

Recognizing Dimensions and Characteristics of Spiritual Urban Space*

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ABSTRACT

Human existence includes two spiritual (immaterial) and material (physical) aspects, and since cities and urban spaces are living areas for humans, planning, and studying cities' future requires paying attention to both existential aspects of humans, including physical and economic dimensions, as well as mental and spiritual aspects. The materialistic perspective of modernism and insufficient attention to the spiritual and ethical principles, methods, and teachings in academic associations, urban developments, and construction of urban spaces have resulted in a spiritual crisis in the cities. The challenge of modern cities is how to link the spiritual and inner dimensions of humans to the urban planning and design of urban space and influence the quality of human perception and experience of urban space. This study aims to identify the dimensions and characteristics of spiritual urban spaces and examine the role of spirituality in the construction of urban spaces. In the literature review section, a systematic review through the Scopus Database has been done by searching two terms "urban space" and "spirituality" and the snowball technique is adopted to identify the studies related to the spirituality topic. To scrutinize the theoretical framework and formulate the conceptual model, a semi-structured interview was done with 51 professors in urban planning, architecture, sociology, Quran and Hadith sciences, psychology, and philosophy disciplines based on the Delphi Technique. Moreover, in-depth interviews were done with 21 citizens (based on data saturation). Ultimately, references and interviews are analyzed based on the thematic analysis, and a network of themes is extracted. The results show that spiritual urban space appears in a platform based on religious and non-religious beliefs (background), which creates the social and cultural identity of that city providing the field for the advent of spiritual urban space. This space provides some dimensions that each consists of some components as follows: a functional dimension that includes one of the components of sacred and identity-based uses and sacred ways and routes. The sacred or identity-based physical architectural dimension includes meaningful materials, colors, and public art. The perceptual dimension consists of cultural, social, and religious signs and symbols, sacred and meaningful soundscapes, and communities belonging to urban spaces. Visual dimension includes cultural landscape, green landscape, sense of glory, sanctity, unity, and humility. Social and cultural dimensions include cultural identity and various specific cultural, religious, and social events in a coherent multicultural society. The natural dimension consists of environmental and natural identity and natural elements, and the time (temporal) dimension includes timely social and cultural uses and events, and sense of time in historical contexts. Experience and perception of spiritual urban spaces have different influences on individuals (subsequent effects), which include desirable relationships with God, self, nature, and others (society).

Keywords: Spirituality, Spiritual Urban Space, Spiritual City, Spiritual Environment.

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1. INTRODUCTION

Modernism has brought many considerable achievements and progress for human life in various fields of science, knowledge and technology, economy and trade, art and philosophy, education and communication, health, food, and housing, which have led to welfare and well-being in human life. However, these achievements have also had adverse effects, including air pollution, climate changes and global temperature rise, environmental damage, consumerism and materialism (Ardalan 2016), terrorism, population growth and human migrations, and economic inequality in the world. Therefore, underlying aspects of human existence, including non-material and spiritual dimensions have been ignored in the creation of cities and urban spaces. Hence, an enormous challenge is occurring with considerable threats to the psychological and physical health and welfare of humans, nature, and other creatures, and which spirituality crisis is one of them (Bermudez 2016). Human satisfaction is not actualized in the modern market-based materialistic world or the incoherent and incompatible postmodern political world, because a major part of human satisfaction is subject to the spiritual and non-material dimensions. Despite the power and development of modernism, therefore, religion is still accepted as the ethical, spiritual, existential, and aesthetical pole by most people around the world (Tanyi 2002). According to the international survey of WIN-Gallup (2012) about religion and atheism, 59% of the world population is religious, 23% is non-religious (but are believers), and 13% is unbeliever (the rest are not classified in these groups and categories, and are undecided in terms of religious ideology). According to the relationship between the concept of spirituality and religion, current studies on the religion future based on the demographic data of Pew Research Center (2015) indicate that the role of religion will not decrease in the world by 2050. Therefore, many describe the current world as a "post-secular" era in which, religion and spirituality are powerful, so must be considered in all affairs. The reason is that the spiritual view (with religious or non-religious approaches) is based on a consistent and comprehensive platform, so can be effective in solving urban problems and natural crises (Bermudez 2016).

Studies on urban spaces and the development of cities have not been so far examined systematically and academically based on the spiritual principles, methods, or teachings in the academic association. However, the recent decade's studies conducted by Seyyed Hossein Nasr and the establishment of the "Architecture, Culture, and Spirituality Forum" have occurred with extensive studies conducted on spiritual architecture and urban planning by Julio Bermudez, Nader Ardalan, Thomas Barrie, and Philip Sheldrake. One of the newest relevant conferences is the "Urban Planning, Spirituality, and Health: Review

of Past and Present/ Prediction of Future" Symposium that was held at Harvard University in 2014. This symposium explained the definitions and principles of spiritual urban planning and its global experiences, strategies, and measures required for its realization. The concept of a spiritual city has been expressed by Philip Sheldrake: "The merely instrumental or useful responses to the future of cities are not enough. We highly need to develop an urban view ethically and spiritually" (Sheldrake 2014). Various theories about spirituality in the city and urban spaces have led to the advent of the "spiritual environment development" approach, which confronts with consumerism lifestyle and emphasizes the preservation of natural and environmental identity and adaptability with nature. On the other hand, the spiritual approach towards cities is "respect-based urban planning" which is a kind of urban planning that respects "human" and "nature" and considers "protection ethics" superior to consumerism and "spiritual and qualitative development" better than the material and quantitative growth (Senbel 2015). The "transcendent city" concept introduced by Nader Ardalan associates with the notion of a spiritual city and considers the principles that led to the creation of cities thousands of years ago and shaped and preserved the historical cities in the Middle East, including Fes in Morocco, Isfahan in Iran, Gapkli Tepe in Türkiye, etc. a way for developing current and future cities to change the urban and rural lifestyles (Ardalan 2016). In this regard, the guidelines and principles for the design of spiritual urban spaces are provided with strategies based on the spiritual foundations and joint teachings and goals of religions expressing that these general values must be explained based on their ethical, human, and sacred notions (Bermudez 2016).

Many studies have been done on spirituality in various fields, such as medicine (Lee and Newberg; Davidson 2005), nursing (Dyson et al. 1997; Tanyi 2002), psychology, and psychiatry (Slife et al. 1999; Grof 2000; Hayes 2002), and neuroscience (Austin 1998; Mind et al. 1991; Newberg et al. 2001; Pinker 1997). Some conferences have been held on the culture, rituals, and meanings of sacred places and religious architecture over the past decades. These conferences include the research conference of "Built Environment and Culture" (University of Cincinnati 1997), "Interdisciplinary Symposium on Defining and Designing Sacred Space" (University of Miami 1993), and "Building Sacred Places" "Space, Place, and Spirituality in the Built Environment" (Academic States 1999). Since few urban studies are available, especially on spirituality and urban spaces, this study aims to determine the dimensions and characteristics of spiritual urban spaces to take a step in explaining the concept of spirituality and its fulfillment in analysis or forming urban spaces. The reason is that the cities are now facing a challenge in linking the development of cities and the design of urban spaces to spiritual

and inner aspects of humans to affect the quality of experience and human perception of urban space. Hence, this study systematically reviews the literature on spirituality through the Scopus Database and also asks the opinions of professors, elites, and people to define the spirituality, elements, and qualities of spiritual urban space to achieve the conceptual model and theoretical framework of spiritual urban spaces based on the two sections mentioned above. This model provides the field for assessing cities and urban spaces based on the spirituality quality and presenting appropriate strategies for this issue.

2. THEORETICAL FRAMEWORK

Theoretical foundations of study are examined within two parts defining the concept of spirituality and the position of spirituality in shaping urban spaces.

2.1. Defining the Concept of Spirituality

Spirituality is a multidimensional concept without any complete and accurate definition. A review of references indicates that spirituality means moving towards transcendence and perfection, relationship and connection (relationship with self, God, nature, and others-society), having meaning and goal in life, and believing in a higher power (divinity or otherwise) (Burkhardt 1989; Emblen 1992; Harrison 1997; Reed 1991; Relf 1997). Spirituality means a kind of self-awareness and ability to go beyond ordinary humanity and reach sublimity in the opinion of Watson (1989) (Dyson et al. 1997). Spirituality is a concept used in various contexts and has different meanings for individuals in various cultures and times. This concept consists of several key themes, such as having meaning, value, relationship, transcendence, and perfection (Martsolf and Mickley 1998). Spirituality includes “transcendent concepts” beyond the perception and limitation of individual consciousness, underlying the relationship between person and nature, others and/or (not necessarily) sublimity, events, rituals, ceremonies, and experiences, and sense of meaning (Bermudez 2016). Spirituality is directly related to the religion of individuals affiliated with some religions, such as Christians, Muslims, and individuals with any other religious orientation; however, spirituality may mean differently for others (Dyson et al. 1997). There are two main views about spirituality. Three cases are considered in the first view; some consider spirituality and religion synonyms with the same nature; others define spirituality as a field that includes religion with a scope beyond religion; some consider a wider range for religion and introduce spirituality as a part of this scope. The second view does not see any relationship between spirituality and religion and separates these two categories. Therefore, a religious person is seen by the first view as an individual whose spirituality is before religion, while the second view believes that a

person can be spiritual without being religious (Abedi Jafari and Rastgar 2007).

Accordingly, four types of spirituality exist:

1. Religious spirituality is based on a particular religion and religious tradition and also relies on a specific belief system.
2. Non-religion or secular spirituality, is based on the denial of God's existence or unity of all phenomena.
3. Mystical spirituality includes personal experience or perception of individuals that may be based on the esoteric or more inner procedures or principles of a religion, such as Judaism, Christianity, and Islam.
4. Trans-religion spirituality, which focuses on the religion's gem. The gem of each religion is related to the unity of religions. In trans-religious spirituality, practical and ethical teachings are important and are found in each religion or school even the nonreligious one.

According to the literature review, a proper definition of spirituality that consists of all religious, nonreligious, human, and environmental dimensions and is appropriate for this study is as follows: spirituality is a trans-religion concept (consisting of religious and nonreligious issues), which is used in various fields providing different meanings for individuals in various times and cultures having a close connection with these concepts. It means having a sense of “goal,” “meaning” and “relationship” with self, others, nature, and God, believing in the sublime and superior creature(s), searching for perfection and unity, ethics, hope, and coordination, and considering all sublime aspects in all life dimensions. Moreover, spirituality gives “meaning,” “value,” and “peace” to life believing that there is a thing beyond the material and an experienced life. This definition can be used in the urban design field within the spiritual urban spaces.

2.2. Spirituality-Human Dimensions Connection

Huma is a spiritual being. Many studies have been done on the relationship between spirituals, and the physical, mental, emotional, and social health of a person. Spiritual health is a dynamic state of being, which can be explained within four domains: the personal domain in which, a person makes a relationship with self; the environmental domain which indicates the relationship between humans and nature; the communal domain that expresses the in-depth relationships between person and others; and transcendental domain associates with a dimension of humans that indicates their connection with a world beyond the ordinary world and the transcendent creature. This four-domain model of spiritual well-being comprises all existing worldviews, from traditional religious to atheist rationalists (Fisher 2011). Table 1 reports the spirituality domains based on the human dimensions and spiritual well-being.

Table 1. Four Domains Model of Spiritual Health and Well Being

Aspect	Domains of Spiritual Wellbeing			
	Personal	Communal	Environmental	Transcendental
Knowledge Aspect -Filtered by World View	Meaning, Purpose, and Values	Ethic, Culture, and Religion	Care, Nurture, and Stewardship	Transcendent
Inspirational Aspects, Essence and Motivation -Filtered by Beliefs	Human's Spirit Creates Awareness: Self-Consciousness	In-Depth Personal Relations Reaching Achieve the Heart of Humanity	Physical, Eco-Political and Social Environment, Connectedness with Nature and Creation	Ultimate Concern Tillich Cosmic Force New Age God, for Theists Faith
Expressed as	Joy, Fulfillment, Peace, Patience, Freedom, Humility, Identity, Integrity, Creativity, Intuition, Self-Worth	Love, Forgiveness, Justice, Hope & Faith in Humanity, Trust	Sense of Awe and Wonder, Valuing Nature/ Creation	Adoration & Worship, Being: at one with Creator, of the Essence of the Universe, in Tune with God

(Fisher 2011)

2.2.1. City Aspects and Spiritual Urban Space

Quality of spirituality in the urban space is based on three foundations: respect for nature, respect for humans and society, and a relationship with a higher power that has different meanings in various cultures and communities (divinity or otherwise). Each aspect of urban space or design qualities that create and strengthen these three foundations would create or strengthen spirituality in the urban space. In the opinion of Carmona, urban space includes physical, social, perceptual, functional, visual, and temporal dimensions. Features and dimensions of spiritual urban space can be divided into these dimensions so that natural, transcendental, and psychological dimensions can be added to them.

Spiritual urban space provides some features that are involved in the "creation" of such space or a sense of spirituality plays a role in its "experience and perception." In terms of perception, spiritual urban space is unique, identity-based, and distinctive. This feature originates from the functional and activity specifications because some functions such as mosques, churches, mausoleums, and tombs of famous or scared individuals, identity-based and cultural functions are considered spiritual due to the type of activity and experience of individuals in them due to their activity, body, and meaning (Omobowal 2020). These spaces have a distinguished visual and cultural landscape in terms of physical form. Experience of these spaces in a specific time or culture context is memorable and provides a specific sense of place due to signs, symbols, paintings, murals, public arts, etc. belonging to various cultures, religions, and ethnicities expressing their sacred and spiritual cultures. Therefore, such places have a

specific acoustic, cultural, and visual landscape with some signs and symbols that reflect sounds of various cultural and religious communities, such as calls for prayer, church bells, religious and local music, etc. (Mattis, Palmer, and Hope 2019).

Spiritual urban space has a specific form character in terms of the body, which is manifested in the identity-based or sacred forms and shapes, such as dome, minaret, Chahartaq, pause and empty scape, Tomb, etc. in which, colors, materials, geometry, decorations, sculptures, public arts are used with spiritual themes, such as faith, compassion, justice, hope, etc. (McGlymont 2018). Visually, the spiritual urban space has a visual identity, so identity-based and sacred physical forms are their specific visual signs. Religions, cultural contexts, and beliefs play a vital role in creating and forming this landscape. Spiritual urban space has a natural and compatible order. Those spaces have a human scale that respects pedestrians and individuals who are involved in human activities, such as movement, song, music, etc. (Bermudez 2016).

These spaces are designed based on respect for and compatibility with nature regarding nature's limitations. These spaces have eco-friendly designs based on the importance considered for water, vegetation, and green space to create a balance between the human soul and the environment and energy efficiency. Natural elements, vegetation, and pristine natural environment indicate the experience of glory and relationship with a higher force (God, Mao, Hindu Gods, etc.), so these variables play a significant role in the spiritual well-being of individuals and their perception of spirituality in the space. In addition to natural elements, the artificial green elements, such

as gardens and spaces with urban gardening, healthy and clean public spaces, nature-based entertainments, aquatic sports, mountain climbing, etc. would lead to reflection, peace, and finally spirituality in the individual because of creating a quite mental and psychological environment and making sense of relationship with the nature and higher transcendent force (Mmako, Courtney-Pratt, and Marsh 2020).

Under the social dimension, positive social interactions appear in the spiritual urban space, and individuals consider ethical values for themselves and others. Sense of belonging and social unity exist between people, and social and cultural events or religious activities providing a specific meaning in each area are done in the space platform (López Villalba 2019). Historical aspects of the space, cultural symbols, religious acts, food, music, literature, traditions and customs, and all that is called intangible culture play a fundamental role in creating a sense of spirituality. Because thinkers and scholars are present in the construction and design of such areas, rationality, knowledge, and wisdom play a significant role in this field and increase the knowledge level of citizens (Ardalan 2016).

Psychologically, the importance of spiritual spaces is based on the context that creates space and the influence of such spaces on the spirit of humans creating relaxation, remembrance, mediation, the experience of solitude, and distance from everyday life (Naor and Mayseless 2020), which leads to person's development and perfection in long term.

Moreover, those spaces that provide some factors in their platform and context that result in a sense of relaxation, solitude, silence, remembrance, and ultimately a sense of spirituality are the background platforms that shape the spiritual spaces (Waked and Albarmelgy 2018).

Therefore, spiritual urban spaces may provide the following features:

- Spaces that are created to make people relaxed in the world and provide a place for them to get away from busy daily life.
- Spaces that are designed based on various factors a sacred place or suitable for a specific event. Spaces are created as a symbol for religious beliefs and identity-based social and cultural events.
- Spaces with specific cultural meanings, which have remained through the history of society and provide a specific character and identity.
- Ancient and historical places that are mixed with modern culture show the new successful and contextualist projects.
- Spaces are defined through the art of architecture or having a sacred physical form (Barrie et al. 2015). Table 2 reports the characteristics of spiritual urban space, which are adopted from the systematic review of references. These characteristics have been classified based on the fundamental themes (dimensions of spiritual urban space) and organizing themes (components of spiritual urban space), and are shown in a table due to the plurality of contents and references.

Table 2. The Theoretical Framework of Research: Dimensions and Characteristics of Spiritual Urban Space

Funda-mental Themes	Organizing Codes	Concepts and Codes	References
Functional	Functional Identity	<ul style="list-style-type: none"> • Functional identity of prominent religious elements and sacred places • Identity-based functions and uses (e.g., bazaar): economic activities in addition to social, cultural, and religious activities (mosque and church in bazaars) • Importance of mausoleums as a spiritual space that is different from other urban spaces 	(Omobowale 2020; Marinic 2016; Grabalov and Nord 2020; Walker et al. 2019)
	Memorability	<ul style="list-style-type: none"> • Influence of religion on the memorability of spaces and spiritual sense of place (in terms of body, activity, and meaning) • Spiritual perception and experience of space uses based on the events, environmental, and spatial components • Effect of the spiritual quality of some urban spaces, including religious and worship places, cemeteries, etc. on the people's perception of the environment and space memorability 	(Bergmann 2017; Marinic 2016; Farrés and Matarán and Avello 2015; Fang and Yang 2017; Lange 2016; Bermudez 2016; Grabalov and Nordh 2020; Senbel 2015; Dyson Cobb and Forman 1997; Farrés et al. 2015)
Perceptual	Color of Belonging to Religious and Cultural Elements	<ul style="list-style-type: none"> • Adding the color of belonging to the urban environment using signs, symptoms, murals, arborglyphs (carving shapes on trees or materials such as wood and steel as a symbol or memento) in the streets and urban spaces, and showing urban culture dimensions 	(Lange 2016)
	Symbols and Signs	<ul style="list-style-type: none"> • Physical signs and symbols of different cultures • Places having religious belief symbols with sacred physical elements proper for religious ceremonies 	(Barrie et al. 2015; Lange and E. 2016; du Toit 2014)
	Soundscape	<ul style="list-style-type: none"> • Soundscape and reflecting the voice of various religious and cultural communities: call for prayer in mosques, bells ringing in church, religious music, regional and local music, etc. 	(Mattis Palmer and Hope 2019; Kovačić 2016)

Fundamental Themes	Organizing Codes	Concepts and Codes	References
Visual	Form Identity (Shape and Form)	<ul style="list-style-type: none"> Physical identity-based forms: dome, minaret, gate, Chahartaqi (four arches), portico, and space Special and identity-based forms of sacred physical elements (tangible or objective values) Specific forms and elements showing unity in religious elements Form features: materials, type of decorations, geometry and geometric shapes, color, light, and motifs 	(Ardalan Bakhtiar and Haider 1973; McGlymont 2018; Nasr 1990; Sheldrake 2014; Barrie et al. 2015; Hegner and Margry 2016; Ardalan 2016b; Ardalan 2016a; Sadeghi et al. 2010)
	Cultural Spiritual Landscape	<ul style="list-style-type: none"> Religious elements and creating a cultural spiritual landscape having identity and creation of spiritual tourism Role of religions and beliefs in the design and organization of religious and worship places: identity of these places and their uniqueness in the urban landscapes effect of new shapes of religious architecture on the urban landscape and spiritual creation 	(Fang and Yang 2017; Hegner and Margry 2016; Becci Burchardt and Giorda 2017; Birtchnell 2016; Havlíček and Klingorová 2018; Hegner and Margry 2016; Marinic 2016; Garmany 2013; Walker et al. 2019; Sheldrake 2009)
	Order	<ul style="list-style-type: none"> realization of unity in the plurality in cities: natural order, geometric order, coordinated order 	(Ardalan et al. 1973)
	Green Landscape	<ul style="list-style-type: none"> role of natural and built green elements in creasing spirituality in the space 	(Grabalov and Nordh 2020; Ardalan et al. 1973)
Physical	Human Scale	<ul style="list-style-type: none"> pedestrian-oriented cities: respect for pedestrians and having a human scale presence of human activities (lecture, song, and music) 	(Ardalan 2016b)
	Spiritual Architecture/ Sacred Architecture/ Transcendent Architecture	<ul style="list-style-type: none"> concentration of “transcendent and spiritual architecture” on creating sacred space instead of aesthetical, technical, and economic aspects of architecture characteristics of the built spiritual environment and architecture: coordination and order, centrality, geometric volumes, and spaces, integrity with nature, contextualism, and integrity with surrounding fabric, continence, comfort, cleanness, land ownership, emptiness and pause space, sensory richness, symbolism 	(Sheridan 2015; Ardalan 2016b; Nasr 1990; Ahmadkhani and Haghparast 2016)
	Public Art	<ul style="list-style-type: none"> cities having special art and cultural centers role of music, song, worship, and collective performance by using somatic and psychological aspects of people memorial forms for icons and events (sculptures, mementos, special physical forms, etc.), and murals with specific themes (e.g., faith, love, compassion, hope, and justice) 	(Ardalan 2016b; Dyson et al. 1997; Hegner and Margry 2016; Lange 2016)
	Environmental Identity	<ul style="list-style-type: none"> environmental identity: considering the spirit of the place (regarding the natural features of the place) using special and sacred characteristics of a natural place for creating urban life identity-based aspect of nature and “originality” of nature compared to built buildings in the city 	(Farrés et al. 2015; Ardalan 2016b; Bermudez 2016; Senbel 2015; Matthews and Tucker 2006; Birch and Sinclair 2013; Van Niekerk 2018)
Environment and Nature	Environmental Sustainability and Harmony with Nature	<ul style="list-style-type: none"> preventing pollution, supporting urban health, and promoting sustainability urban planning based on the respect for nature: a reflection of spiritual health in the environmental field in a right connection with nature paying attention to natural limitations and compatibility with nature, and environmental preservation eco-friendly design: importance of “culture,” “natural elements,” and “geographical location” (context) The importance of water in creating meaning and spirituality in the environment spiritual environmental development (attention to natural limitations and harmony with nature/ respect for God and divine presence on the land/coping with consumerist lifestyle) interactional design: technology-nature connection for creating meaning and spirituality dimensions of the “green design” approach in the creation of spirituality in the built environment, the importance of creating a balance between human, human’s soul, nature, and environment with the built environment by creating a sense of place, contextualism, nature-based design, and energy efficiency 	(Bermudez 2016; Senbel 2015; Sheldrake 2014; Walker et al. 2019; Fisher 2011; Barrie et al. 2015; Sheldrake 2009; Ardalan 2016b; Van Niekerk 2018; Rafeian et al. 2010; Sheldrake 2009; Bidwell and Browning 2010; Abbas 2014; Naghizadeh 2004)
	Natural Elements and Environment	<ul style="list-style-type: none"> importance of natural pristine environment, vegetation, natural elements, and gardens such as spiritual and sacred space relationship between nature and spiritual mental well-being The importance of using natural elements and green spaces in the design of mausoleums as a spiritual space spirituality experience in natural elements: sense of glory, magnificence, and wonder, sense of transcendence and sanctity, sense of meaning and purposefulness in life, relationship with creature (higher power), worship and spiritual feeling 	(Naor and Mayseless 2020; Mmako et al. 2020; Ennis 2004; Grabalov and Nordh 2020; Nix 2016; Waked and Albarmelgy 2018; Baur 2018; Bergmann 2017; Sheldrake 2009; Rafeian et al. 2010)

Funda- mental Themes	Organizing Codes	Concepts and Codes	References
	Green Built Elements: Urban Gardening and Garden	<ul style="list-style-type: none"> • relationship between humans and the environment through local ecosystem services animal domestication, and plantation • importance of gardens in various cultures: producing foods, cultural spatial figures for health and well-being, identity-based space, having a sense of place, spirituality, social interactions, having therapeutic/medicinal purposes • role of gardens, urban gardening culture, and public spaces in developing and protecting healthy lifestyles and communities 	(Nix 2016)
	Nature-Based Recreation and Sports	<ul style="list-style-type: none"> • nature-based recreations • nature-based sports and mind preparedness (parkour, yoga, massage, reiki, meditation, etc.) for creating spirituality (at a personal scale) 	(Baur 2018; Vanstone 2003; Bramadat 2019; Potter 2019; Lea Philo and Cadman 2018)
Social-Cultural	Social Interactions	<ul style="list-style-type: none"> • City as a place for favorable social interactions and social cohesion • social interactions (importance of relationship with self and others/ sense of belonging and respect for others) • three pillars of spirituality” God, self, others • reflection of spiritual health in four scopes of spiritual well-being: personal scope in which, a person inter-relates with the self, social scope with in-depth interpersonal relationships, environmental domain, and transcendental domain. • Justice and equality (inclusiveness of all groups of people in the city) and gender quality • fostering the concept of common good and public well-being 	(Sheldrake 2009; Sheldrake 2014; Dyson et al. 1997; Fisher 2011; Minea 2012)
	Social Justice and Inclusiveness	<ul style="list-style-type: none"> • architecture provides an alliance for social justice and spirituality through the creation of sacred space and supports the development of required capacities for a fully humanistic life. • Sacred and spiritual space would appear when a profound and extensive perception of spirituality, a holistic view of social justice, and conscious social architecture are linked to each other. 	(Sheridan 2015; Sheldrake 2014; Fedele and Knibbe 2013; Birch and Sinclair 2013; Sheldrake 2009; Dyson et al. 1997)
	Multicultural Coherent Communities	<ul style="list-style-type: none"> • The presence of various walks of society from different religions and cultures would create multicultural and inclusive cities, which leads to a spiritual space in the city beyond a certain religion • Cultural and religious pluralism: interaction between religions and different cultures based on secularism • Cultural pluralism creates a new image of the city and brings identity • Improving global communication to strengthen solidarity among communities 	(Sheldrake 2014; Sheldrake 2009; Ardalan 2016b; Romero Pérez and Lecaros 2020; Hegner and Margry 2016; Fisher 2011; Marinic 2016); (Van Niekerk 2018; Havlíček and Klingorová 2018)
	Cultural Identity	<ul style="list-style-type: none"> • Cultural elements in the creation of spirituality: historical characteristics, worship actions, food, music, traditions and rituals, literature, etc.; tangible and intangible cultures of cities for the promotion of cultural concepts of cities • Places with special cultural meanings belonging to ancient and historical periods • Ancient places integrated with contemporary culture • Social semiotics: signs and symbols in social life 	(Marinic 2016; Bermudez 2016; Senbel 2015; Hegner and Margry 2016; Dyson et al. 1997; Ardalan 2016b; Barrie et al. 2015; Keller et al. 2013; Birch and Sinclair 2013; du Toit 2014; Heng 2014; Van Niekerk 2018)
	Social Cultural Events	<ul style="list-style-type: none"> • Social events and meaningful social activities in each region • Region-specific cultural, social, and faithful events • Celebrations and festivals, local cultural ceremonies, rituals, and traditions • Importance of social cultural events in the sacred places • Holding social, cultural, political, and humanistic events • Social cultural events related to burial ceremonies in cemeteries 	(Mmako et al. 2020; Omobowale 2020; McGlymont 2018; Becci et al. 2017; Marinic 2016; Grabalov and Nordh 2020; López Villalba 2019; Heng 2014; Garmany 2013; Hegner and Margry 2016; Barrie et al. 2015)
Psychological	Solitude and Silence, Comfort and Peace	<ul style="list-style-type: none"> • Solitude and silence: solitude in the pristine natural environment to discover the inner world and personal identity • Worship places as “calm and silent shelters” • Cemeteries as a spiritual relaxing environment • Some places to disconnect humans from the universe 	(Barrie et al. 2015; Grabalov and Nordh 2020; Hegner and Margry 2016; Naor and Mayselless 2020; Imani and Shahrabi 2019)
	Thinking and Worship	<ul style="list-style-type: none"> • Thinking: the importance of natural environments for experiencing solitude and disconnection from everyday life and modern technologies, thinking of the life meaning and the sacred • Creating a sense of worship and remembrance in spiritual spaces 	(Naor and Mayselless 2020; Nasr 1990; Imani and Shahrabi 2019)

Fundamental Themes	Organizing Codes	Concepts and Codes	References
Psychological	Personal Development and Perfection	<ul style="list-style-type: none"> • Personal development and perfection in the spiritual space • Identify the subjective and intangible spiritual elements • Importance of spiritual lifestyle (at personal/communal and social scales) • The personal domain is one of the spiritual health dimensions in which a person is in the right relationship with self. 	(Fedele and Knibbe 2013; Fisher 2011; McGlymont 2018; Naor and Maysless 2020; Sheldrake 2009; Imani and Shahrabi 2019)
	Public Health	<ul style="list-style-type: none"> • Influence of spirituality on public health • The psychological and spiritual effect of natural elements on reducing mental stresses (limited access of many citizens to natural areas and subsequent increased daily pressures and stresses) • Psychological effects of nature-based education and designs • Influence of spirituality on mental health: creating mental health and rehabilitation for individuals, increasing access to social support networks and social capital, creating emotional mental health, changing moods and ethical aspects of a person (donation, sense of sin, meditation, exercise, etc.) • Importance of religious built environment and architecture on mental health • The gap in human needs' hierarchy in contemporary urban design due to the lack of a context for mental health and well-being in society 	(Baur 2018; Birch and Sinclair 2013; Cornah 2006; Ennis 2004; Naor and Maysless 2020; Imani and Shahrabi 2019)
	Healing Environment and Activities	<ul style="list-style-type: none"> • Green environments that are suitable for exercise • Healthy and healing environment to create a balance between soul and body: the importance of green design and Feng shui in creating a balance between human and spirituality in the built environment (the connection between nature, human, human's soul, and built environment) • Advantages of exercise in urban or semi-urban environments creating positive experiences • Nature-based exercises and mind preparedness (parkour, yoga massage, reiki, meditation, etc.) in creating spirituality (at a personal scale) • Importance of psychological aspects in the spaces having spirituality quality: influence of gardens and gardening plans, protected green farms, parks, urban forests, and external environments of neighborhood 	(Abbas 2014; Baur 2018; Bramadat 2019; Lea et al. 2018; Mmako et al. 2020; Potter 2019; Vanstone 2003)
	Support for Affected Groups	<ul style="list-style-type: none"> • Psychological effects of spirituality on individuals in urban spaces and neighborhoods under specific conditions (e.g., immigrants, patients, elderlies, slum areas, the urban poor, etc.) 	(Agunbiade 2019; Berman 2010; Dilger 2014; Garmany 2013; Marinic 2016; Matthews and Tucker 2006; Minton Isaacson Varilek Stadick and O'Connell-Persaud 2018; Mmako et al. 2020; Nakau et al. 2013; Sheringham and Wilkins 2018)
Belief-Based and Transcendent	Religious Events and Actions	<ul style="list-style-type: none"> • Region-specific belief-based events • Social, religious, and cultural beliefs inside or around the sacred places • Cultural spiritual events and their influences on people's perception of the environment • Sacred places "as quiet and calm shelters" for worship actions • Places with religious beliefs for holding social and cultural ceremonies 	(Barrie et al. 2015; Becci et al. 2017; Dyson et al. 1997; Farrés et al. 2015; Hegner and Margry 2016; Omobowale 2020)
	Sanctity (Religious and Mystical Teachings)	<ul style="list-style-type: none"> • Importance of religious teachings and beliefs, religious action in construction, and perception of urban space and built environment • Effect of religion on the memorability of urban spaces • Presence of individuals who can influence the beliefs of people in any region (religious and ethical leaders, divine guardians, etc.) • Application of religious and ethical thoughts and beliefs for preserving urban environment by people • Importance of humans' views in sanctifying places and exercise of power • Attention to a mystic in the formulation of spiritual frameworks: ontology/perfectionism (transcendent) (moving from plurality to unity) • Emphasis and attention to resurrection to achieve a spiritual perspective of a humanistic city • Using sacred elements and concepts in the cities; reaching a spiritual perspective of a humanistic city • Places for disconnecting humans from the world 	(Ardalan 2016a 2016b; Barrie et al. 2015; Becci et al. 2017; Bergmann 2017; Hegner and Margry 2016; Omobowale 2020; Sheldrake 2009 2014; Streib and Hood 2013; Walker et al. 2019; Rafieian et al. 2019)

Funda- mental Themes	Organizing Codes	Concepts and Codes	References
Belief-Based and Transcendent	Transcendent Ethics and Values	<ul style="list-style-type: none"> • The transcendent domain is one of four domains of spiritual health that is related to the relationship between humans with other universes: perceiving God's presence in all affairs to achieve a good city • Values, ethic, and spirituality as elements creating a city during the post-secularism period • The connection between daily life and positive ethical traits, such as compassion, hope, freedom, happiness, etc. • Preliminary ethical components to create a spiritual urban development: truth/ health/ honesty; benevolence/ ethic; beauty/ aesthetical; simplicity/ humility; human dignity/ equality; empathy/ kindness/ live; mental attitude/ mindfulness/ relationship with God (prayer and worship); respect (for nature and life); belonging/ access/ relationship with local and global community; security/ safety/ peace; transcendence and perfection (for each person, culture, ethnicity, truth, etc.); meaning/ health; indigenous cultural values; lack of unilateral view on economic productivities; criticism of quantitative orientation 	(Bermudez 2016; Farrés et al. 2015; Fisher 2011; Grabalov and Nordh 2020; Herman Beaumont Cloke and Walliser 2012; Mattis et al. 2019; Naghizadeh 2004; Sheldrake 2014; Rafician et al. 2019)
	Religious Identity	<ul style="list-style-type: none"> • Expressing religious identity and reminding values of people • The importance of cultural and religious products that are used by individuals in the society to determine the territory and show their sacred and faith identity. These products include formal and informal clothes, jewelry, tattoos, religious actions, etc. 	(Lange and E. 2016; Mattis et al. 2019)
	Wisdom and Rationality, Awareness, Knowledge, and Wisdom	<ul style="list-style-type: none"> • Importance of knowledge and wisdom (formation of educational centers next to sacred spaces) • Teaching and improving the awareness level of people • Creating social life and urban vitality due to the presence of scholars and science seekers in cities • Using wisdom and rationality in urban affairs management to achieve a good city 	(Ardalan 2016b; Sheldrake 2014)

Dimensions of spiritual urban space (according to what is reported in Table 2) are divided into perceptual, visual, social, physical, functional, and temporal dimensions based on the dimensions of the urban space mentioned by Carmona (2003). However, the current studies related to spirituality in urban space would add new domains, including natural, psychological, and transcendental domains to the available ones. Religious values and beliefs, moralities, and cultural foundations of each society provide the field for creating spirituality in the city and urban space playing the role of driving force and background power for creating and shaping these spaces (Fisher 2011; Farrés et al. 2015). On the other hand, the creation of spiritual urban space leads to considerable effects, including spiritual

influences, providing some opportunities for solitude, reflection, thinking, worship, and relationship with God, existence, and human's disconnection from the burin everyday life (Hegner and Margry 2016; Naor and Maysseless 2020), and its psychological effects are based on the promoting mental health of people by creating a peaceful and healing space (Abbas 2014; Bramadat 2019; Lea et al. 2018; Baur 2018; Potter 2019; Mmako et al. 2020; Vanstone 2003). Some urban spaces have been introduced as spiritual spaces in the reviewed studies. These spaces include religious places (worship places for various religions), sacred places, places with pristine natural elements, cemeteries, public spaces of the habitats for religious and cultural minorities, and mixed urban bazaars with religious functions.

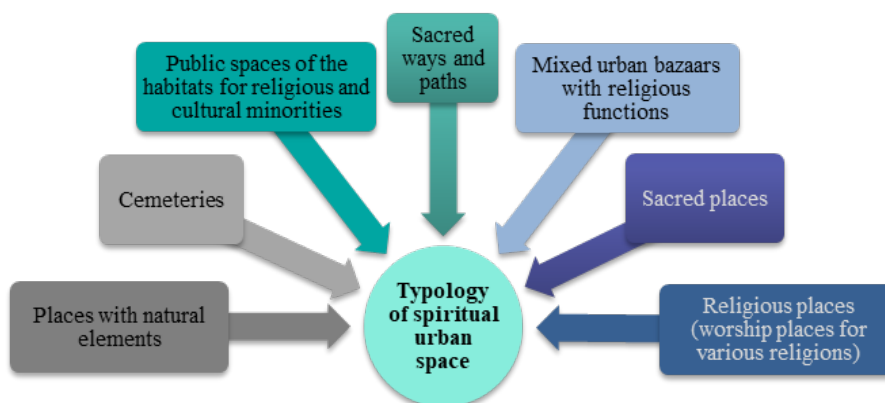


Fig. 1. Typology of Spiritual Urban Space (introduced in the Reviewed References)

3. METHOD

The method of this study is done within two phases: literature review and interview with the professors and elites. In the first phase, a semi-systematic review technique is used to review the literature review and examine studies related to spirituality in urban planning and architecture disciplines. The sum of the sample size equals 84 studies in the literature review phase. In the systematic review step, the terms “spirituality” and “urban space” were searched through the Scopus Database and 56 papers were extracted from 2000 to 2022, which comprised 28 papers retrieved from journals, 2 conference papers, 4 books, 8 chapters of one book, and 4 passages from those books that reviewed and analyzed this topic. Finally, 17 papers that were not related to spirituality and urban space were deleted from the analytical process.

The studies of the second phase of the literature review are selected through snowball and purposeful sampling techniques. This technique identifies those studies that are specifically related to spirituality in various fields of architecture, urban planning, theology, and philosophy. These references are associated with studies on ACS¹ Forum and or the more cited or reviewed papers of this field, and their contents were analyzed to scrutinize the theoretical framework. The studies selected through snowball sampling comprise 23 journal papers, 4 books, and 3

chapters of a book. In sum, 40 studies were reviewed of which, 70% were journal papers. Findings are analyzed based on the Thematic Analysis to achieve the framework of spiritual urban spaces within six basic themes: defining spirituality, types of spirituality, spirituality domains, spirituality-religion connection, and characteristics of spiritual urban space.

In the second phase, the Delphi technique, open-ended questionnaire, and semi-structured interviews are used to ask elites and professors the relevant questions. The statistical society comprises 51 members, including professors of urban planning and architecture (16 members), Quran and Hadith sciences (15), geography, engineering and philosophy (15), sociology (9), and psychology (2). Moreover, a theoretical framework was designed based on the citizens' opinions. For this purpose, 21 citizens were interviewed via an online platform. The interviewed individuals consisted of 11 women and 10 men, and data saturation was obtained through 21 interviews. Interviews were done based on the in-depth and nonstructured technique based on the definition of spirituality, characteristics, and qualities of spiritual urban space, and elements and components of spiritual urban space. Ultimately, the answers given by elites and citizens were analyzed based on the Thematic Analysis method and the obtained network of themes is presented in Figs 2, 4, and 5. Table 3 reports a summary of the techniques used in the study.

Table 3. Different Methods used in this Research

Research Step	Data Collection	Additional Information	Type of Method	Sampling Method	Sample Size	Analysis Method	Reduction Technique	Outcome
Literature Review and Theoretical Foundations	Semi-Systematic Review	Systematic review through Scopus database searching studies consisting of the terms “spirituality” and “urban space” between 2000 and 2020	Quantitative Method	Purposeful and Systematic	53	Thematic Analysis	Open, Axial, Selective Coding	Illustrating a Network of Themes to Formulate a Theoretical Framework
	Non-Systematic Review	Studies related to the thesis topic and indexes in other databases than Scopus	Qualitative Method	Snowball	30			
Defining and Scrutinizing Domains of Spirituality	Delphi Technique of Semi-Open Questionnaire for Elites (Professors and Experts)	Questions about the definition or spirituality and characteristics of spiritual urban space	Qualitative Method	Purposeful	51 Persons (Professors and Experts)	Thematic Analysis	Open, Axial, Selective Coding	

4. DATA ANALYSIS

The following questions are asked of professors and citizens:

1. How do you define spirituality? 2. What are the

characteristics of spiritual urban spaces? 3. What are the practical physical or natural elements of spiritual urban spaces?

The main purpose of this study is to determine the

dimensions and characteristics of spiritual urban space. To do so, answers given by elites and citizens have been analyzed to extract the themes related to the purpose by using the Thematic Analysis. Other studies and analyses have been done based on interviews or comparative studies on the opinions of the elites and citizens in another research. However, the themes expressed by both groups have been depicted with different colors in Figs 3, 4, and 5.

For this purpose, the answers were first implemented through open coding and then divided into core themes based on axial coding and into organizing themes based on selective and thematic coding. The respondents to the first question included elites and university professors who expressed the following features in the definition of spirituality: subjective nature of spirituality, vague definition and concept of spirituality, inner and esoteric nature of this concept, transcendental nature of spirituality and its relationship with other universes, and its fundamental difference with the religion. In contrast, the answers given by citizens included a relationship with God and divine terms. They also believed that a good relationship with self, God, others (society), and nature is one of the most underlying aspects in the definition of spirituality. Other themes such as peace,

meaning, sanctity, worship, etc. are fundamental subjects used in the spirituality definition presented by the respondents. Fig 2 shows the network of themes extracted from the thematic analysis of the first question.

According to the answers, spirituality is a multidimensional concept with different meaning levels. Some believe that they have experienced various spirituality rates based on the space and different times and conditions, and these levels provide different values. In their opinion, the highest level of spirituality is experienced in the relationship with God, which means that spirituality is defined based on religion and religious issues. They believe that spirituality comes with a sense of peace and security, solitude, reflection, and thinking. This kind of spirituality is experienced and perceived in the subjective and personal spaces of each person. The third type of spirituality is at a lower level, which is a feeling obtained from good relationships with others or a sense of social happiness. The favorable social relationships pave the way for friendship and kindness between people, opportunities for gathering together, and so forth. Fig 3 depicts the spirituality levels from the view of citizens and experts.

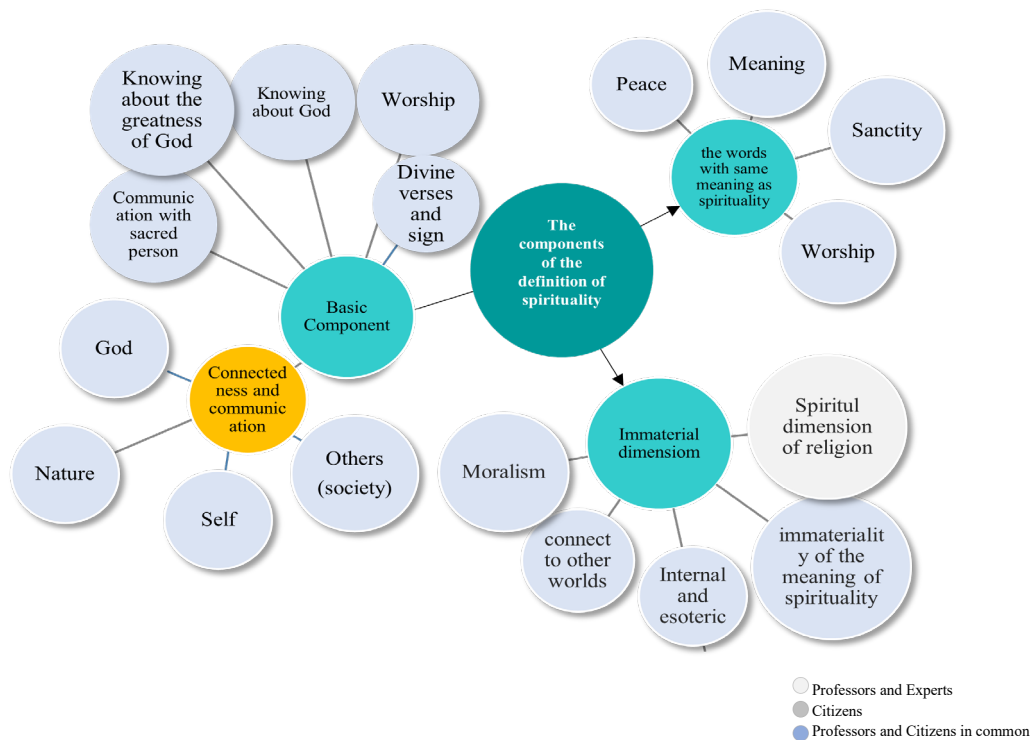


Fig. 2. Themes of the first Question: Components of Spirituality Definition based on the Opinions of “Professors and Experts” and “Citizens”

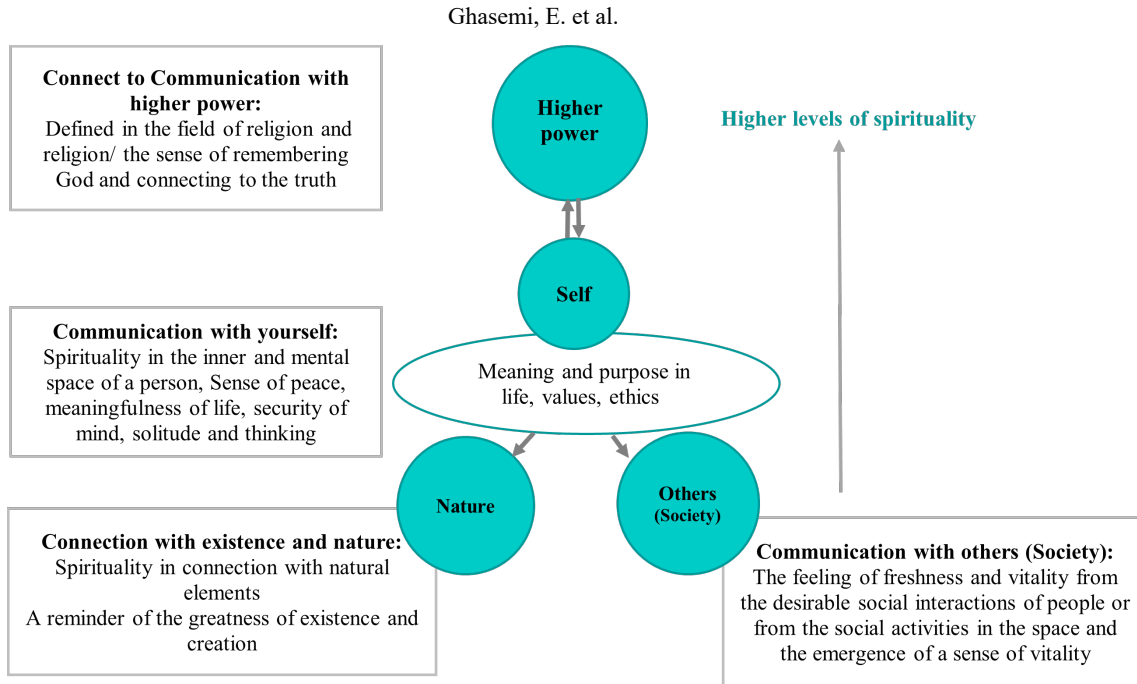


Fig. 3. Hierarchy of Spirituality in the Opinion of two Groups of “Professors and Experts” and “Citizens”

The topics mentioned in the second question are related to the quality and characteristics of spiritual urban space, which are classified based on the organizing themes within the following domains: physical, functional, perceptual, visual, temporal, environmental, and spatial. The qualities mentioned by citizens and professors show many specifications in common, which are reported in Fig 4 separately. The components of the functional dimension of spiritual urban space comprise religious or meaningful functions, and components of the physical domain include buildings with identity-based architecture in the space, clear materials motifs and colors in the space architecture, simplicity and absence of modern architectural features, mystical elements, and sacred symbols in the furniture, murals or walls of building or urban space, as well as public art presence based on these cultural symbols. The visual dimensions consist of form identity, visual identity, sense of unity, glory, balance, and sacred as the most substantial characteristics of these spaces. Also, perceptual components such as a sense of meaning, remembrance, solitude, peace, a sense of inner tenderness, and identity played a vital role in the perception and experience of these spaces. In the opinion of experts, these spaces include cultural events based on traditions and customs, rituals, cultural values, worship-based social behavior patterns,

favorable social interactions, all-inclusiveness, social justice, and equality. The presence of natural elements in the form of water, clean air, vegetation, sunlight, and clear sky with the soundscape of nature are among the highly important features of spiritual urban spaces. Ultimately, perception of such spaces leads to prayer and worship, a sense of relationship and connection with God, reflection, thinking, a sense of disconnection from this world and everyday life, remembering good deeds and avoiding sins, and the advent of divine signs and sacred values.

Spiritual urban space provides the following features in each dimension: a physical form having character and identity and motifs of historical buildings in the physical dimension; social interactions in the space based on kindness, compassion, responsibility, happiness, and cooperation with peers under the social dimension; visual identity in the visual dimension; greenness and vegetation and availability of water in the space in natural dimension, and sense of peace, solitude, and meaning under the perceptual dimension. The mentioned features are the most common and main characteristics introduced by respondents and interviewees. Moreover, disconnection from the word, remembrance of God, and relationship and connection with God have been mentioned as one of the highest levels of spiritual urban space among transcendental dimensions.



Fig. 4. Themes related to the Second Question: Characteristics and Qualities of Spiritual Urban Space based on the Opinions of “Professors and Experts” and “Citizens”

The third question is about the elements existing in these spaces or the typology of the spaces that are considered spiritual spaces. According to the answers, spiritual spaces consist of functional, physical, and natural elements. Functional elements include cemeteries, worship places, and religious places, and physical elements consist of historical fabrics, contextualist fabrics, physical elements of various religions, including domes, minarets, church

bells, etc., and natural materials in harmony with nature. Natural elements include mountains, trees, sky, views of sunlight, vegetation, and pristine nature. The answers given to this question comprise not only the religious and ritual elements but also the natural elements and historical, old, and contextualist fabric are considered as the elements and shapes that evoke spiritual feelings in humans. Fig 5 depicts the network of themes related to the third question.

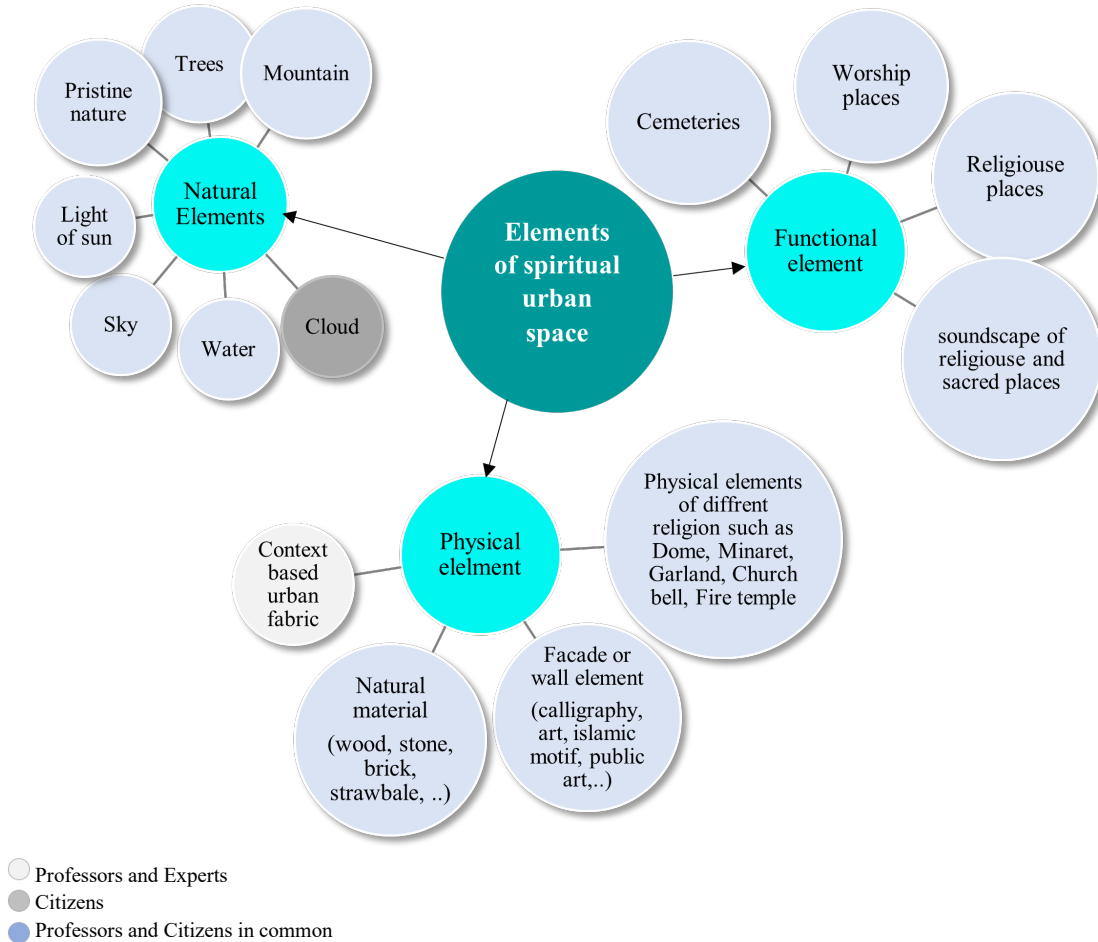


Fig. 5. Themes related to the third Question: Different Types of Elements of Spiritual Urban Spaces based on the Opinion of two Groups of “Professors and Experts” and “Citizens”

5. DISCUSSION

Spiritual urban space is a kind of urban space in which, spirituality and semantic manifests are seen in the human perception and experience. These spaces provide some qualities that either play a role in the “creation” of such a place or its spiritual soul in the “experiences and perception” considered. Quality of spirituality in urban spaces is based on three pillars: respect for nature, respect for humans and society, and a relationship with the higher power that has different meanings in various cultures and communities (divinity or ...). All aspects of urban space and qualities of urban design that contribute to the creation and promotion of these three pillars would create or promote spirituality in the urban space. The available studies on spirituality have not so far examined all dimensions and characteristics of the spiritual urban space, while this study has tried to investigate and classify these features and domains. Spiritual urban space is shaped in a context (background), which plays an important role in forming or destroying spirituality in the urban space.

This context appears based on “religious beliefs,” “theoretical wisdom” (beliefs and mysticism), or “pragmatic wisdom” (religious rules, religious rituals), and or based on a “trans-religion” context relying on the “ethic” and “rationality.” These contexts would result in the creation of cultural, social, and meaningful values in the city. These cultural social values and identity provide the field for creating spaces that build the social and cultural identity of that city and pave the way for creating spiritual urban space, whose functional domain includes one of the following components: sacred and identity-based functions, and sacred routes and paths. The physical domain of this space includes sacred or identity-based architecture, meaningful public art, materials, and colors. The perceptual domain of this space comprises cultural, social, and religious signs and symbols, sacred and meaningful soundscape, and a sense of communities belonging to the urban spaces and the visual domain includes cultural landscape, sacred landscape, green landscape, sense of glory, unity, and humility. Social and cultural dimension consists of cultural identity

and various special cultural, religious, and social events in a coherent multicultural society; the natural domain includes environmental and natural identity and natural elements. Finally, the temporal domain of this space includes timely social and cultural uses and events and sense of time in historical contexts.

Perception and experience of presence in these spaces leave different effects (subsequent effects) on individuals in terms of psychology and spirituality. These effects consist of good relationship with self, God, others, and nature. A good relationship between humans and God creates the chance to create solitude, reflection, remembrance, thinking, and spiritual thinking. A favorable relationship between humans and existence and nature provides the field for protecting and respecting nature and creating a sense of belonging to a natural and pristine environment.

Moreover, this relationship in the built environment would create a sense of place, place protection, and a sense of belonging. Social relationships and interactions are promoted based on improving ethical characteristics, such as kindness, humility, helping each other, etc. resulting from the spiritual urban space effects within the good relationship of humans with the community. In the personal domain, these spaces would improve the psychological-mental state, sense of peace, comfort, and exhilaration, and avoid daily stresses and anxieties. Fig 7 depicts the contexts shaping the spiritual urban space, dimensions, qualities, and characteristics of spiritual urban space, and the effects of these spaces within the conceptual model adopted from the review of references and opinions of professors, experts, and citizens.

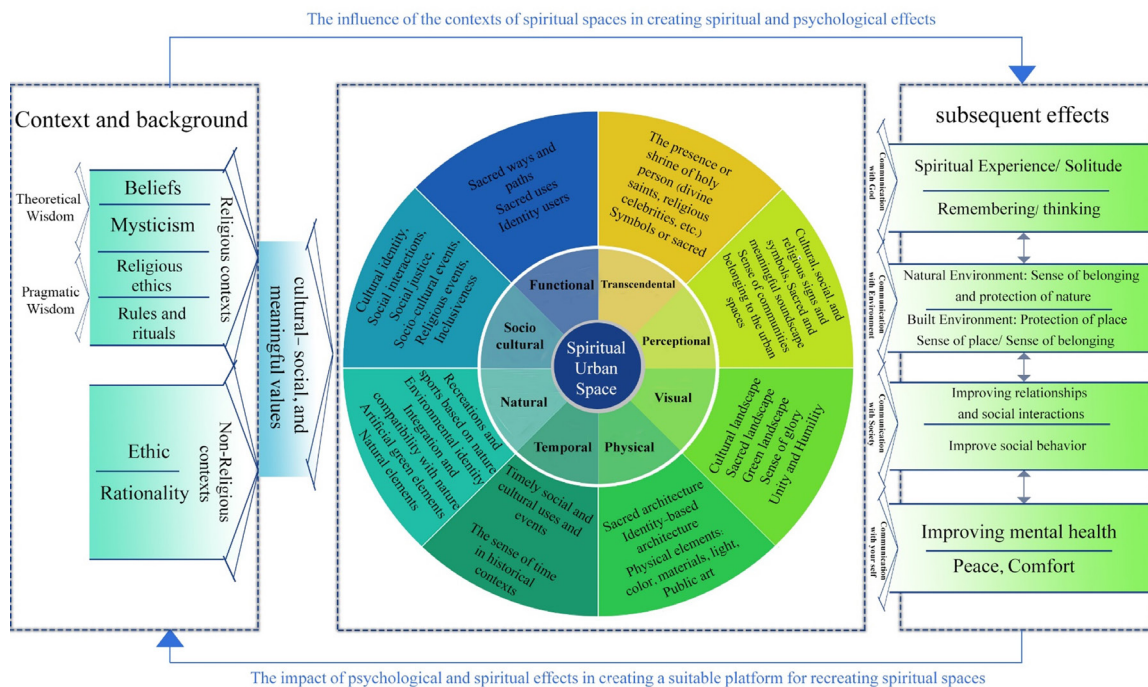


Fig. 7. Conceptual Model of Study: Spiritual Urban Space, Background, and Subsequent Effects

6. CONCLUSION

Two concepts of urban space and spirituality are first investigated to understand the definition of spiritual urban space, which results in obtaining the notion of spiritual or spiritualist urban space. Spirituality is a trans-religion concept (that embraces both religious and non-religion affairs), which may have different meanings in various contexts for individuals within various times and cultures. There is a close connection between spirituality and the following concepts: a sense of having “purpose,” “meaning” and “relationship” with self, others, nature, and God, belief in the creature(s) from the higher and transcendent level, searching for perfection and unity,

moralties, hope and coordination, consideration of transcendent dimensions in all domains of life regarding this feeling that there is something beyond the material and experienced life that gives “meaning,” “value,” and “peace” to the life of individuals. Spirituality has four types: religious spirituality, non-religious spirituality without belief in God, God-less (atheism) spirituality (secularism), and trans-religious spirituality, which can be classified into various personal, communal, environmental, and transcendent domains. Each domain provides various manifests and features. On the other hand, urban space consists of various physical, functional, visual, perceptual, environmental, social, and

temporal dimensions, and each dimension has its specific environmental qualities. According to the studies conducted in this research within two phases of systematic review of references and literature review, as well as interviews with citizens and elites, dimensions of spiritual urban space include physical, functional, perceptual, visual, social, environmental, and natural, and temporal dimensions that provide some qualities, such as place's soul, cultural sacred soundscape, soundscape of nature, form identity, glory and scope, meaning, memorability, meaningful symbols, identity, ethic-based social interactions, all-inclusiveness, comfort, peace, sense of time, solitude, silence, mystical symbols, cultural landscape, and sacred landscape. These spaces are shaped based on a religious and non-religious context and consist of some specific functions, such as sacred functions/ or identity-based functions, sacred and identity-based

form and architecture, and or natural elements. The typology of spiritual urban spaces includes worship and religious spaces, meaningful spaces having an identity, sacred roads and paths, and natural pristine environments and cemeteries. Every person receives different influences when present in this space. Favorable relationship with God (sense of worship/ spiritual thinking and experience), good relationship with self (improving psychological state, peace, and comfort), good relationship with the community (favorable social relationships and improved behavioral characteristics), and proper relationship with the nature (sense of belonging to the environment and its preservation) are among the most important effects of spiritual urban spaces. Fig 8 depicts the themes of spiritual urban space based on the constituent concepts of two "spirituality" and "urban space" concepts based on selective coding.

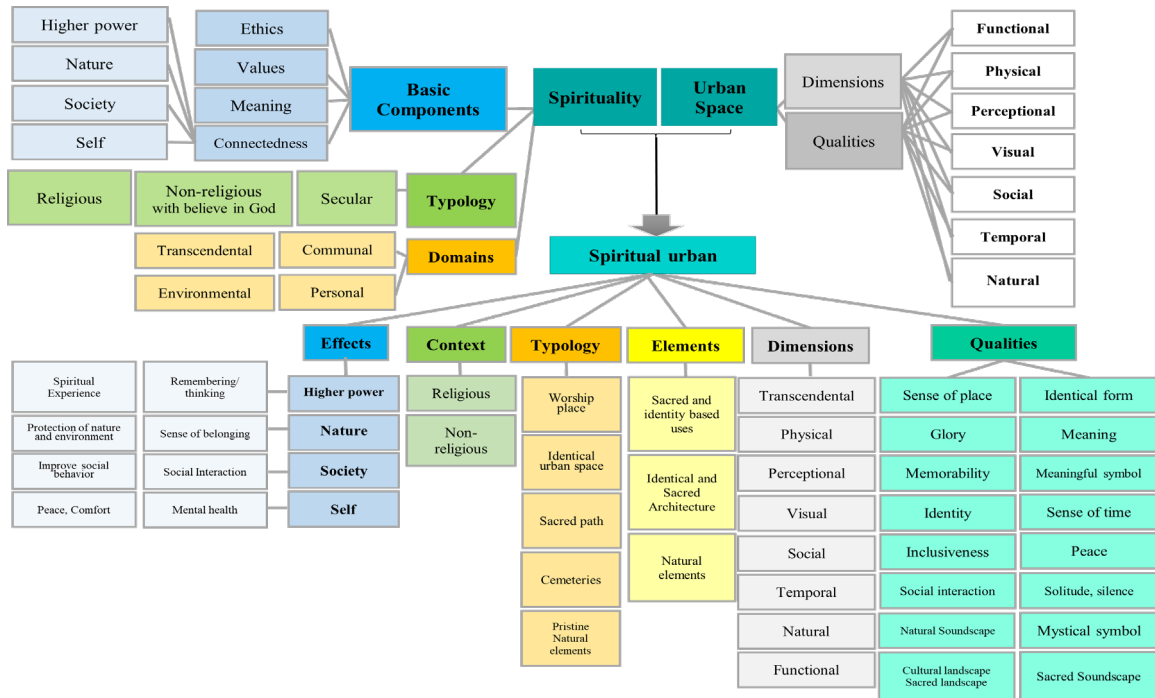


Fig. 8. Themes of Spiritual Urban Space

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CONFLICT OF INTEREST

The authors have no conflicts of interest to declare.

MORAL APPROVAL

The authors commit to observe all the ethical principles of the publication of the scientific work based on the ethical principles of COPE. In case of any violation of the ethical principles, even after the publication of the article, they give the journal the right to delete the article and follow up on the matter.

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The authors state that they have directly participated in the stages of conducting research and writing the article.

ENDNOTE

1. Architecture, Culture and Spirituality

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