

Anticipating the future of Hindu crematoria in urban India – A cross-sectional study

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Abstract

Background

India's rapid urbanization has led to urban isolation and a weakening of traditional community support systems, particularly noticeable during bereavement. This isolation impacts emotional well-being and highlights the need for thoughtfully designed grieving spaces. Traditional Indian crematoria, often utilitarian and emotionally stark, lack elements that support healing and remembrance.

Objectives

This study explores the potential of integrating passive recreation spaces within crematorium premises as a means to support the bereaved. It focuses on understanding perceptions of mourners and how such spaces can promote emotional well-being through the lens of Indian philosophy.

Methodology

A qualitative descriptive cross-sectional study was conducted through an online survey using Google Forms. A total of 31 participants who had experienced bereavement between six months and one year before the survey, and had exposure to Nigambodh Ghat crematorium in Delhi, were included. The questionnaire assessed their emotional responses and views on the inclusion of passive recreational spaces within crematorium grounds.

Results

The majority of participants expressed support for incorporating passive recreational spaces in crematoria. These were perceived as valuable in providing emotional relief, supporting mourning processes, and offering a serene setting for remembrance and future visits. Many participants emphasized that such spaces could reduce emotional distress and foster a sense of continuity and peace.

Conclusion

The study reveals that mourners are receptive to the idea of enhancing crematorium environments with therapeutic landscapes. Such integration could address emotional needs often overlooked in conventional cremation settings.

Recommendation

To address the identified urban issues that have become a reality of the contemporary urban situation, appropriate solutions in the form of integrated therapeutic passive recreational spaces should be considered by involving landscape architects and urban policymakers to integrate contemplative and therapeutic ambience within crematoria. This would allow inclusive urban public spaces and align with cultural philosophies of remembrance.

Keywords: Urban isolation; Crematorium, Grief, Passive recreation spaces, Memorial; stakeholders, Community, Mental wellbeing

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Introduction

In the past several decades, India has undergone rapid urbanization, with 31.2% ^[14] of its urban population in 2011, which increased to 34.47% in 2019 ^[24]. As per the United Nations, her urban population is further projected to increase to a staggering 50% by 2050 ^[25]. Such fast-paced population has given rise to a plethora of gnawing issues, such as unplanned and overpopulated cities, and has affected the mental health of its populace negatively.

^[7] Unprecedented urbanization creates unprecedented

consequences, including urban isolation ^[1], one of such consequences. In Indian cities, urban isolation is caused due to factors such as nuclear family, lack of social interaction, lack of work-life balance, non-native/ migrant unacceptance, trust issues, and greater social media involvement. ^[1] This is contrary to the traditional Indian way of life, where important events from life, right from birth to death, encompassing all celebrations and mourning, involved the entire community ^[22]. Death, especially in the Indian Hindu context, is not just a matter of tragedy but also a series of serious and elaborate

religious rituals ^[22], unlike most of its counterparts, where the last rites of a deceased are relatively less elaborate. This scenario fits the erstwhile India very well, where the sense of community involvement ^[22] was much stronger making it easier not just to carry out the elaborate months long rituals seamlessly but also to alleviate and deal with the emotional suffering of the mourners ^[12] unlike our contemporary times where communities, families and individuals are fragmented due to urban isolation ^[1] altering mourning, too, into a fragmented affair. In India's western counterparts, commemorating the loss of valuable life has found its due place in the form of passive recreational spaces ^[14] in various formats such as memorials, war memorials, memorial gardens, contemplation spaces, and adaptive reuse of cemeteries, etc. ^[15]

Indian crematoria are used by people of various faiths such as Hindus, Sikhs, Buddhists, and Jains. Owing to a higher population, it is the Hindus who extensively use the cremation facilities, and this paper will focus on the Hindu philosophies about death wherever applicable. Notably, Hindu crematory grounds or crematoria are suited to the execution of the rituals around the deceased ^[22], ^[12] but not the bereaved. The common rituals practiced in the event of a Hindu's death are prescribed in the sacred verses *Garuda Purana*, a primary Hindu religious text consisting of 18000 verses, which was documented more than a thousand years ago ^[4]. More than a thousand years later, the bereaved mourner situated in an Indian metropolitan city is most likely suffering due to urban isolation.

Beginning of an unconventional Indian crematorium design

A symbolically designed crematorium which intertwines diverse spatial zones, such as parks, has already been completed by d6thD Design Studio in their completed project, Udan Crematorium, a 1000 sq. m., situated in Amalsad village, in the western Indian state of Gujarat. ^[10] This project was commissioned by Saribujrang Nirvandham Trust, and it also addresses the need for public spaces by incorporating areas such as children's parks within the premises. ^[10] However, as per Nordh et al, multifunctional and recreational use of spaces in the funerary regard may be socially unacceptable and disrespectful to some. ^[15]

Any format of architectural design always begins with defining the user ^[23] in order of hierarchy of the proposed design. For instance, although various teaching and non-teaching staff are also prominent users of a play school, yet, the design of the school gives the foremost importance to the spatial and ambient requirements of the primary users, who are the toddler students, including but not restricted to the criteria of anthropometrics, activities, functions, proxemics, circulation, and aesthetics suited to toddlers.

According to the same universal design logic, considering that the crematorium ground or crematorium exists for the smooth functioning of the last rites of the deceased ^[20], it is natural for the space within its premises to be mainly intended for the rituals concerning the dead. Yet, on defining the users of a crematorium, the bereaved is the

primary living user and therefore the most important living stakeholder.

Grief and Hinduism

The bereaved is a unique user type from the perspective that he does not have any unique anthropometric requirements. His requirements are more of an intangible nature as he suffers from grief, a natural outcome of the loss of life. ^[19] Depending on the circumstance, the bereaved may experience complicated grief, leading to a lower level of well-being. ^[19] Modern psychologists have also started considering grief as not a pathological condition but a natural, tragic phase of life that should be addressed with sympathy by showing solidarity with the bereaved in their time of grief. Accommodating and allowing grief and bereavement to manifest naturally, rather than pathologically treating them, promotes well-being and a better approach towards life as per the concepts of positive psychology. ^[19]

Hinduism adheres to the concept of Moksha (salvation) as the ultimate in attainment, until which the soul reincarnates in cycles. ^[21] Death is significant in its synonymy with an end as well as a beginning. The individual soul has no beginning and no end, even though the physical body passes away as per the Bhagavad Gita, Chapter 2:27. ^[17] The soul is mentioned as *dehi*, the possessor of the body termed as *deha*. And the soul, just as it changes forms of the body, in one lifetime (childhood, youth, old age), similarly it continues to perform the consistent act of change of many bodies as mentioned in Bhagavad Gita, Ch. 2:22. ^[17] This makes death of utmost significance since it is not just suggestive of an end but also signifies the passage to the afterlife. Therefore, the funeral ceremonies that are observed or practiced in Hindu society are directly related to what people believe about life and death. Consequently, Hindu funeral procedures are some of the most intricate customs. These deep philosophical ideas effectively allow "narrative reconstruction, posttraumatic growth, positive emotions, and spirituality as means to promote well-being" ^[19] in people who have experienced the loss of a loved one by allowing grief to find its true space.

Healing

Nature, greenery, as well as gardening, have been believed to have a therapeutic effect ^[8] on the grieving who is going through different stages of grief. A natural landscape setting can be a valuable facilitator for passive recreation.

Stakeholders

Inclusion of the concerned community by exploring the stakeholders' concerns is crucial to effective and appropriately designed spaces. ^[5] To ensure the same, engaging in a dialogue and interacting with possible users is extremely crucial. ^[13] It is an important tool for ensuring inclusivity. Gathering data by asking the correct users about their opinions and perceptions is an effective way of ensuring that all the stakeholders benefit at large.

This study explores the possibility of appropriate integration of passive recreation in the setting of a conventional Indian crematorium.

Materials and methods

Study design

The study followed a descriptive, cross-sectional design using an online survey method to gather data on the perceptions of bereaved individuals regarding the integration of passive recreational spaces within crematorium premises. The survey was conducted in July 2023 using Google Forms and aimed at generating a descriptive analysis of the emotional and spatial needs of the bereaved within the cremation setting.

Study setting

The study was carried out with a locational and emotional convergence criterion. The locational setting was Nigambodh Ghat, Delhi—one of the oldest, busiest, and most prominent crematoria in the city, situated on the banks of the Yamuna River.^[18] This site offers both traditional wood-based and eco-friendly CNG-based cremation facilities, including free services for underprivileged populations (figure 1).

The emotional context was opted to be the occurrence of death of a relevant person within the previous one year to six months^[26] of the conduct of the survey; within July 2022 and December 2022 (figure 1). The relevance may be either emotional attachment or family relations. The definition of family, however, is not just restricted to parents, spouse, siblings, or households of the same bloodline sharing one common kitchen (figure 1). But in the cultural context of Indian (especially Hindu) families, the idea of a family may also include in-laws, families of siblings, first and second cousins, including their families, and similarly siblings, first and second cousins, including their siblings on their in-laws' side.

Participants and eligibility

Inclusion criteria

- Individuals aged 18 and above.
- Exposure (either partial or complete) to Nigambodh Ghat crematorium.

- Emotional or familial attachment to a deceased person cremated at the above location within the past six months to one year.
- Willingness to participate and provide consent via the online form.

Exclusion criteria

- Individuals with no exposure to Nigambodh Ghat.
- Those who had not experienced bereavement within the defined time frame.
- Individuals unwilling or unable to provide informed consent.

Questionnaire

A questionnaire was prepared considering the design process attribute of need identification as a pre-design component for architectural or landscape architectural design, and to observe stakeholder participation.^[16] While the study aimed to generate a descriptive analysis in determining whether the need for a passive recreation space in a crematorium is sensible and desirable, the questionnaire was prepared through a thematic process due to the sensitive nature of the topic, to ensure a crisp and empathetic set-up. Potential participants were identified by taking into consideration the event of death. Subsequently, about 100 adults were approached, either personally or by phone, to briefly familiarize them with the premise of the study. Out of them, 46 willingly interacted with free-flowing bilingual (Hindi and English) clarity. These interactions led to the identification of certain vocabulary codes. From this and the literature, a questionnaire spread across 12 questions pertaining to demography, beliefs, and experiences pertaining to bereavement, situation in the study setting, and perceptions and opinions was prepared. The codes collected from the initial interaction ensured specific closed-ended options to the answers only with the exception that the user's innermost experience or feeling was concerned. The questionnaire was prepared in Google Forms in English and was tested by 3 willing volunteers of varying ability in the language. Further, the questionnaire was revised by altering some words and phrases for better comprehension of potential respondents with a rudimentary understanding of the language.

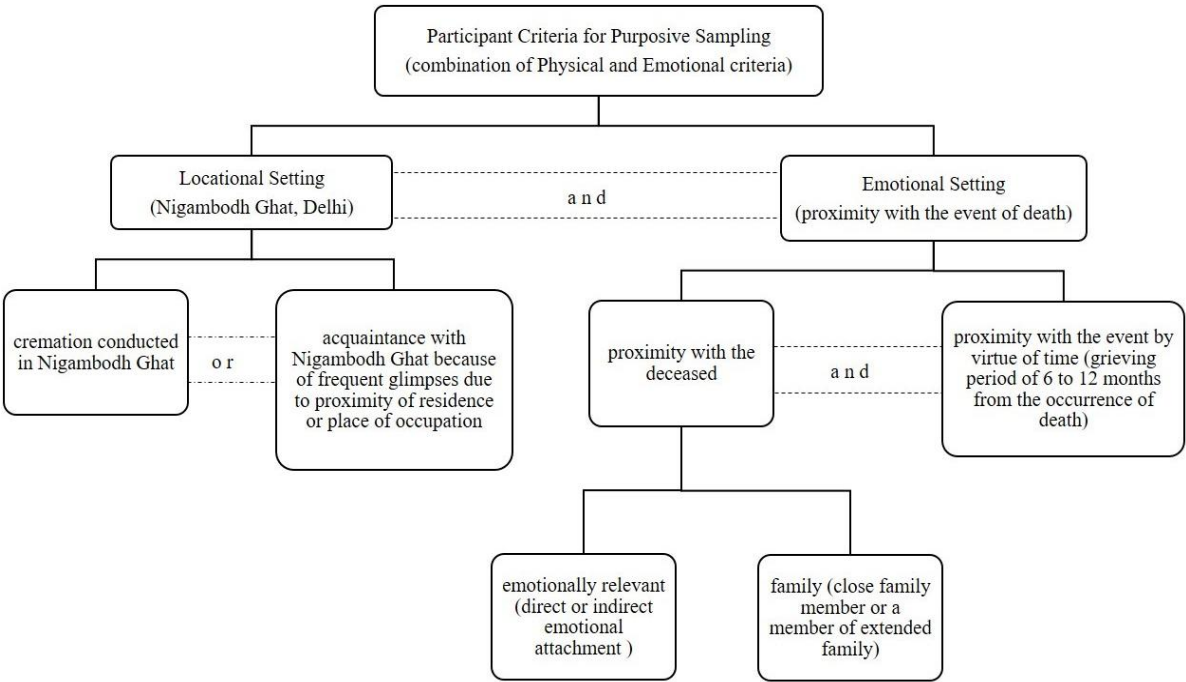


Figure 1. Flowchart showing participant criteria for purposive sampling (Source: Author)

Sampling

A purposive sampling was done with the intention that each participant fulfilled at least one criterion of each of the locational as well as the emotional trait, as explained in the study setting. The same is illustrated in Figure 1. The potential participants were approached personally or by phone. After having made the premise of the study clear to them, they were also encouraged to snowball the sample in their familiar circle that fulfilled the study criteria.

Data collection

Data was collected with the help of the online survey conducted through Google Forms distributed by an anonymous link. During the 1st week of July 2023, potential participants were made aware that the purpose of the research was not for commercial benefits in nature, that their information would be kept anonymous and hence confidential, and that their attempt and participation in the questionnaire indicated that they were giving consent to be a part of the research. If they left any question field blank, they were encouraged to feel free to contact the author by phone, in the event of the possibility of any question having caused them any emotional or moral crisis. The data was collected in the last week of July 2023.

Bias

To reduce potential selection bias, participants were selected based on clearly defined inclusion criteria linked to both emotional and locational relevance. Snowball sampling was encouraged within those boundaries to

prevent overrepresentation of any one social group. Language accessibility was addressed by ensuring the questionnaire was bilingual in English and Hindi, and tested for clarity. Emotional bias was considered by providing participants with the option to seek support if any question caused distress.

Data analysis

Descriptive qualitative analysis was used to describe, interpret, integrate, and synopsise the data collected from the 12 qualitative items of the questionnaire.

Results

Out of the 46 participants who were initially expected to respond, 32 respondents attempted the Google Form quiz, out of which 31 participants completed the survey forms. Due to the confidential and anonymous nature of data collection, and the possibility of snowballing and attempts by family members or roommates attempting from the same device or account, it was not possible to accurately determine the response rate. The data collected from these 31 resulting Google Forms was analyzed.

The respondents’ data, which was summarized with the help of a spreadsheet, is presented below in Table 1. This is followed by the individual analysis of each question item. Some of the questions (the grammar and vocabulary of which were tweaked during the design of the questionnaire to suit the respondents possessing rudimentary English comprehension) underwent slight grammatical changes, ensuring that the essence of the questions remains the same. The supporting graphical representations were generated in MS Excel.

Table 1: Table depicting responses obtained from the online questionnaire of 12 items from 31 participants

<i>Premise: Natural Characteristics</i>		<i>n</i>	<i>%</i>
Gender			
	male	16	51.61290323
	female	15	48.38709677
<i>Premise: Life stage</i>		<i>n</i>	<i>%</i>
Age group			
	18-24 years	27	87.09677419
	25-34 years	3	9.677419355
	35-44 years	1	3.225806452
<i>Premise: Association with the idea of grief consequent to death</i>		<i>n</i>	<i>%</i>
In your lifetime how have you ever experienced someone's death?			
	Yes	27	87.0967742
	No	4	12.9032258
If so, who exactly is it then?			
	Someone in their family	14	45.16129032
	Someone close to you	13	41.93548387
	Death of acquaintances	2	6.451612903
	Someone unrelated whose news of the death affected them	2	6.451612903
<i>Premise: Socio-philosophical association with death</i>		<i>n</i>	<i>%</i>
How were the last rites done for the deceased person?			
	Cremation	24	77.41935484
	In-Ground Burial	2	6.451612903
	Above-Ground Entombment	3	9.677419355
	Uncommon Hindu last rites	2	6.451612903
Do you believe that there is life after death?			
	Yes	24	77.41935484
	No	7	22.58064516
<i>Premise: Practical association in the context of the event of death</i>		<i>n</i>	<i>%</i>
Did you ever visit a crematorium?			
	Yes	20	64.51612903
	No	11	35.48387097
Were you allowed entry?			
	yes	19	61.29032258
	no	3	9.677419355
	to some places only	6	19.35483871
	not applicable, didn't visit	3	9.677419355
<i>Premise: Experiential perception- Ambience-centered</i>			
<i>Intimate Experience</i>		<i>n</i>	<i>%</i>
If yes, how was your experience while visiting a crematorium?			
	uneasy	13	41.93548387
	peaceful and quiet	6	19.35483871
	depressing	4	12.90322581
	traumatizing	3	9.677419355
	Numb	1	3.225806452
	Not been to one	1	3.225806452
	didn't respond	3	9.677419355

Table 1(contd. from previous page): Table depicting responses obtained from the online questionnaire of 12 items from 31 participants

<i>Opinion consequent to experience</i>		<i>n</i>	<i>%</i>
Do you believe there should be a place or something around the cremation ground to go back and live the memories of the person?			
Yes		14	45.16129032
No		6	19.35483871
Maybe		11	35.48387097
<i>Emotion-generated opinion</i>		<i>n</i>	<i>%</i>
Did you feel negative or repelled energies/ vibe while visiting the cremation?			
yes		18	58.06451613
no		12	38.70967742
didn't respond		1	3.225806452
<i>Emotion generated perception</i>		<i>n</i>	<i>%</i>
To change the discomfort around cremation, do you think there should be retracing such spaces to make it less depressing and more comfortable for visitors			
Yes		19	61.29032258
No		5	16.12903226
Maybe		7	22.58064516

Premise: Natural characteristics

Out of the 31 respondents who completed the survey, almost equivalent males (n=16; 51.61%) and females (n=15; 48.39%) participated, indicating that although the Indian funerary rituals are centered around men as principal mourners, at a human and urban level, women are similarly concerned and impacted by the idea of death. The eldest son is the chief mourner in the event of death. As per traditional customs, the involvement of males throughout the funerary rites of the dead is the common

norm.^{[22],[6]} This is changing and was especially seen during the pandemic in cases where male members of a family had perished and the bereaved females performed the last rites.^[16] The nearly equal male and female participation indicates an increasing possibility of social change in the context of centuries-old male-centric customs.

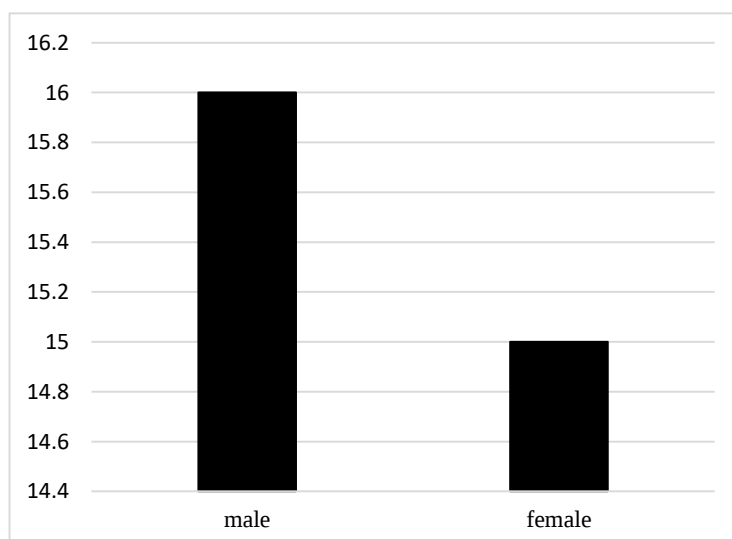


Figure 2: Chart showing nearly equal participation of males and females

Premise: Life stage

The majority of the respondents (n=27, 87.1%) belonged to the age group of 18 to 24 years whereas only 3.22 %

(n=1) and 9.68% (n=3) from the age groups of 35 to 44 years and 25 to 34 years respectively participated in the study although at the outset of the study, adults from diverse age groups were approached. This indicated much

greater concern and keenness regarding funerary and mourning practices amongst the youngest adults, who showed a taboo-free non conservative attitude regarding a

study of this nature. This younger age group displayed a greater comfort level and willingness towards addressing a topic that is related to a premise about a bereaved person's mental well-being.

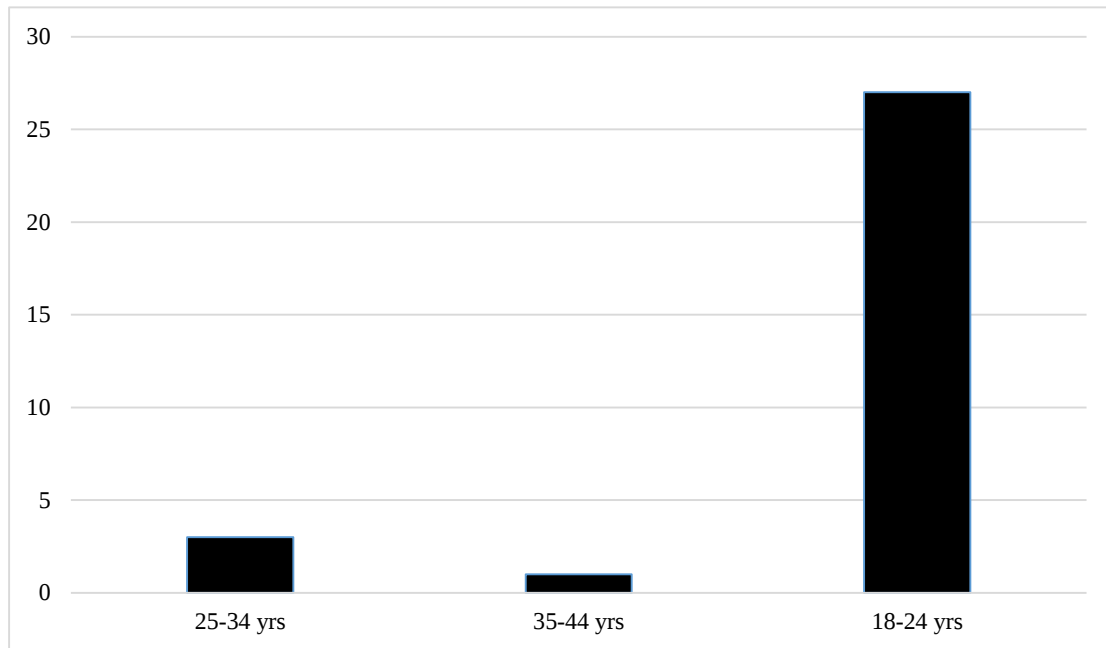


Figure 3: indicating the age groups of the respondents in years

Premise: Association of grief consequent to death

It was questioned whether the participant had come across the event of someone's death. This question is intended to

orient the respondent towards the idea of death, not necessarily the exact event of somebody's dying, but a more subjective idea of having witnessed someone's passing away in the form of the updates or even news of a death that the respondent related to.

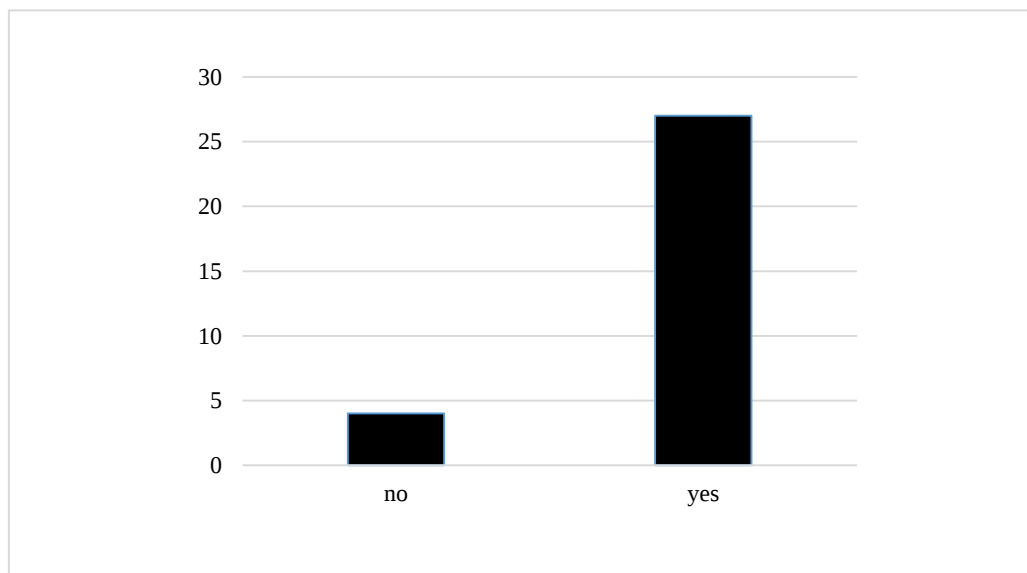


Figure 4 shows responses on asked where the participant has come across any significant death.

Deemed association: Most of the respondents (87.1%; n=27) believed that they felt intimately about the event of an incidence of death (refer to figure 4). The question

addressed the emotional conviction that whether or not the respondent physically came across the event of the death, they experienced the emotional ordeal closely.

Still, 12.9% (n=4) revealed that they did not feel realistically connected with the event of death and were rather detached by its occurrence by answering no to the question. In this regard, although it is a human trait to find death a painful occurrence, yet, as per the Hindu philosophy of the soul reincarnating in cycles, death is significant in its synonymy with an end as well as a beginning.

Defining the association: The participants largely identified with being close to the deceased, whom they

respectively recognized for the survey. Most of the respondents referred to people who were either someone whom they considered as part of their family (45.16%, n=14) or someone that they were directly emotionally close to (41.93%, n=13) (refer to Figure 5). As the questionnaire was progressing to a more personal emotional domain, it could be observed that a few participants referred to the death of acquaintances (6.45%; n=2) or someone that they were not related to anyhow, yet whose passing away affected them (6.45%; n=2).

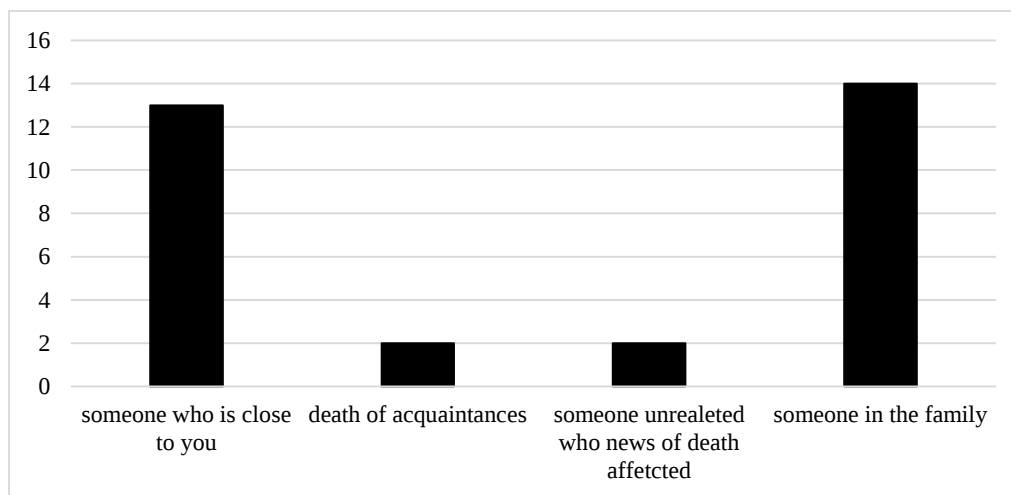


Figure 5 showing the responses of the participants' association with the deceased

Premise: Sociophilosophical association with death

Ritualistic setting for the funeral. A sharp majority (77.42%; n=24) of the respondents said that the last rites of the deceased were done by cremation. Whereas few referred to the funeral done by in-ground burial (6.45%; n=2) or above-ground entombment (9.68%; n=3). Notably, it was also revealed that a few respondents, who

left the fields blank, eventually also referred to unconventional burial such as drowning (6.45%; n=2) (refer to figure 6).

The funerary method of burning on wooden platforms is the traditional method, which is elaborate, whereas nowadays, CNG cremation facilities are also becoming popular, especially in Nigambodh Ghat.^[12] These have much less consumption in terms of the environment, time, and money.

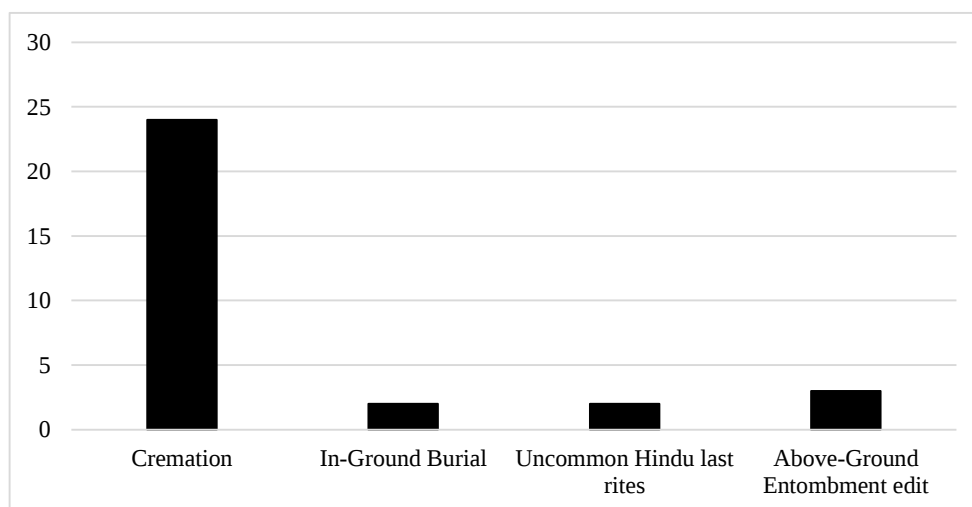


Figure 6 shows the responses regarding the method of last rites of the referred deceased.

Fundamental concept of life and death (refer to Figure 7)

On being asked whether the respondent believed in life after death, most (77.42%; n=24) of the respondents believed in life after death, whereas 22.58% (n=7) did not believe in life after death. The participants already showed a philosophical

inclination towards the fundamental facts of life. Culturally, they were in harmony with a belief system that has certainly influenced them. Life after death is essentially a prevalent Hindu concept that revolves around the idea of karma and the soul journeying through many lifetimes until it reaches salvation.^[21]

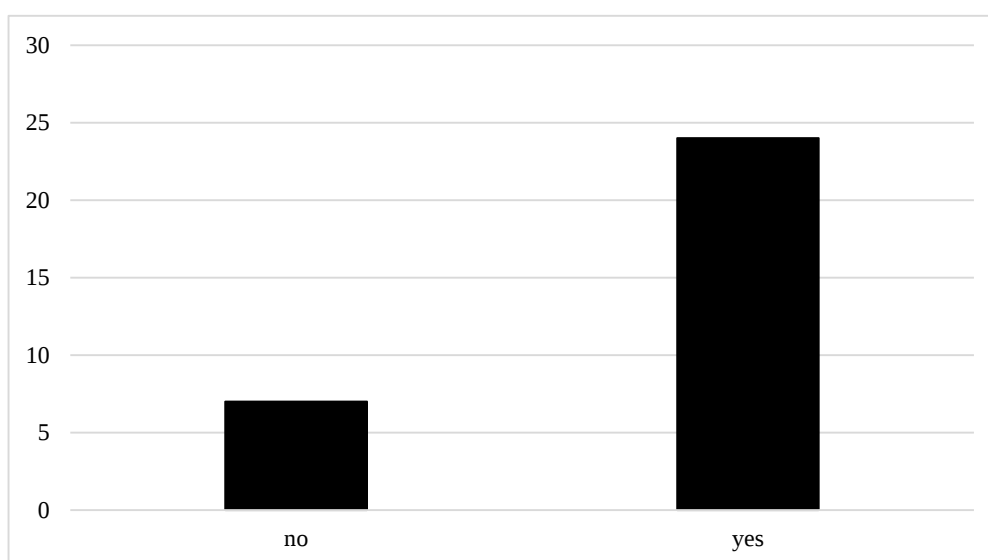


Figure 7 shows the results of belief in life after death

Premise: Practical association in the context of the event of death

64.52% (n=20) agreed to have visited a crematorium, whereas 35.38% (n=11) denied. In this experiment, the respondents were asked to visit Nigambodh Ghat. (refer to Figure 8)

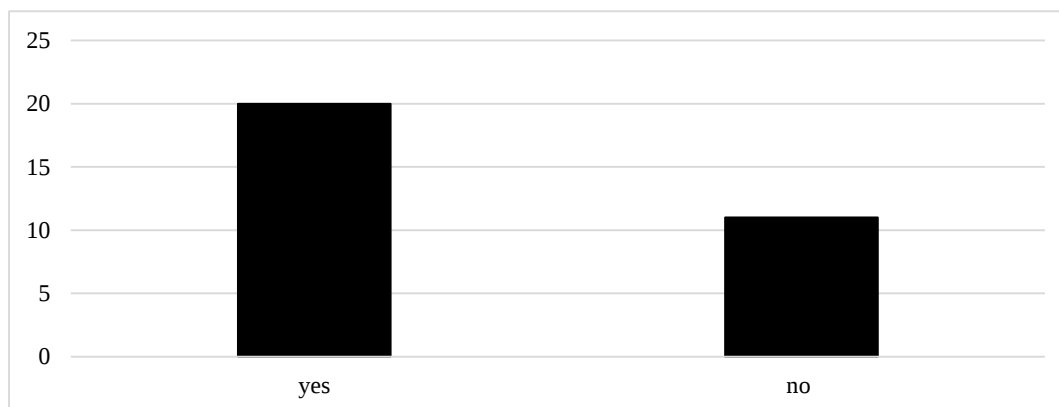


Figure 8 shows the results of whether the respondent visited the crematorium.

Further, upon asking, 61.29% (n=19) reported that they were allowed into the crematorium, and 19.35% (n=6) were allowed to some places in the crematorium only. 9.6% (n=3) said that they were not allowed to enter the crematorium, and, consequent to the response to the preceding question, where 9.685 (n=3) left the field blank, it was supposed that they did not enter the site. It could be interpreted that respondents' being allowed entry to the crematorium fully or partially is subject to interpretation, as they previously mentioned that they did not visit the crematorium. In this regard, the respondent may possibly be referring to some other instance of a crematorium visit.

It can also be construed that in certain previous responses, in a similar regard, that were negative meant so due to not visiting every nook and corner of the site. Also, being allowed within the premises of a Hindu crematorium is predominantly a matter of case-specific dos and don'ts, for example, in the case of being a female or in some cases, family superstitions.

Notably, all the participants had had at least a fleeting glimpse of the crematorium Nigambodh Ghat due to the proximity of either their residence or place of occupation. Therefore, the yes and no responses in this regard are certainly subjective. It is common to see dead bodies

being ritualistically taken into the Nigambodh Ghat premises when one is in the vicinity. For the sake of the study, the participants were encouraged to visit it if they had not or at least to make the attempt to visit it and stop by its entrance portal, and observe the ambience if they

cannot bring themselves to enter inside the premises. It could be observed from the visit to the Ghat that although there are no particular restrictions to visiting Nigambodh Ghat, it is common practice not to loiter within the entire premise as a gesture of courtesy and common decency.

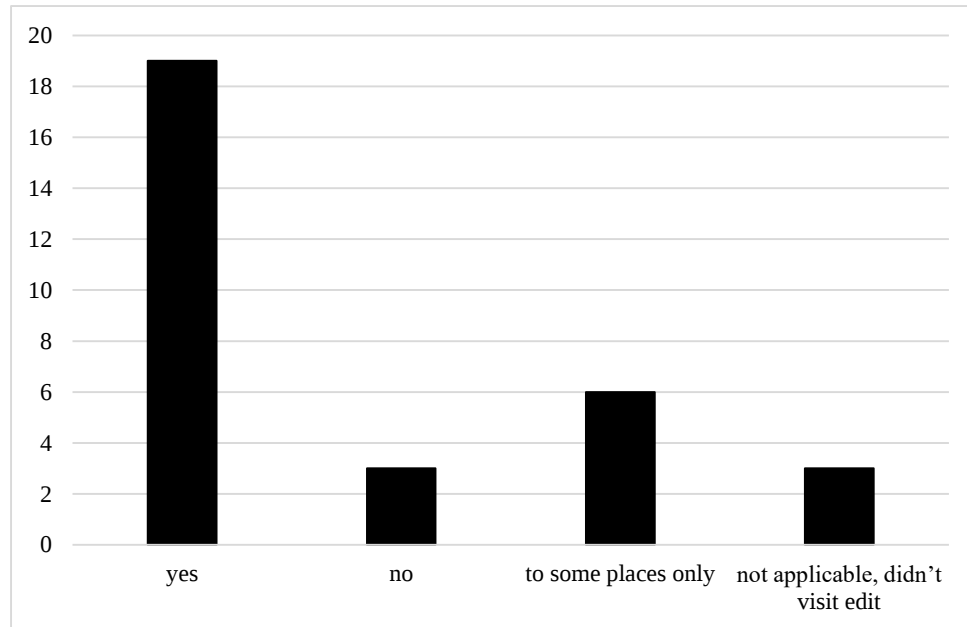


Figure 9 shows the results of whether respondent was allowed entry if they visited the crematorium.

Premise: Experiential perception: Ambience-centered

Intimate Experience (refer to Figure 10)

Most (41.94%; n=13) of the respondents said that they experienced uneasiness while visiting the crematorium, 12.09% (n=4) reported that they found the experience

depressing, and 9.68% (n=3) admitted to finding the experience traumatizing. There was also a reported (3.23%, n=1) experience of having felt numbness. 12.09% (n=4) of respondents did not mention the feeling they experienced.

Contrary to these reports, 19.35% (n=6) of responses reported that their experience while visiting the crematorium was peaceful and quiet.

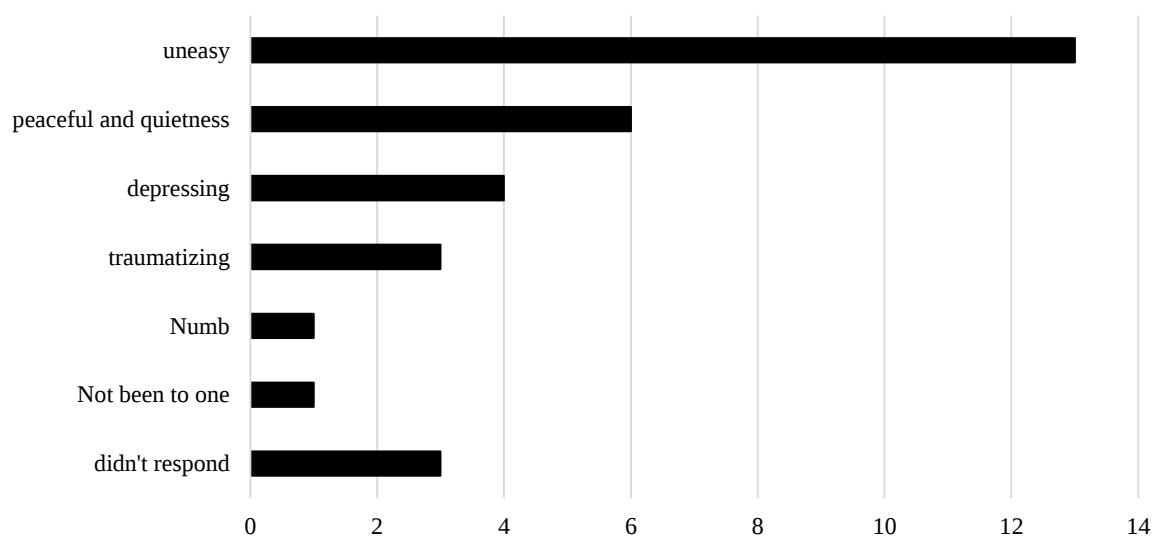


Figure 10 shows responses to the question "How was your experience while visiting a crematorium?"

Premise: Opinion consequent to experience (refer to Figure 11)

After having disclosed their most personal experience as generally of uneasiness, numbness, trauma, or depression, yet on being questioned whether there should be a place or something close to the crematorium ground to go back and live the memories of the deceased, most (45.16%; n=14) respondents believed that there should be such a place close to it. A significant (35.48%; n=11) amount of response was maybe due to the possibility of a similar

option, which indicated a stronger cumulative possibility. Whereas 19.355 (n=6) did not believe in the requirement of such a place.

As the concept of a memoriam garden, healing landscapes, contemplation spaces, etc., are generally unheard of within the common Indian population, the words of the question were kept extremely simple in order to maintain convergence between architectural terms and layman's terms. Also, the words "around the crematorium ground" were used to indicate a space next to the crematory facility and not a space outside the premises of the crematory ground.

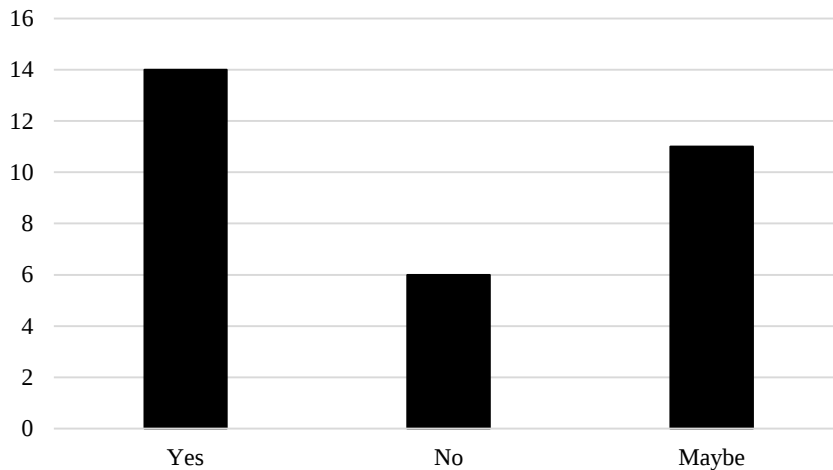


Figure 11: Shows results to the question "Do you believe there should be a place or something around the cremation ground to go back and live the memories of the person?"

Premise: Emotion-generated opinion (refer to Figure 12)

Most of the respondents (58.06%; n=18) said that they felt negative energy or repelled while visiting, whereas 38.70% (n=12) did not find the crematorium to have any negative effect on them. 1 respondent (3.23%, n=1) left the field blank.

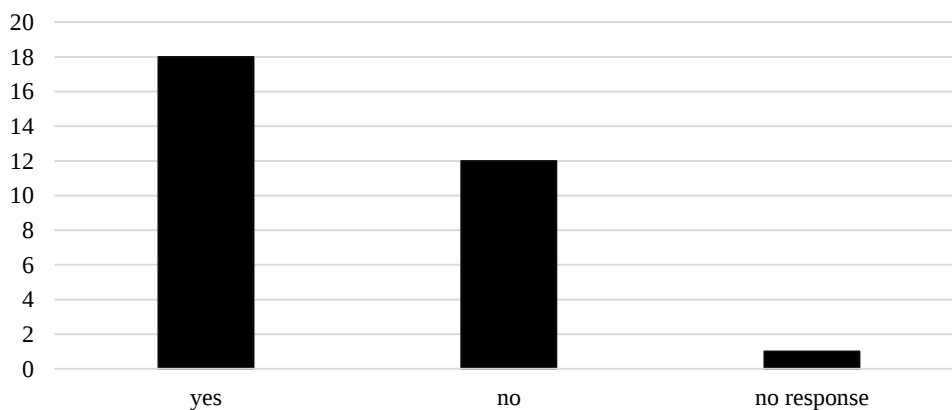


Figure 12: Results of the response to the question whether the respondent felt any negative emotion while visiting the crematorium

Premise: Emotion-generated perception (refer to Figure 13)

Most (61.29%; n=19) respondents thought that there should be spaces in or around the crematorium for passive recreation aimed at contemplation and emotional healing, which should be accessible at any time of the year, irrespective of the occurrence of death.

A significant amount (22.58%; n=7) considered the possibility of such spaces, whereas 16.13% (n=5) were against the idea.

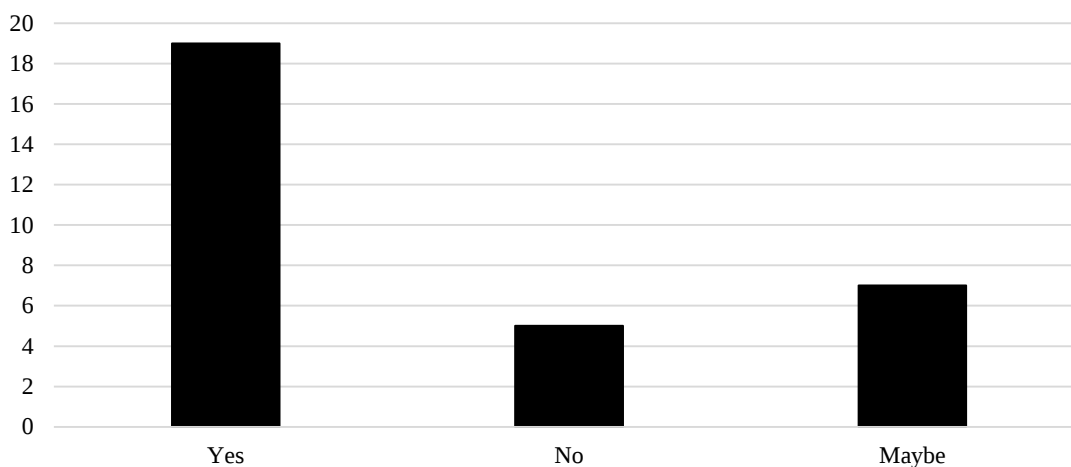


Figure 13 responses to whether they should be integrated with the crematorium for passive recreation should be for later visits.

Table 2: Summary of key results from the online survey (n = 31)

Variable	Response Categories	% (n)
Gender	Male / Female	51.61% (16) / 48.39% (15)
Age Group	18–24 / 25–34 / 35–44	87.10% (27) / 9.68% (3) / 3.23% (1)
Experience of Death	Yes / No	87.10% (27) / 12.90% (4)
Relationship to Deceased	Family / Close person / Acquaintance / Unrelated	45.16% (14) / 41.94% (13) / 6.45% (2) / 6.45% (2)
Type of Last Rites	Cremation / Entombment / Burial / Other	77.42% (24) / 9.68% (3) / 6.45% (2) / 6.45% (2)
Belief in Life After Death	Yes / No	77.42% (24) / 22.58% (7)
Visited Crematorium	Yes / No	64.52% (20) / 35.48% (11)
Entry to Crematorium	Full / Partial / Denied / Did not visit	61.29% (19) / 19.35% (6) / 9.68% (3) / 9.68% (3)
Experience at Crematorium	Uneasy / Peaceful / Depressing / Traumatizing / Numb	41.94% (13) / 19.35% (6) / 12.90% (4) / 9.68% (3) / 3.23% (1)
Need for Memorial Space Near Crematorium	Yes / Maybe / No	45.16% (14) / 35.48% (11) / 19.35% (6)
Felt Negative Energy at Crematorium	Yes / No / No response	58.06% (18) / 38.71% (12) / 3.23% (1)
Support for Passive Recreational Spaces	Yes / Maybe / No	61.29% (19) / 22.58% (7) / 16.13% (5)

Discussions

This study aimed to explore the possibility of integrating therapeutic and contemplative landscapes within traditional Indian crematoria to support mourners in urban areas. The core findings from this research revealed multiple emotional, cultural, and design-related considerations that can guide future interventions.

Firstly, the study identified a clear willingness among stakeholders for more accessible and inclusive urban crematoria, particularly regarding gender neutrality in grieving spaces. This aligns with the broader objective of reimagining crematoria as holistic environments that cater not just to ritualistic obligations but also to emotional and psychological healing. Young urban Indians, in particular, demonstrated a growing openness toward conversations around death, indicating a societal shift that supports the study's rationale for integrating commemorative spaces within crematoria.

A significant finding was that death is perceived as an intimate and often private experience, not limited to familial relationships. The study revealed that mourners often include acquaintances and distant associates, who might not be formally acknowledged during traditional rites but who still experience profound emotional responses. This observation supports the need for spaces that cater to "silent mourners"—individuals who may not participate in rituals but still require emotional closure. While Indian urban memorials such as Jallianwala Bagh and Gandhi Smriti commemorate politically or historically significant deaths, private grief for personal losses lacks architectural or landscape representation, underscoring a gap in current design practice.

The emotional environment of crematoria, particularly those like Nigambodh Ghat, was also found to be distressing for many visitors. The ambience, marked by multiple visible pyres, can cause traumatic responses even among those culturally conditioned to accept the philosophical idea of the soul's immortality^[2,14]. This is further exacerbated by the lack of contemplative space, which limits the capacity of mourners to process grief meaningfully during or after the rites. The Master Plan of Delhi 2021 briefly mentions the inclusion of "landscape areas" in crematoria^[3], but remains vague about their purpose and emotional utility, thus highlighting the need for clearer guidelines.

When interpreting these results, it becomes evident that the current crematorium layouts in Indian cities do not address the emotional or psychological needs of mourners, despite cultural acknowledgment of the significance of death and rituals. Importantly, participants in the study supported the idea of returning to the crematorium after the funeral to find solace and contemplate, in keeping with Hindu beliefs that "actual death" occurs during cremation itself^[9]. Such behaviour necessitates designated memorial zones that are non-ritualistic in function but spiritual and healing in purpose. Comparatively, Western countries have long integrated therapeutic landscapes such as grief gardens, memorial parks, and contemplative zones within or adjacent to crematoria to offer a space for emotional release, remembrance, and healing^[14]. These interventions are based on research showing that environmental design

influences emotional responses and can mitigate mental distress during bereavement^[11]. The present study thus supports similar integrative landscape strategies tailored to Indian sociocultural and ritualistic complexities, especially given the urban fragmentation of contemporary families and reduced communal grieving.

In conclusion, the study reinforces that an emotionally considerate crematorium design is both necessary and feasible. Stakeholders support a more humane and integrated space, one that accommodates mourning, remembrance, and healing beyond the immediate ritual. Such designs can transform traditional crematoria into inclusive, multifunctional urban spaces that honor the full spectrum of human emotion associated with death and loss.

Generalizability

The findings may be cautiously generalized to urban Hindu crematorium users in Delhi, particularly younger mourners, but may not represent all demographic groups or rural settings.

Conclusion

Grief, bereavement, and mourning are natural outcomes at the event of a loss of life during any human being's lifetime. The rapid urbanization in India has brought with it urban isolation and, consequently, a lacuna in the traditional social healing catalysts that helped during and post-bereavement. A suggestive community-centric solution in the form of an integrated crematorium design, where suitable due is given to passive recreation spaces for therapeutic purposes related to various tasks of grieving and remembrance within the crematorium premises, was presented to the stakeholders. The narrative that could be derived from the descriptive study indicates that a strong need for addressing the existing lacunae of lack of inclusivity, sensitivity, and appropriate space, literally and metaphorically, within an Indian urban crematorium premise is detected for catering to the unique needs of the stakeholders' mental well-being. The stakeholders are prepared for a suitable remedial change within the crematorium premises that would consequently benefit the urban community. Further, as landscape areas are already suggested within crematoria in the Master Plan of Delhi 2021; rather than having any random children's park or unplanned chunk of greenery, it would only benefit the community if such designated landscaped areas are in the form of passive recreation spaces integrated within the proposed as well as existing crematoria with characteristics compliant with the emotional needs of the affected members of the community within the urban context of Delhi.

Limitations

The study's limitations include a small sample size, purposive sampling, potential emotional bias, and its confinement to one geographic location and cultural context.

Recommendations

To address the identified urban issues that have become a reality of the contemporary urban situation, appropriate solutions in the form of integrated therapeutic passive recreational spaces should be considered by involving landscape architects and urban policymakers to integrate contemplative and therapeutic ambience within crematoria. This would allow inclusive urban public spaces and align with cultural philosophies of remembrance.

Conflict of interest

The author declares no conflicts of interest related to the conduct or publication of this study.

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Data availability

The data supporting the findings of this study are available from the corresponding author upon reasonable request, in line with ethical confidentiality assurances.

Author biography

Ar. Jahnabi Kalita is an Assistant Professor at the Department of Architecture and Planning, Indira Gandhi Delhi Technical University for Women, specializing in landscape architecture with a strong involvement in promoting inclusive urban spaces and community-centric design.

Author contributions

Ar. Jahnabi Kalita conceptualized the study, designed the questionnaire, conducted data collection and analysis, and prepared the manuscript; survey support was acknowledged from collaborating architects.

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List of abbreviations

CNG – Compressed Natural Gas

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