their experience of collective participation.

context of political protest. In the sporting studies emotional intensity of experience may have acted as a proxy for CSR (the goal of watching sports is to some extent to be entertained [Sloan, 1989, as cited in Fagan, 2011, p202]), such that an intense experience was a realisation of a collective goal thereby encouraging future participation (see Drury & Reicher, 2005). Participants in the current study were not merely seeking exaltation, but were instead striving to achieve political goals. The differences between these group objectives may account for the different relationships between emotional intensity, positivity and intention of future participation between the studies. Although there are outstanding issues concerning the differing (and complimentary) roles of positivity and emotional intensity of experience, linear regression analysis from Study 7 does suggest that the experience of collective participation is related to future group commitment.

In the final structural equation model (Model 4), the emotional experience variables (emotional intensity and positivity) were moved to the start of the model such that they were positioned as antecedents to shared identity/relatedness, which in turn predicted intention of future participation. This was based upon preliminary evidence from elsewhere suggesting that the embodiment of (shared) emotion may function as an indicator of shared identification (see Chapter IV; Blaylock et al., 2011). The model had good fit, highlighting the necessity of future longitudinal studies to explore the likely bidirectional relationships between emotional experience, shared identity and relatedness.

Limitations

As noted previously in the discussion, strength of social identity failed to significantly predict emotional intensity of experience in our model. One possible explanation for this unexpected

result concerns our operalisation of social identity. In order to measure strength of social identity, it was first necessary to provide a label for that identity. Because of the variety of possible relevant social categories at the events, broad social identity labels were provided (e.g. 'anti-NATO protestor'). For people who were participating in the demonstrations as a member of a particular social group (e.g. the SWP), it is likely that this identity, rather than the broad social category given to them in the questionnaire, captured their social identity at the events.[150] Indeed, 60% of participants provided an alternative social identity to the one provided in the questionnaire.

A more general methodological limitation concerned the post-event nature of participation, such that participants were no longer immersed in their collective experience when completing their questionnaires. There were both practical and ethical reasons why the questionnaires were not disseminated during the protests. In order to subject our hypothesised model to SEM the questionnaire included multiple variables, each of which contained several items; in total the questionnaire required 40 participant responses.[151] Pragmatically it would have been difficult for a sufficient number of participants to complete and return questionnaires during the limited duration of the demonstrations. Moreover, completing a detailed written questionnaire whilst marching on the cobbled streets of St Andrews and Edinburgh would have presented participants with significant practical challenges! In addition, the fact that the researcher was unable to attend the anti-SDL protest (it took place on the same day as the anti-NATO demonstration in a different city) would have prevented recruitment from this event, further limiting the sample size. In conjunction with these practical issues was an ethical concern.

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[150] The shared identity and CSR items were not vulnerable to this criticism because they did not explicitly refer to the identity which was shared, or the goal that was to be realised.

[151] This may be compared to the 'onsite' questionnaires used in Study 3, in which scale validity was limited by the small number of items included for each variable, ultimately weakening the analysis.

Protestors were giving up their free time to take part in the demonstrations, and to ask these people to spend a substantial portion of that time participating in our study would have been an unreasonable demand. However, despite the potential problems associated with post-event self-report responding, there were striking similarities between the data collected in this study, and the 'onsite' questionnaire data collected in Study 3. Combined with analysis of participant interviews conducted during the protests, we can therefore have confidence that participants' post-event questionnaire responses were an accurate representation of their collective experiences.

There was also a methodological limitation regarding how participant recruitment may have constrained the participant sample. When recruiting participants during the G-20 and NATO demonstrations the researcher made an effort to approach a diverse and representative sample of the population (Mason, 1996). However, recruitment at these events was dependent upon participants disclosing their contact details in order to receive the link to the online questionnaire.[152] Several crowd members were unwilling to provide this information, with some expressing concern that the author was an undercover police officer. It is likely that participant distrust limited the inclusion of 'radical' protestors in the sample. This problem was particularly clear at a failed attempt by the author to recruit participants at an anarchist anti-NATO demonstration the day before the larger march. Recruitment of anti-SDL protestors was open to a different potential confound. In order for participants to access the questionnaire link they had to visit one of the protest organisers' social networking web pages in the days following the demonstration. This potentially excluded people who had a negative experience at the protest, and would perhaps be unlikely to browse these websites after the event. Analysis of the

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[152] Participants who did not wish to provide their email address were given the researcher's contact details and encouraged to request the questionnaire link after the demonstration. Regrettably, no participants used this method to take part in the study. Furthermore, due to the online nature of the questionnaire, access to a computer with an internet connection was required in order to participate.

questionnaire data attempted to limit the impact of these various recruitment issues by controlling for which protest participants had attended.

7.4.2 Summary

Protestors from three political demonstrations completed an online questionnaire examining their experience of collective participation. Linear regression analysis tested the hypotheses generated from previous studies. The results were also analysed using SEM, and our hypothesised model (informed by the analysis of previous chapters) closely fitted the observed data. The results provide further evidence that participation in collective events may be experienced as both emotionally intense and positive. Moreover, collective emotion was not driven by a loss of identity, but was instead rooted in shared identification with co-present others. Shared identity transformed intragroup relations to create a sense of relatedness between group members, which was then experienced with both emotional intensity and positivity. Shared identity also created the conditions for the realisation of group goals, such that collective aims could only be achieved if co-present others shared these same goals. CSR was experienced as positive and emotionally intense by participants. Intention of future participation was significantly predicted by a composite of shared identity and relatedness. In this way the experience of collective participation was seen to shape commitment to future collective action. A further model in which emotional experience acted as an antecedent to shared identification and relatedness, which in turn predicted intention of future participation, also had good fit, suggesting that emotional experience may have functions as both an antecedent and consequence of within-crowd social relations.

VIII. GENERAL DISCUSSION

8.1 CHAPTER OVERVIEW

The general discussion begins by recounting the theoretical motivation for this thesis (8.2). The methods and analyses from the empirical chapters are then recalled (8.3), before the key findings are summarised and discussed in relation to the research literature (8.4). The limitations of the research and possible directions for future study are then considered (8.5). The chapter ends with a brief conclusion of our findings (8.6).

8.2 THESIS MOTIVATION

The present research was motivated by a desire to return the study of crowds to the heart of social psychology, and to reinstate matters of the heart to the study of collective action. Crowds moved to the periphery in part due to classic crowd psychology's pathologisation of collective emotionality (Freud, 1921/1922; Le Bon, 1895/2002; McDougall, 1920/1939). This work argued that collective passion was a consequence of group members losing their identities, and thus their ability to reason. Crowd behaviour could therefore be demonised as irrational, and meaningful collective action delegitimised.

Research from the last 30 years within the social identity tradition has challenged the notion of crowd irrationality. Central to this work has been Reicher and colleagues' SIM and ESIM of crowd behaviour (Drury & Reicher, 2000; Reicher, 1982, 1984, 1987). A number of ethnographic and experimental studies have demonstrated that identity is not lost within crowds,

but rather that there is a cognitive shift from personal to social level identification. In this way crowd members act collectively in terms of the norms and behavioural limits of their salient social identity. Crowd behaviour should therefore be considered as meaningful social action, and not an irrational explosion of emotion.

By arguing so vehemently for the reasoned nature of collective behaviour, there is a danger that the false reason-emotion dichotomy has been inadvertently preserved but reversed (Reicher, 2001, in press). Contemporary social psychology has all but neglected the emotional experience of participating in crowd events, partly through a fear of sliding back into Le Bonian irrationalism. This is despite a vast array of anecdotal evidence that crowds can be sites of passion. When trying to explain the emotionality of crowds, commentators have therefore continued to rely upon the classic – and discredited - notions of deindividuation, contagion and irrationality.[153] Since crowd emotion has been under-researched, the potential antecedents of collective passion have likewise been overlooked, particularly the experience of within-crowd social relations. Although there is evidence from small group and inter-individual studies that shared ingroup membership may engender agreement, trust and solidarity, the role that shared identity may play in creating relatedness in crowds – and the contribution that the experience of such relatedness may play in crowd emotionality – remains moot.

The object of this thesis was therefore to examine the nature of collective *experience* in collective events i.e. what it feels like to be in crowds. We defined the concept broadly as

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[153] See for example the BBC's analysis of the 2011 'English riots' (de Castella & McClatchey, 2011). Furthmore, much of the criticism of the rioters noted with dismay that they appeared to be enjoying themselves, conflating the emotional experience of collective action with morality of behaviour (e.g. Richard Fenton-Smith, a BBC producer, who reported that "the young people knew what they were doing, with some people laughing and treating the looting in Woolwich as a cheap thrill" [BBC News, 2011]). This is reminiscent of Taine's (1897) horror at the "primitive animal, the grinning, sanguinary, wanton baboon, who chuckles while he slays, and gambols over the ruin he has accomplished" (pp52-53, cited in Gilje, 2003, p152).

incorporating both the experience of intragroup social relations (relatedness), and emotionality (positivity and emotional intensity) of collective participation. The empirical studies were further designed to examine the potential antecedents, and consequences of such collective experience.

8.3 REVIEW OF EMPIRICAL RESEARCH

The first empirical chapter (IV) explored the nature of collective experience at two different 'live' crowd events in order to generate hypotheses for subsequent investigation. Studies 1 and 2 used ethnography and retrospective interviews to examine the experiences of students at a demonstration, and football supporters at public screenings, respectively. Study 3 analysed questionnaire data collected during Study 2 to test the emergent hypotheses from the two qualitative studies. Participants' social identities were key to their experiences of the events, such that strength of social identity significantly predicted emotional intensity of experience. Furthermore, when participants in both social contexts felt that co-present others shared their salient social identity, intragroup social relations were positively transformed towards intimacy, trust and ease (connectedness), a sense that one's participation in the group was acknowledged and valued by others (recognition), and the reflection of one's identity-relevant cognitions, emotions and behaviours (validation). These experiences were in stark contrast to participants who did not appraise other crowd members to share their salient social identity. For these people, their collective participation was instead characterised by insecurity, exclusion, and antagonism.

Demonstrators with shared identity in Study 1 experienced intragroup relatedness as positive. The valence of collective experience was more complex in Studies 2 and 3 as football supporters struggled to unpick the positivity of relatedness, from the negativity of watching their

teams lose, and an enjoyment of the 'rollercoaster of experience'. What was clear in both contexts however was that relatedness could be experienced with emotionally intensity. Furthermore, interviews with participants at both events suggested that their experience of collective participation potentially shaped their identification with the relevant group, and intention of taking part in future group events.

Chapter V experimentally tested the hypothesis that relatedness (and its behavioural manifestations) operated as a function of shared identity. In a within-subjects design, participants imagined that they were aboard a train crowded with strangers (non-breakdown condition) and answered questionnaire items examining their perception of shared identity, relatedness, and likelihood of solidarity behaviours (e.g. sharing a bottle of water with another passenger). Participants were then told that the train had broken down (breakdown condition) before repeating the questionnaire items. This was designed to instil a sense of shared identity between the imaginary passengers due to a perception of shared fate. T-tests confirmed that the experimental manipulation was successful i.e. that shared identity was significantly higher in the 'breakdown' than 'non-breakdown' condition. Mediation analysis then demonstrated that shared identity mediated the relationship between experimental condition and relatedness, and that relatedness mediated the relationship between shared identity and solidarity behaviours. The study therefore provided support for the hypothesis that shared identity determines relatedness, which in turn may encourage intragroup solidarity behaviours.

Chapter VI presented two laboratory studies examining the hypothesised positive relationship between relatedness and emotional intensity of collective experience that emerged from Chapter IV. Scottish football supporters (Study 5) and Europeans (Study 6) watched an

identity-relevant film (Scottish international football or European ten-pin bowling respectively) either alone, or with others who shared their salient social identity. It was expected that participants in the group condition would have a more emotionally intense experience than those in the alone condition, due to the emotionally intense experience of relatedness generated through being in a group of shared identity. Questionnaire items were used to measure relatedness and strength of social identity, and emotional intensity was triangulated using the questionnaire, a real-time interactive device and continuous relative heart rate data. In addition to these quantitative measures, all participants were retrospectively interviewed about their experiences.

The experimental hypothesis was rejected in both studies i.e. participants in the group condition did not experience their participation as significantly more emotionally intense than those in the alone condition. The retrospective interviews revealed that whilst each participant identified with the relevant social categories (a prerequisite of participation in the study), mutual self-categorisation did not necessarily equate with the perception of shared identification. Instead of focussing on differences between alone and collective participation, the data was re-examined in terms of strength of relatedness. As expected, high relatedness groups scored higher on each measure of emotional intensity (questionnaires, sliders and relative heart rate) than low relatedness groups. Analysis of the retrospective interviews provided further evidence for the Chapter IV claim that the relationship between relatedness and emotional intensity was in part a consequence of reciprocal validation. Participants explained that fellow group members could validate their emotional experience of the event, thereby amplifying their initial emotional reaction. Participant interviews suggested that this process was facilitated by an increased willingness in high relatedness groups to physically and verbally express emotional experiences. In both studies strength of social identity also significantly predicted emotional intensity of

experience as participants emotionally appraised the films in terms of their salient group membership. However, relatedness continued to significantly predict emotional intensity when controlling for strength of social identity, suggesting independent pathways to emotional experience. Both studies also provided preliminary evidence that strength of social identity could be shaped by the experience of collective participation. Low relatedness participants in Study 5 experienced a drop in their strength of identity as Scotland supporters, whilst Study 6 high relatedness participants recorded an increase in their strength of identity as Europeans.

The final empirical chapter (VII) tested a preliminary model of collective experience based upon the findings of the previous studies. Protestors who had attended one of three political demonstrations completed an online retrospective questionnaire that examined the nature of their collective experiences. This data was supplemented by onsite semi-structured interviews conducted at two of the protests. The demonstrations were chosen because they were expected to contain 'uneasy alliances' of various groups, thereby allowing us to examine the impact of perceived shared identity variance upon relatedness, CSR, emotionality of experience, and intended future participation. SEM analysis revealed that the observed data closely fitted our predicted model. A composite shared identity/relatedness variable predicted perception of CSR, and both the shared identity/relatedness composite and CSR independently predicted emotional intensity and positivity of experience. Furthermore, an alternative model in which emotional experience predicted shared identity/relatedness (which in turn predicted intention of future participation) also had good fit. This provides preliminary evidence that collective emotional experience may have functions as both an antecedent and consequence of within-crowd social relations.

8.4 KEY FINDINGS

Despite the discrepant social contexts between the studies, several common themes emerged from our analyses. In line with a social identity approach to crowd behaviour (SIM; Reicher, 1984, 1987; ESIM; Drury & Reicher, 2000; Reicher, 1996, 2001; Stott & Reicher, 1998), when participants self-categorised themselves as members of a social group there was a *cognitive* transformation from personal to social identity, leading group members to behave within the norms and limits of their salient social identity (e.g. as student demonstrators or Scottish football supporters).

Whilst self-categorisation determined this cognitive shift, our analysis revealed that participants' sense of shared identity with one another underpinned *relational* transformations within the crowd (Neville & Reicher, 2011; Reicher, in press). By shared identity we mean the perception that co-present others are members of one's salient social category. The conceptual distinction between shared identity and self-categorisation (operationalized in our studies as strength of social identity) became particularly clear during Chapter VI; each participant self-categorised themselves as a member of the relevant social group, but did not necessarily perceive co-present others to share this same identity. Shared identity (or lack thereof) could be appraised in a number of ways, including interpretation of embodied emotion (e.g. facial expressions), ingroup symbols (e.g. wearing team colours), shared action (e.g. chanting), and shared fate (e.g. vulnerability to rent increases). These findings complement a recent analysis of shared identity development at collective displays of Irish national identity (Blaylock, Stevenson, O'Donnell, Reicher, Muldoon, Bryan, & Neville, 2011) which identified attendance, visual markers, shared experiences, and shared affect as indicators of shared social identity.

Chapters IV, VI and VII presented qualitative evidence that shared identity could lead to relatedness, and Chapter V demonstrated the relationship experimentally. As strangers were appraised as sharing one's salient social identity, the 'self-other' boundary shifted to include group members as part of the self, leading to a positive transformation of social relations. Within crowds of shared identity group members felt connected to one another such that strangers became sources of intimacy and trust rather than threat and misunderstanding. Instead of feeling invisible and ignored, group members' participation and value in the group was recognised and acknowledged. Co-present others shared and validated one another's' identities, emotions and behaviours. Critically however, whilst participants with shared identity could experience the crowds as supportive and nurturant, they could equally be unpleasant places to those without shared identity. Several participants in each of the empirical studies reported feeling an absence of shared identity within the groups, and consequently experienced isolation and detachment instead place of warmth and support.

The analysis confirms findings from previous research showing that within psychological groups social relationships may be transformed towards expected agreement, respect, trust, comfort in intragroup physical proximity, and helping behaviours (e.g. Haslam et al., 1998; Haslam & Reicher, 2005; Levine, et al., 2002; Neville, 2005, 2007, 2011; Novelli et al., 2010; Reicher & Haslam, 2006a, b, 2010). Whilst many of these studies have noted relatedness at an interpersonal level, the studies within this thesis have systematically examined relatedness at crowd events, and have presented empirical evidence for the determination of relatedness by shared identity. These findings fit well with an analysis of within-crowd social relations at the Magh Mela Hindu festival which noted that a shared Hindu identity could facilitate connectedness, recognition and validation (PMMRG, 2007a, b). The studies presented in this thesis extend this work by using a wide range of methods to demonstrate a commonality of

process within a diverse set of collective social contexts. Furthermore, whilst the focus of the PMMRG has predominantly been upon forms of relatedness and identity-enactment (CSR), this thesis has systematically interrogated the relationships between shared identity and relatedness, and the impact of social identity and relatedness upon emotionality (positivity and intensity) of collective experience.

In addition to cognitive and relational transformations, our analysis identified an *emotional* transformation within crowds towards emotionality (Reicher, in press). As predicted by IET (Mackie et al., 1999, 2000; Smith, 1993, 1999; Smith et al., 2007), as collective events were appraised as relevant to participants' socially-extended selves, participation was emotionally experienced as a function of group membership. For example, the more a participant identified with being a supporter of the Scottish football team, the more emotionally intense their experience of watching the team play.[154] In addition to emotional experience as a function of self-categorisation, analysis from this thesis suggests that the experience of relatedness may have further contributed to the emotionality (positivity and intensity) of collective experience.

The relationship between relatedness and positivity was problematic. Participants in the qualitative studies did report experiencing relatedness as positive (and lack of relatedness as negative[155]), but the two variables did not consistently correlate in the questionnaire data. Whilst there was a positive correlation between relatedness and positivity at the political demonstrations in Chapter VII, there was a negative (but non-significant) correlation for football supporters in Chapter IV (Study 3). Participant interviews in Study 2 offered possible explanations for this

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[154] See also Foote's (1951) discussion of identity as a motivation for the emotional involvement of sporting audiences.

[155] Prima facie evidence from semi-structured interviews suggested that a lack of relatedness was particularly unpleasant for participants who had mistakenly expected to share a social identity with other crowd members.

inconsistency. Firstly, whilst the football supporters did recall the positivity of within-crowd relatedness, both Scotland and England lost their crucial matches and so – as predicted by IET – supporters of these teams experienced negative affect on behalf of their group memberships. This relates to a second context-specific complexity regarding valence of experience. Several football supporters in Study 2 explained that the negative experience of watching their team lose could be experienced positively as part of a 'rollercoaster of experience'. Coupled with anecdotal evidence elsewhere that negative experiences of watching one's football team may augment supporter authenticity (e.g. Edge, 1997; McIlroy, 1993), it seems that negativity in this context may at times paradoxically be experienced positively. This finding serves as an important warning that although our analyses identified various commonalities across different social contexts, one must not decontextualize participants' collective experiences from the events in which they are participating. Whilst the association between relatedness and positivity varied between studies, the relationship between relatedness and emotional intensity of experience was more consistent.

Analysis of questionnaire data (Chapters IV, VI and VII) and real-time self-report and psychophysiological data (Chapter VI) confirmed a positive association between relatedness and emotionality of collective experience. This relationship was unpacked in participant interviews. Qualitative analysis (Chapters IV, VI and VII) concluded that a reciprocal validation of group emotions could lead to a process of mutual amplification of emotional intensity of crowd members' experiences. Although strength of social identity was positively associated with both relatedness (through shared identity) and emotional intensity (through group-based appraisal), regression analysis from Chapters VI and VII confirmed that relatedness continued to predict emotional intensity of experience when controlling for strength of social identity i.e. the relationship was not merely an epiphenomenon of social identity relating to both variables. The process of reciprocal validation and emotional amplification noted in this thesis is somewhat

reminiscent of classic 'circular reaction' explanations of collective emotionality (e.g. Allport, 1924; Blumer, 1939; Park and Burgess, 1921), which argued that mutual interstimulation between crowd members led all those present – regardless of group affiliation – into a frenzy of any passing emotion. However, contrary to these early accounts, issues of identity were critical in our data because relatedness was dependent upon shared identity, and only emotions consonant with group membership were communicated and amplified (Lang & Lang, 1961; Lundquist & Dimberg, 1995; Parkinson, 1996). Emotional communication and influence were therefore not automatic, precognitive or random, but were rather underpinned by a shared perspective on the world.

In addition to reciprocal validation, interview analysis from Chapters IV (Study 1) and VII, and questionnaire analysis from Chapter VII suggested a second path between relatedness and emotionality of experience mediated by perceived group power. A sense of shared identity and relatedness, such that co-present others acted in unison to realise shared goals, facilitated the ability of crowd members to impose their collective identity upon their social reality. CSR was then experienced with emotional intensity and positivity. These results confirm the findings from previous crowd research in which intragroup unity enabled CSR, which in turn led to empowerment and intense positive affect (Drury & Reicher, 2005; Drury et al., 2005; Reicher & Haslam, 2006a; Schmitt et al., 2010).

The results presented within this thesis therefore suggest three ways in which collective emotional experience operates as a function of social identity. Firstly, self-categorisation leads to the emotional appraisal and experience of identity-relevant events on behalf one's socially extended self. Secondly, when social identity is shared with co-present others, intragroup social

relations can be transformed towards relatedness, which can amplify the emotional intensity of collective experience through reciprocal validation. Finally, shared identity and relatedness can facilitate CSR which can be experienced with intense positive emotionality. Analysis from the current body of work therefore provides further evidence against the contention of classic crowd psychology that collective emotionality is rooted in a loss of identity (e.g. Freud, 1921/1922; Le Bon, 1895/2002; McDougall, 1920/1939), and thus that crowd action is irrational.

Whilst the group emotions literature argues that identification with a social category is an antecedent to group emotions, qualitative analysis from Chapter IV (Study 1) and questionnaire data from Chapters IV (Study 3) and VI (Studies 5 & 6) presented preliminary evidence that the experience of collective participation may in turn have shaped participants' social identities. Student demonstrators described how their experience of relatedness at the protest strengthened their social identification with the group, and mediation analysis from Study 3 indicated that football supporters' strength of social identity partially mediated the relationship between emotional intensity of collective experience and likelihood of watching future matches. Furthermore, participants who experienced a low level of relatedness in Study 5 reported a weakening of their strength of social identity, whilst the strength of identity of high relatedness participants in Study 6 relatively increased after collective participation. These findings contribute to a growing body research which suggests that social identity should be understood as both an input and output of collective participation and experience.[156] For example, using an experimental paradigm Livingstone and colleagues (Livingstone et al., in press) demonstrated how perception of shared anger with fellow group members strengthened categorisation with this group, and consequently increased the likelihood of participating in collective action. Drury & Reicher (2000) have also presented evidence from an ethnographic study in which the self-

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[156] As an Egyptian protestor remarked on the day that President Mubarak resigned, "This is the most important thing about the revolution: The Egyptian people have changed in these 18 days" (BBC News, 2011).

understandings of environmental protestors came to be radicalised through the experience of collective conflict with the police. As these authors point out, this suggests that crowds not only reflect social meanings, but can create new ones. In this way collective action is characterised by both social determination and social change.

Related to this point is the bidirectional relationship between collective experience and future group participation. As expected, results from Chapters IV (Studies 1, 2 & 3) and VII found that strength of social identity was positively associated with participant intentions of future collective participation (i.e. group commitment). This finding corroborates the results of a number of studies which identify strength of identity as an antecedent to participating in collective action (e.g. Klandermans, et al., 2002; Simon et al., 1998; Simon & Klandermans, 2001). Analysis from Chapters IV (Studies 1, 2 & 3) and VII extended this work by providing preliminary evidence that the emotional experience of collective participation could also encourage participants to take part in future group action. Interviews with student demonstrators cited their positive and emotionally intense experiences at the protest as inspiring them to participate in future demonstrations, and football supporters explained how the excitement of experiencing matches collectively encouraged them to watch future games. Questionnaire data from Study 3 confirmed this qualitative evidence by showing that emotional intensity of experience partially mediated the relationship between strength of social identity and intention of future participation. Positivity was negatively related to group commitment in this context, due to the negative experience of high identifiers watching their teams lose. However, linear regression analysis in Chapter VII positivity of collective experience emerged as a strong predictor of intended future participation. Our data does therefore suggest that the emotional experience of taking part in collective events may have a role to play in determining group commitment.

This finding supplements research from the collective action literature which has identified a number of discrete emotions as predictors of participation in political collective action including anger (Van Zomeren et al., 2004, 2008), contempt (Tausch et al., 2011), guilt and shame (Iyer et al., 2007). What our research shows for the first time is that future co-action may not just be predicted by specific emotions based upon group-level appraisal, but that the *emotional experience of participation* in collective action can shape group commitment. Our analysis therefore suggests that in addition to being a consequence of participation, there exists a dynamic process whereby the experience of crowds may in turn give rise to future participation i.e. collective experience should be considered as both an input and output of crowd action.[157]

Although this thesis has presented evidence that the emotional experience of collective participation may in part determine future co-action, the analysis also suggests that the strength of this relationship may vary across collective contexts. In Chapters IV (Study 3), strength of social identity continued to significantly predict intended future participation once collective experience variables had been added as mediators. The endurance of this relationship suggests a cautionary note to the predictive power of collective experience. It would be unreasonable to expect that the experience of one collective event – particularly one that people participated in regularly – would entirely determine one's future commitment to the group; if this were the case then every 'damp squib' of a football match or demonstration would cease future participation. Instead, strength of identity with the relevant social category continues to drive future action-tendencies, although this relationship may be shaped by the experience of collective

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[157] Moreover, the evidence that positivity of experience can act as a predictor of collective action participation should provide further impetus to broaden social psychology's somewhat myopic focus upon negativity to include a wider range of emotional experiences (Seligman & Csikszentmihalyi, 2000).

participation, particularly at novel events such as the demonstration for University of St Andrews students in Chapter IV (Study 1).

8.5 LIMITATIONS AND FUTURE DIRECTIONS

This chapter has drawn together the findings from our empirical studies. Rather than being seen as the conclusion of an exhaustive investigation, it is hoped that the work shall function as a starting point for further study. Whilst our analyses have identified various aspects of collective experience and their possible antecedents and consequences, the studies were limited in a number of ways, and further investigation is required to substantiate our preliminary model of collective participation and experience.

Perhaps the most obvious limitation is the fact that much of the quantitative analysis relied upon provisional scales. The necessity of scale development was a consequence of studying such an under-researched topic. Although all of the scales used in this thesis were shown to be statistically reliable, there was an issue in establishing an analytic distinction between shared identity and relatedness in two of the questionnaire studies. In Chapter V, four shared identity and three relatedness items were dropped from the analysis in order to make the two scales as distinct as possible. Moreover, in Chapter VII the two scales correlated so strongly that they were necessarily combined to form a composite variable in our pathway model. We do not claim to have yet developed definitive scales; each new study has furthered our understanding of shared identity and relatedness leading to advances in their measurement. However, we do believe that our quantitative analyses offer a valid insight into the roles of shared identity and relatedness for collective experience. Furthermore, collaborating research groups have refined the scales first used within this thesis by identifying items that consistently load onto either

shared identity or relatedness factors using Principal Components Analysis (PCA) (Neville & Reicher, 2011). Future research should build upon this work to develop analytically and operationally distinct shared identity and relatedness scales for use by the wider research community.

A second potential criticism of the analyses is that the social processes described at football matches, demonstrations and aboard public transport may have been situation-specific i.e. the results might not generalise to other social contexts. At one level the results from our studies in fact show remarkable similarity both to each other, and to the findings of related research carried out at a religious festival (PMMRG, 2007 b; Stevenson et al., 2010), collective displays of nationalism (Blaylock et al., 2011) and mass participation cycle events (Schmitt et al., 2010). Nonetheless, there were some inconsistencies in the pattern of results across our studies, both in terms of forms of relatedness expression, and emotional dimensions of collective experience. For example, whilst in the sporting audience context of Study 2 (Chapter IV), a sense of relatedness allowed football fans to be physically intimate (e.g. dancing and hugging), this was not apparent in interviews with student demonstrators (Chapter IV, Study 1). Furthermore, whilst a freedom to approach and talk to strangers comprised a key component of relatedness in the collective contexts examined in this thesis, at the Magh Mela pilgrims instead characterise relatedness as being given the space and peace by others to enact their Hindu identity (Stevenson et al., 2010). These differences in forms of relatedness do not contradict our claim that within-crowd social relations may be positively transformed and experienced within psychological groups. Instead, in the way that different crowds act in accordance with the norms of their shared social identity, different forms of relatedness will operate as a function of these shared group norms.

With regards generality of emotional experience, emotional intensity of participation emerged as critical in sporting contexts (which were essentially exercises in entertainment [Sloan, 1989, as cited in Fagan, 2011, p202]), whereas at the political protests in Chapter VII it was positivity, not intensity, of emotional experience that predicted group commitment using linear regression. To complicate matters, emotional intensity could be experienced positively at the football matches as part of a shared objective of excitement. This process did not apply to the demonstrations, because the goal in this context was not to be entertained, but to achieve some form of political change. Related to these differences was anecdotal evidence from participant interviews in Chapters IV (Study 2) and VI (Study 5) which revealed that an outgroup presence in the intergroup context of football may contribute to an exciting 'atmosphere' (e.g. through trying to out sing each other and intergroup schadenfreude). It is difficult to see how intergroup hostility could make a positive contribution to collective experience in the other social contexts examined in this thesis. Further work is therefore needed to explore how variance in group norms and social context may lead to different forms of emotional experience.

There is also a need for further investigation into how validation of emotion within a group of shared identity might lead to reciprocal amplification of emotional experience. This process was a common theme in our participant interviews, but our quantitative evidence for this claim was correlational. A simple experiment could manipulate a participant's shared identity and shared emotional reaction with an unseen other during an identity-relevant event, and examine whether both variables were required for an amplification of emotion as predicted by our analysis. Furthermore, using the real-time interactive sliding devices from Chapter VI, participants could record the intensity of their emotional experience watching an identity-relevant stimulus whilst being able to see the real-time emotional trace of other participants whose shared ingroup status is manipulated. In this sense, one could examine the impact of the

meta-representation of ingroup/outgroup/control others' appraisals upon participants' own emotional experiences. Our analysis thus far would suggest that participants' experiences would only be influenced by the trace of shared identity participants who were similarly experiencing the stimulus. It would be interesting to note the effect of a divergent emotional experience with a member of one's own group. It is possible either that one's emotionality would converge with that of the other group member, or that the other participant would cease to be regarded as ingroup since shared emotional experience can act as an indicator of shared group identity, negating the influence of the other participant's trace.

It would also be revealing to conduct quasi-experimental research investigating the relationship between shared identity and relatedness in less artificial settings that the laboratory (Chapter VI) and imaginary train (Chapter V) used in this thesis. Appraisals of shared identity and relatedness could be examined using a combination of participant interviews and analysis of facial expressions and body language at collective gatherings that were either expected not to have shared identity (e.g. public transport during rush hour, or a shopping queue), or to have shared identity (e.g. sporting or music audiences). Moreover, the visualisation paradigm used in Chapter V could be adapted to a live setting to confirm its results in an externally valid context. For example, a mini-bus load of participants – under the pretence that they were travelling to a laboratory to complete individual tasks for course credit – could undergo a staged breakdown. This would encourage shared identity (through a sense of common fate) against the researcher outgroup who would inform participants that they were no longer to receive course credit. Participant interactions before and after the 'breakdown' would be recorded and coded for relatedness and solidarity behaviours, and this data could be supplemented by retrospective questionnaires and interviews.

Finally, longitudinal ethnographic, diary and questionnaire research is necessary to substantiate our provisional claims that strength of social identity and future participation may be shaped by the experience of collective action, and that there is a bidirectional relationship between collective emotionality and within-crowd social relations. Our research on this topic thus far has been limited to retrospective interviews, within-subject questionnaires in artificial experimental contexts, and the measurement of intended future participation, not actual participant behaviour. Research elsewhere has examined the long-term effects of participation in specific forms of collective behaviour, including research with environmental campaigners (Drury & Reicher, 2005), and religious pilgrims (Stevenson et al., 2010). Further research could extend this work by exploring the outcomes of collective participation in a variety of social contexts (including 'transfer' between participation in one context and future action in another), and by explicitly focussing on the role that collective experience plays in determining these outcomes.

8.6 CONCLUSION

This thesis has examined the experience of taking part in crowd events. The empirical work has demonstrated three ways in which collective emotion is determined by social identity. Firstly, as argued by IET, group members appraised and experienced collective events on behalf of their salient social identities. Secondly, the realisation of participants' collective goals was experienced with empowerment and intense positive affect. Finally, an appraisal that co-present others shared one's salient social identity (and not mere self-categorisation) positively transformed social relations to give group members a sense of relatedness with each other. The experience of relatedness was both positive and emotionally intense, in part through a reciprocal validation and amplification of emotional experience. This thesis has therefore begun to addresses the neglect of collective experience within the social identity literature, and further refutes the claim from

classic crowd psychology that collective emotionality is a consequence of lost identity. Furthermore, in addition to exploring the antecedents of collective experience, our analysis suggests that collective participation and experience exist in a dynamic relationship, such that the experience of collective action may shape social identification and participation in future action.

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APPENDICES

Appendix IV - Materials referred to in Chapter IV

Appendix V - Materials referred to in Chapter V

Appendix VI - Materials referred to in Chapter VI

Appendix VII - Materials referred to in Chapter VII

APPENDIX IV

Appendix IVa   Study 1 Ethical Approval [Amendment to Study 2/3 application]

Appendix IVb   Transcription Conventions

Appendix IVc   Studies 2 and 3 Ethical Approval

Appendix IVd   Study 3 Participant Information Sheet and Questionnaire

28 April 2008

Ethics Reference No: *Please quote this ref on all correspondence*	PS3397 Amendment
Project Title:	**An experimental study into the experiential differences of watching a sporting event individually or collectively**
Researchers Name(s):	Fergus Neville
Supervisor(s):	Professor S Reicher

The University Teaching and Research Ethics Committee (UTREC) approves this study from an ethical point of view. Please note that where approval is given by a School Ethics Committee that committee is part of UTREC and is delegated to act for UTREC.

Approval is given for completion within the stated time period. Projects, which have not commenced within the time given must be re-submitted to your School Ethics Committee.

You must inform your School Ethics Committee when the research has been completed. If you are unable to complete your research within the validation period, you will be required to write to your School Ethics Committee and to UTREC (where approval was given by UTREC) to request an extension or you will need to re-apply.

Any serious adverse events or significant change which occurs in connection with this study and/or which may alter its ethical consideration, must be reported immediately to the School Ethics Committee, and an Ethical Amendment Form submitted where appropriate.

Approval is given on the understanding that the 'Guidelines for Ethical Research Practice' (http://www.st-andrews.ac.uk/media/UTRECguidelines%20Feb%2008.pdf) are adhered to.

Yours sincerely

Tracy Niven

Committee Secretary

On behalf of the Convenor of the School Ethics Committee OR Convener of UTREC

Appendix IVb

Transcription conventions are based upon the suggestions given by Parker (1992, p124). Where text has been omitted from the transcript it is signalled by a pair of empty square brackets like this [ ]. Pauses in speech lasting longer than three seconds are indicated with three full stops like this … Information provided by the author for clarification, including description of participant actions, is given within square brackets [like this].

9 November 2007

Ethics Reference No: *Please quote this ref on all correspondence*	PS3397
Project Title:	**An experimental study into the experiential differences of watching a sporting event individually or collectively**
Researchers Name(s):	Fergus Neville
Supervisor(s):	Professor S Reicher

The University Teaching and Research Ethics Committee (UTREC) approves this study from an ethical point of view. Please note that where approval is given by a School Ethics Committee that committee is part of UTREC and is delegated to act for UTREC.

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Yours sincerely

Tracy Niven

Committee Secretary

On behalf of the Convenor of the School Ethics Committee OR Convener of UTREC

A STUDY INTO THE EXPERIENCE OF WATCHING FOOTBALL

We are conducting a study at today's game into the experience of watching football matches. We are interested in the differences between being at the match, watching it in a public place or pub, and watching it at home.

If you would like to participate in our study then please complete this short questionnaire – it should take no longer than 2 minutes and your name will be entered into a draw to win your national team's strip.

You may omit any questions that you do not want to answer. A researcher will collect your completed questionnaire after full-time.

After signing the consent form, **please fill in the first page of the questionnaire (both sides) before the match, and the following page (both sides) at half-time**. Please complete the questionnaire alone and do not discuss your answers with others. Feel free to ask the researcher if you have any further questions.

Thanks for your help.

Fergus Neville (*fgn@st-and.ac.uk*)

07753380019

School of Psychology

University of St Andrews

PLEASE ANSWER BOTH SIDES OF THIS PAGE BEFORE KICK-OFF

Please indicate your

1) Gender   2) Age

   M   F

☐   ☐   _____

3) What is your nationality? (*Scottish, British, Italian etc.*)

  _____

4) Which team are you supporting in today's match? (*This will be referred to as "your national team" for the rest of the questionnaire*)

  _____

5) How important is your nationality to you? (*please tick in the appropriate box*)

not at all important		moderately important		extremely important

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

6) How much do you have in common with other supporters of your national team?

nothing at all		moderate amount		a deal		great

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

7) How often do you regret that you are a supporter of your national football team?

never		moderate amount		often

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

8) How important is the success of your national football team to you?

not at all important		moderately important		extremely important

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

9) How often do you think about the fact that you are a supporter of your

national football team?

<div align="center">

never   moderate amount   often

☐   ☐   ☐   ☐   ☐   ☐   ☐   ☐   ☐

</div>

10) How much do you agree with the following statement?

I feel a sense of being "connected" with other supporters of my national team.

<div align="center">

totally disagree   totally agree

☐   ☐   ☐   ☐   ☐   ☐   ☐   ☐   ☐

</div>

11) How much do you agree with the following statement?

Nationality is an important part of who I am.

<div align="center">

totally disagree   totally agree

☐   ☐   ☐   ☐   ☐   ☐   ☐   ☐   ☐

</div>

12) In general, how important is being a supporter of your national football team to your self-image?

<div align="center">

not at all   moderately   extremely

important   important   important

☐   ☐   ☐   ☐   ☐   ☐   ☐   ☐   ☐

</div>

13) How much do you agree with the following statement?

The success of the national team is unimportant to me.

totally disagree   totally agree

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

14) Generally, how good do you feel about yourself when you think of yourself as a supporter of your national football team?

not at all   moderately   extremely

good   good   good

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Please answer the remaining questions at HALF TIME only

15) Where are you watching the match?

In your home   Someone   Pub/Bar   Other (*please state*)

else's home

☐   ☐   ☐   ☐ _____

16) How many other people are present with you to watch the match? (*Give estimate if in a crowded place*) _____

17) Have you been distracted in any way from watching the match? (*If yes please give details*)

No   Yes

☐   ☐   _____

18) How much are you enjoying watching the match so far?

not at all   moderately   very much

enjoying   enjoying   enjoying

☐   ☐   ☐   ☐   ☐   ☐   ☐   ☐   ☐

19) What has the quality of football been like in today's match so far?

poor   average   excellent

☐   ☐   ☐   ☐   ☐   ☐   ☐   ☐   ☐

20) How much do you agree with the following statement?

It is a better experience to watch matches with other supporters rather than alone.

totally disagree   totally agree

☐   ☐   ☐   ☐   ☐   ☐   ☐   ☐   ☐

21) How intense have you found the experience of watching the match so far?

not at all intense			moderately intense			very much intense		
☐	☐	☐	☐	☐	☐	☐	☐	☐

22) How would you rate your current mood?

very negative			neutral			very positive		
☐	☐	☐	☐	☐	☐	☐	☐	☐

23) How important is it for you to watch your national team's matches in the future?

not at all important			moderately important			extremely important		
☐	☐	☐	☐	☐	☐	☐	☐	☐

24) How emotional have you found the experience of watching the match so far?

not at all emotional			moderately emotional			very emotional		
☐	☐	☐	☐	☐	☐	☐	☐	☐

25) How well do you think that your national team has played so far today?

　　　not at all well　　　　　moderately well　　　　　very well

☐　☐　☐　☐　☐　☐　☐　☐　☐

26) How important is it for you to watch the game with other supporters of your team?

　　　not at all　　　　　　　moderately　　　　　　　extremely

　　　important　　　　　　　important　　　　　　　important

☐　☐　☐　☐　☐　☐　☐　☐　☐

27) How much do you agree with the following statement?

I *am not going to watch my national team's matches in the future.*

　　　totally disagree　　　　　　　　　　　totally agree

☐　☐　☐　☐　☐　☐　☐　☐　☐

28) What do you think are the major differences in experience between a) watching the match at home and b) watching it in a public place with others?

_____
_____
_____
_____
_____

Thank you for completing the questionnaire.

We would also like to conduct a short interview with you at a later date about your experiences of watching this game, for which you will be paid.

Would you like to be interviewed?

Yes   No

☐   ☐

If you have any further questions then please contact

Fergus Neville - fgn@st-and.ac.uk

APPENDIX V

This Appendix comprises the materials referred to in Chapter V.

Appendix Va   Study 4 Ethical Approval

Appendix Vb   Study 4 Questionnaire

16 February 2010

Ethics Reference No: *Please quote this ref on all correspondence*	PS6137
Project Title:	**A study into the experiential dimensions of shared identification**
Researchers Name(s):	Fergus Neville
Supervisor(s):	Professor S Reicher

The University Teaching and Research Ethics Committee (UTREC) approves this study from an ethical point of view. Please note that where approval is given by a School Ethics Committee that committee is part of UTREC and is delegated to act for UTREC.

Approval is given for completion within the stated time period. Projects, which have not commenced within the time given must be re-submitted to your School Ethics Committee.

You must inform your School Ethics Committee when the research has been completed. If you are unable to complete your research within the validation period, you will be required to write to your School Ethics Committee and to UTREC (where approval was given by UTREC) to request an extension or you will need to re-apply.

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Approval is given on the understanding that the 'Guidelines for Ethical Research Practice' (http://www.st-andrews.ac.uk/media/UTRECguidelines%20Feb%2008.pdf) are adhered to.

Yours sincerely

Tracy Niven

Committee Secretary

On behalf of the Convenor of the School Ethics Committee OR Convener of UTREC

We are interested in how people experience using public transport.

Taking part in this study involves picturing yourself in various scenarios and completing multiple choice questions about your imagined experiences.

You are not obliged to answer any questions with which you feel uncomfortable. Participation should take less than thirty minutes of your time.

Your responses and contact details are entirely confidential, shall only be viewed by the researchers running the study, and will not be passed on to any third party.

Please contact Fergus Neville with any questions regarding the study at fgn@st-and.ac.uk

1. I understand the above information and give my consent to participate in the study *

◯ I agree to participate in the study

3. What is your Gender?

◯ Male ◯ Female

4. What is your age?

[   ]

This study requires you to imagine that you are taking a train journey.

Please try to picture yourself in the scene, and think carefully about how you would act and feel at each stage.

We are particularly interested in how you imagine yourself relating to the other passengers on the train.

You are taking a train journey that requires you to change trains at a station about halfway through the trip.

During the first leg of the journey the train is very crowded with other passengers, and you are forced to stand in the aisle.

You do not know or recognise any of the other passengers on the train.

Please spend approximately 2 minutes describing how you are experiencing the train journey e.g. how/if the other passengers are interacting with yourself or each other, how comfortable you are finding it on the train, what sort of mood you are in, what you are thinking about etc.

We are interested in which parts of your social identity are important to you in different social contexts. For example, your identity as a student may be important to you, but might become less important when you are thinking of yourself as a citizen of your nation, or as a supporter of your favourite sports team. The following questions refer to your identity as a **passenger** at this point in the train journey. Again, please try to imagine yourself aboard the train when answering the questions.

To what extent do you agree with the following statements?

6. 'My identity as a passenger means very little to me.'

Totally
Disagree

Totally
Agree

7. 'I am thinking of myself in terms of this identity during the train journey.'

Totally
Disagree

Totally
Agree

8. 'This identity is an important part of how I see myself'

Totally
Disagree

Totally
Agree

9. 'My identity as a passenger is important to me'

Totally
Disagree

Totally
Agree

10. If there is an identity other than 'passenger' that better defines how you feel then please enter it below.

11. If you provided an additional identity above, how important is this identity to you?

Not At All
Important

Very
Important

We are now interested in your relationship to the other passengers on the train.

To what extent do you agree with the following statements?

12. 'I feel a sense of 'shared identity' with the other people on the train'

Totally

Disagree

Totally

Agree

13. 'I have <u>no</u> sense of 'we-ness' with other people on the train'

Totally

Disagree

Totally

Agree

14. 'The other people on the train have similar norms, principles, and goals as me'

Totally
Disagree

Totally
Agree

○ ○ ○ ○ ○ ○ ○

15. 'There is <u>no</u> shared understanding between myself and other people on the train'

Totally
Disagree

Totally
Agree

○ ○ ○ ○ ○ ○ ○

16. 'Other people on the train feel a sense of 'shared identity' with one another'

Totally
Disagree

Totally
Agree

○ ○ ○ ○ ○ ○ ○

17. 'All the passengers feel 'in it together''

Totally
Disagree

Totally
Agree

○ ○ ○ ○ ○ ○ ○

18. 'I feel <u>no</u> sense of 'connection' with the other passengers'

Totally
Disagree

Totally
Agree

○ ○ ○ ○ ○ ○ ○

19. 'I feel a sense of 'oneness' with the other people on the train'

Totally
Disagree

Totally
Agree

○ ○ ○ ○ ○ ○ ○

20. 'The other passengers are experiencing the journey in the same way as me '

Totally
Disagree

Totally
Agree

○ ○ ○ ○ ○ ○ ○

21. 'I feel a sense of intimacy with the other people on the train'

Totally
Disagree

Totally
Agree

○ ○ ○ ○ ○ ○ ○

22. 'I have no sense of ease interacting with the other passengers'

Totally
Disagree

Totally
Agree

○ ○ ○ ○ ○ ○ ○

23.   You   count   approximately   50   other   people   in   your   carriage.

Please estimate how many people would have to join or leave the carriage for you to feel comfortable. (Please prefix your answer with '+' for more people, or '−' for less)

[   ]

We are interested in how comfortable you would feel in each of the following scenarios.

24. Due to the number of people in the carriage the person behind you is forced into physical contact such that your backs are touching. How comfortable are you with this?

 Not At All
Comfortable

Very
Comfortable

○ ○ ○ ○ ○ ○ ○

25. The person in front is also forced into physical contact with you. They are sweating through their clothing and the back of their wet t-shirt touches you. How comfortable are you with this?

Not At All
Comfortable

Very
Comfortable

○ ○ ○ ○ ○ ○ ○

26. The person to your right asks for a drink from your bottle of water. How comfortable are you sharing your water with this person?

Not At All
Comfortable

Very
Comfortable

○ ○ ○ ○ ○ ○ ○

27. There is a strong smell of body odour from the person next to you on your left. How comfortable are you with this?

Not At All
Comfortable

Very
Comfortable

○ ○ ○ ○ ○ ○ ○

28. At one point in the journey there is an audible 'farting noise' from one of the people standing next to you, and an unpleasant odour wafts through the air of the carriage. How comfortable are you with this?

Not At All
Comfortable

Very
Comfortable

○ ○ ○ ○ ○ ○ ○

29. How comfortable would you feel if one of the people in the carriage tried to engage you in conversation?

Not At All
Comfortable

Very
Comfortable

○ ○ ○ ○ ○ ○ ○

30. How comfortable would you feel at starting a conversation with one of the other people in the carriage?

Not At All   Very
Comfortable   Comfortable

○   ○   ○   ○   ○   ○   ○

31. You have brought a bar of chocolate with you for the journey. How likely are you to offer some of it to the other passengers?

Not At All
Likely   Very Likely

○   ○   ○   ○   ○   ○   ○

32. 'This train journey has been largely positive'

Totally   Totally
Disagree   Agree

○   ○   ○   ○   ○   ○   ○

33. 'I feel ignored by the other passengers.'

Totally   Totally
Disagree   Agree

○   ○   ○   ○   ○   ○   ○

34. You want to go to the bathroom but are unable to take your suitcase due to the restricted space in the aisle. Your bag contains some valuables including a laptop computer and a small amount   of   money.

How much do you trust the passenger next to you to look after the bag?

Not At All   Completely
Trust   Trust

○   ○   ○   ○   ○   ○   ○

35. 'The other passengers do <u>not</u> share my views and opinions.'

Totally   Totally
Disagree   Agree

○   ○   ○   ○   ○   ○   ○

36. 'The other passengers notice and acknowledge my presence.'

Totally
Disagree

Totally
Agree

○ ○ ○ ○ ○ ○ ○

37. 'My interactions with the other passengers are negative'

Totally
Disagree

Totally
Agree

○ ○ ○ ○ ○ ○ ○

38. A passenger asks to borrow your mobile phone to telephone a friend. How likely are you to lend your phone to this person?

Not At All
Likely

Very Likely

○ ○ ○ ○ ○ ○ ○

39. 'The other passengers are on the 'same wavelength' as me.'

Totally
Disagree

Totally
Agree

○ ○ ○ ○ ○ ○ ○

40. 'I feel <u>no</u> sense of trust with the other passengers.'

Totally
Disagree

Totally
Agree

○ ○ ○ ○ ○ ○ ○

41. 'I am enjoying travelling on this train'

Totally
Disagree

Totally
Agree

42. 'My relationship with the other passengers is a positive one'

Totally
Disagree

Totally
Agree

○   ○   ○   ○   ○   ○   ○

43. A passenger asks to borrow some money to buy a sandwich from the buffet car. How likely are you to lend money to this person?

Not At All
  Likely   Very Likely

○   ○   ○   ○   ○   ○   ○

44. 'Being on the train is a negative experience'

  Totally   Totally
  Disagree   Agree

○   ○   ○   ○   ○   ○   ○

45. 'I am enjoying my interactions with the other people on the train'

  Totally   Totally
  Disagree   Agree

○   ○   ○   ○   ○   ○   ○

46. 'The other passengers strike me as trustworthy.'

  Totally   Totally
  Disagree   Agree

○   ○   ○   ○   ○   ○   ○

47. 'I feel invisible to the other passengers.'

  Totally   Totally
  Disagree   Agree

○   ○   ○   ○   ○   ○   ○

48. You see another passenger struggling to lift their heavy bag onto the luggage rack. How likely are you to help this person?

Not At All
  Likely   Very Likely

You reach the station where you have to change trains. After a short wait your next train arrives at the correct time and you get on.

You are the only passenger from the first train to take the second one.

During the second leg of the journey the train is again very crowded with other passengers, and you are forced to stand in the aisle. You do not know or recognise any of the other passengers on the train.

Halfway through the second part of your journey the train unexpectedly slows down and stops in the countryside. There are no stations nearby.

After a few minutes there is an announcement by the train company that the train has broken down, and that a replacement service will be provided within 15 minutes. However, it takes over an hour for the replacement train to arrive. At this point all the passengers (including yourself) change trains.

[At this point the questionnaire items from the first 'journey' were repeated]

You have now completed the questionnaire. If you have any additional comments about your imagined experience, or comments about the questionnaire in general, then please leave these below.

Thank you for participating in this study. We will use your data to explore the change in social relations within crowds (e.g. crowded train carriages) as people re-categorise themselves as members of a common group (e.g. as passengers) instead of as individuals. We will also address the quality of relations between group members (e.g. support and helping) and the way this relates to crowd experience.

If you have any questions or concerns about the research please do not hesitate to contact Fergus Neville at fgn@st-and.ac.uk

If you feel adversely affected by participating in this study you may contact Student Support Services at this address - sss@st-and.ac.uk

APPENDIX VI

This Appendix comprises the materials referred to in Chapter VI.

Appendix VIa   Study 5 Ethical Approval

Appendix VIb   Study 5 Recruitment Poster

Appendix VIc   Study 5 Identity Salience Task

Appendix VId   Study 5 Questionnaire

Appendix VIe   Study 6 Ethical Approval

Appendix VIf   Study 6 Identity Salience Task

Appendix VIg   Study 6 Questionnaire

28 October 2008

Ethics Reference No: *Please quote this ref on all correspondence*	PS5074
Project Title:	**An experimental study into the experiential differences of watching a sporting event individually or collectively**
Researchers Name(s):	Fergus Neville
Supervisor(s):	Professor S Reicher

The University Teaching and Research Ethics Committee (UTREC) approves this study from an ethical point of view. Please note that where approval is given by a School Ethics Committee that committee is part of UTREC and is delegated to act for UTREC.

Approval is given for completion within the stated time period. Projects, which have not commenced within the time given must be re-submitted to your School Ethics Committee.

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Yours sincerely

Tracy Niven

Committee Secretary

On behalf of the Convenor of the School Ethics Committee OR Convener of UTREC

GET PAID TO WATCH

FOOTBALL!

We are looking for Scotland fans to watch highlights of a match in the

St Andrews Psychology Department as part of a study.

You must be a Scotland supporter and Scottish to take part.

The study lasts one hour and you will be given **£5** for your time.

Please contact Fergus Neville

SCOTLAND SUPPORTERS

On the additional paper provided please write down

1. Three things that you and most other Scotland supporters do most often

2. Three things that you and most other Scotland supporters do relatively rarely

3. Three things that you and most other Scotland supporters generally do well

4. Three things that you and most other Scotland supporters generally do badly

[Note: The following is the post-stimulus questionnaire. The pre-stimulus questionnaire repeated items 1-20]

SCOTLAND SUPPORTER QUESTIONNAIRE 2

Please indicate the amount to which you agree/disagree with the following statements

by circling 1 - 9

1.   **Scotland supporters have a lot in common with each other**

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

2.   **The fact that I am a Scotland supporter is an important part of my identity**

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

3.   **I am similar to the average Scotland supporter**

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

4.   **Being a Scotland supporter is an important part of how I see myself**

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

5.   **Being a Scotland supporter gives me a good feeling**

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

6.   **I often think about the fact that I am a Scotland supporter**

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

7.   **I feel solidarity with Scotland supporters**

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

8.   **I feel a bond with Scotland supporters**

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

9.   **I think that Scotland supporters have a lot to be proud of**

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

10.   **I am glad to be a Scotland supporter**

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

11.   **I feel committed to being a Scotland supporter**

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

12.   **I have a lot in common with the average Scotland supporter**

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

13.   **It is pleasant to be a Scotland supporter**

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

14.   **Scotland supporters are very similar to each other**

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

For questions 15 – 20 please indicate how accurately the following adjectives describe <u>your current mood</u>

15.   *Cheerful*
not at all   very

accurately   1   2   3   4   5   6   7   8   9   accurately

16.   *Low-spirited*
not at all   very

accurately   1   2   3   4   5   6   7   8   9   accurately

17.   *Satisfied*
not at all   very

accurately   1   2   3   4   5   6   7   8   9   accurately

18.   *Depressed*
not at all   very

accurately   1   2   3   4   5   6   7   8   9   accurately

19. *Happy*

not at all   very

accurately   1   2   3   4   5   6   7   8   9   accurately

20. *Sad*

not at all   very

accurately   1   2   3   4   5   6   7   8   9   accurately

21. **I enjoyed watching the highlights of the Scotland – Italy match today**

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

22. **It is a better experience to watch matches with other supporters rather than alone**

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

23. **Watching the highlights of the Scotland – Italy match today was an emotionally intense experience**

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

24. **I found it exciting to watch highlights of the Scotland – Italy match today**

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

25. **How likely are you to watch Scotland's next qualifying match?**

not at all likely   1   2   3   4   5   6   7   8   9   very likely

26.   **I found watching the match today a dull experience**

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

27.   **I had a sense of ease with other Scotland supporters watching the match today**

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

28.   **I felt that the other Scottish fans watching the game today shared my thoughts regarding the match**

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

29.   **I felt a sense of "oneness" with other fans of the Scottish national team watching the game today.**

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

30.   **The other Scotland supporters experienced the same emotions as I did today watching the match.**

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

17th March 2009

Ethics Reference No: *Please quote this ref on all correspondence*	PS5074 Amendment
Project Title:	**An experimental study into the experiential differences of watching a sporting event individually or collectively**
Researchers Name(s):	Fergus Neville
Supervisor(s):	Professor S Reicher

The University Teaching and Research Ethics Committee (UTREC) approves this study from an ethical point of view. Please note that where approval is given by a School Ethics Committee that committee is part of UTREC and is delegated to act for UTREC.

Approval is given for completion within the stated time period. Projects, which have not commenced within the time given must be re-submitted to your School Ethics Committee.

You must inform your School Ethics Committee when the research has been completed. If you are unable to complete your research within the validation period, you will be required to write to your School Ethics Committee and to UTREC (where approval was given by UTREC) to request an extension or you will need to re-apply.

Any serious adverse events or significant change which occurs in connection with this study and/or which may alter its ethical consideration, must be reported immediately to the School Ethics Committee, and an Ethical Amendment Form submitted where appropriate.

Approval is given on the understanding that the 'Guidelines for Ethical Research Practice' (http://www.st-andrews.ac.uk/media/UTRECguidelines%20Feb%2008.pdf) are adhered to.

Yours sincerely

Tracy Niven

Committee Secretary

On behalf of the Convenor of the School Ethics Committee OR Convener of UTREC

EUROPEANS

Please write down…

1. Three things that you and most other Europeans do most often

2. Three things Americans do relatively rarely

3. Three things that you and most other Europeans generally do well

4. Three things that Americans generally do badly

Now please complete the questionnaire

[Note: The following is the post-stimulus questionnaire. The pre-stimulus questionnaire repeated items 1-20]

EUROPEAN QUESTIONNAIRE

Please indicate the amount to which you agree/disagree with the following statements by circling 1 - 9

1. Europeans have a lot in common with each other

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

2. The fact that I am European is an important part of my identity

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

3. I am similar to the average European

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

4. Being European is an important part of how I see myself

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

5. Being European gives me a good feeling

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

6. I often think about the fact that I am European

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

7. I feel solidarity with other Europeans

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

8. I feel a bond with other Europeans

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

9. I think that Europeans have a lot to be proud of

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

10. I am glad to be European

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

11. How likely are you to watch future sporting events involving a team representing Europe?

not at all likely   1   2   3   4   5   6   7   8   9   very likely

12. I feel committed to being European

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

13. I have a lot in common with the average European

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

14. It is pleasant to be European

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

15. Europeans are very similar to each other

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

16. I intend on watching other sporting events featuring a European team in the future

not at all likely   1   2   3   4   5   6   7   8   9   very likely

How accurately do the following adjectives describe your current mood?

17. *Cheerful*

not at all

accurately   1   2   3   4   5   6   7   8   9   accurately

very

18. *Low-spirited*

not at all

accurately   1   2   3   4   5   6   7   8   9   accurately

very

19. *Satisfied*

not at all

accurately   1   2   3   4   5   6   7   8   9   accurately

very

20. *Depressed*

not at all

accurately   1   2   3   4   5   6   7   8   9   accurately

very

21. *Happy*

not at all

accurately   1   2   3   4   5   6   7   8   9   accurately

very

22. *Sad*

not at all

accurately   1   2   3   4   5   6   7   8   9   accurately

very

23. I enjoyed watching the highlights of the Europe - USA match today

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

24. It is a better experience to watch sports with other supporters rather than alone

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

25. Watching the bowling was an emotionally intense experience

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

26. I had fun watching the bowling today

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

27. I found it exciting to watch highlights of the Europe - USA match today

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

28. I found watching the match today a dull experience

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

29. I prefer to watch sports on my own rather than with a group of other supporters

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

30. I had a sense of connection with the other participants watching the match today

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

31. I had a sense of ease with the other participants watching the match today

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

32. I felt that the other participants watching the game today shared my thoughts regarding the event

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

33. I felt a sense of "oneness" with the other participants watching the game today

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

34. The other participants experienced the same emotions as I did today watching the event

totally disagree   1   2   3   4   5   6   7   8   9   totally agree

APPENDIX VII

This Appendix comprises the materials referred to in Chapter VII.

Appendix VIIa   Study 7 Ethical Approval

Appendix VIIb   Study 7 Advertisement

Appendix VIIc   Study 7 Questionnaire

5 May 2010

Ethics Reference No: *Please quote this ref on all correspondence*	PS6364
Project Title:	**Consequences of Shared Group Identification**
Researchers Name(s):	Fergus Neville
Supervisor(s):	Professor S Reicher

The University Teaching and Research Ethics Committee (UTREC) approves this study from an ethical point of view.   Please note that where approval is given by a School Ethics Committee that committee is part of UTREC and is delegated to act for UTREC.

Approval is given for completion within the stated time period. Projects, which have not commenced within the time given must be re-submitted to your School Ethics Committee.

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Any serious adverse events or significant change which occurs in connection with this study and/or which may alter its ethical consideration, must be reported immediately to the School Ethics Committee, and an Ethical Amendment Form submitted where appropriate.

Approval is given on the understanding that the 'Guidelines for Ethical Research Practice' (http://www.st-andrews.ac.uk/media/UTRECguidelines%20Feb%2008.pdf) are adhered to.

Yours sincerely

Tracy Niven

Committee Secretary

On behalf of the Convenor of the School Ethics Committee OR Convener of UTREC

Appendix VIIb

Were you there?

We are conducting research into how people experience being a part of a crowd in a political protest (the emotions felt during the event, relationships to other crowd members etc). Please follow the link below if you wish to complete our online questionnaire. It should take about 10 minutes to fill out, and in compensation for your time you will be entered into a draw to win £50.

If you have any questions about the study then please contact

Fergus Neville - fgn@st-and.ac.uk

http://www.surveygizmo.com/s/192916/participant-experiences-of-protest

Thanks for your time.

We are interested in peoples' experiences at political demonstrations.

Taking part in this study involves completing some multiple choice questions, and should take less than ten minutes of your time.

Your responses are entirely confidential, shall only be viewed by the researchers running the study, and will not be passed on to any third party.

Please contact Fergus Neville with any questions regarding the study at fgn@st-and.ac.uk

Which protest were you at? (If you were at more than one then please select the most recent)

G20 Protest in St Andrews (6th Nov)

G20 Protest in St Andrews (7th Nov)

Smash NATO Protest in Edinburgh (13th Nov)

Anti-NATO Protest in Edinburgh (14th Nov)

Anti-Scottish Defence League in Glasgow (14th Nov)

The following questions refer to your identity as a [identity inserted here]

3. 'This identity means very little to me'

Totally
Disagree

Totally
Agree

○ ○ ○ ○ ○ ○ ○

4. 'I often think of myself in terms of this identity'

Totally
Disagree

Totally
Agree

○ ○ ○ ○ ○ ○ ○

5. 'This identity is important to me'

Totally
Disagree

Totally
Agree

○ ○ ○ ○ ○ ○ ○

6. If there is an identity other **[identity inserted here]** which you feel better describes your participation in the protest, please enter it below.

[_____]

Please think back to <u>before</u> the protest. We are interested in your expectations about the event.

7. 'Before the protest I expected to feel a sense of 'shared identity' with the other people in the crowd'

Totally
Disagree

Totally
Agree

○ ○ ○ ○ ○ ○ ○

8. 'I did <u>not</u> expect the other people at the protest to have similar values, principles, and goals as me'

Totally
Disagree

Totally
Agree

○ ○ ○ ○ ○ ○ ○

9. 'I expected everyone in the crowd to think of each other as members of a single group'

Totally
Disagree

Totally
Agree

○ ○ ○ ○ ○ ○ ○

In this section we want you to think back about how you felt <u>during</u> the protest.

10. 'The protest accomplished what I hoped it would achieve'

Totally
Disagree

Totally
Agree

○ ○ ○ ○ ○ ○ ○

11. 'The other people at the protest had similar values, principles, and goals as me'

Totally
Disagree

Totally
Agree

○ ○ ○ ○ ○ ○ ○

12. 'The image that outsiders who watched the demonstration have of my protest group is the

one I wish them to have '

Totally
Disagree

Totally
Agree

○ ○ ○ ○ ○ ○ ○

13. 'The protest was a failure'

Totally
Disagree

Totally
Agree

○ ○ ○ ○ ○ ○ ○

14. 'I felt <u>no</u> sense of intimacy with the other people in the crowd during the protest'

Totally
Disagree

Totally
Agree

○ ○ ○ ○ ○ ○ ○

15. 'I felt <u>no</u> sense of 'connection' with the other people at the demonstration'

Totally
Disagree

Totally
Agree

16. 'Everyone in the crowd thought of each other as members of a single group'

Totally
Disagree

Totally
Agree

17. 'I felt a sense of 'oneness' with the other people at the demonstration'

Totally
Disagree

Totally
Agree

18. 'I enjoyed being part of the crowd during the demonstration'

Totally
Disagree

Totally
Agree

19. 'Participating in the protest was an emotionally intense experience'

Totally

Totally

Disagree   Agree

○   ○   ○   ○   ○   ○   ○

20. 'The other people in the crowd experienced the protest in the same way as me'

Totally   Totally
Disagree   Agree

○   ○   ○   ○   ○   ○   ○

21. 'Other people in the crowd felt a sense of 'shared identity' with one another'

Totally   Totally
Disagree   Agree

○   ○   ○   ○   ○   ○   ○

22. 'I am likely to participate in future demonstrations regarding this topic of protest'

Totally   Totally
Disagree   Agree

○   ○   ○   ○   ○   ○   ○

23. 'I felt it easier to express myself to others in the crowd because I knew they'd be on the same

wavelengh'

Totally   Totally
Disagree   Agree

○   ○   ○   ○   ○   ○   ○

24. 'My experiences in the crowd during the protest were positive'

Totally
Disagree

Totally
Agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

25. 'I felt a sense of 'shared identity' with the other people in the crowd'

Totally
Disagree

Totally
Agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

26. 'I am <u>not</u> willing to give any more of my time to protesting on this issue'

Totally
Disagree

Totally
Agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

27. 'The crowd's actions at the protest reflected my values, principles, and goals'

Totally
Disagree

Totally
Agree

28. 'My experiences in the crowd during the protest were negative'

Totally
Disagree

Totally
Agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

29. 'I had <u>no</u> sense of 'we-ness' with the other people in the crowd'

Totally
Disagree

Totally
Agree

◯   ◯   ◯   ◯   ◯   ◯   ◯

30. 'There was <u>no</u> shared understanding between myself and the other crowd members as to what we were protesting about'

Totally
Disagree

Totally
Agree

◯   ◯   ◯   ◯   ◯   ◯   ◯

31. 'I will attend another protest on this issue if one is organised'

Totally
Disagree

Totally
Agree

◯   ◯   ◯   ◯   ◯   ◯   ◯

32. 'If that demonstration is what it means to be a protestor for this issue, then I no longer consider myself as one of them'

Totally
Disagree

Totally
Agree

◯   ◯   ◯   ◯   ◯   ◯   ◯

33. 'It was exciting to be part of the crowd at the demonstration'

Totally

Totally

Disagree   Agree

◯   ◯   ◯   ◯   ◯   ◯   ◯

34. 'I do <u>not</u> see myself in the way that other people will have seen me who watched the protest'

 Totally   Totally
Disagree   Agree

◯   ◯   ◯   ◯   ◯   ◯   ◯

35. 'It was a dull experience being in the crowd during the protest'

 Totally   Totally
Disagree   Agree

◯   ◯   ◯   ◯   ◯   ◯   ◯

36. Approximately how many other political demonstrations have you previously participated in?

☐

37. If you have any additional comments about your experience at the protest then please leave these below.

38. If you have any comments about this questionnaire then please leave these below.

Thank you for participating in this study. We will use your data to explore the concept of collective experience i.e. the thoughts and feelings of individuals in a crowd. We will also address the quality of relations between group members (e.g. support and helping) and the way this relates to crowd experience.

If you have any further questions or comments regarding this study or the issues raised in it, please email Fergus Neville at fgn@st-and.ac.uk