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## ARTICLE

# The role of identity-related beliefs in the appraisal and management of crowding: Insights from the Hajj

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**Abstract**

In crowds, to the degree one identifies with other crowd members one likely experiences a sense of common purpose, social connection and mutual support. Such is the psychological significance of these correlates of a shared identity that even others' close physical proximity can be pleasurable. However, such pleasure in others' proximity cannot be assumed: physical crowding can bring practical challenges and so potentially disturb the positive experience of crowd membership. In the research reported here, we explore crowd members' reports of such challenges and the ways in which these were interpreted and managed through reference to the beliefs and values associated with crowd members' shared identity. Our data arise from semi-structured interviews ( $N = 33$ ) with British Muslims after participating in the Hajj pilgrimage in Saudi Arabia. Exploring these data sheds light on the ways in which identity-related beliefs and values can contribute to the maintenance of order and harmony even in situations where crowding could undermine the positive experience of others' proximity. Accordingly, our analysis advances our understanding of the self-organization and self-policing of crowds.

**KEYWORDS**

crowding, crowds, Hajj, identity, identity-related belief

## BACKGROUND

In sharp contrast to classical psychological assumptions (Le Bon, 1895/1968; Zimbardo, 1969), crowds as diverse as football fans (Stott et al., 2001), protestors (Reicher, 1984) and people escaping danger (Drury et al., 2009), can exhibit socially organized behaviour. Addressing this organization contributes

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to the development of social psychological theory (Reicher, 2017). So too it is practically important: crowd management interventions based on misconceptions can be dangerously counter-productive (Drury et al., 2013a, 2013b, 2015).

Our research explores the experience of physical crowding. Specifically, we report British Muslims' experiences when undertaking the Hajj (the annual Muslim pilgrimage to Mecca). This pilgrimage entails performing a set of prescribed rituals across several sites under a tight time schedule. Accordingly, pilgrims must navigate their way through crowded areas where they constantly bump into others (and are themselves bumped into). This presents practical challenges (Owaidah et al., 2019). Our analysis focuses on how these are interpreted and managed through reference to participants' identity-related beliefs and values. In doing so, we contribute to contemporary analyses of the social accomplishment of crowd order.

Below, we consider the role of shared identity in crowd behaviour, the experience of crowding and crowd movement. We then consider the role of identity-related beliefs and values in crowd members' appraisal of their physical and social environment. Finally, we present our analysis of how such identity contents are relevant to managing the challenges of crowding.

## Crowds, crowding and crowd movement

The Social Identity approach to behaviour explains that although we can define ourselves in terms of our personal identities, we sometimes do so in terms of a particular group membership (Turner et al., 1987). Moreover, it shows this variation is consequential: when conceptualizing ourselves in terms of a group membership we understand our social relationships, our values and how we should behave, from the vantage point of that social identification (Reicher & Hopkins, 2016). Applying this approach to crowds leads to the insight that physical and psychological gatherings differ – whereas the former entail aggregates of individuals defining themselves in terms of their individuality, the latter involves people defining themselves in terms of a shared group membership (Reicher, 2011, 2017). This transforms the basis for their cognition and behaviour (Drury & Reicher, 2020) such that crowd members act according to their identity-related beliefs and values (Reicher, 1984), and, despite not knowing each other personally, experience a sense of mutual social connection (Neville et al., 2022; Neville & Reicher, 2011; Reicher, 2017). These features of a shared identity facilitate mutual understanding (Hopkins et al., 2019), the provision of social support (Drury, 2018; Haslam et al., 2012) and the scaffolding of group members' identity-related behaviour (Hopkins et al., 2023; Reicher et al., 2021). Moreover, these experiences contribute to the joy so often seen in crowds (Hopkins et al., 2016) and can have lasting consequences for identification and well-being (Khan et al., 2015, 2016; Tewari et al., 2012).

Such outcomes are all the more striking because close physical proximity with strangers can be uncomfortable (Wang & Ackerman, 2019). However, research shows a shared identity results in people choosing greater proximity (Novelli et al., 2010) and that higher levels of crowd identification are associated with reduced crowd density judgements and preferences for more crowded locations (Novelli et al., 2013). Again, such findings reflect the significance of a shared identity for crowd members' sense of social connection (Neville & Reicher, 2011) and expectations of social support (Alnabulsi & Drury, 2014). It also likely reflects the ways in which our sense of disgust at others' physicality (e.g. their sweat) is reduced under a common identification (Hult Khazaie & Khan, 2020; Reicher et al., 2016).

Yet, a shared identity is not guaranteed. Whilst some sites (e.g. pilgrimage sites) may have potential for a shared identity, there may instead be factionalism arising from disagreement over beliefs and practice (Eade & Sallnow, 1991; Sallnow, 1981) and competition (Bilu, 1988). Moreover, even when a shared identity is experienced there may be scenarios (e.g. an emergency evacuation) in which crowd members take no pleasure in others' physical proximity. More generally, the experience of other's proximity likely depends on the crowd's identity-related norms and values. For example, whilst some music cultures may valorise close and very physical contact (e.g. the physicality of the mosh pit: Riches, 2011), others may not.

It is also important to recognize that physical crowding can bring practical challenges. It can result in crushing injuries (and deaths). Although often attributed to ‘panic’-motivated ‘stampedes’, this is misleading (Barr et al., 2023): typically the problem is practical in that there is simply no room for movement of any sort (Alluri et al., 2017; de Almeida & von Schreeb, 2019). In less extreme scenarios, crowding can constrain one’s movement and negatively impact one’s experience. For example, pilgrims attempting to traverse a series of religiously significant sites may find their access blocked or find themselves buffeted by others limiting their ability to perform their rituals as they would wish (Kadrouch-Outmany & Buitelaar, 2021). As such experiences can disrupt the development and maintenance of a shared identification, a key question for contemporary crowd research concerns the ways in which crowd members negotiate the challenges associated with crowding (e.g. as when members of the crowd physically push up against each other).

Insights into such issues can be found in research on pedestrian behaviour. Whilst people’s movement is affected by the physical environment, Templeton et al. (2018, 2019) show identity processes also play a role such that with a shared identity people walk slower, longer, and in a manner that maintains greater person-to-person proximity. Again, this underscores the point that with a shared identity, social relations are such as to allow a degree of informal coordination and choreography. Building on this approach, we explore how social organization is accomplished even in circumstances where the practical challenges of crowd density could be assumed to result in tension and disharmony. Central to our analysis is an emphasis on the ways in which the beliefs and values associated with crowd members’ shared identity provide a lens through which such difficulties can be appraised and managed (and social organization accomplished).

## Identity content and the appraisal of crowd experience

The beliefs and values associated with a social identity provide the lens through which events are appraised and experienced (Levine & Reicher, 1996). For example, Hindu pilgrims’ reports of their experiences at a festival which entails bathing in the cold waters of the Ganga reveal the importance of identity-related beliefs and values in the appraisal and management of such conditions: rather than the cold being judged aversive, it was judged as religiously meaningful, even pleasurable (Pandey et al., 2014).

In similar vein, experimental research at this same (loud) religious festival showed the appraisal of noise was a function of identity-related belief. Specifically, the same (ambiguous) loud noise was evaluated differently according to its congruency with the values associated with crowd members’ pilgrim identity: when labelled as coming from the local city it was experienced more negatively than when labelled as having religious content (Shankar et al., 2013). Moreover, this sound-identity congruency impacted the sound’s processing (Srinivasan et al., 2013, 2015; Tewari et al., 2020). The wider implication of such work is that what counts as a stressor is not a given but depends on identity-based appraisals in which identity-related content is key (Hopkins & Reicher, 2021).

Drawing on these observations, we consider how identity-related beliefs and values feature in crowd members’ accounts of the appraisal and management of the practical challenges of crowding (e.g. bodily contact, being buffeted by others, the limits on one’s movement, etc.). We do so through an analysis of Hajj pilgrims’ reports of their crowding experiences.

## The Hajj

The annual Hajj entails an intensive schedule of prescribed rituals as performed by the Prophet Muhammad at different locations in and around Mecca (Saudi Arabia) according to a tight five-day timetable (Van Steenbergen, 2016). Each year it attracts in excess of two million Muslims. The rituals are wide-ranging. Pilgrims wear distinctive clothing, must desist from many everyday activities (e.g. sexual

intercourse, fighting or arguing, wearing perfume, etc., Toorawa, 2016) and undertake site-specific rituals. These include throwing seven stones at pillars representing Satan, circling the *Ka'aba* (a construction dating back to pre-Islamic times) seven times (a ritual known as the *Tawaf*) and touching or kissing the Black Stone (a feature of the Ka'aba believed to be a remnant of the original structure made by Abraham: Borujerdi, 2018; Sabiq, 1993). The sites associated with these rituals are particularly crowded. For example, pilgrims typically seek to get as close to the Ka'aba as possible during their Tawaf and get within touching distance of the Black Stone (Larsson & Sorgenfrei, 2021).

Previous research shows Hajj pilgrims can experience a strong shared identity (Alnabulsi et al., 2018; Alnabulsi & Drury, 2014). This is facilitated by Islamic beliefs concerning the significance of the Ummah (the global Muslim community), a common dress code and the synchronous pursuit of ritual. Such a shared identity impacts the experience of crowding: Alnabulsi and Drury (2014) found stronger shared identification was associated with more pleasurable experiences of crowding (a relationship mediated by the belief that others would be supportive if help was needed). Yet, at the same time there is evidence that some Hajj sites are characterized by competition for space (Owaidah et al., 2019) with consequences for pilgrims' perceptions of solidarity (Alnabulsi et al., 2018). Also, as pilgrims often act in groups (e.g. those associated with their tour providers, Owaidah et al., 2021) there is potential for different groups to physically rub up against each other (as when one tour group crosses the path of another). The potential for these encounters to be framed as intergroup (and a sense of shared identity subverted) is augmented by the fact that these tour groups can originate from different countries.

Our research focuses on participants' accounts of their experience of crowding and how it impacted their movement and ritual practice. Throughout, we explore crowd members' reports of how these experiences were shaped by their understandings of the values and beliefs associated with their shared Hajji identity. The resources available for such meaning-making are diverse, including guidance from Qur'anic text, religious scholars, Hajj tour operators, social media and other information-sharing networks (Caidi, 2020, 2023). Some beliefs and values are directly related to the issue of proximity. For example, Islamic norms regulate contact between unrelated males and females (Thimm, 2021) and contribute to the gendered experience of Hajj crowding (Alsolami et al., 2018; Kadrouch-Outmany & Buitelaar, 2021). Other beliefs and values have more general implications for pilgrims' behaviour. For example, Qur'anic verse specifying behaviour during the Hajj (e.g. *al Baqarah* 197) forbids '*jidat*' (engaging in angry altercation with others).

Our analysis explores the implications of such identity-related meaning-making resources for the appraisal and management of crowding-related phenomena (e.g. pushing). In doing so, we contribute to understanding the informal social organization of the crowd and how it is an ongoing social accomplishment.

## METHOD

### Participants

33 British Muslims (28 males, 5 females, aged 23–66) who had completed the Hajj were interviewed. All were recruited through Islamic Centres, mosques or Hajj travel organizations. Participants are identified by a number and their gender (M/F). 32 interviews were carried out within a 3-month period after the 2018 Hajj (11 pilgrims) or 2019 Hajj (21 pilgrims). One (07F) was interviewed 9 months after the 2018 Hajj.

### Interviews

Semi-structured interviews were conducted by the first author (a Muslim, Turkish, male) in mosques, cafes, homes and offices (*M* duration = 51 min). Questions addressed participants' social relations and

TABLE 1 Interview schedule.

1. When at the Hajj, how did you feel about the other pilgrims you were with? Who were they (e.g. from your tour company, from your country)?
2. Did you feel a sense of connection with them? If connection reported: Which ritual at the Hajj made you feel more connected with other pilgrims? What sort of relationship did you experience? Did you have a sense of connection with all other pilgrims or a subset? Why? If no connection reported: Why do you think you felt no such connection?
3. How did you experience the Hajj crowd? How did the experience of the crowd at the Hajj compare to other crowds (e.g. the crowd in an airport and gatherings at a mosque for Friday prayers)?
4. Did being in the crowd at the Hajj affect your health and well-being? If yes, how?
5. Did the Hajj crowd impact your performance of the Hajj rituals? If yes, which ritual was influenced the most? How was it affected? If the impact was negative, how did you deal with this?
6. When at the Hajj, how did you find the experience of living in close proximity to others? Where were the pilgrims living close to you from? Were there any differences between pilgrims from your country and others? If yes, what were they? Were there any similarities between pilgrims from your country and them? If yes, what were they?
7. When at the Hajj, did you interact with other pilgrims? If yes, what kinds of interactions took place? Who were the people you interacted with (e.g. from your tour company, from the same country, from other countries)? Which of the Hajj rituals involved greater interaction with other pilgrims? Could you please explain how and why?
8. Which ritual of the Hajj was the most difficult to perform? Why? Which one was the easiest to perform? Why?
9. During the Hajj, did you find yourself helping other pilgrims? Did you find yourself needing others' help? If yes, could you elaborate (where, when, with whom and how)?
10. More generally, has undertaking the Hajj had any impact on how you see yourself and how you relate to others?

interactions with others at the Hajj, how this compared to their experiences of large groups elsewhere (e.g. airports and mosque gatherings), how their interactions with others varied according to different Hajj locations, their experiences of crowding, etc. (see Table 1 for the interview schedule). Translations of Arabic religious terms and explanations appear within parentheses. Excluded text is replaced by ellipses.

## Ethics

Approval was obtained from the University of Dundee's Research Ethics Committee. Prior to participation, participants provided informed consent. Participants received no compensation. As interview data may allow interviewees to be identified, our data are not publicly available. However, interested parties may contact the authors to discuss our analyses.

## Analytic approach

Our reading of these data reflects our theoretical commitments as social identity researchers. In particular, we became interested in how the practical challenges of crowding could potentially undermine participants' social connection with others. Exploring their accounts of crowding, we noted frequent reference to the significance of identity-related beliefs and values. This then became the focus for our analysis and our exploration of these issues of belief was aided by the insights the first author was able to bring by virtue of his being a Muslim with experience of undertaking the lesser Muslim pilgrimage (known as *Ummah*) at Mecca.

As our aim was to develop a process model of Hajj participation our methodological approach has parallels with Grounded Theory (Charmaz, 2006). However, given our interest in participants' varied experiences of crowding we were also drawn to the broad logic of a form of Thematic Analysis in which 'researcher subjectivity is conceptualised as a resource for knowledge production' (Braun &

Clarke, 2021). First, interviews were transcribed, read and re-read and a series of initial codes created. These codes were related to elements of the social identity model of crowd behaviour (e.g. 'shared purpose', 'solidarity', 'mutual recognition', etc.). As these were compared in an iterative manner, we were sensitized to the distinctive features of the Hajj relevant to participants' experiences. These included the challenges involved in performing a set of prescribed rituals across several crowded sites under a tight time schedule.

As our interest in crowding crystalised, we noted participants' references to how identity-related beliefs and values shaped their crowding experiences. These took two broad forms. The first concerned the ways in which such identity-related content shaped the appraisal of their experiences of being in a moving crowd (e.g. bodily contact and pushing). The second concerned the role of such identity content in negotiating and managing crowding-related challenges.

## ANALYSIS

When describing their experiences across a range of sites participants referred to the sense of connection experienced with each other. As participants travelled in nationality-based tour groups, their experiences at the start of the Hajj were often reported to take place in hotels and as being structured around a common nationality or ethnicity. However, when describing their experiences of undertaking the Hajj itself, they referred frequently to interactions with others beyond their tour group as they and other Hajjis engaged in the synchronous pursuit of identity-relevant rituals. Describing these experiences, participants spoke of the pleasures associated with their performance of religious rituals. It was also in this context that they referred to their experiences of crowding (especially being buffeted and pushed).

In what follows we present material which illustrates the ways in which identity content shaped participants' (i) appraisals of crowding and (ii) management of the challenges associated with crowding. Within each of these categories, we found variations which encouraged further differentiation. These inductively generated sub-categories are elaborated and illustrated as the analysis unfolds.

### The appraisal of crowding

Here we explore how crowding-related issues were evaluated through reference to the beliefs and values associated with participants' Hajji identity. Comparing extracts with each other, we identified three ways in which identity-related beliefs and values were relevant.

#### Identity, crowding and the crowd

When discussing crowding, some participants could be found differentiating between crowding and the crowd such that the beliefs and values attributed to the latter compensated for the challenges of the former. Specifically, participants described how being with others brought both challenges and pleasures. On the one hand, others blocked access to significant sites (e.g. the Black Stone) and contributed to the experience of being buffeted and pushed. On the other hand, the crowd's presence gave meaning to their ritual practice (extract 1) and facilitated aspects of their movement across the site (extract 2):

##### Extract 1

If there wasn't a crowd, I'd do something that I couldn't do. Like I'd go and kiss the Black Stone ... But the crowd is part of the ritual. So we shouldn't view the crowd as negative,

the crowd is also positive, it makes you see that it is not something strange, you know, the whole of the world, the whole of the Islamic world is doing this.

43M

#### Extract 2

It's so many people and they are like – especially when you do the Tawaf – a lot of pushing and squeezing. But that's something you have to tolerate because there's a lot of people over there and in terms of the benefit of having so much crowd is when you do the walking, it just, even though it's a very long distance, it just helps you to just keep on walking, walking because everybody's walking, walking. If you're doing it alone, you're probably going to find it difficult but since there are so many people walking you just follow with the crowd, it just helps you to continue walking.

41M

These extracts illustrate some of the ways in which the challenges associated with crowding were judged to be balanced by what could be gained from the crowd. In extract 1 restricted access to the Black Stone was compensated for by the understanding that others' presence validated Islamic belief and Hajj practice. In extract 2 others' 'pushing and squeezing' was compensated for by the way in which walking alongside others 'helps you to continue walking' (extract 2). In other words, there is a sense in which participants' interpretation of the crowd as a community of fellow believers motivated by the same beliefs and values allowed participants to identify benefits that compensated for the challenges associated with crowding.

### Identity and the experience of bodily contact

A second way in which identity content was relevant to the interpretation of crowding involved participants appraising potentially challenging crowding experiences through reference to the beliefs and values associated with their shared identity such that the negativity of these experiences was reduced. For example, in extract 3, the crowd is conceptualized as motivated by high (identity-related) values such that the phenomena associated with crowding (e.g. others' pushing) were judged less negatively than would otherwise be the case:

#### Extract 3

(This) crowd is a benevolent crowd. It is a big difference. Benevolent means a good crowd and another is not so good crowd. You see, like I said to you before, in a supermarket someone might bump into you, or in a mall or something on the street, and you just feel a bit angry and you control your anger. But here you're always getting bumped into but the people, either they're smiling or they're doing their own thing, they're *zikiring* (engaging in recitations invoking the memory of Allah) or someone pushes back. I'm talking about the Tawaf mainly, where the people try and get out so they brush through you. But you don't feel bad, and I hope they don't feel bad either, so in that element, you see, the crowd isn't such a problem because it's a good (crowd).

43M

In this extract, the experience of bumping into each other at the Hajj is differentiated (positively) from experiences in other crowded scenarios. Key to this differentiation is the way in which the behaviour of others at the Hajj was interpreted through reference to the beliefs and values associated with participants' shared identity as pilgrims. That is, as others were understood to be motivated by the virtuous



beliefs and values associated with their shared identity, their pushing was represented as accidental (rather than malicious). As a corollary, there was no basis for anyone experiencing offence ('you don't feel bad, and I hope they don't feel bad either').

Building on such an identity-based appraisal of the challenges of crowding, participants argued that pushing was likely instigated by all (themselves included) and that it often resulted in forms of interaction repair shaped by the content of their shared religious identification. For example, one spoke of the pleasure of being part of the crowd circling the Ka'aba during the Tawaf and of the way in which it looked as if 'the stars are gliding and turning with the spiral movements in space; they are in order; it inspires confidence in you'. They continued:

Extract 4

Of course, locally you can sometimes be stuck shoulder-to-shoulder, but it is because of the crowd. However, everybody acts without hurting and discomforting each other; everybody respects each other; even if one's foot mistakenly touches you, one comes and requests you to give your blessing. One continues his/her *Tawaf* after saying your goodbyes. Such situations show the special thing at the Hajj that there is no bad intention at all.

12M

Again, the point here is that the challenges of crowding (e.g. bodily contact) were interpreted through reference to the beliefs and practices of their shared pilgrim identity. As a corollary others' behaviour was understandable (and forgivable). Indeed, there is a sense in which the interaction repair made possible through such mutual understanding turned a moment of potential tension and disharmony into an opportunity to cement participants' connections with each other.

However, if some features of crowding (e.g. others' pushing) could be 'forgiven', there were scenarios in which the effects of crowding were judged more problematic. It is to these and their theoretical significance that we now turn.

## When crowding becomes problematic: the challenge of identity performance

A third way in which identity content was relevant to the interpretation of crowding and its associated phenomena (being pushed) concerned the identification of scenarios in which crowding was judged problematic. Specifically, crowding was judged problematic when it was experienced as compromising participants' abilities to enact identity-related beliefs and values. Sometimes, this was because crowding impeded adherence to the time schedule integral to some of these rituals. Sometimes, it was because crowding impeded the performance of the ritual itself. For example, one participant referred to the practical difficulties encountered when trying to perform the ritual of stoning the devil when surrounded by others jostling to do the same:

Extract 5

They were pushing each other, they were not bothering about some people really. While you're stoning, your hand is there. Somebody touch your hand, you actually drop your own stone without hitting to the devil. That's why they really ask you to take extra stones. So, in case you gonna drop some of the stones because people are really pushing on the side and from the back side, on the side, front side because they're not actually paying attention because they're too busy stoning the devil. When they're stoning the devil, either their hand is touching your hand, or their hand push your hand down or maybe in the meantime you're holding your stone with the thumb and the finger, your stone is drop without hitting the devil. It means you can need to get another stone out to hit the devil.

09M

On other occasions, participants referred to the difficulties associated with crowding as they moved around the Hajj sites. For example, women spoke of their discomfort at being pushed by men (even if accidentally) because it compromised Islamic gender-related norms. Male participants also expressed concern over such contact. For example, one reported that he did not mind very close contact with others (even when drenched in sweat), but that such contact was problematic when it resulted in him being pushed into physical contact with women:

Extract 6

In terms of like hygiene or like a different person, I didn't have any issues because they just, I felt the sweat, I felt their like wet cloth, I felt their breath on my face, I felt all of that but it didn't bother me, somehow maybe I don't know, maybe I switched off and it didn't bother. Maybe I was happy to be doing my *Tawaf* and maybe I was concentrating on something else, but it just didn't bother me. The only time something that was a physical push, or physical contact of some kind of like a nudge or a poke, that's, that's it really, and also, I have to be careful with the women, don't get ahead of you, so you have to be careful not to touch but you can't sometimes help it, but you lift your hands up so that way, yeah, at least.

31M

Moreover, male participants also reported their frustration at how they were sometimes unable to fulfil their identity-related role of protecting women from bodily contact with men. As this same participant put it:

Extract 7

there were points that I was angry at individuals, not the crowd because there were individuals that within the crowd that were acting for their own benefit in a selfish way. Like, for example we had a duty to protect women in our group, but you will see men trying to cross between. We structured the group in a way that men were surrounding the women. Because it's a very tight crowd, some people want to break through.

31M

Here again, there is a sense in which the beliefs and values associated with participants' shared identity framed the experience of the bodily contact arising in a tightly packed, moving crowd. Specifically, such contact was appraised in relation to what it meant for the male interviewee's ability to fulfil his 'duty to protect women in our group'. Indeed, appraising the situation in these terms was key to the participant's negative experience of crowding.

The wider significance of the extracts presented in this third sub-section is that they allow insight into when crowding can come to be judged as more problematic. The common thread is that although many features of crowding (e.g. bodily contact and the experience of others' pushing) can be understood (and forgiven) through reference to participants' understandings of their shared identity-related beliefs and values, there are contexts where crowding is judged more problematically. Again these scenarios highlight the significance of identity-related values and beliefs. Sometimes others' bodily contact was experienced as impeding one's performance of a particular ritual (extract 5). Sometimes bodily contact was judged problematic because identity-related norms concerning such contact and its social regulation were violated (extracts 6 and 7). In other words, just as identity-related beliefs and values can mitigate the negative impact of crowding, so such beliefs and values can mean that some features of crowding come to be represented as problematic. These scenarios are when crowding is judged to result in participants acting in ways that contradict identity-related beliefs and norms.

## The management of crowding

Turning to participants' reports of how they managed scenarios in which crowding was judged problematic, we identified three ways in which identity-related content was reported as relevant. Again, these sub-categories were generated through a process of iterative comparison and are described below.

## Identity content and the control of one's responses

Our first sub-category comprised examples in which participants reported identity-related beliefs and values as motivating self-control. That is, when faced with the challenges of crowding (as when trying to access particular sites), participants referred to the need to ensure that their own behaviour conformed to identity-related beliefs and values. For example, one explained that whilst 'the whole process overall was the most amazing experience of my life', they faced crowding-related frustrations which required considerable self-control. In turn, they characterized such self-control as integral to the essence of the Hajj. Citing a Qur'anic verse (*al Baqarah* 197) forbidding '*jidal*' (engaging in angry altercations) at the Hajj, they observed that the challenge was to 'make sure you have patience' because entering into argument would 'ruin your Hajj'. Moreover, they argued that it was this need for self-control that made the Hajj such a challenge. Explaining that people do things 'that can make you angry inside', they continued:

### Extract 8

I think if there's any stress-related, it's probably that, trying to stop yourself from reacting to any of these things and just stay quiet. Stay quiet. Yeah, just be patient, I think that, if you're talking about any stressful moments that's probably the most stressful moments, anyone who's doing something that normally in this life you would be like, "What are you doing?" right? But you don't want to do that, so you just try and just keep it to yourself because you don't want to ruin everything you've done by having an argument with someone else. *La jidal fi al-Hajj*, which means no, it's one of the rules, don't have any bad, you know, arguments with any people.

15M

Another participant, referring to the norm that altercations should be avoided, added that if there was to be any negative judgement of other's behaviour, it should come from Allah because only Allah could discern others' motivations. Explaining that many sought to get access to the holiest sites and that this involved pushing that 'unknowingly or knowingly can cause inconvenience for someone else', they cautioned only 'Allah knows if it was deliberately or unintentionally', and continued:

### Extract 9

You just have to expect that you will sometimes, would be faced by these challenges. And you just have to really bite your tongue, be patient and do *sabr* (patience) because *sabr* is *agr* (rewarded) and in Hajj, when you're specially in *Harām* (*Al Masjid Al Harām* or the Grand Mosque) you can't argue with anyone, you can't fight with anyone, you have to do *sabr* and you have to be patient and if anyone says anything to you, you can just leave it up to Allah.

19M

Here again, we see how identity-related beliefs and values were invoked as guides to how one should respond to the challenges associated with the most crowded sites of the Hajj. Moreover, it is noteworthy that the injunction to be patient and avoid entering into argument was underscored through reference to the identity-related belief that only Allah could properly judge other's motivations and whether they warranted rebuke.

## Identity content and the modification of one's own ritual practice

A second way in which Islamic beliefs and values were reported as relevant to the management of crowding-related challenges entailed participants modifying their own practice to avoid identity-inappropriate interactions. For example, given the challenges crowding posed for one's abilities to focus on spiritual issues, participants reported modifying their religious practice so that they avoided environments where they would be subject to being pushed. Thus, one participant (06F) explained that when

undertaking the Tawaf they chose a path at some distance from Ka'aba because 'the more inside you went, the harder it was because it was intense pushing and shoving'. She continued 'I felt like the more inside I went, the more I was trying to survive' and that rather than their closeness to the Ka'aba contributing to their spiritual experience, the experience of others' bodies pushing against theirs detracted from such experience such that they modified their ritual activity:

Extract 10

I couldn't concentrate on my *duas* (supplications) or my *takbirs* (repeating 'Allahu Akbar' or 'Allah is the Greatest') or my *zikr* (recitations invoking Allah) or anything like that because I was too busy to try to make sure I wasn't getting trampled over, but the minute I went more out and was more in the outskirts, I was able to concentrate, that connection was there, I felt like it was just me and God, kind of. That's how I felt.

06F

Other participants noted the challenges associated with crowding at the most significant sites could result in their own behaviour contravening identity-related norms and values and that they modified their practice accordingly. Take for example the challenges associated with getting close to the Black Stone as reported by one participant:

Extract 11

It's very unlikely that you are able in Hajj period to touch the Black Stone and not have done anything wrong ... People are pushing, pulling, shoving, you know, it's not nice. So, if you're able to get to the Black Stone ... likely you had to push someone or pull someone to get there, and my personal opinion is our religion doesn't teach us to do that ... In fact, there's the opposite, you know, the last thing we are meant to do in our religion is to harm someone. We need to do the opposite of that, we cannot harm anyone. So, it's a lot better to stand far away from the Black Stone and just acknowledge the Black Stone, okay, than to attempt to go and harm someone else to go and touch the Black Stone, that doesn't make any sense.

15M

In a similar vein, another participant argued:

Extract 12

You don't want to push people. You don't want to hurt people to get to the Black Stone. Because of the crowd, you could only get there if you were prepared to push people which I didn't want to do. I didn't want to push people. I didn't want to hurt people. So, Black Stone, from the distance, I used to look, and I used to put my hand in the front and kiss my hand. It's just as good as kissing the Black Stone because it says, 'if you push and if you hurt people, it's *haram* (religiously unlawful)'. So, do you want to do *haram*? No. It's forbidden. You don't want to hurt people. It's forbidden but you get the same *sawab* (religious reward), you get the same reward even if you kiss the Black Stone from a distance by raising your hand and kissing your hand.

04M

For these participants (extracts 11 and 12) gaining access to the Black Stone had religious benefit. Yet, they cautioned it was meaningless if gained through behaviour that contravened other identity-related beliefs and values. That is, there is a sense in which the evaluation of such access is dependent on identity-related values which can pull in rather different directions (the value of accessing the Black Stone vs. that of avoiding hurting others) and that here the balance implied an alternative ritual practice. Again, such deliberation points to the ways in which the challenges of crowding are understood and managed through reference to participants' conceptualisation of their identity-related beliefs and values (and how they should be balanced).

## Identity content and the modification of others' behaviour

A third way in which identity content was relevant to managing the challenges of crowding entailed participants invoking such content in order to modify others' behaviour. For example, one participant described invoking identity-related beliefs concerning the importance of performing good deeds (and the significance of divine judgement) when seeking to manage the problems of crowding exacerbated by other pilgrims choosing to sit (rather than stand) whilst praying. Specifically, the interviewee invoked identity-related content so as to modify others' behaviour and so ease the challenge of crowding:

### Extract 13

I remember there was one time we were all sitting to pray, and there was one woman (saying) "I want to pray". Some other women were like "No, there is no space". I just turned to her (the woman who said 'no'), say, "listen, the minute you stand up, there is gonna be space for at least few more people." And I was like "we come here to do good; we come here to get deeds. If you're selfish with the space, God is gonna be angry and sad us." She got very embarrassed. I wanted to make a point that you've not come here to be selfish, do whatever you can to increase your deeds ... I was like "don't ever refuse anyone a place to pray".

06F

In other instances, the invocation of identity-related beliefs and values was less explicit but nevertheless involved reference to readily understandable identity-related content. For example, revisiting the issue of Islamic gender-related norms (see above), one male participant explained that when walking, mild pushing from behind was to be expected because people were walking at a similar pace, but that more forceful pushes could knock one into others and that this was particularly problematic when those others were of the opposite sex:

### Extract 14

Another thing in the crowd that person behind you pushing you, as if... maybe they were pushed from behind but, yeah, like you feel this like pushing behind you which is okay if it's a mild push, you know that that person is like going with the pace of you. But, no, pushing you to push you to go forward, because you have a woman in front of you, you have to resist, so a few times I had to push myself back just to tell this person, "Look, there's a woman ahead of me I cannot go to the speed that you want to" so there were a couple of occasions like that.

31M

Here again we see the relevance of identity-related content in the management of the bodily contact associated with crowding: When potentially buffeted into identity-inappropriate contact with female pilgrims, the participant reports pushing back and modifying the behaviour of those behind him through invoking the shared identity-related norm concerning male–female contact.

## DISCUSSION

Previous research shows crowds can display socially organized behaviour and that the concept of shared identity helps explain such order (Reicher, 1984, 2011, 2017). However, such order should not be taken for granted – crowding can bring challenges which have the potential to test and undermine crowd members' shared identification and the relations of solidarity it supports. The significance of our research is that we explore some of the means by which order and harmony are accomplished in the testing conditions to be found at the Hajj. Specifically, we explored how crowding and the phenomena associated with it (e.g. being buffeted and pushed by others) were evaluated and managed through reference to participants' (shared) identity-related beliefs and values.

Exploring the identity-based processes underlying such order is theoretically and practically important. With regards to theory, previous research has stressed the ways in which crowd members' positive experience of crowd membership and others' physical proximity is shaped by the relational intimacy and social support made possible by a shared identity (Drury & Reicher, 2005; Hopkins et al., 2019; Neville & Reicher, 2011). More specifically, we know that physical proximity is not necessarily aversive but can be experienced positively when participants identify with each other (Alnabulsi & Drury, 2014; Alnabulsi et al., 2018; Novelli et al., 2010, 2013). So too, we know from studies of pedestrian behaviour that those experiencing a shared identification can coordinate their walking so they were closer to each other (Templeton et al., 2018, 2019). Our research complements such work through highlighting the role of identity-related beliefs and values in the accomplishment of order and harmony when one's efforts to perform one's religious rituals could so easily be compromised through crowding. As our analysis reveals, crowding was appraised in a variety of ways. First, participants differentiated between crowding and the crowd, with the latter being attributed values and beliefs that compensated for the challenges posed by the former. Second, crowd members' pushing could be understood (and forgiven) as being motivated by shared identity commitments. Third, when crowding and its related experiences (e.g. being pushed) were appraised negatively, it was because it compromised participants' ability to realize identity-related beliefs and values. In turn, it is apparent that in such scenarios, participants reported that identity-related beliefs and values shaped their responses. First, participants reported seeking to ensure their own psychological responses to such challenges were in-keeping with identity-relevant norms. Second, participants described modifying their own religious practice so as to avoid such scenarios (and thus ensure their behaviour continued to be identity-appropriate). Third, they reported invoking identity-related content in order to modify other's behaviour and thus re-establish order and harmony.

These observations about the identity-based self-policing are not only theoretically important but also have practical implications. Many approaches to managing crowding at events such as the Hajj are informed by computer modelling studies (see Owaidah et al., 2019, 2021). However, such models tend not to reflect social psychological insights as to how crowd behaviour is shaped by social identity processes (Templeton et al., 2019; Templeton & Neville, 2020). To the degree such modelling informs the authorities' crowd management strategies there is a danger that the self-organizing processes in crowds are overlooked. Furthermore, there is a danger that practitioner action premised on such misunderstandings can contribute to risk (as when practitioners' references to 'panic' in their communications might undermine the sense of shared identity necessary for crowd self-organization: Drury et al., 2013a, 2013b, 2015).

Inevitably our analysis has its limitations. Our data originate from a particular group of pilgrims and it is likely their judgements reflect British cultural sensitivities to crowding and bodily contact (which may differ from other communities attending the Hajj). Future research could explore the experiences of Hajj crowding amongst those from different cultures (see Haq & Jackson, 2009). Moreover, our data are self-report and we have no way of corroborating whether participants did indeed respond to crowding in the manner they reported. It is certainly possible that in the interview context, they sought to manage their self-presentation as a 'good' Hajji. Ideally, future research would complement interviews with observational data (see Kadrouch-Outmany & Buitelaar, 2021).

However, with these caveats in mind, the present research provides *prima facie* evidence for the argument that any understanding of the experience of crowding must not only consider the way that social relations in crowds may become closer under a shared identity but must also attend to the beliefs and values associated with that identity and how these facilitate the maintenance of such positive social relations. Inevitably, these will differ according to the crowd identity under consideration. Some crowd identities may valorise proximity in ways that others will not (Riches, 2011), with the corollary that crowding will be experienced differently from crowd to crowd. Yet, the wider point remains. Not only do such identity-related beliefs and values shape how and when being pushed is judged positively or negatively, but they also shape the ways in which crowding scenarios that could be assumed to disturb social relations may be managed and the ongoing self-organization of crowds accomplished.

## AUTHOR CONTRIBUTIONS

**Enes Yalcin:** Conceptualization; methodology; data curation; investigation; funding acquisition; writing – original draft; writing – review and editing; formal analysis; project administration. **Nick Hopkins:** Conceptualization; writing – original draft; writing – review and editing; formal analysis; supervision.

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## CONFLICT OF INTEREST STATEMENT

The authors confirm that there are no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

## DATA AVAILABILITY STATEMENT

As the data may allow identification of the interviewee, they are not publicly available. However, interested parties may contact the authors to discuss our analyses.

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