

# Beyond borders: Exploring the mental, emotional, and spiritual significance of Hajj

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## Abstract:

For Muslims all across the world, the desire to participate in the religious rites of the Hajj (pilgrimage to Mecca) which stands as one of the five pillars of Islam is a heartfelt longing. It stands for the pinnacle of devotion and spiritual gratification, luring followers to the most sacred city in Islam for a life-changing journey of faith, comradeship, and submission to Allah. Muslims hold Mecca in the highest regard; it is a source of endless inspiration and devotion throughout their lives, as seen by their desire to undertake the Hajj and Umrah. The pilgrimage encompasses a series of synchronized rituals and acts of worship, each holding its unique spiritual meaning, and serve as a powerful testament to the universal nature of Islamic teachings. These rituals have a significant impact on Muslims' mental and spiritual well-being. Hajj elicits a spectrum of feelings; creates unity, humility, and thankfulness; and encourages self-reflection as well as personal development. It also instills a sense of spiritual fulfillment. Hajj transcends personal boundaries, strengthening a pilgrim's sense of connection to the larger Muslim community that rejuvenates their hearts and souls toward the teaching of Islam. Hence, it is imperative to explore in depth this transformative journey, illuminating the mental, emotional, and spiritual dimensions that bind Muslims across the globe.

## Keywords:

Crowds, Hajj, mental morbidity, pilgrimage, psychosocial

**H**ajj, the yearly pilgrimage to Makkah (Mecca), holds great importance as one of the five pillars of Islam, symbolizing a significant spiritual expedition undertaken by Muslims globally.<sup>[1]</sup> This amalgamation of rituals draws an annual attendance of up to 3 million pilgrims and is considered by many Muslims as a spiritual climax. Indeed, the word "Hajj" occurs 11 times in the Qur'an, with Surah Al-Hajj (The Chapter of Al-Hajj) dedicated to this sacred journey, emphasizing the central role and importance of the Hajj in Islam. Truly, the Hajj experience is more than just sacred duty and religious rites. It is a vital tool for promoting peace, harmony, and tolerance in an interconnected world while also including

political, social, economic, and intellectual dimensions.<sup>[2]</sup>

The emotional and social aspects of the Hajj are extremely important in shaping pilgrims' mental and physical health.<sup>[3,4]</sup> The gathering of so many heterogeneous people can impose out-of-character changes that influence their behaviors and impact their health and well-being [Figure 1].<sup>[3]</sup> Personal challenges that pilgrims face during the Hajj include heat exposure, physical exertion, overcrowding, sleep deprivation, fear of getting lost, and immersion in a sea of cultural differences.<sup>[5]</sup> These factors can cause physical and emotional stress, which can lead to anxiety, depression, and other mental health issues.<sup>[6]</sup>

Few studies have investigated the emotional and social dimensions of Hajj and how

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Figure 1: The large gathering of pilgrims in the grand mosque during Hajj

they affect pilgrims' mental health.<sup>[7-10]</sup> In this context, Clingingsmith's study contends that the Hajj has a profound effect on Muslims' religious beliefs and social attitudes. It promotes feelings of unity with other Muslims and contributes to a shift from localized belief into global Islamic practice, thereby increasing tolerance and peaceful inclination.<sup>[7]</sup> Together, these findings underscore the transformative powers of the Hajj, not only at the individual level but also within the broader context of global Islamic practice and unity.<sup>[7]</sup> Some studies reported a spectrum of emotions and observations ranging from positive behavior to potential risk. For example, concerns revealed during a focus group discussion with 11 Pakistani female pilgrims included crowd control and the pilgrim's ability to interact effectively with diverse cultures, shedding light on this previously underexplored aspect of the Hajj experience.<sup>[8]</sup> In this context, others believe that the Hajj has an important influence on individual ethical behavior while bestowing religious merit on those who successfully complete it.<sup>[9]</sup>

Many Muslims regard the pilgrimage to Mecca as the pinnacle of religious development and a means of achieving moral fulfillment and nurturing a close relationship with God (Allah). Completing the Hajj is a blessing, symbolizing one's devotion and closeness to the Divine.<sup>[10]</sup> As a result, the Hajj is a one-of-a-kind gathering that provides pilgrims with an experience they would not have had otherwise, in which pilgrims interact with various groups of people and attempt to embody the unity in which sacred things are revered. Despite extensive research on pilgrims' physical health during Hajj, little attention has been paid in the medical literature on the impact of the Hajj on pilgrims' mental health (psychosocial perspective) given the multifaceted nature of this topic.

In this review, we examine the emotional and social changes that occur during the dynamic experience of the Hajj, opening the door to address the health benefits and precautions of mass gathering during the Hajj. Each facet of these issues is addressed individually, encompassing psychosocial, mental, spiritual, and crowd-related aspects, notwithstanding their inherent interconnections.

## Literature Review

We conducted an organized literature search to find pertinent papers using PubMed, the Cochrane Library, and Embase. Abstracts and papers published in English between January 1990 and December 2023 were searched. The following keywords were used alone or in combination: *Hajj*, *psychosocial of Hajj*, *mental changes during Hajj*, and *crowd during Hajj*. The bibliographies of pertinent articles were also examined. We looked for more relevant information in the reference lists of original papers, narrative reviews, and clinical recommendations. Citations from the publications found through these searches were also examined and added as applicable. Table 1 provides a summary of the 19 qualifying studies included in this review.

### Psychosocial aspects of Hajj

The Hajj inherently provides a communal and international experience, presenting a distinctive opportunity for studying psychosocial interactions. These psychosocial dimensions encompass the diverse experiences and emotions that have considerable influence on the mindset, perspective, and well-being of Muslim pilgrims. Delving into these aspects of Hajj can allow pilgrims and communities to develop a profound appreciation of the sacredness of this religious rite and encourage working toward a more inclusive and supportive milieu that will benefit all Muslims embarking on Hajj.<sup>[9]</sup>

Comprehensive factors that contribute to the overall impact of the pilgrimage on individuals, societies, and economies should be identified and understood. In this context, an Indonesian study performed a comprehensive analysis of the experiences of pilgrims using observation and interviews.<sup>[24]</sup> The findings revealed the profound influence of spiritual-theological and psychological factors on pilgrims' overall Hajj experiences, highlighting the comparatively lesser impact of economic aspects.<sup>[24]</sup> This effect becomes evident when we consider one significant aspect of this journey: experiencing an in-person visit to the Grand Mosque and the Kaaba. These symbols of deep spiritual significance evoke intense emotions in pilgrims and mark a significant milestone in their spiritual journey,<sup>[11]</sup> leaving a lasting emotional imprint that shapes their spiritual journey beyond Hajj.<sup>[25]</sup> This encounter

Table 1: Summary of studies on psychosocial, mental, and emotional aspects of Hajj pilgrims

Authors	Date published	Type of study	Hajj year	Focus of the research	Total number of respondents included in the study	Nationality	Pre, during, post Hajj	Result of the study
Abd Rahman et al. <sup>[6]</sup>	2019	Qualitative-focus group discussion		Psychosocial aspects of crowd - female Pakistani pilgrims	11	Pakistan	During Hajj	A negative encounter brought on by a lack of understanding Barriers to communication brought on by varying cultural and linguistic backgrounds Selfish behaviors contributed to the presence of crowding
Al Ajarma <sup>[11]</sup>	2023	Narrative		Explore the pilgrimage experience in light of Birgit Meyer's idea of a "sensational form," which serves to emphasize the many ways in which pilgrims express and interpret certain Hajj trip moments		Morocco	Post-Hajj	By narrating their embodied experiences of the Hajj, pilgrims are able to memorialize sacred time and space upon their return At the group level, sharing the Hajj experience elicits feelings and emotions for both those who have previously performed the Hajj and those who have not
Alnabulsi 1 and Drury <sup>[9]</sup>	2014	Survey	2012	Social identification effect of crowd density on safety	1194	Mix	During Hajj	As crowd densities increased, feelings of safety decreased; this effect was tempered by a sense of belonging to the crowd and the impression that Muslims were the majority. As density rose, people with a high level of crowd identification actually felt more secure
Alnabulsi 2 <sup>[12]</sup>	2015	Interpretative phenomenological analysis	2011	Crowd psychology	70	Mix	During Hajj	While being surrounded by a large group of people might make one feel unsafe, this is countered by the sense of community and belonging that comes from being a part of a larger group of people, both of which are associated with feelings of safety
Alnabulsi 3 et al. <sup>[13]</sup>	2018	Survey Questionnaire	2012	Collective behavior	1166	Mix	During Hajj	The relationship between supporting others and having a common social identity was stronger in the plaza than in the mosque, pointing to the importance of site and space in regulating crowd cooperation
Alnabulsi 4 et al. <sup>[14]</sup>	2020	Verbal Survey Questionnaire	2012	Impact of Hajj experiences of self-change	1175	Mix	During Hajj	Positive emotional experience and the idea that the group represented the Muslim value of oneness predicted self-change factors through crowd identification
Alsolami 1 et al. <sup>[15]</sup>	2016	Survey Questionnaire	2015	Personal factors-crowd perception	165	African	During Hajj	The strongest association between control and mood was found in sociability When the ability to control the surroundings and mood levels is perceived to be improving, pilgrims interact or communicate more effectively

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Authors	Date published	Type of study	Hajj year	Focus of the research	Total number of respondents included in the study	Nationality	Pre, during, post Hajj	Result of the study
Alsolami 2 <i>et al.</i> <sup>[16]</sup>	2017	Survey Questionnaire	2015	Sustainable physical-crowding perception	473	Mix		Coding and signage are essential in reducing the perception of crowding The degree of perceived crowding was greatly impacted by disorientation reasons Pilgrim's perceived human crowding is an effective dimension in understanding the effect of crowding on pilgrims during Hajj
Alsolami 3 <i>et al.</i> <sup>[17]</sup>	2018	Survey Questionnaire	2015	Crowding perception	128	Southeast Asian	During Hajj	Psychiatric illnesses were present in 7.2% of people The most prevalent psychiatric disorders, including major depressive disorders (2.0%), agoraphobia (18.0%), psychotic disorders (1.4%), and suicide risk of 6.2% Considerably more likely to be female (P0.001), single (P0.012), at risk of suicide (P0.001), and using psychiatric drugs (P0.028)
Alzahrani <i>et al.</i> <sup>[18]</sup>	2021	A structured diagnostic interview	2016	Utilized MINI scale to diagnose psychiatric disorders	513	Mix	During Hajj	Information in the spiritual realm is imparted through a range of information modalities and associated practices
Caidi 1 <sup>[9]</sup>	2020	Qualitative-exploratory, interview		Information coping strategies of Hajj pilgrims	12	Mix	Post-Hajj	Through iterative and dynamic information processes, pilgrims were able to comprehend the Hajj landscape, how it changed them, and how they fit into it
Caidi 2 <sup>[9]</sup>	2019	Qualitative-exploratory, interview		Information	12		Post-Hajj	A movement from regional to global Islamic practice is brought about by the Hajj. It also fosters a more tolerant and peaceful disposition and improves views toward women and ingrained beliefs and opinions, such as those regarding religion and other people, can be changed
Clingingsmith <sup>[7]</sup>	2009	Survey	2006	Impact of the Hajj - religion and tolerance	1605	Mix	Post-Hajj	The pilgrim's sense of belonging is influenced by their travel to Mecca and Medina through forging a connection with space Highlights the Muslim mentality and sense of belonging in relation to home, a homecoming to a sacred location
Togustlu <sup>[21]</sup>	2017	Interview and observation		Focuses on the space of pilgrimage rituals, identifies the motivations for the 15 practices of the pilgrimage		Belgium - Turkish	Post-Hajj	The spiritual journey of the Hajj had no immediate influence on the mental health status of Hajj pilgrims; the prevalence of mental health problems was 0.6% prior to the journey and 0% afterward
Fateh <i>et al.</i> <sup>[22]</sup>	2019	Questionnaire	2011	Mental health	154	Iran	Pre- and post-Hajj	

Contd...

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Khan <i>et al.</i> <sup>[6]</sup>	2017	Descriptive	2016	Mental health	182	India	During Hajj	Acute recovery is facilitated by straightforward, nonpharmacological treatments such as social support and counseling in an appropriate sociolinguistic environment. Cumulative stress produces the complete spectrum of mental decompensation. Sleep, mood, and behavior were more frequently impacted (65%, 63%, and 59%, respectively). 28% of patients reported having physical symptoms.
Masood <i>et al.</i> <sup>[5]</sup>	2007	Descriptive	2005	Psychiatric morbidity	92	Mix	During Hajj	The category "Neurotic, stress-related, and somatoform disorders" had the highest percentage (34%) followed by "Mood disorders" (22%). 33% of patients reported having a medical problem. 79% of patients received medication advice, and 6.5% had to be admitted to a mental health facility.
Özen <sup>[23]</sup>	2009	Interview		To investigate the frequency of psychiatric disorders and sociodemographic characteristics of Turkish pilgrims in psychiatry department of Turkish Mecca Hospital	294	Turkish	During Hajj	Among the patients, depression (26.5%), adjustment disorder with anxiety (16.3%), and panic disorder (14%) were the most prevalent disorders. In 49% of the patients, anxiety disorders were identified either on their own or in co-morbidity with any other psychiatric disease. Nine percent of the patients displayed acute psychotic, schizophrenia, dementia, or manic symptoms that would make it difficult for pilgrims to conduct Hajj ceremonies.
Zulfa <sup>[24]</sup>	2015	Descriptive-qualitative approach		Psycho-condition, mental, and desires experienced or possessed by the pilgrims		Java, Indonesia		80% of the pilgrims invoke the pilgrims to gain new spirit of life, to have mental peacefulness and mental satisfaction in living their lives.

MINI=Mini-international neuropsychiatric interview

cultivates ongoing solemnity in performing the rites of worship and a sincere devotion to Allah.<sup>[10]</sup>

Regardless of status or ethnicity, the rituals of Hajj underscore unity, brotherhood, and equality among Muslims globally, fostering a sense of unity.<sup>[7]</sup> The Hajj journey entails rigorous preparation, including financial planning, health assessments, and establishing mental resilience, reflecting a holistic integration of spiritual, social, physical, and emotional dimensions.<sup>[26]</sup>

During the Hajj, pilgrims engage in a range of ritual activities at different holy sites emulating the actions of the prophet Mohammed (peace be upon him), which can evoke a spectrum of emotions including gratitude, euphoria, reverence, and humility, providing a deep and meaningful connection with the esteemed past. The serenity that accompanies these experiences culminates in a reassuring sense of achievement and satisfaction upon completing the Hajj rituals.<sup>[9]</sup> This noteworthy achievement bolsters self-esteem and self-confidence, resulting in an overall enhancement of psychological well-being.

Cooperation and promoting peaceful relationships with others are key aspects of group behavior during the Hajj, reflecting the profound impact of group dynamics and interdependence. One of the most noticeable effects of the crowd during Hajj is the pilgrims' sense of unity and connectedness, where the individual loss of responsibility and the perception of universality of behavior heavily influence crowd behavior and increase with crowd size.<sup>[27]</sup>

The sense of community and connection fostered during Hajj can improve an individual's mental health and well-being.<sup>[28]</sup> Pilgrims are provided with the opportunity to participate in the exchange of personal narratives, experiences, and hardships, giving rise to a distinctive milieu of collective sharing. This environment engenders a profound sense of solidarity, particularly for individuals who may experience feelings of isolation or seclusion in their everyday lives. The shared connection among pilgrims acts as a potent source of solace and motivation, offering further comfort and encouragement during their spiritual journey.<sup>[3,29]</sup>

The transformative social behavioral changes observed during Hajj can be explained through the lens of *contact theory*, a significant sociological principle.<sup>[30]</sup> Contact theory postulates that increased interaction among individuals from diverse backgrounds can result in improved understanding, diminished prejudice, and stronger social connections.<sup>[31]</sup> In the specific context of Hajj, contact theory is instrumental in forging connections among pilgrims with shared group identity. Collaborative

engagement with fellow pilgrims leads to more favorable perceptions of various groups. Fundamentally, feelings of being part of a larger whole during the Hajj journey contribute to improved perceptions of diverse groups.<sup>[14]</sup> The collective rituals of the Hajj introduce pilgrims to diverse cultural groups, offering Muslims an invaluable opportunity to establish connections with a broader Muslim community that, despite cultural differences, shares their profound beliefs and values.<sup>[7]</sup>

The social influence of Hajj may assist pilgrims in developing a steadfast spiritual resilience that extends well beyond the pilgrimage, as the emotional experiences, poignant memories, and shared narratives of the Hajj continue to exert a profound and positive impact on Muslim communities long after its conclusion.<sup>[10,32]</sup> The long-lasting impact on societies is evident from post-Hajj anthropological observations that inner experiences during Hajj influence individuals' roles within families and positions within local ethnic communities.<sup>[10,21,33,34]</sup> Moroccan pilgrims increased charitable actions, had greater community involvement, and demonstrated a strong dedication to Islamic principles, enhancing their society's social fabric.<sup>[10]</sup> Similarly, in Bangladesh, Hajj completion inspired religious enthusiasm and motivated others to pursue spiritual journeys. The pilgrimage was a source of inspiration for Turkish pilgrims residing in Belgium, encouraging them to enhance their religious practices and deeply influencing their daily observance of religion.<sup>[21]</sup>

In essence, the Hajj experience has a positive impact on pilgrims' psychological well-being, reinforcing their devotion to Islam and catalyzing continued growth in their religious journey. A study of 803 Indonesian pilgrims who had completed 3 years after pilgrimage assessed its effect on Islamic religious commitment using the Investment Model of Commitment.<sup>[32]</sup> The study found a positive association between Hajj satisfaction, Hajj investment, and Islamic commitment, indicating that Hajj contributes to strengthening the pilgrims' level of devotion to Islam.<sup>[32]</sup>

Essentially, the Hajj is a profound psychosocial experience that combines self-reflection on the part of the pilgrim, brotherhood among the community, and spiritual renewal. Travelers experience dramatic psychosocial adjustments as they navigate the sacred rites that have an impact on their relationships with the Divine and their fellow pilgrims. Obtaining a comprehensive grasp of the holistic essence of the Hajj encounter can be facilitated by recognizing and delving into its unfolding psychosocial components.

### Mental aspect of Hajj

Pilgrims often experience a range of mental changes due to the intense and transformative nature of the Hajj, with

its unique blend of physically demanding rituals and significant mental challenges.<sup>[4]</sup> Several days of physically demanding rituals can be exhausting, especially for old or unhealthy pilgrims.<sup>[5,6]</sup> In addition, the mental demands of Hajj are equally profound, requiring a state of spiritual devotion and mindfulness throughout the journey. They reflect on their faith, seek forgiveness, and renew their commitment to Islam. Heat-related complications of intense activity, large crowds, and hot weather may impair memory, concentration, and executive function, affecting pilgrims' mental health and overall well-being.<sup>[5-7,35]</sup> First-time pilgrims, older individuals, and those from rural backgrounds were more vulnerable to mental challenges. Behavior, mood, and sleep disturbance were commonly affected at rates of 65%, 63%, and 59%, respectively, in a cohort of pilgrims referred for mental health services during Hajj. Accordingly, adequate psychiatric services tailored to the well-being of pilgrims during their Hajj journey are warranted.<sup>[5]</sup> Gender differences in mental health were observed in a study of 1604 Pakistani pilgrims, where female pilgrims experienced higher distress levels and lower overall well-being compared with their male counterparts.<sup>[7]</sup> Different stress levels in female pilgrims were attributed to a shifting dynamic of gender equality during Hajj compared to customary Pakistan norms.<sup>[7]</sup> However, despite the emotional tribulations endured, overall life satisfaction remained positive among female pilgrims.<sup>[7]</sup>

A study of 136,000 Indian pilgrims during Hajj season 2016 found that 182 (1.3%) experienced psychiatric illnesses, with stress-related illnesses being the most common (45.7%), followed by psychosis (9.8%), insomnia (7.3%), and mood disorders (5.6%). Apprehension, disrupted sleep, anxiety, and a heightened fear of getting lost were the most commonly recorded symptoms. These symptoms were attributed to the demanding environment, extreme heat, and widespread expectation of incidents such as stampedes. Notably, while some pilgrims were administered psychotropic medications, they all successfully completed the Hajj pilgrimage.<sup>[6]</sup>

A study of 513 pilgrims conducted during 2016 Hajj revealed that 7.2% suffered from mental health conditions, with the majority diagnosed with major depression, agoraphobia, and psychotic disorders.<sup>[18]</sup> In another comprehensive study of 13,000 Turkish pilgrims, 294 (0.2%) sought psychiatric help. These individuals often had prior psychiatric history and lacked international travel experience. They reported a spectrum of mental health challenges encompassed major depression (26.5%), anxiety (16.3%), and panic disorders (14%), exhibiting a more pronounced prevalence among elderly individuals, those with limited educational backgrounds, and those

grappling with preexisting medical or psychiatric conditions.<sup>[23]</sup>

A study that assessed the mental health of 156 Iranian pilgrims before and after the Hajj using the General Health Questionnaire found no significant difference in their mental health.<sup>[22]</sup> As previously mentioned, a diverse array of mental shifts among pilgrims of various nationalities is evident, accentuating the intricate interplay between mental well-being and the pilgrimage experience.<sup>[4,5]</sup> When these two aspects intersect, a dynamic interplay emerges, shaping pilgrims' psychological experiences.<sup>[5]</sup> Therefore, the Hajj journey necessitates a significant amount of mental preparation to enhance understanding of the rituals and align one's intentions to face the journey's challenges while maintaining a positive attitude throughout the Hajj period. For this spiritual aspect of Hajj, developing mental discipline, self reflection, and a willingness to let go of negative attitudes and behaviors are required for this spiritual aspect of Hajj.<sup>[5,6]</sup> Alternatively, accepting Allah's invitation to visit Mecca and an immersion in worship during Hajj can induce a soothing effect on the mind, with pilgrims experiencing a profound sense of spiritual fulfillment and inner tranquility that pilgrims attain during Hajj contribute significantly to their mental and emotional well-being. Moreover, individuals often undergo emotional catharsis and a feeling of relief as they are encouraged to confess their sins and seek forgiveness.<sup>[6,7,34]</sup> This multifaceted experience has the potential to bring about positive changes at both the individual and societal levels. It is therefore, of paramount importance to address mental health during the Hajj by providing robust support and necessary resources to pilgrims. Access to proficient mental health practitioners, counseling services, and support groups is crucial in easing the challenges pilgrims may face on their sacred journey. Prioritizing pilgrim's mental health not only enhances individual well-being but also fosters a sense of collective security and accomplishment. By taking a proactive approach to mental health, the Hajj becomes an enlightening and spiritually enriching experience for all participants.<sup>[5,6,18]</sup>

### The spiritual and religious experience

For Muslims all over the world, Hajj is the ultimate act of devotion and submission to Allah and provides the opportunity for Muslims to unite and worship shoulder to shoulder before their Creator. The rituals of Hajj transcend the boundaries of language. They provide an avenue for millions of Muslims to express their deepest spiritual emotions and beliefs without uttering a single word. In an era dominated by verbal and written communication, Hajj stands out as a testament to the power of symbolic, collective actions that speak directly to the human soul. The profound significance

and spiritual immensity of the pilgrimage in Islam are best expressed by the supplication “The blessed Hajj has no reward but heaven.” In Mecca, pilgrims commence with the Tawaf ritual, circling the Kaaba in the center of the Grand Mosque counterclockwise seven times, making it one of the most crucial rituals of the Hajj. The urge to seek Allah’s mercy and forgiveness throughout the trip is motivated by the goal of heaven. This belief instills a profound sense of purpose and devotion among pilgrims as they embark on the transformative journey of Hajj, aspiring for eternal bliss and closeness to Allah and thereby embracing their authentic Islamic identity.<sup>[10]</sup> Pilgrims participate in rituals that serve as reminders of Allah’s supreme power, unity, and sovereignty. The entire journey is centered around the exclusive worship of Allah and the earnest pursuit of His forgiveness and blessings. Therefore, the rituals evoke intense emotions that go beyond what language is capable of conveying and link the participants to a vibrant spirituality. Their main objective is to offer genuine pilgrims an opportunity to have their sins completely forgiven upon their return. This connection aligns worshippers also with Abraham’s (Ibrahim’s) legacy, which encompasses a history of greatness, a higher purpose, and a community broader than what currently exists. The pilgrimage to Mecca begins with the intention to perform Hajj (niyyah). The first step of the Hajj involves entering the state of Ihram (consecration), which is a ritual purity. For men, this entails wearing two white pieces of cloth – one around the waist and the other draped over the shoulder. Women, on the other hand, wear modest attire that covers their entire body, with the exception of the face and hands [Figure 2]. The act of wearing Ihram symbolizes the equality of all pilgrims before Allah regardless of their background or social status and represents a state of ritual purity and



Figure 2: The ihram dress code for male and female pilgrims

sanctity.<sup>[7]</sup> The inauguration of the Hajj is heralded by the solemn enunciation of the “*talbiyah*,” an utterance of profound spiritual significance for Muslims. The *talbiyah* stands as a resolute declaration, encapsulating the pilgrim’s fervent intention and unwavering commitment to answer Allah’s summons, embarking on the sacred journey of Hajj. The pilgrims then detach from their daily routine and perform a series of rituals in Mecca to strengthen their faith and deepen their connection to Allah. In Mecca, pilgrims commence with the Tawaf ritual, circling the Kaaba in the center of the Grand Mosque counterclockwise seven times, making it one of the most crucial rituals of the Hajj. The Kaaba is believed to be Allah’s house and the very first house of prayer where Muslims praise their Creator. Tawaf represents the unity of Muslims worldwide, as they all face the same direction during prayer. Another important ritual is the Sa’i, which involves walking back and forth seven times between the hills of Safa and Marwa. This is in commemoration of Hajar, Prophet Ibrahim’s wife, who ran between the hills in search of water for her son Ismail (Ishmael). These physical actions mirror the spiritual journey and serve as a testament to penance, perseverance, and dedication. The pinnacle of Hajj culminates with pilgrims spending the day in prayer and supplication at Arafat, a plain outside Mecca followed by spending a night in Muzdalifa to pray and collect pebbles. These pebbles are then used for “*Ramy al-Jamarat*,” (stoning the devil) three pillars symbolically stoned to symbolize Abraham’s refusal of Satan’s temptations in the following 3 days. By engaging in these physical actions, the pilgrims feel as though they are engaging in a conversation with Allah, sensing they stand in His presence, especially with their deep belief that the Ka’bah is the House of Allah. They feel this interaction occurs directly before Allah.<sup>[24]</sup> Soon after, Muslims celebrate the Eid al-Adha festival, during which Muslims around the world commemorate Prophet Ibrahim’s sacrifice and willingness to obey Allah’s command. The Quran captures this significant trial with the verse: “O Ibrahim you have fulfilled the vision. Indeed, we thus reward the doers of good. Indeed, this was a clear trial.”-Qur’an 37:104. Pilgrims sacrifice an animal, usually a sheep or goat, and the meat is distributed to the poor and needy. The Hajj finally concludes with spending 3 days in Mina (the tent city) worshipping to Allah. These physical actions possess a profound spiritual meaning that reflects the soul’s journey, with the rituals serving as a conduit between the physical and spiritual realms. Through these deeds, Muslims seek purification and repentance, trying to seek Allah’s mercy and forgiveness, but also these spiritual practices and religious experiences have the potential to cultivate deep-seated empathy, compassion, and understanding within individuals, thereby encouraging more favorable social interactions and nurturing



enriching relationships with others.<sup>[7]</sup> As they carry out the religious rites associated with Hajj, the pilgrims have sincere and profound wishes. They sincerely and humbly implore Allah in the hopes that their sacrifices and devotion will be acknowledged. The ultimate goal is to achieve a state of “Hajj mabrur,” symbolizing a successful and well-received pilgrimage. Upon successfully completing the Hajj, individuals are granted the esteemed titles of “Hajji” (for males) or “Hajja” (for women). These titles serve as monumental symbols of their remarkable achievement and unwavering spiritual dedication. Representing elevated spiritual status and significant contributions to the faith, they command the utmost honor and respect within their community.<sup>[10,34]</sup> With everything considered, the Hajj journey, whether regarded from a spiritual, religious, or broader perspective, is consistently regarded as a turning point in one’s life, marked by a heightened sense of spirituality, a deepened connection to Allah, and a profound shift in perspective and priorities. The rigorous rituals, the collective devotion, and the magnificent atmosphere of the pilgrimage combine to create an atmosphere conducive to personal reflection, introspection, and profound inner growth that reinforces the idea of one Ummah, transcending geographical and social boundaries.<sup>[36]</sup> Many pilgrims witness the Hajj’s profound impact on their lives, which permeates every part of their existence and shapes their values, interpersonal connections, and worldview.<sup>[10,19,36]</sup>

It is also worth noting that the tents serve as a potent symbol of equality. Every pilgrim takes shelter under the same kind of tent, regardless of income or status, revealing the central Islamic ideals of equality and brotherhood. These tents’ transient nature serves as a powerful reminder to pilgrims of life’s transient nature. The basic conditions of tent dwelling promote a departure from worldly comforts. Accepting this basic way of life enables pilgrims to transcend materialistic desires and focus on introspection, prayer, and spiritual development. Hajj is therefore about a deep connection with Allah rather than only performing physical deeds and rituals. This deeply spiritual and reflective experience serves as a guiding light pointing the soul toward ultimate enlightenment.

### The impact of mass gathering of Hajj

The complexities of crowd dynamics during Hajj reveal unique perspectives on human behavior, unity, and spirituality on an unparalleled level.<sup>[3]</sup> In a group context, the central emphasis is on the conduct and feelings of individual participants.<sup>[20]</sup> Numerous studies have been conducted on the effect of crowd psychology on pilgrims during Hajj.<sup>[3,12-14]</sup> These studies provided an insight into the behaviors and emotions of millions of pilgrims from various cultures and backgrounds who gather in a small

area for pilgrimage to perform their rituals. Given the scale of Hajj, understanding the dynamics of crowd behavior is paramount. One pivotal concept that provides insight into the behavior of Hajj pilgrims is social identity.<sup>[27]</sup> According to the social identity theory, people categorize themselves into different social categories such as Muslim or Hajji which influence their relationships and behaviors. This affiliation with a group of pilgrims affects how an individual views themselves and behaves toward other pilgrims who belong to the same or different groups. The crowd, therefore, becomes an extended group, rather than a collection of strangers, leading to greater intimacy, trust, respect, cooperation, mutual influence, and helping behavior among the pilgrims.<sup>[3]</sup> Despite having a variety of national, ethnic, and linguistic backgrounds, pilgrims who are performing the Hajj largely identify as Muslims undertaking a sacred journey. This predominant identity as a pilgrim tends to recede other personal or group identities. When the sense of shared identity is heightened during Hajj, there is a greater likelihood of spontaneous supportive behaviors, even in challenging or potentially dangerous situations, such as the dense crowd conditions at the Grant Mosque and at the site for the symbolic stoning of the Devil ritual at the Jamarat pillars. High crowd densities can potentially lead to safety incidents. Consequently, the shared identity among Hajj pilgrims can serve as a protective factor. When identifying as a collective, individuals are more likely to conform to group norms, leading to more orderly behavior, even in tight spaces.<sup>[37]</sup> During the 2012 Hajj season, Alnabulsi and Drury conducted a study on 1195 pilgrims in the Holy Mosque and the plaza in Mecca. Their analysis found that, rather than crowd density, a shared social identity with the crowd was a key factor in reported safety and cooperation.<sup>[3,13]</sup> This sense of unity was especially pronounced in the plaza, suggesting that specific locations can greatly influence cooperative behaviors in large gatherings.<sup>[14]</sup> They provided evidence that the feeling of a collective social identity played a pivotal role in this supportive conduct, surpassing the influence of location or the density of the crowd.<sup>[3,13]</sup> Being a part of such a sizable and diverse group of people may therefore be both exhilarating and difficult. Nevertheless, irrespective of the magnitude of the crowd, individuals who experience a sense of control are likely to react positively to the situation due to the feelings of belongingness and unity that arise from being part of a psychological crowd.<sup>[16,38]</sup> Notably, the efficient infrastructure, such as coding and signage, combined with reduced spatial anxiety, decreases crowding perception among local pilgrims.<sup>[16]</sup> It was also found that among African pilgrims, there is a significant link between a sense of control and sociability.<sup>[15]</sup> While, among Southeast Asian pilgrims, the feelings of crowding play a crucial role in understanding the impact of congestion during the Hajj.<sup>[17]</sup> Moreover, harmonious relationships and cooperation with others,

as well as related values such as unity and peace, are spiritual values that are both visible and expected during Hajj.<sup>[13,39]</sup> According to mediation analysis, one reason why some people felt safer was the perception that other people in the crowd were supportive.<sup>[3]</sup> Additionally, the group norms of pilgrims during Hajj play an essential role in maintaining harmony and order amid the vast gathering.<sup>[13,40]</sup> There is a cognitive shift as pilgrims start to base their actions on shared norms, values, and understandings. The white Ihram worn by every pilgrim during many rituals symbolizes a collective dedication to upholding the sanctity of the journey.<sup>[13]</sup> This acts as a guiding norm, fostering harmony, reducing conflict, and encouraging mutual reverence. With Islam's teachings emphasizing virtues like patience (Sabr) and tolerance (Tasamuh), pilgrims are consistently reminded to embody patience throughout their pilgrimage. These acted behaviors influence the overall demeanor of the Hajj crowd and reinforce these virtues as group norms. The established norm of mutual assistance encourages a collaborative spirit, emphasizing the value of aiding fellow pilgrims, especially the elderly, and the sharing of resources like food and water. As the rituals of Hajj, whether it be the Tawaf or the symbolic stoning of the devil in Mina, are performed in a specific sequence. This orchestrated rhythm fosters a sense of unity and synchrony in actions, minimizing chaos. Finally, Islam advocates for peace, particularly during sacred endeavors like the Hajj, prevailing group norms strictly discourage aggression or violence, even when provoked.<sup>[41]</sup> In other words, group behavior and emotional experiences are a result of a shared self rather than a loss of self. This is a shift from individual personal identification to group-based social identification, which in turn influence the pilgrims' behavior.<sup>[13,42]</sup> Conversely, although the massive gathering during Hajj shows the commitment and togetherness of Muslims, it also presents difficulties due to the large number of pilgrims. The high density and the urgency to perform the rituals can lead to bottlenecks, increasing the potential for stampedes.<sup>[42]</sup> This viewpoint becomes particularly evident in catastrophic incidents, such as the 2015 mina tragedy during Hajj, often described as a "panic" and "stampede." This can be attributed to pilgrims during Hajj often relinquishing their individual identities, acting with less predictability, and being influenced by prevailing emotions or ideas.<sup>[43,44]</sup> Furthermore, pilgrims vary widely in age, health, and physical ability, leading to differing paces within the crowd. Especially when faster-moving groups encounter slower-moving ones, there is a potential for accidents.<sup>[45]</sup> The extreme heat, coupled with the physical exertion of the rituals, can lead to heat-related illnesses, making some pilgrims faint or become less aware of their surroundings, thereby inadvertently contributing to potential accidents.<sup>[35,46]</sup> Therefore, the Saudi government's investment in technology and infrastructure for the

Hajj pilgrimage reflects a commitment to ensuring a seamless and meaningful experience for millions of pilgrims. By leveraging modern transportation, digital platforms, and advanced crowd management systems, especially those involve massive gatherings, such as the multilayered Jamaraat bridges. These investments have not only enhanced the efficiency of the Hajj but have also contributed to the overall well-being and satisfaction of pilgrims.<sup>[47,48]</sup> Nevertheless, the inherent challenges of organizing such a sizable event highlight the importance of ongoing readiness and attention.

Put differently, social identity theory provides valuable insights into the dynamics of the crowd during the Hajj. As pilgrims come together in Mecca, their shared identity as Muslims on a sacred journey fosters a powerful sense of unity, trust, and support. Understanding these psychological mechanisms can help in better managing the crowd and enhancing the overall experience of the Hajj pilgrimage for all participants.

## Conclusion

The Hajj pilgrimage stands as a profound testament to the resilience of the human spirit, the depth of religious devotion, and the power of communal solidarity. By navigating the mental and social challenges inherent in this sacred journey, pilgrims emerge spiritually renewed, psychologically strengthened, and socially connected. Few studies have been published to date on the impact of Hajj on pilgrims' mental health. This review underscores the need for continued exploration into the transformative potential of Hajj, aiming to enhance the well-being of future pilgrims and nourish our understanding of this pivotal Islamic practice. Therefore, studies of the dynamic psychosocial aspects of Hajj will also assist professionals in charge of Hajj administration in better understanding the pilgrim's social identities which could help to interact with them in a way to keep their psychological health in mind and empower them to allocate resources effectively.

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## Conflicts of interest

There are no conflicts of interest.

## References

1. Gatrad AR, Sheikh A. Hajj: Journey of a lifetime. *BMJ* 2005;330:133-7.
2. Raj R, Bozonelos D. Pilgrimage experience and consumption of travel. *Int J Relig Tour Pilgrimage* 2015;3:38-45.
3. Alnabulsi H, Drury J. Social identification moderates the effect of crowd density on safety at the Hajj. *Proc Natl Acad Sci U S A* 2014;111:9091-6.
4. Hankir A, Chariwala Z, Siddique U, Carrick FR, Zaman R. Hajj and the mental health of Muslim pilgrims: A review. *Psychiatr*

- Danub 2019;31:290-3.
5. Masood K, Gazzaz ZJ, Ismail K, Dhafar KO, Kamal A. Pattern of psychiatry morbidity during Hajj period at Al-Noor specialist hospital. *Int J Psychiatry Med* 2007;37:163-72.
  6. Khan SA, Chauhan VS, Timothy A, Kalpana S, Khanam S. Mental health in mass gatherings. *Ind Psychiatry J* 2016;25:216-21.
  7. Clingsmith D, Asim IK, Kremer MR. Estimating the impact of the Hajj: Religion and tolerance in Islam's global gathering. *Q J Econ* 2009;124:1133-70.
  8. Abd Rahman S, Sulong J, Mat Saad Z, Mohd Mahudin ND, Ahmad Hatta Z, Mohd Hashim IH, *et al.* Identifying the psychosocial aspects of crowd during pilgrimage: The experiences of a group of Pakistani female Hajj pilgrims (Mengenalpasti Aspek Psikososial Orang ramai Yang Bersesak Semasa Haji: Pengalaman Kumpulan Jama'ah Haji Wanita Pakistan). *J Islam Asia* 2019;16:416-35.
  9. Joll Christopher M. Muslim Merit-Making in Thailand's Far-South. Muslims in Global Societies Series. Berlin: Springer; 2011. p. 4. Available from: [https://www.academia.edu/1975047/Muslim\\_Merit-making\\_in\\_Thailands\\_Far-south\\_Springer\\_2011](https://www.academia.edu/1975047/Muslim_Merit-making_in_Thailands_Far-south_Springer_2011). [Last accessed on 2020 Nov 10].
  10. Al Ajarma K. Hajj: Muslim pilgrims refashioning themselves. *Religions* 2021;12:36.
  11. Al Ajarma K. 'Beyond words': Moroccan pilgrims' narrations about their ineffable Hajj experiences through stories about the senses. In: *Narrating the Pilgrimage to Mecca*. Ch. 11. Leiden, The Netherlands: Brill; 2023.
  12. Alnabulsi H. The Crowd Psychology of the Hajj. PhD Thesis, University of Sussex, UK; 2015.
  13. Alnabulsi H, Drury J, Templeton A. Predicting collective behaviour at the Hajj: Place, space and the process of cooperation. *Philos Trans R Soc Lond B Biol Sci* 2018;373:20170240.
  14. Alnabulsi H, Drury J, Vignoles VL, Oogink S. Understanding the impact of the Hajj: Explaining experiences of self-change at a religious mass gathering. *Eur J Soc Psychol* 2020;50:292-308.
  15. Alsolami B, Embi MR, Enebuma WI. The influence of personal factors on Hajj crowd perception among African Pilgrim Group in Mina. *Indian J Sci Technol* 2016;9:1-9. [doi: 10.17485/ijst/2016/v9i46/107123].
  16. Alsolami B, Embi M, Enebuma W. The influence of sustainable physical factors on Hajj crowd perception among internal pilgrim group in Mina. *Chem Eng Trans* 2017;56:409-14.
  17. Alsolami B, Embi MR, Majrashi AA, Karban AS. Assessing the effects of crowding perception and gender among Southeast Asia Pilgrims in Mina, Saudi Arabia. *Int J Eng Technol* 2018;7:1137-41.
  18. Alzahrani AS, Alqahtani AM, Elmorsy SA, Alhazm M, Mahd HA, Albarakati B, *et al.* Prevalence of psychiatric disorders in Hajj pilgrims using MINI as a diagnostic tool. *J Public Health (Berl)* 2021;29:169-75.
  19. Caidi N. "I was not willing to risk my hajj": Information coping strategies of hajj pilgrims. *Journeys Int J Travel Travel Writ* 2020;21:41-62.
  20. Toch H. Psychology of crowds revisited. *Contemp Psychol* 1988;33:954.
  21. Toguslu E. The meaning of pilgrimage (Hajj): Re-shaping the pious identity of Belgian Turkish Muslims. *Islam Christ Muslim Relat* 2017;28:19-32.
  22. Fateh M, Mousavi SA, Sohrabi MB, Arabi M, Emamian MH. The effect of hajj trip on mental health: A longitudinal study. *J Relig Health* 2020;59:1319-26.
  23. Özen Ü. Sociodemographic characteristics and frequency of psychiatric disorders in Turkish pilgrims attending psychiatric outpatient clinics during Hajj. *Dicle Med J Cilt* 2009;37:8-15.
  24. Zulfa M. Multidimensional phenomena of Hajj: Study of Javanese pilgrims. *Indones J Islam Muslim Soc* 2015;5:135-62.
  25. Juraev Z, Ahn YJ, Hyun K. Place and Behavior: Unveiling the Behavioral Dynamics of the Hajj Pilgrimage. Gwangju, South Korea. 25 June 2023. doi: 10.20944/preprints202306.1709.v1.
  26. Odessey DE. *Islamic Holistic Philosophy*; 2017.
  27. Tajfel H, Turner J. The social identity theory of intergroup behavior. In: Worchel S, Austin WG, editors. *Psychology on Intergroup Relations*. 2<sup>nd</sup> ed., Chicago: Nelson-Hall; 1986. p. 7-24.
  28. Wolfe M. *One Thousand Roads to Mecca: Ten Centuries of Travelers Writing about the Muslim Pilgrimage*. New York City, New York: Grove Press; 1997.
  29. Neville F, Reicher S. The experience of collective participation: Shared identity, relatedness, and emotionality. *Contemp Soc Sci* 2011;6:377-96.
  30. Pettigrew TF, Tropp LR. A meta-analytic test of intergroup contact theory. *J Pers Soc Psychol* 2006;90:751-83.
  31. Allport GW. *The nature of prejudice*. Reading, MA: Addison-Wesley; 1954.
  32. Utomo S, Scott N, Jin X. The impact of Hajj satisfaction on Islamic religious commitment: A theoretical framework. In: *Islamic tourism management of travel destinations*. 2018. p. 55-67.
  33. Frey NL. Stories of the return: Pilgrimage and its aftermaths. In: Badone E, Roseman S, editors. *Intersecting Journeys: The Anthropology of Pilgrimage and Tourism*. Illinois, USA: University of Illinois Press; 2004. p. 89-109.
  34. Islam MT. The impact of Hajj on the society of Bangladesh. *Hamdard Islam* 2021;42:1-2. Available from: <https://www.hamdardislamicus.com.pk/index.php/hi/article/view/9>. [Last accessed on 2024 Mar 31].
  35. Schlader ZJ, Gagnon D, Adams A, Rivas E, Cullum CM, Crandall CG. Cognitive and perceptual responses during passive heat stress in younger and older adults. *Am J Physiol Regul Integr Comp Physiol* 2015;308:R847-54.
  36. Caidi N. Pilgrimage to the Hajj: An information journey. *Int J Inf Divers Incl* 2019;3:44-76.
  37. Drury J, Winter G. Social identity as a source of strength in mass emergencies and other crowd events. *Int J Ment Health* 2003;32:77-93. Available from: <https://www.jstor.org/stable/41345071>. [Last accessed on 2023 Dec 12].
  38. Dion D. Personal control and coping with retail crowding. *Int J Serv Ind Manage* 2004;15:250-63.
  39. Shariati A. *Hajj: Reflection on its Rituals*. Houston, TX: Islamic Publications International; 2005.
  40. Neville FG, Novelli D, Drury J, Reicher SD. Shared social identity transforms social relations in imaginary crowds. *Group Process Intergroup Relat* 2022;25:158-73.
  41. Malcolm X's (Al-Hajj Malik El-Shabazz) Letter from Mecca. Available from: <https://www.islam.uga.edu/malcomx.html>. [Last accessed on 2023 Aug 17].
  42. Sim F, Mackie P. The language of the masses. *Public Health* 2015;129:1429-30.
  43. Hopkins N, Reicher S. Adding a psychological dimension to mass gatherings medicine. *Int J Infect Dis* 2016;47:112-6.
  44. Relihan DP, Jones NM, Holman EA, Silver RC. Shared social identity and media transmission of trauma. *Sci Rep* 2023;13:11609. <https://doi.org/10.1038/s41598-023-33898-2>.
  45. *A History of Hajj Tragedies* | World News. London; 2006. Available from: <https://www.theguardian.com>. [Last accessed on 2013 Aug 29, Last retrieved on 2023 Jul 31].
  46. Yu W, Vaneckova P, Mengersen K, Pan X, Tong S. Is the association between temperature and mortality modified by age, gender and socio-economic status? *Sci Total Environ* 2010;408:3513-8.
  47. Mnasri C, Farhat A. Numerical simulation of the flow of crowds at the Jamarat Bridge during the Annual Hajj event. *Open J Fluid Dyn* 2016;6:321-31. [doi: 10.4236/ojfd.2016.64024].
  48. Felemban E, Sheikh AA, Naseer A. Improving response time for crowd management in Hajj. *Computers* 2021;10:46.