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Research Paper

Explaining the Effects of Lived Experience on Residents' Territorial Functioning in Peoples' Secondary Territory from the View of Experts*

Samaneh Hossein-Abadi[a]- Shahram Purdeihimi[b]- Bahram Saleh Sedghpour[c]**

[a] Ph.D. in Architecture, Faculty of Architecture and Urban Development, Shahid Beheshti University, Tehran, Iran.

[b] Professor of Architecture, Faculty of Architecture and Urban Development, Shahid Beheshti University, Tehran, Iran (Corresponding Author).

[c] Associate Professor of Educational Sciences, Faculty of Humanities, Shahid Rajaei University, Tehran, Iran.

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ABSTRACT

"Territory" is one of the most essential human "intrinsic" needs in most physical environments, especially in residential environments, which can promote the human scale of the environment, and consequently, the quality of artificially made environments. Research has shown that under equal circumstances, people may behave differently in their secondary territories. For this, the present article aimed to understand what may distinguish residents' territorial functioning in a residential environment. Assuming that humans' mental content influenced by their lived experience may cause people to exhibit different performances under similar conditions, this article aimed to shed light on how peoples' "lived experience" may influence the way they determine their secondary territory. In this connection, using an exploratory and a "Delphi" method, the study conducted open interviews by asking ten experts how they would think about secondary territories, presenting final outcomes in the form of a "Goal-Content" Table after performing two open and axial coding stages. Then, the table was used to devise a 15-item questionnaire that questioned 21 experts in this regard. The snowball method, used to select the experts, helped to create theoretical saturation. Responses given by the interviewees were analyzed manually using the SPSS software. Next, to ensure the results were valid, the second questionnaire, made of 56 items provided by respondents, was prepared, and the same statistical population was put under question. Similar results between the two stages underscored the validity of the results. Thus, concerning peoples' exposure to their territory and their territorial functioning about to their lived experience led to six main approaches which were the role of ownership over identity, the role of perceived comfort over environmental control, the role of external control over security, the role of identity over ownership, the role of perceived comfort in permanence in the environment, and the role of internal control over security.

Keywords: Territorial Functioning, Secondary Territory, Cognition, Lived Experience.

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** E_mail: hosseinabadi.1390@gmail.com

1. INTRODUCTION

Man has always had expectations of his living environment that are tailored to his life needs, and his "evaluation of how the environment responds will be influenced by how values are formed in his mind" (Purdeihimi 2015). For this, the more the environmental responsiveness to the individual's needs is compatible with his mental values, the more the individual will be satisfied with the environment. Under different circumstances, researchers have classified various human needs, the most notable of which was the classification of the needs into two broad categories primary/functional needs and secondary/transcendental needs (Ekhtiari 2012; Herzberg 1968; Davis 1972; Doyal and Gough 1991). The primary category of needs, focused by modern architects, believed man to be a single-dimensional being confined to the fabric, viewing all needs of people across the world as the same and presenting its architectural response simply based on a physical approach (Le Corbusier 1986; Le Corbusier 1988; Lang 1994). This consequently resulted in the intrinsic and true needs of humans being neglected. For this, researchers were led to understand humans in the form of "Humanities[1]", as influenced by Jung's work in the 1960s, eliminating the need to deal with human needs from a purely functional form.

Since the majority of humans spend most of their time living in their residential environments, it is essential to improve their quality by focusing on both functional and transcendental dimensions of their needs. In this regard, it is imperative to pay attention to the concept of territory as one of the main human needs, which helps to directly influence environmental quality (Sharifipour 2017). Focus on the "mental dimension" of human territory drives researchers to use various territorial scales, such as primary, secondary, and temporary territory scales (Altman 1975; Hall 1966; Sommer 1969). Meanwhile, as "humans' territorial functioning is considered to fall under three main parts of cognition, behavior, and marking" (Taylor 1988), it was deemed critical to recognize territory, especially the secondary territory, for the individual to utilize territorial benefits. A communal territory in a residential environment directly targeting peoples' mental ownership could lay the ground for the residents' different perceptions of their territories and boundaries. For this, it is crucial to facilitate residents' "territory finding" when designing residential environments. For this, this article aimed to answer the following questions:

- What are the factors influencing the formation of the individual's "meaning" and "mental image" of their secondary territory?
- How would peoples' "secondary territory" be strengthened in residential neighborhoods?

2. STATEMENT OF THE PROBLEM

Urban spaces and neighborhoods have constantly changed in recent years and seen considerable developments, resulting in social inequality, a falling sense of readability, spatial lack of control, waning boundary control mechanisms, and consequently increased security threats, and reduced social stability. In this connection, to meet residents' changing demands, the processes of neighborhood reconstruction have considerably transformed the model of the urban residential environment and territorial functioning on a residential scape scale.

While a residential environment functions to provide shelter, a place to establish communications, form meaning, and supply recreational facilities (Rofe 1995), many of the existing service spaces on streets have functioned as the outcomes of residential units and contributing to meeting these functions.

For Porteous (1971), the rising population in the 20th century, compounded with the explosive development of technologies and political upheavals, has subjected traditional neighborhoods to mounting urban evolution pressure. Discussing this problem, Saghatoleslami et al. (Saghatoleslami, Hoseinian, and BehnamiFars 2014) maintain that changes to Iranian neighborhoods' physical structures have converted centralized neighborhoods into decentralized units. This led to traditional neighborhoods being replaced by island subsets and economic segregation-based residential regions where fundamental principles of sustainability are discarded for economic progress. In this connection, the evolving models of residential neighborhood development have led to the transforming territorial functioning of urban residents. Hall (1969), in the meantime, argues that the impacts of changing residential neighborhood design patterns on territory, compounded with the lack of attention to personal spaces and territories, and the public's perception of and encounter with emotional outputs, will be, in most cases, excessively stressful and harmful.

In this connection, while human needs have become more complicated and wide-ranging than being met in a single territory, residents in cities are not alone dependent on their residential environments to meet their needs, thereby using numerous urban areas to meet their needs by considering the developments made in ICT and urban transportation means. However, the environment surrounding the house still has a certain position in residents' daily lives, with people believing in the significance of their residential areas to improve their quality of life even if they are not dependent on their residences to meet their needs (Banerjee and Baer 1984).

Emerging urban development models have outlined territorial realms without considering the human

scale or the individual's territorial needs. These developments have led to a combination of private houses with no boundary with public ownership, leading the individual to enter the public realm as soon as he leaves the house (Castell 2010, 7). This nonetheless led to the erosion of the semi-public realm, which has captured the attention of such planners as Jacobs (2007), Gehl (2016), and Madanipour (2016). Therefore, the transformation of residential neighborhood structures has changed the sense of having a territory, urban residents' territorial functioning, and finally the quality of life in modern times. Hence, recent developments in residential environments are claimed to bring a kind of perception of territory in the living environment and neighborhoods for the public. Meanwhile, residents appropriating areas close to the house to establish semi-public and semi-private territories could be critical for both local communities and security reasons (Castell 2010).

Now, considering the significance of semi-public territories in residential environments, this article aims to address crises caused by eliminating the "secondary territory" to help revive and strengthen this type of territory in residential environments while seeking to examine how residents would understand their secondary territory. The study also reviews the territory-finding process to explore and describe the models and factors influencing the understanding and revival of the semi-public territory as a bond linking the private and public territories. Initially, the study reviews the literature to explore the concept of territory as a critical human need and then describes territorial functioning using the Delphi method to discover the main indicators and factors involved in understanding the residents' secondary territory.

2.1. Territory as a Key Human Need

"Because architectural designs help to create favorable conditions in human behavioral environments and behaviors are usually formed based on needs, the human living environment should be tailored to the needs and mechanisms to meet those needs" (Purdeihimi 2015). The term "need" was first developed in psychology in the early 1930s (Deci et al. 1980, 228), meaning a variable that helped produce a specific behavior in the individual (Ekhtiari 2012) and bringing about his more favorable performance (Faziul Haque et al. 2014). A need is, however, considered as the lack of something in the human's life. In the second half of the 20th century when Jung's theories of the human's mental dimension began to dominate, experts were attracted to the immaterial dimension of the individual's needs, as needs, in this period, were divided into two "biological" or "basic physiological needs", i.e., avoiding deprivation and "humane" or "social and mental needs" (Davis 1972, 22; Herzberg 1968, 55). This was followed by the introduction of various human needs models led by Maslow's proposed model[2] as the most influential model in human behavior perception (Anburaj Balraj 2017; Crandall et al. 2020; Lussier 2019). According to this model, the individual interacts with the environment and manipulates its capacity to meet the needs he has had since birth (Taormina et al. 2013). Maslow believes in two main groups of human needs, i.e., "intrinsic" and "instinctual" needs (Huitt 2007), classifying them into five levels which, if realized, would meet peoples' mainly instinctual needs" (Fig. 1) (Mullins 2007).

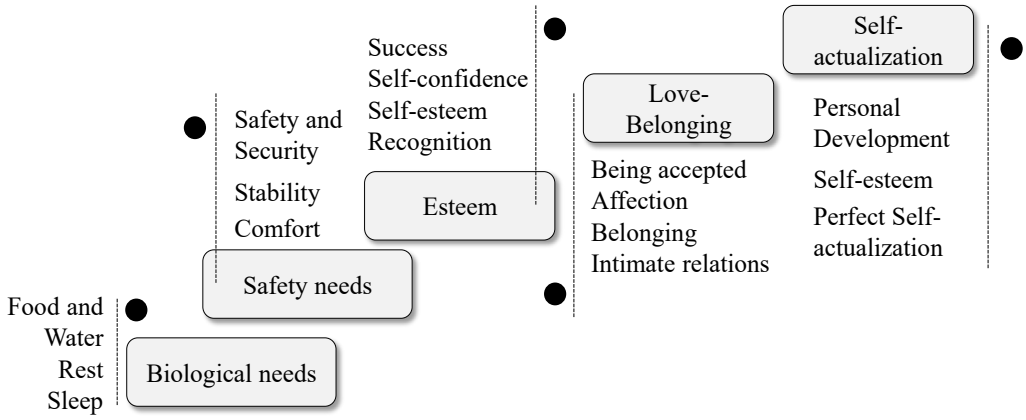

Fig. 1. Graph of Maslow's Hierarchy of Needs

(Derived from Maslow 2012)

In this connection, "territory" as one of the most essential human mental needs was incorporated by environmental psychologists into human behavioral studies, and its dimensions are seen within all levels of "Maslow's needs" (Fig. 2).

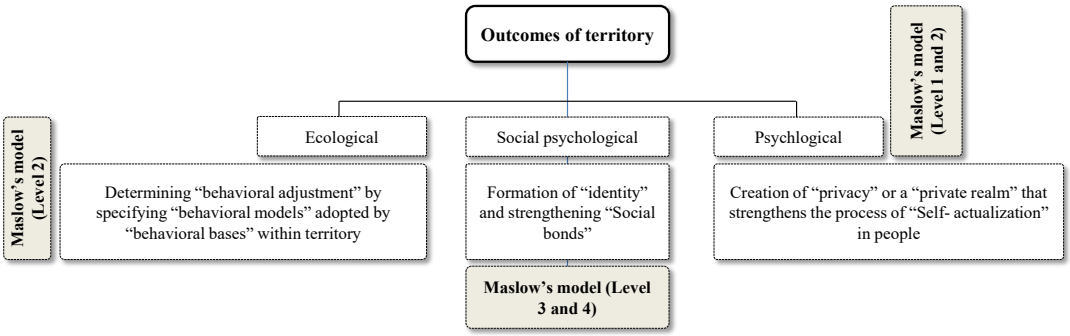

Fig. 2. General Classification of Territory Outcomes by Taylor and its Relationship with Maslow's Model of Needs (Taylor 1988, 96)

This concept has a critical role in the human's "quality of life" (Table 1), enabling the individual to organize his surroundings and feel "belonging" and "security" in the context of individual or collective "order" and "identity".

Table 1. Significance of Addressing the Territory from the View of Experts

Experts/Scholars	Significance of Addressing Territory
Proshansky et al. (1970)	The individual defines his "identity" and transfers it to others by "territory"
Altman & Hitorn (1970)	Territory involves meeting "biological" and "social" needs and protects "personal identity"
Harris & Gold (1980)	Territory influences a wide range of human social needs, including "identity" and "self-actualization"
Hirschon & Gold (1982)	Territory meets complicated social needs, including identity" and "self-actualization"
Sell (1983)	Territory influences the formation of independent individual and collective "identity" of residents Territory influences the required level of "privacy" Territory provides the individual with the necessary opportunity to remain alone, and consequently, develops the feeling of "self-actualization"
Taylor (1988)	Territory reduces anxiety and increases the ability to "control the environment"
Ono (2001)	Territory in the residential environment strengthens "attachment to place", "social integration", and "the physical organization of the environment"
Marco (2012)	Territory predicts behavioral modeling of the environment to reduce anxiety in people
Memluk Kuban Uglu (2019)	Territory speeds up the need in the environment due to the presence of "social regulations" and "individual satisfaction" Territory influences "environmental perception and relations" and the "individual's attachment to place" Territory organizes "social interactions" and strengthens the individual "identity"

2.2. Defining Territory

Territory is a completely subjective concept and is regarded by Lynch as a product of human mental ideation (Lynch 1981). Meanwhile, referring to the physical dimension of this concept, Pastalan (1970), and Hirschon and Gold (1982), have emphasized the significance of the temporary or permanent occupation of the environment as influencing the formation of territory. Harris and Lipman (1980) and Passi (2003) argue that territory falls under "social processes" and presumes it to be a center for the human's environmental relations. Defining territory, Habraken (2000) and Altman (1975) demonstrated that the "control" of space by an agent and its spatial expansion to provide the necessary "privacy" are key to meeting human needs. Territory in the human mind appears to have been established as an intrinsic matter, mainly involving the "mental ownership" of the surrounding environment and its belonging, as proposed by Appleyard et al. (1982) and Madanipour (2008).

There are two prominent approaches to human territory; the first approach considers territory to be an "instinctual talent" aimed at meeting physiological needs (adjusting social interactions, avoiding

transgression, and allocating environmental resources to self), with the human territory being considered as "identical" to that of animals (Van Vliet 1983). The second approach considers this similarity to be relative due to cultural processes and learning abilities that enable man to adapt to the environment and meet higher-level needs.

2.3. Various Scales of Territory

For researchers, if the typology of territory is not measured properly, a conflict will highly likely unfold over the ownership of space (Brown 1987). Hence, numerous measures have been taken to identify various kinds of territory (Table 2). The scale, under consideration by this article, is mainly founded on Altman's Theory, which divides the territory into four categories: personal space, primary territory, secondary territory, and temporary territory, with the secondary territory being in focus as the close-to-house territory.

2.4. Territorial Functioning and its Constituting Elements

"Territorial functioning" refers to a social system that controls a space and defends it against others (Kintrea 2010). This functioning involves a mechanism to regulate "privacy" and a function of mind used by the individual to remain open or non-open to social contacts (Altman 1975), requiring personalization through space marking to enable the individual to transfer his ownership to others (Fig. 3) (Altman 1975; Harris and Lipman 1980; Gifford 1987; Brown 1987; Haron 2018). Sell (1983) characterizes the main features of the "human nature" of territorial functioning to include "tool-making", "abstraction of thought", "learning over instinct" and "change in behavior along the life cycle", thereby categorizing them within "intrinsic needs" due to their relevant mental aspects.

"Territorial functioning" in humans is divided into three main parts: cognition, behavior, and symbolic marking (Taylor 1988), which are directly interactive, and improvement in one part improves the other two. Exposed to territory, the individual first recognizes his or the other's territory and then uses signs perceivable to others to demonstrate his territory. This marking is performed by using peoples' mental information of relatively common roots, thereby making it possible for the marker or his user to perceive symbolic meanings.

Table 2. Different Scales of Territory from the View of Researchers

Classification Indicator	Classification	Classification Indicator	Classification
Alexander Chermayeff (1966) Environmental Domains	- Group's public spaces - Group's private spaces - Family's private spaces - People's' private spaces	Goffman (1971) Organization	- Fixed territory (geographically, e.g. the environment) - Situational territory (fixed equipment in the environment) - Self-directed territory (dependent on personal space and individual assets)
Altman (1975), inspired by Landis (1949)	- Primary (private) territory - Secondary (semi-public and semi-private) territory - Public (temporary) territory	Newman (1972) (Providing Security, Personalization, Ownership, and Control)	- Private territory: Levels of personalization and higher protection - Supporting territory: Semi-private or communal territory - Semi-public territory: (simple mental ownership) - Public territory: (with no sense of ownership for users)
Liman and Scott (1967)	- Public territory (free access without a scope of freedom) - Home territory (used by a certain individual or group to control the environment due to mental belonging) - Interactive territory (the place where social ceremonies are held based on certain accessibility rules) - Body territory	Taylor (1988) Significance of Centrality	- Interior spaces of residential units - Immediate spaces in proximity of houses and residences - Regularly used spaces (working space, etc.) - Public places with temporary territories*

* According to Taylor and Brooks (1980), it is possible for individuals to depend on these places in the short run (Taylor and Brooks 1980).

Recognizing the behavioral settings in his territory, the individual seeks to control the behavioral patterns adopted by those bases, reserving the right for himself to defend it against any violation.

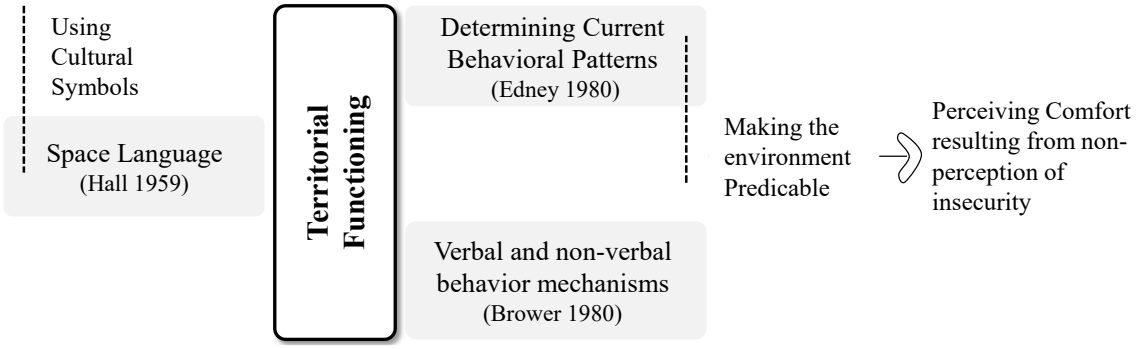

Fig. 3. Effects of Territorial Functioning

(Based on Gold 2020)

2.5. Territory Finding

2.5.1. Cognition Process

Researchers argue that "cognition" is the outcome of man's internal processes of mind by which he stores, thinks, and recalls information in his mind (Saif 2013). Herzberg (2003) considers cognition as consisting of a linear trend beginning with the individual "sensing" the environment and ending with the creation of "meaning" through a subjective process of "perception" (Fig. 4), giving the relationship between man and the environment a kind of "conscious" feature.

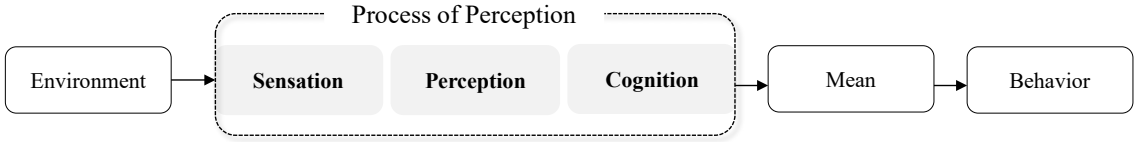

Fig. 4. Man-Environment Path of Interaction

(Bruner and Postman 1949)

A) Sensation

The process of the human's "understanding of the environment" firstly depends on his "sensation" of the environment which arises from the environmental stimulation of the human's nervous system and his sensory organs. According to this interaction, the individual, based on his needs, receives information from the environment via his senses (Sharqqi et al. 2017). Therefore, the more senses are involved in the process of understanding (Bakhtiarmanesh 2016; Soheili et al. 2019; Landry 2013), the better image of the physical environment will be formed in the individual's mind (Salehiniya and Niroumand 2018; Shirazi et al. 2010; Hazreena 2010).

B) Sensory Perception

"Sensory perception" is another stage of the process of understanding. "Perception" is not an arbitrary act (Merleau-Ponty 2005); rather, it is a subjective process wherein sensory experiences become meaningful, enabling man to understand the relationship between matters and object meanings (Iravani and Khodapanahi 2000). "Perception" is generally the process of "organizing" and interpreting "sensory input data" to make it meaningful (Sarmadi et al. 2020). Information is classified based on its characteristics in the brain (Bakhtiarmanesh 2016) and its adjustment with "mental patterns", which are represented in the form of two "acquired" in combination with "intrinsic patterns" or "innate" patterns, created inside the human mind since birth (Salingaros 2000). The outcome of this stage includes a mental image of the environment for the individual.

C) Intellectual Perception or Cognition

"Intellectual perception" is the third stage of the process of understanding which involves mental exploration of the information organized in the brain. In this stage, the individual judges the intended mental image with a criterion of "values" and "mental ideation", thereby giving a certain "meaning" to the environment (Sarmadi et al. 2020). The individual then demonstrates a positive or negative emotional reaction to the environment and performs an appropriate "behavior" in line with the meaning created in the mind.

D) Lived Experience

For meanings to be formed in the mind, mental information is required to be within "mental patterns" (Abbasi, Habibi, Mokhtabad Amroi 2018). For this, the nature of this information will distinguish how people may understand a single concept. While part of the mental information is "innate" and is shared by all humans, the difference should be sought in the "acquired" information, which is sociologically seen as influenced by how people live (Salingaroos 2000). In the meantime, a different behavior between two people with a similar living manner suggests that each individual's mental information is considerably influenced by his direct experience of life. For this, what makes the meaning and understanding of a single concept different among humans appears to be the outcome of the individual's peculiar "lived experience", which is defined as the same "human's immediate and instinctual knowledge of his life" (Van Manen 1990). This [lived experience] will not, however, be capable of converting transient sensations over time. Lived experience is a totality formed in the memory and can be again experienced the same way (Gadamer 1975). Influenced by the individual's lived experience, and more specifically the individual's acquired mental information, mental information appears to play an effective role in the individual's understanding of the environment. In sum, this article aimed to find the causes of differences in various peoples' territorial functioning under fixed time and place circumstances to examine how lived experience affects their territorial functioning.

3. METHODOLOGY

This article employed an exploratory approach using the Delphi method to expand the topic under study and beyond what is found in the literature (Fig. 5). Thus, to posit a "theory" to examine the views of experts on the relationship between "lived experience" and "territorial functioning", some interviews with an "exploratory" approach were conducted with ten experts in at least three areas of interest, namely architecture, urban development, and subsets of Humanities. The interviews asked the experts to rely on their personal experiences to describe the concept of territory in the residential environment. The ten response sheets were then analyzed by open and axial coding procedures, which were administered by two levels of response analysis and three levels of response analysis, respectively.

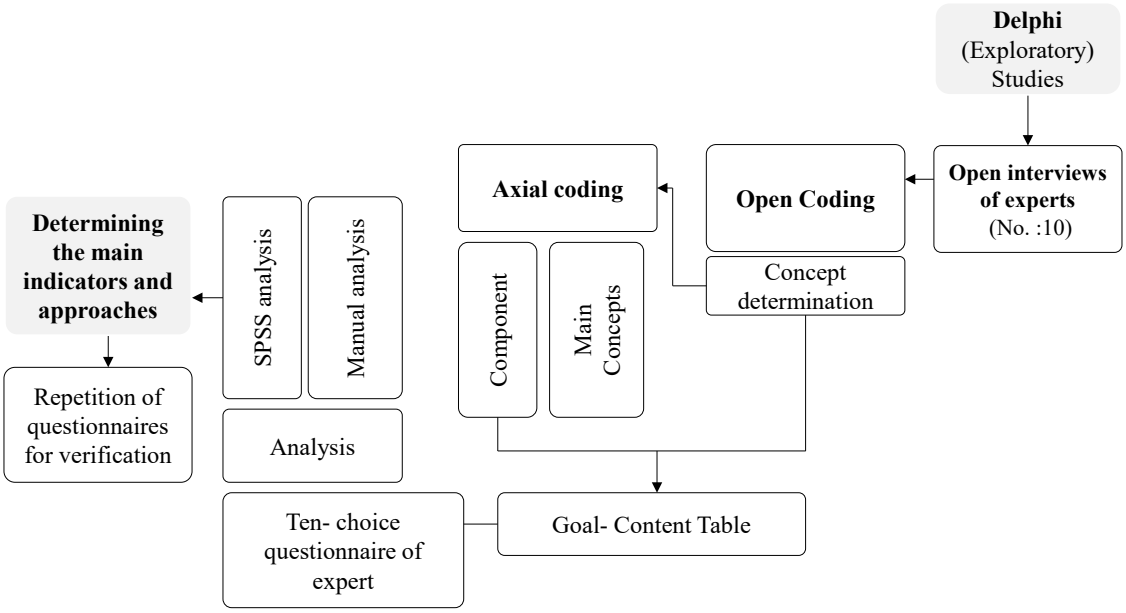

Fig. 5. Path covered in the Delphi Method

The first-level analysis of the "open coding" included determining statements with the subject-related key concepts in each interview, thereby helping to form the initial headings for the conceptualization process. In the second-level analysis, as distinguished by each interview, the key statements in sets with members of common characteristics were ordered using the degree of proximity to and distance from the concept under study in each set and within a hierarchical 9-point spectral continuum (Table 3).

Table 3. Sample of the Second-Level Analysis of the Open Coding

1	2	3	4	5	6	7	8	9
The Sense of Insecurity	13	12 a	27 a	15	11 b	26 a	5	The Sense of Security
	20 a	26 b		27 b	17	26 c	6 a	
	9				18			
					19			
					21			
					22			
					24			

Regarding the third-level analysis, the open coding results were entered into the "axial coding" stage where common concepts were identified by adjusting the continua obtained from the pairwise correspondence of diagrams, with the axial coding being completed by "naming" the intersection of the concepts of both axes as the intended "Category 28" (Table 4) (Fig. 6).

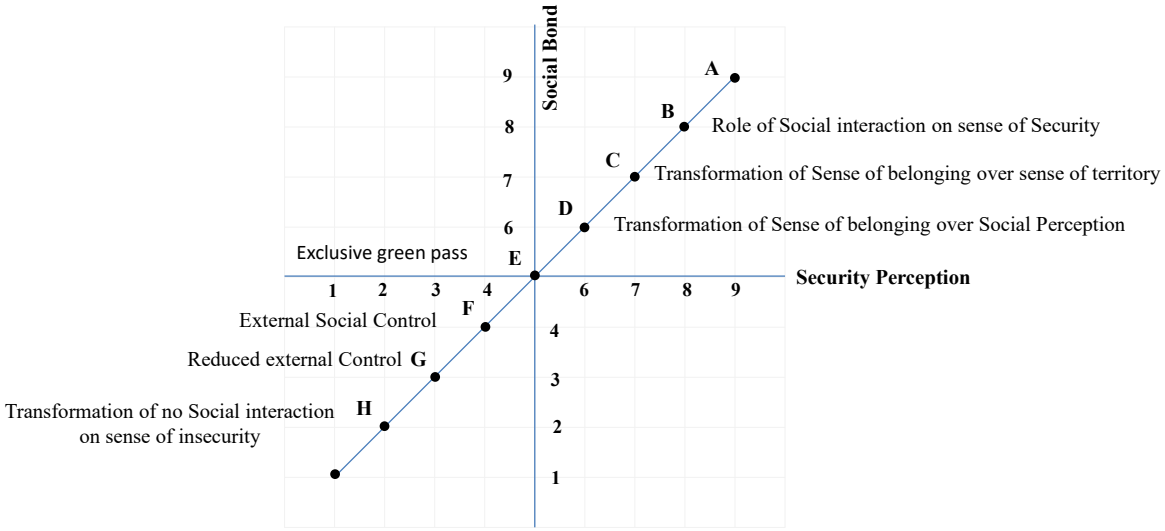

Fig. 6. Sample of Level 3 Analysis in Axial Coding

Table 4. Main Concepts and Relevant Categories

Categories	Concepts						
	1	2	3	4	5	6	7
Stable Identity	Transformation of Lack of Identity in Urban Architecture	Effects of Visual Domination on Privacy Dimensions	Role of Landscape in Identity Formation	Transformation of Horizon of View in Environmental Facilities	Role of Residents' Economy in Environmental Facilities	Green Path	Fluid Path
Role of Ownership in Privacy Perception	Role of Sound Violation on Indefensible Space	Role of Abandoned Space in Insecurity Perception	Effects of using Place in Insecurity Perception	Transformation of Land Use Mix on Place Attachment	Role of External Control in Permanence in the Environment	Control	Effect of Restricted Traffic on Ownership
Role of Social Readability in Place Attachment	Transformation of the Lack of Social Bond on the Sense of Belonging	Transformation of Restricted Social Bond on Territory Perception	Effects of Supervision on Place Management	Role of the Owner's Length of Residence in Secondary Territory Perception	Transformation of Solidarity Bonds On Security Perception	Effect of Economic Class on Landscaping the Residential Environment	Role of Primary Territory Perception on Social Readability

Categories	Concepts						
	1	2	3	4	5	6	7
Role of External Control in Security	Transformation of the Lack of Social Interaction on the Sense of Insecurity	Reduced External Control	External Social Control	Exclusive Green Pass	Transformation of the Sense of belonging on Social Interaction	Transformation of the Sense of belonging to the Sense of Territory	Role of Social Interaction in the Sense of Security
Role of the Length of Residence in Internal Control	Transformation of Social Heterogeneity on Internal Control	Transformation of the other Territory on the Perception of the Sense of belonging to Place	Role of the Length of Residence in Social Interaction's	Role of Social Readability in the Formation of Social Bonds	Role of the Length of Residence in Promoting Internal Control	Role of Famous Families in Social Readability	Role of Collective Memories in Territory Perception
Internal Social Control	Transformation of Inappropriate Proportions of Space on Social Interactions	Temporal Understanding of Place	Role of Participation in Managing the Environment on Place Attachment	Role of Privacy Perception in the Sense of Belonging	Role of Privacy in Security Perception	Role of Restricted Traffic in Mental Ownership	Internal Social Control
Menal Comfort and Physical Convenience	Transformation of Negative Memories on Space Control	Transformation of Interfering Sound on Comfort Perception	Role of Visual Domination in Reduced Environmental Welfare	Role of Social Interactions in Privacy Boundaries	Role of Understanding Environment In Territorial Boundaries	Effect of Mental Image on Understanding the Environment	Effects of the Observer's Eye on Comfort Perception
Positive Mental Image or Positive Sense	Transformation of Indefensible Spaces on the Sense of Belonging to the Environment	Role of Light in Establishing Social Interactions	Transformation of Using Space on Place Belonging	Transformation of Security on a Place Attachment	Social Signs	Role of Internal Control in Acceptable Behavioral Patterns	Role of Internal Control in the Positive Mental Image of the Environment
Privacy Perception	Transformation of Interfering Sound on Comfort Perception	Transformation of High Traffic on Environmental Comfort	Transformation of High Traffic on Security Perception	Transformation of Repeater Use of the Environment on Privacy Perception	Proportion of Behavioral Patterns with Behavioral Settings	Transformation of Insecurity Perception on Mental Ownership	Role of Social Readability in Security Perception

The outcome of this stage included the goal-content table where the goals included the concepts derived from the open coding and the content included headings and categories derived from the axial coding. These categories were stable identity, privacy perception, the role of ownership in privacy perception, the role of social readability in place attachment, the role of external control in security, the role of length of residence in environment control, social internal control, physical comfort and mental convenience, and the role of positive mental image of the environment.

To complete the study's Delphi section, after the goal-content table was given, a 185-item questionnaire that measured the intersection of each goal with the related content in the form of three "cognitive, emotional, and behavioral" domains was devised to meet the different perspectives of the respondents. In conjunction with the goal-content table, this questionnaire that involved 9-option spectral responses was provided in the first stage to five experts, to be later provided to another 212 experts, after being confirmed by the five experts. In this stage, experts used the snowball sampling method to create a theoretical saturation. The sufficiency of the sampling volume was confirmed by the KMO test in the analysis stage of the questionnaire.

3.1. Classification of Concepts from the View of Experts Using the Q Factor Analysis

Before discussing the results, it is necessary to introduce the Q factor analysis method in the study. Researchers broadly define this analysis as the "systematic study" of subjectivity. According to this method, peoples' perception of individuality rather than understanding what is shared by a large population is discussed (Corr 2001, 293-297). This enables the researcher to reveal peoples' mental content of various subjects (Ranjbar et al. 2016; Brown 1987). This method is usually thought of as a bond between "qualitative" and "quantitative" research methods (Khoshgoyan Fard 2006), because, on the one hand, participants are selected purposefully and in smaller sizes, which makes it closer to the qualitative method, and, on the other hand, findings are obtained through a factor analysis and completely quantitatively.

By adopting an epistemological structure, the Q methodology suggests that humans practice not by reality but by the images of reality they have in their minds (Boros 2006). The Q method helps facilitate the intellectual patterns governing individual decisions. This method aims to "classify the intellectual system" of respondents to enable the researcher to first identify perceptions and then to classify people by their perceptions (Kitzinger 1999).

4. FINDINGS

In the analysis stage of 21 response sheets, six broad perspectives were determined. Then, to verify the results of this stage, common items among experts in each of the six perspectives were determined and were again provided to the respondents in another questionnaire with 56 items. After data from the second questionnaire were received and response sheets were analyzed, the raised perspectives were again classified.

Table 5. KMO and Bartlett's Sphericity Tests to Examine Sample Size Adequacy

KMO and Bartlett's Sphericity Tests		
Sampling Adequacy using the Kaiser-Meyer-Olkin Measure		0.669
Bartlett's Sphericity Test	Chi-Square Value	489.724
	Freedom Degree	210
	Sig.	0.000

Table 6. Data Variance after Factor Analysis Rotation

Classification of Professionals/Experts	Of	No. of Professionals/Experts
First	Group	13-3-15-12-5
Second	Group	1-7-14
Third	Group	17-20-10-6
Fourth	Group	9-21
Fifth	Group	11-4
Sixth	Group	6-8-18
Seventh	Group	2
Eighth	Group	9

Findings showed that the sampling volume adequacy (using KMO and Bartlett's Sphericity tests) held a value of 0.669, i.e., higher than 0.6 which is confirmed (Table 5). Moreover, the tests showed that the significance value was 0.000 being smaller than 0.05. This enables factor analysis to be performed on the questionnaire's results. Therefore, as suggested by the Q factor analysis and the examination of the collected data analysis rotation, eight main factors (approaches) were specified (Table 6). However, because two factors 7 and 8 indicated the views of only one individual and a single person cannot offer a scientific approach, these two factors were eliminated from the sum of the main approaches.

Also, the rotated data variance value of 66.691 indicated that around 67% of the expert responses involved scientific approaches with acceptably identical and uniform tendencies. Meanwhile, the remaining 32% show the individual's interest and tendencies, which are not recognized as scientific (Table 7).

Table 7. Description of Data Variance

Component	Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.030	19.192	19.192	2.628	12.513	12.513
2	2.224	10.592	29.784	2.342	11.150	23.663
3	1.658	7.897	37.681	1.913	9.110	32.773
4	1.423	6.777	44.459	1.635	7.787	40.560
5	1.369	6.519	50.978	1.535	7.308	47.868
6	1.132	5.388	56.366	1.461	6.955	54.823

Component	Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
7	1.093	5.204	61.570	1.342	6.392	61.215
8	1.075	5.121	66.691	1.150	5.476	66.691

According to the Scree Eigenvalue Plot, because the factor rotation milestone is the place where the plot's slope changes, the first factor of the eight approaches, as suggested by expert responses, saw a higher significance level than other approaches (Fig. 7).

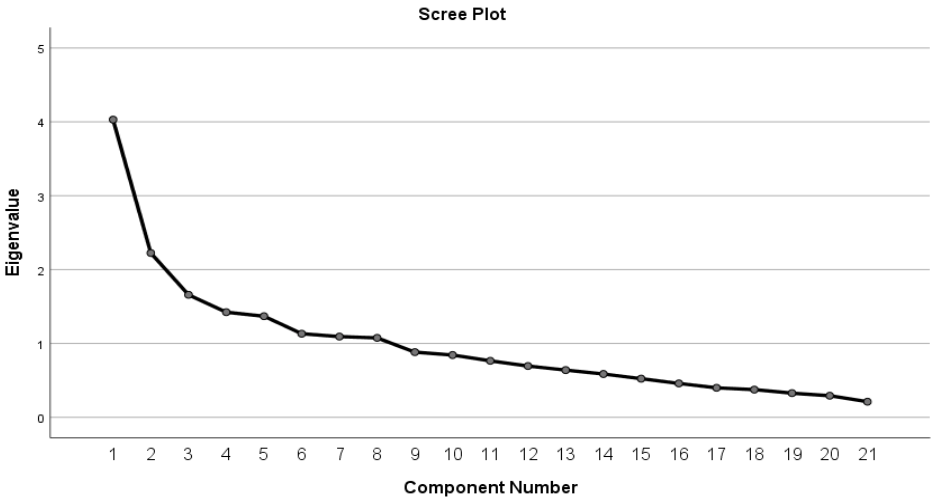

Fig. 7. Scree Eigenvalues Plot

On the other hand, using the rotated data table to identify the variables in each approach, each time, the factor whose value is larger than – and + 0.3 falls under that approach, which determines the variables of each approach (Table 8). After classifying the experts into each approach, items with scores 8 and above were extracted to help find common thinking themes among the experts in each group. Then, "naming" the broad concept was performed based on the common items between the experts in each group, with each selected subject, along with its subset, referring to one of the factors influencing territory determination in lived experience-dependent mental information.

Table 8. Matrix of Rotated Data and Relevant Factor Loadings (Including Classification of Experts based on Their Views)

	Components							
	1	2	3	4	5	6	7	8
Var 005	0.747	0.0120	0.106	-0.038	-0.051	0.170	0.129	-0.021
Var 012	0.712	-0.166	0.123	0.247	0.073	-0.208	0.102	0.114
Var 015	0.697	0.149	0.159	0.027	-0.057	0.197	0.394	0.008
Var 003	0.683	0.336	-0.232	0.242	0.497	-0.036	0.042	-0.016
Var 013	0.577	-0.036	0.232	0.242	0.497	-0.036	0.042	-0.016
Var 014	0.030	0.817	-0.013	-0.222	-0.105	0.026	0.052	-0.046
Var 007	0.0143	0.701	0.101	0.233	0.256	-0.226	0.0163	0.073
Var 001	0.105	0.693	-0.027	0.183	0.217	0.087	0.118	-0.007
Var 006	0.027	-0.004	0.804	0.162	0.123	0.0165	0.052	0.062
Var 010	0.0151	0.114	0.666	0.101	0.044	-0.081	-0.213	0.243
Var 020	0.329	0.104	0.582	-0.229	-0.245	0.078	0.115	-0.378
Var 017	0.068	-0.360	0.520	-0.169	0.205	-0.032	0.251	0.014

	Components							
	1	2	3	4	5	6	7	8
Var 021	0.078	0.165	0.046	0.794	-0.210	-0.073	-0.003	0.150
Var 019	0.074	-0.030	0.043	0.475	0.239	0.217	0.034	-0.194
Var 004	-0.019	0.056	-0.09	-0.052	0.665	0.192	0.292	0.075
Var 011	0.079	0.296	0.180	0.002	0.624	-0.070	-0.218	-0.074
Var 018	0.060	-0.201	0.142	0.022	0.038	0.739	-0.097	0.155
Var 008	0.188	0.112	-0.054	-0.007	-0.033	0.541	0.340	-0.125
Var 016	0.032	0.406	0.016	0.251	0.259	0.515	0.007	0.081
Var 002	0.200	0.193	0.013	0.039	0.098	0.021	0.799	0.094
Var 009	0.099	0.010	0.146	-0.034	-0.013	0.102	0.089	0.888

In this stage, the six named approaches, along with their subset items, were again provided to the five experts who were asked to produce their views on the proposed subjects. After employing the views in the approach classification and naming each of them, the second questionnaire, which included 56 items and was based on the common items, was devised and provided to the same 21 experts. After analyzing the second series of questionnaires, the common results of the two stages underscored the proper trend of the study.

5. DISCUSSION

As stated, recent developments in neighborhood and residential areas have disrupted the physical systems of traditionally centralized neighborhoods, helped establish decentralized residential areas with higher density rates, and consequently eliminated secondary territories in the proximity of neighborhoods' residential units. When the secondary territory is eliminated, the primary territory is seen as a fully private territory in proximity to the public domain, causing negative and adverse impacts, piling up presses, and inflicting mental harm. While experts maintain that "territory" is a mechanism to achieve favorable privacy in the environment, it is critical to realize the secondary territory in residential areas is a separate space to go from the public domain to the private domain and vice versa. Since the secondary territory falls under "communal" areas and is discussed as a completely "subjective" concept, it is also imperative to understand the "physical" and "non-physical" factors in residential areas. Hence, to achieve the cognitive patterns focused on by residents, it is crucial to review their mental images of the secondary territory. Thus, assuming that each individual's mental image and his different concept meanings depend on his lived experience, and lived experiences are peculiarly unrepeatable, this study aimed to review peoples' mental images of territory to discover "common concepts" in different peoples' lived experiences while presenting the above cognitive patterns in the form of "categories" and "the main indicators" to revive the secondary territory.

6. CONCLUSION

While the cause of difference in understanding the secondary territory between different people can be attributed to their mental images of territory (which itself arises from their lived experiences), Delphi studies for the exploration of physical and non-physical patterns within the secondary territory show that:

1. Responding to the first question: For researchers, the stage of perceiving the process of understanding reveals that to organize input information from the senses (forming the mental image of the environment), the mental patterns, influenced by lived experiences, fell into six groups of security, ownership, internal and external controls, identity, physical comfort, and mental convenience, as well as privacy. On the other hand, in the final stage of understanding, the mental image of the environment formed in the mind of the user will be made meaningful under the value system of the six factors of the role of ownership over identity, the role of perceived comfort over the environmental control, the role of external control over security, the role of identity over ownership, the role of perceived comfort in permanence in the environment, and the role of internal control over security. Meantime, the individual will adjust an appropriate behavior in the environment and use comprehensible marks in territorial marking.

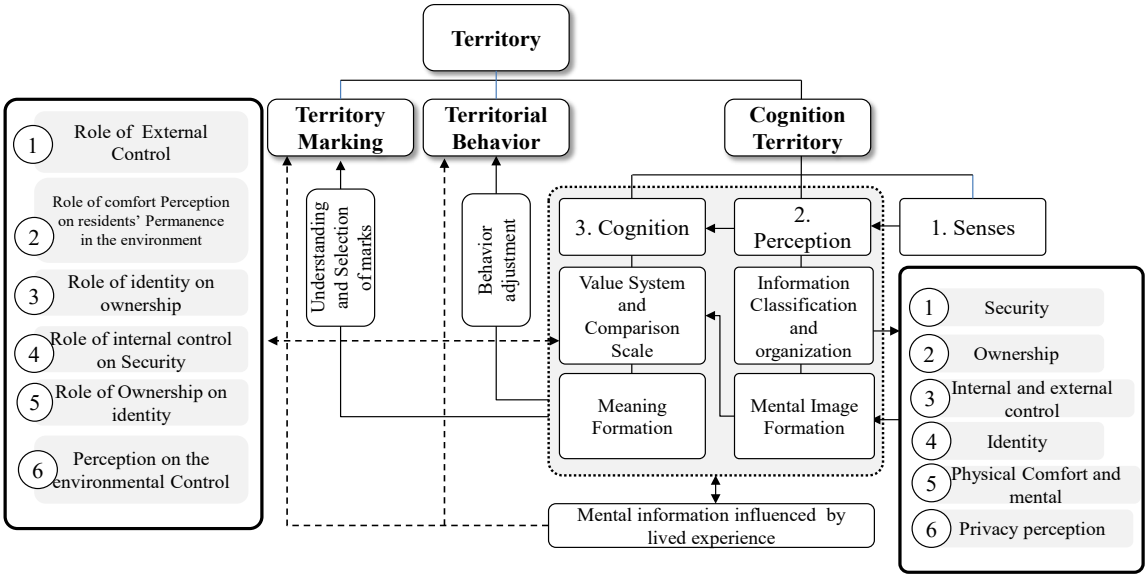

Fig. 8. Impacts of Lived Experience on Territorial Functioning

2. Responding to the second question: According to the main six approaches obtained from Delphi studies; to help revive the residents' secondary territory, it is critical to classify the physical and non-physical characteristics of the environment under the categories obtained from the Delphi section to strengthen the secondary territory. Meanwhile, this is aimed at strengthening those characteristics based on the significance and priority of each of the approaches raised by the experts, as given in Table 10.

Table 9. Approaches focused by Researchers on the Subject of the Lived Experience on the Territorial Functioning

Approaches	Factors
The Role of Internal Control in Security Perception 3-13-15-12-5	While the sense of "security" is thought of as the main outcome of a territory, "controlling" the internal occurrences of the territory could be one of the main tools to achieve this goal. The formation of robust communication networks between residents and families within a territory, which is a function of social readability, could help strengthen control and monitor the territory. This concept falls under the category "Role of internal control in residents' perception of security" within the territory.
The Role of Comfort Perception in Residents' Permanence in the Environment 1-7-14	Environmental responsiveness to individual needs at both functional and transcendental levels will improve the sense of satisfaction and belonging to the living environment, thereby strengthening physical comfort and mental convenience and increasing the individual's chance of survival in the environment.
The Role of Identity in Ownership 17-20-10-6	While the characteristics governing house and residential areas could indicate the "identity" of the individual, the more the individual reveals (distributes) his identity signs in the environment, i.e., the more he has a sense of belonging to the environment physically (e.g., buildings typology, pavement construction, furniture, materials, etc.), socially (e.g., social classes, household typology, social bonds, etc.), and landscaping (vegetation, environmental design, etc.), the more he will have a strong sense of ownership against the environment.
The Role of External Control in Security Perception 19-21	Where strangers have a growing presence in areas due to various reasons (e.g., the mixing of land uses with the residential use of the alley situation, physical characteristics, and the higher density of buildings) or it is difficult to differentiate strangers from insiders due to the growing number of residents, or it is more likely to see residents' territories being exposed to transgression, it would be critical to employ environmental control tools (e.g., using CCTV cameras, alley guarding, restricting peoples' traffic to the inside of the alleys, etc.) to help provide security and improve the sense of security for residents.
The Role of Ownership in Identity 11-4	A territory is characterized by a sense of ownership over the territory; for this, the more the individual has a sense of belonging to his living territory, the more he will use identity signs to display his territorial ownership.
The Role of "Comfort" Perception in Environmental Control 16-8-18	Since the individual's sense of comfort in the environment is directly correlated with his sense of ownership, the more the individual feels comfortable in his territory, the more his sense of ownership will be. This will enable him to improve his control by providing a sense of comfort and security within the territory.

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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.

PARTICIPATION PERCENTAGE

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

ENDNOTE

1. In its current sense, Humanities were first proposed in the late 19th century by the German philosopher Wilhelm Dilthey (1833-1911); however, the objective achievements of empirical sciences in the modern era resulted in neglecting Humanities until the early 1960s.
2. Maslow's theory is basically founded the "intrinsic nature" of man. Assuming that human nature is fixed, he directed his attention to its scientific study (similar to the empirical sciences). His measures were met with criticism from other researchers, with a group criticizing the prioritization of physiological needs (Krech, Crutchfield, & Ballachey 1962; Wahba & Bridwell 1976), another group criticizing the human behavior as "universally presumed" (Springborg 1981; Fitzgerald 1977), and the other group criticizing the disregard for the need to establish "social bond" to satisfy all needs.

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