

# Role of the Third Place in Recognition of Environmental Perception Theories

Mohammadreza Mohammadi Vosough<sup>1</sup>, Toktam Hanaee<sup>2\*</sup>

<sup>1</sup> M.A. Student of Urban Planning, Department of Urbanism, Mashhad Branch, Islamic Azad University, Mashhad, Iran.

<sup>2\*</sup> Assistant Professor, Department of Urbanism, Mashhad Branch, Islamic Azad University, Mashhad, Iran.

Received 2023.04.25; Accepted 2023.07.30

**ABSTRACT:** Since the third places are very effective in relieving the anxiety and tension of the citizens and the studies conducted in the past, consider this component as a multifaceted component that different results are mentioned in the articles depending on the time and different places, in this article using A comprehensive questionnaire of artificial intelligence has been used. We are looking to find key variables in these main components of this research, which are the perception of persons, third place, and environmental perception. In this case, we can achieve maximum use of third places to improve urban spaces according to key variables. This research, which aims to improve the quality of urban hangouts to increase the quality of urban space on urban perception, originated from a basic question which is to identify and prioritize the factors effective in improving the quality of the third place in urban perception, in this research artificial intelligence information by setting up a questionnaire The detailed influencing variables of the third rank of environmental perception have been collected. The purpose of this research is to investigate and identify the role of the third place in environmental perception, and since the research method is qualitative, it has been analyzed using research onion and MAXQDA software. In the end, by showing a map of the relationships between the influential variables of this research, it is stated which includes: the sense of belonging, individual perception, experience and habit, and environmental perception.

**Keywords:** *Environmental Perception- Man & Environment Interaction- Third Place - environmental psychology- Behavior of people.*

## INTRODUCTION

In environmental psychology, the research examines people's responses to what is perceived by considering the mechanisms involved in cognition and, ultimately, the creation of personal perception. In particular, Stephen Kaplan (1979) has inspected the assessment of 2D versus 3D scenes through 4 instructive components counting coherence, complexity, lucidness, and riddle. The Ambiances organize particularly investigating experiential and tangible subjects in space and put. (Thibaud, 2012; Thibaud & Siret, 2015). Individual and social behaviors happen and create in physical spaces and space, and individuals have a common impact that's appeared through culture. From this point of see, the part of the physical space plan is exceptionally critical, even though it may be a component that decides the quality of the space and people's prosperity. As an illustration, able to allude to when we plan and look at the spaces in such a way that our objective is to meet human

needs, and we are conditioned by social and individual wants and indeed the understanding of the concept of well-being. (Hall, 1996). In other words, it can be said that the comes about of an urban plan should not be judged as an objective reality per se but should be inspected concerning clients. (Altman & Rapoport, 1980). The urban design contains a coordinated and indirect effect on the physical environment of people's way of life (encounter) and eventually on social and individual behavior. In other words, it can be said that the development of fabric space empowers and indeed bad habit versa it cannot avoid its creation, foresee human elements, and eventually make social life. All the concepts that Jan Gehl called life between buildings. (Gehl, 2011). Last, inside this social space, people's individual life takes place. (Piga & Morello, 2015). The relationship between reality and recognition isn't momentary. The perceptual involvement of a question isn't a genuine duplicate of reality but a representation. This

\*Corresponding Author Email: [t.hanaee@mshdiau.ac.ir](mailto:t.hanaee@mshdiau.ac.ir)

representation is continuously a halfway entertainment of reality. Now and then, we cannot get things that exist or bad habits and versa, and sometimes we get things that don't exist. Sometimes, These perceived illusions appear that what the individual feels within the tactile organs does not compare to what is seen within the mental representation. Concurring to (Bronfenbrenner, 1996), discernment is the set of forms by which we recognize, organize, and make sense of the feelings we get from natural boosts. We emphasize that boosts can come from an inner or outside environment. This way, recognition, and feelings are organized and then framed a discernment, a mental representation of a seen boost. The contrast between animal perception in common and human recognition is within the shape and way of this representation. People have an uncommon way of utilizing the more complex tactile data "in a way that oversees it in such a way as to make a mental representation of objects, highlights, and spatial connections from the environment" (Bronfenbrenner, 1996). Their capacity compensates for the tangible confinement in people for mental representation, which enhances the quality of interaction with the environment. Each creature, in its advancement, has created a perfect way", a perfect way, to adjust to its environment. We capture ourselves by being human. In expansion to steady activity, response, and interaction, people can cut real-time joins with reality and make other times and spaces, in other words. People can oversee reality uniquely, bargain with symbolism, and alter their behavior after this perusing. Since human capacity is the most distinct, looking at his natural discernment becomes more vital. Man's interaction with the environment numerous times causes environmental lopsidedness and the return of weight on the man himself and negative impacts on nature. In expansion, if the man is dependable for numerous natural issues, the arrangement to these issues lies in him. The way people interpret reality and themselves, that's, understanding reality and themselves meddling with the quality of human interaction with the environment. (Saunders,

2003). With the progress of urbanization and the rapid growth of cities, paying attention to the needs of people's communities and planning and planning has found a special place in the perception of individuals, each person, by being in the environment, according to a series of variables, including the level of awareness, experience. has a distinct understanding. Considering that the study of environmental perception is a multifaceted component and provides different research results depending on the time and place, identifying and investigating the influential variables of this component using artificial intelligence information and inference and the high percentage of collected information compared to setting up a device is necessary. The questionnaire is different from the people in this research from the environment, this research, which aims to improve the quality of urban hangouts to increase the quality of urban space on urban perception, originates from a basic question which is to identify and prioritize the effective factors in improving the quality of the third place in urban perception. In the following figure, research keywords have been compiled for better familiarity with the research. (Fig. 1)

**Literature Review**

Over five decades of his recognized career, Gibson brought modern clarity to the ancient issues of the convention. He proposed an elective hypothesis of discernment, which he depicted as an adaptation of coordinate recognition to recognize it from the circuitous approach of Rene Descartes. For White, and Rene Descartes, our recognition of reality comes from the representations we have shaped inside ourselves, whereas Gibson's hypothesis of coordinate discernment states that the environment contains all the data required to decide its characteristics. Hence, recognizing these highlights depends on acknowledging the specified data within the environment (Braund, 2008).

David Morris says that we don't get the crude and uncovered highlights of the environment, but we get what the environment

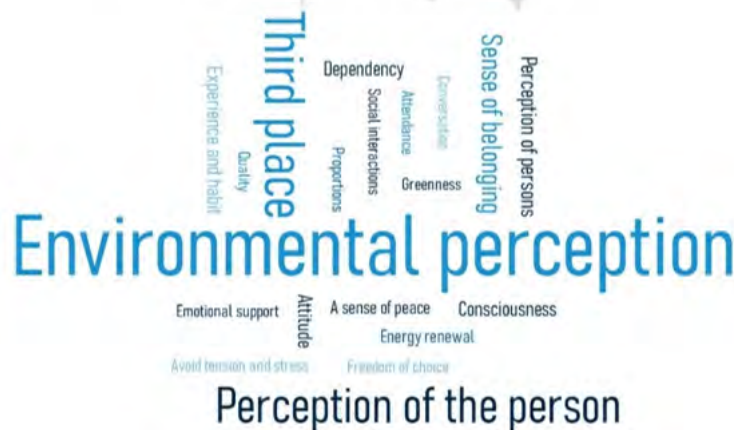


Fig. 1: Research cloud code

can do for our body, how we will utilize it, or within the encompassing environment. (Braund, 2008).

Environmental perception is a concept of discernment for connections between people and social orders with the encompassing environment. In other words, interaction with the quality of natural discernment is a basic component of life. In connection and communicating with the environment, people have been continually disturbing the biological adjust, which has eventually driven them to make a push for themselves and natural harm. However, it ought to be famous that natural recognition is straightforwardly related to natural mindfulness in such a way that individuals Are more mindful, and the quality of interaction between people and the environment is more profound. Intelligent behaviors all result from discernment and cognitive forms. (Marques et al., 2020).

Interaction with the environment is basic for the survival of species. Interaction with high-quality natural recognition is a basic component of creature life. In an intriguing approach, we can see how this developmental consideration is progressively coordinated into today's brain research (Gangestad & Tybur, 2016, 5-8).

Gibson's hypothesis of coordinate discernment, known as the environmental show, conceptualizes affordance and accepts that being human does not require higher cognitive forms to the degree of tactile and perceptual encounters. While, within the top-down concept, constructivist creators consider that the perceiver makes an introductory inside representation of the boost and employments other sources of data separated from sensory information. In this way, learning encompasses an important part of this handle. Recognition may be an energetic handle amid which different theories are proposed concerning recognition based on three components:

1. Tangible information, sense data. 2. Put away information, known and recovered data from memory. 3. Built data, inferred data when cognitive forms are enacted at a tall level. (Marques et al., 2020).

Recognition is the primary step in human communication. The act of perception is so common and visited that it is taken for allowed in most cases and isn't.

Indeed assessed or taken under consideration. We hypothesize that if people extend their environmental mindfulness, they are likely to associate more mindfully with the environment. The level of biological mindfulness is specifically related to the self-awareness of the quality of one's natural discernment (Marques et al., 2020). Each day we watch the aimless utilization of the thing "recognition," with two common implications:

As a cognitive act and a moral act, which suggests how an individual sees, interprets, or judges reality. In casual discussion, you'll ordinarily see, "Did you take note of something distinctive around me?" when there's a alter in someone's appearance, such as hair color. Or "How do you see the effect of this news on the economic advertise?" when you present an unused component into a discourse, such as a

political choice. These implications of the word discernment are not off-base; be that as it may, its meaning is broader, and the semantic issue, as it were, emerges when we diminish or mutilate its meaning, which can jeopardize the discussion.

Recognition can be inspected from distinctive viewpoints:

1-Through handling is made by physical, chemical, natural, social, and mental jolts (full of feeling, social, and cognitive).

2-With perceptual levels and bearings, from subliminal discernment to wide cognizant discernment, or from self-perception (inner world) to natural discernment (external world).

3-The variables that influence that recognition:

Outside (such as concentrated, differentiate, movement, and discord).

Inner (inspiration, encounter, culture [information, convictions, values]).

4-Through perceptual shortfalls, obsessive (visualizations, daydreams) or not (visualizations, camouflage, impersonation). Perceptual handle.

As we have seen so distant, discernment isn't fair the natural product of a brain at work, yet the organically acquired viewpoints of the species, but the mind in conjunction with the full body, systemically and comprehensively that brings together the individual as well. Mental reality has outside physical and social impacts. It can be said that recognition has a natural substrate and another agent. We have something specifically related to the human physical, tactile framework concerning the natural substratum. It may be a framework that covers three major capacities:

Sense of depth, sense of self,

Interception, sense of function

Major systems of organs in the body and internal conditions

External sense is the direct interaction of the external world on the body; for example, responsible for the feeling of heat and cold (Marques et al., 2020).

Beneath the layer of representation, it alludes to the method of making self and reality. This handle of organizing and extraordinarily deciphering tangible information is socio-historically affected.

It recognizes two deciding components in recognition:

Self-directed and behavioral. The primary one alludes to the organic qualities related to the apprehensive framework and associated with the brain. The moment alludes to behavioral characteristics related to inspiration, identity, learning, demeanor, social needs, and social foundation related to the intellect. The Bruner impact development got to be known as the "Modern See at Recognition," which highlighted the mental components that meddled with discernment:

1. Selectivity (each perceiver sees reality depending on his characteristics and interface. 2. Arrange and meaning for the caught-on (the set of thoughts related to the caught-on, concepts, and essential concepts within the case and setting). 3. Shaping a thought (nourishment from encounters, information,

biased convictions). 4. Classification (organization of decisions into classes, not as it were levelheaded but ideological and enthusiastic).

It ought to be arranged towards a homogeneous system, regarding the fundamental divisions agreeing to the embraced hypothetical approach, which may get a differing topical center, from which illustrations based on the involvement of conspicuous thinks about within the fields of human topography, ponders on the topophilia establishments of discernment; Instruction, cognitive and social authentic angles, imperative life encounters and memory; Human science, questions approximately the delineation and development of human ecology, social interaction; and logic, the phenomenological establishments of discernment and their moral and tasteful measurements (Maia, 2020) The consider of natural discernment joins together the components that contribute to it:

A. The shared impact of understanding human behavior and his environment. B. Giving information for the favorable human natural participation of the settlement organization between. C. Arranging natural instructive measures (Alves, 2016, 131-148).

Natural recognition assembles cognitive, passionate, and social components as common discernment. It can be characterized as an outlet for tricky scrupulous joins with the environment, be that as it may, the act of seeing the environment is implanted in it and learning to ensure it. And beware of the same. Too, concurring with the ideological impact of each society, it can be characterized by how individuals see, get it, and communicate with the environment. The coming about reactions or appearances are the result of collective and personal judgments and desires, from cognitive recognition, the forms of each person (Ursi & Towata, 2018) rejoining the diverse psychosocial measurements of natural recognition:

1-cognitive (arrangement of mental pictures)

2-passionate;

3-Inclinations related to the environment (allure level).

According to urban sociologist Ray Oldenburg, the third place, a major public institution, is a shelter in front of the home or workplace, where one can regularly interact with friends, neighbors, colleagues, and strangers. Relatedly, according to Oldenburg, third places are informal public gathering places. Next, Oldenburg also described third places as public places in a neutral context where people can gather and interact with each other. In contrast to the first places, i.e., home and the second places, defined as workplaces, in the third places, the conditions are such that people put aside their usual worries and enjoy socializing and social relations with the people around them. (Oldenburg, 1997). In the following form, the variables studied and investigated in this research are categorized according to the main components, compiled for better understanding and easier familiarization with the variables that will be investigated further. (Fig. 2)

## MATERIALS AND METHODS

Since many articles related to environmental perception are all information collected by people, we are trying to fill the information gap in this field and examine new results using artificial intelligence. In this research, by combining the two variables of environmental perception and the third place, we investigate the role of the third place in the recognition and perception of the environment from the point of view of artificial intelligence because many of our searches in the virtual space, which are often affected by the personality of each person, exist in the internet space. Also, in other articles where the questionnaires were conducted through individuals due to the limitation in the number of questionnaires and often a small group of people was selected as a statistical volume, like a greenhouse, it provides different results depending on the place



Fig. 2: The theoretical framework of research

and time, but in this research, using intelligence Artificial that by creating an algorithm from the results of people's searches that leads to the recognition of each person's personality, it is possible to obtain the most dominant and accurate answers to the questionnaire and the results obtained from it can be adopted as the main results in this field of studies. This research has been carried out using qualitative approaches, which have special complexity and variety, and further, the primary analysis has been done using thematic analysis. (Denzin et al., 2023). Because by using this type of analysis, it will base the main skills for other analyses. (Holloway & Todres, 2003). For example, we can refer to the research done by Ryan and Bernard in 2000, which uses thematic analysis as an analytical process based on the opinion of the data and considers a specific approach in research. (Ryan & Bernard, 2000).

Flexibility is one of the most important benefits of thematic analysis. Qualitative analysis methods are divided into two parts:

1- The first category includes those that exist because of integration with a specific theoretical or epistemological position or are a root of them. Such as conversation analysis (Hutchby & Wooffitt, 2008, 265) and interpretive phenomenological analysis (Smith & Osborn, 2015, 312). There are limitations in the framework of this method, and it can be stated as a principle to guide the analysis. However, for other methods, Such as contextual analysis (Corbin & Strauss, 2014, 131) and discourse analysis (Willig, 2015, 312), and quotation or narrative analysis (Murray, 2015, 312), there are discrepancies, the most important of which can be pointed to is extensive extraction from within their theoretical framework.

2- The second category, which is independent of epistemology and theory and is used in a wide range of theoretical and epistemological approaches, although they are often implicitly expressed as

a practical/experimental method, but the thematic analysis is originally in the second category. (Roulston, 2001). The thematic analysis method that we mentioned earlier leads to the foundation of a flexible and useful research tool by creating theoretical freedom, and it can potentially be used for an accurate and rich report combined with the complexities of the data. This research uses the potential of thematic analysis, such as flexibility, as mentioned earlier, for data analysis.

Thematic analysis is used to classify the analyzed data and express patterns related to the extracted data. As mentioned, this method can express and interpret more detailed data with various topics. (Boyatzis, 1998, 70). In research that seeks to discover the use of interpretations, thematic analysis can be used as one of the best analyses available in this field because, in this research method, we see an increase in complexity and accuracy, ultimately improving the overall concept of the research. Thematic analyzes allow understanding and analyzing any problem, and finally, the researcher can analyze the potential of each problem more extensively by using this

method. (Marks & Yardley, 2003, 30). Using comparative and establishment methods due to their flexible nature can be considered another benefit of using thematic analysis. (Frith & Gleeson, 2004). Taking advantage of the dominant approaches of the collected information leads to the beginning of the research with precise content. It will lead to a wider allocation and, finally, to the statement of theories, which will increase the accuracy and ensure the effective connection of the patterns with the information. The processed data are categorized and displayed considering their differences and similarities. (Miles, Huberman, & Saldana, 2019). It is important to display the content in the research when using thematic analysis; the model should describe a major part of the data. (Marks & Yardley, 2003, 67).

In this method, a logical process should be carried out that at the beginning of each pattern and the connection between them, the classification of information is connected to discover the mutual connection between variables and factors, to create conceptual coherence, and at the end to identify the validity of the final results in a way that fits the theoretical framework of the research is done All the steps of displaying and drawing information must be done sequentially. (Mile et al., 2019). Considering that the collected information is of qualitative type, the research method adopted is qualitative, and the collected information was done using research onion and MAXQDA software. First, the required information was collected, and then by examining the literary background and examining the variables proposed by the experts and paying attention to the library documents to categorize the variables of the Third place components as well as the important components of environmental perception and personal perception and evaluating these components using the results obtained from the questionnaire using MAXQDA software and finally we reach the most important influencing variables. The following text has compiled a graph to understand the research process better. (Fig. 3)

### Data Analysis

In this section, we analyze the collected data using MAXQDA software. First, in the collected documents, we code the words from the texts of the collected documents. At this stage, according to the variables mentioned earlier in the theoretical literature and the theoretical framework of the stated research, we choose the codes displayed in the following list, compiled in the figure of all the checked codes. (Fig.4)

In this section, the number of coding done in the documents collected in the software is displayed, and as you can see, the highest number of coding is related to environmental perception & third place variables, and the lowest number of coding is related to emotional support & avoid tension and stress variables. The following figure displays the evaluated codes' ratio for better understanding. (Fig. 5)

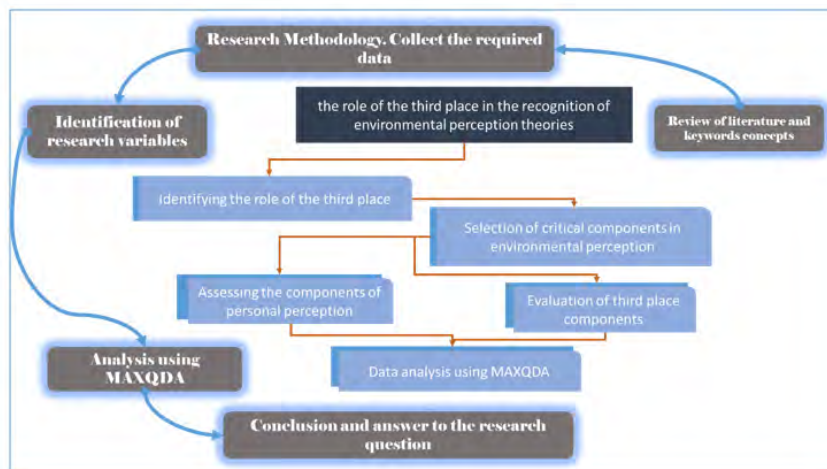


Fig. 3: The model and process of research methodology

Code System	Count
Code System	1209
Environmental perception	420
Perception of the person	208
Dependency	27
Conversation	8
Social interactions	9
Attendance	8
Attitude	24
Emotional support	5
Experience and habit	37
Consciousness	24
Perception of persons	47
Third place	248
Avoid tension and stress	6
Sense of belonging	77
Freedom of choice	8
Energy renewal	14
Greenness	12
A sense of peace	13
Proportions	6
Quality	8

Fig. 4: The list of coding done in the MAXQDA software

In the output of the matrix from the MAXQDA software, from the analysis and coding of the documents collected in this research, we see the highest correlation between the variables environment perception & third place and then environment perception and perception of the person, among which among the variables third place, perception of the person, we see the most coding relationship between sense of belonging & experience and habit & dependency & attitude variables. In the following figure, the output matrix from the software shows the relationships between all the coding done from the documents collected in this research. (Fig. 6)

Finally, for a better conclusion and a complete view of all

the relationships between the codings done in the MAXQDA software, we prepare a map of the relationships between the codings done from the collected documents, which you can see in the following figure, and it is important that based on the frequency, the thickness of the connecting line between the codes increases. (Fig. 7)

## RESULTS AND DISCUSSION

The results of this research are in line with the results of research such as Ryuzo Ohno's research, which is 2018, in an article entitled Studies on Environmental Perception indicates the importance of environmental perception and the effect of

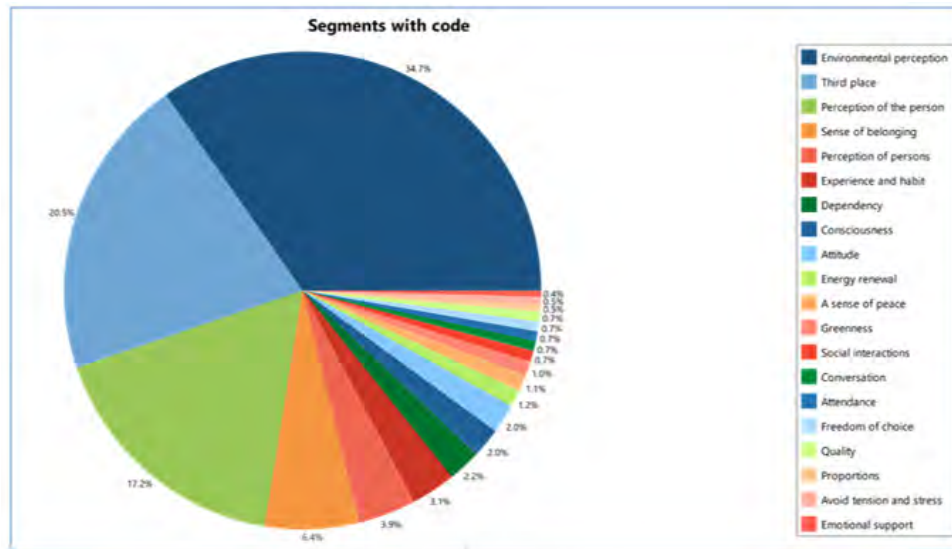


Fig. 5: Segments with code

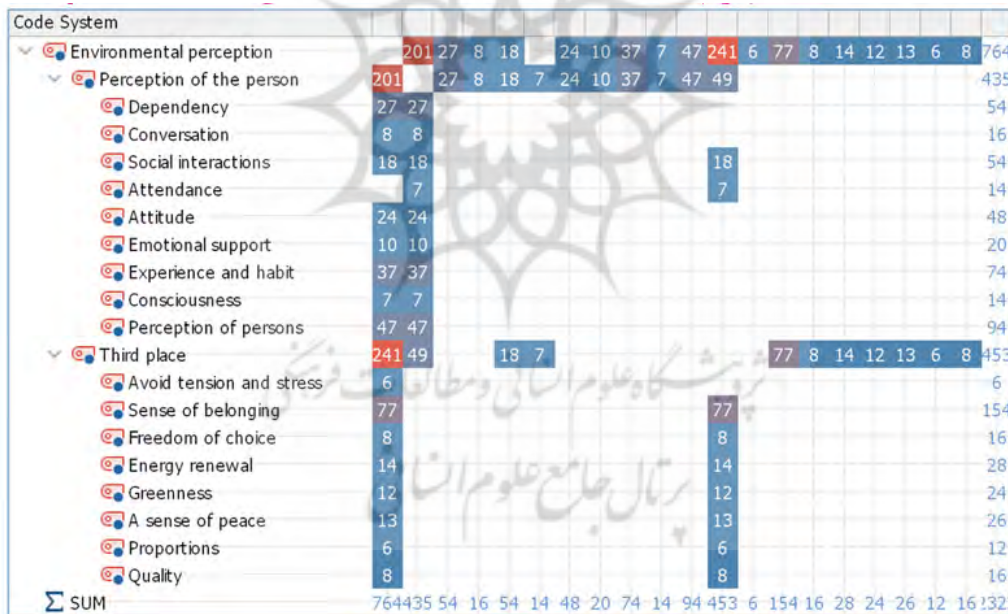


Fig. 6: The relations between codes in the MAXQDA software

spatial proportions and characteristics on people's perception. Some characteristics in people must cause perception. Different from the environment, the most important of which have been discussed in this research, include the type of attitude, experience, habit, and also In this paper, direct and continuous perception is emphasized instead of cognitive aspects of perception, which depend on conditions such as cognitive schema and the current psychological state among

individual perceivers. Also, in this article, the study of vision and perception of the environment during movement may compensate for the shortcomings of the traditional object-oriented approach and contribute to a more comprehensive understanding of environmental perception. New research tools have been developed and tested to investigate the dynamic nature of environmental perception. During movement, empirical studies generally support their validity. While other

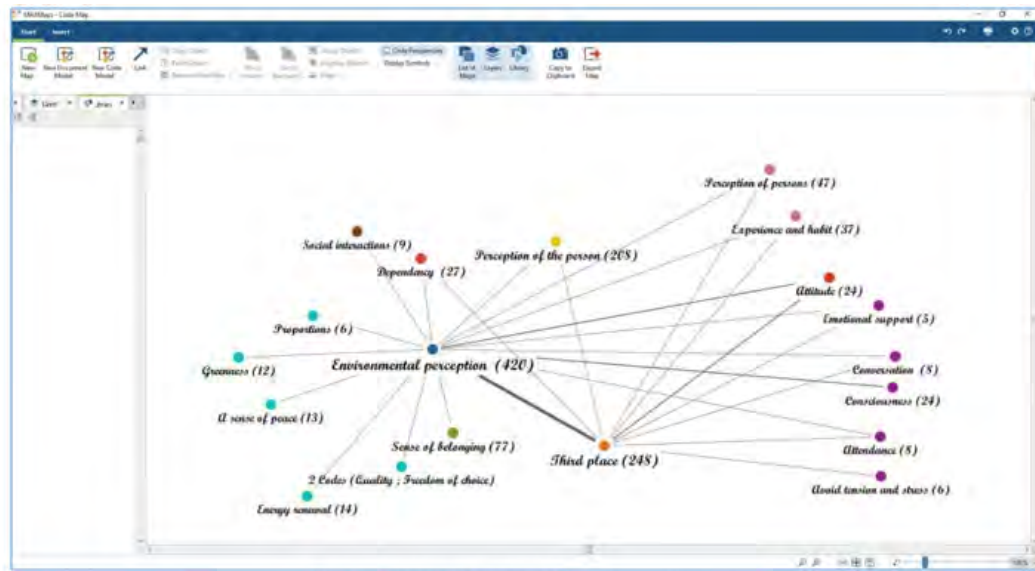


Fig. 7: CODE MAP, MAXQDA software

researchers tend to limit their research subjects according to existing conventional methods, in this article, an attempt has been made to examine perception in its natural state, which requires new tools. Regarding future environmental behavior studies, the impact of a new data environment should be considered. Today, it is easy to obtain information about the physical properties of the built environment at a fine scale through Google Street View photos and 3D laser-scanned models of buildings, as well as information about human behavior through the digital footprints left by tracked individuals. By sensors such as mobile phones and social media records. Meanwhile, it has many new sophisticated techniques to measure and analyze human responses, such as wearable physiological sensors, virtual reality simulation, and big data mining. Although the new data environment and analytical techniques provide strong support for investigating basic and immediate perceptions of the environment, these tools alone do not lead to understanding the relationship between the environment and behavior. Because to gain a comprehensive understanding of that relationship, the results must be interpreted with careful reference to existing theories or models of environmental and behavioral studies. Finally, although this paper has mainly focused on visual aspects, this paper attempts to draw attention to the multifaceted nature of environmental perception. The influence of non-visual environmental information received unconsciously was suggested by the experimental research of this research on a Japanese garden. Due to the changes in built environments that cause an increasing dependence on new artificial elements, the importance of environmental features of natural and traditional environments that enrich our sensory experience should be

rediscovered. (Ohno, 2018, 194-206). Also, the results of the research conducted in 2020 by Valéria Marques and her colleagues in research entitled "Environmental Perception" indicate that environmental perception is expressed as an important concept of perception that is very effective in the relationships of individuals and societies with the environment. which has been the cause of discovering the interactive relationship between humans and the environment and has been the cause of finding important influencing characteristics in this relationship, and finally for the most important influencing variables in that research, including moral, emotional, ecological and knowledge and awareness characteristics, and its results show that people in interaction With environmental perception, it leads to environmental awareness. The more this awareness, the better its quality, and also, In this article, the interaction between the environment and living beings is emphasized. That each creature has acquired the capacity to reply to boosts. The appraisal made in this investigation between the level of mindfulness and activity control appears to contrast these two components. In people, the interaction with the environment isn't as it was based on physiological needs; in expansion, needs and wants are moreover-shaped. In its social quality, environmental education is vital in improving natural recognition. The cognitive, enthusiastic, and inactive highlights of the gathering of people are emphasized in this investigation. Standard recognition alludes to the capacity influencing the organism's perceptual preparation to procure natural highlights and components critical for survival (life). Any standard recognition will be influenced by how perceptual forms are fortified, whether the information is considered or overlooked. The standard recognition is impacted by mental



plans (acquired and developed), metallic structure, concepts (developed), and temporal-spatial settings. Natural instruction ventures give a wealthy involvement that fortifies the subject. The (re)construction and transaction of faculties are fueled by overhauling involvement and the trade of discernments between members. Natural mindfulness is closely related to the presentation of natural mindfulness, and it induces that the more mindfulness; there's, the higher the quality of interaction between humans and the environment. Person and bunch attitude meddling a part with discernment and picking information. Intelligent behavior is caused by recognition and cognitive forms and is highlighted in judging and anticipating the course of environmental occasions. There's no non-partisanship; indeed, there's an ideological-political course within the impassion or avoidance of explicit metalizing. Freedom is found not as it were in cognitive advancement but in self-awareness, expecting duty, and social maturity. It can be concluded that the relationship between recognition and natural mindfulness isn't as if it were a cognitive address but moreover incorporates other socio-historical questions such as financial matters and legislative issues. Media can strongly influence perceptual preparation. In any case, to counter ordinariness, ideological generation, lived encounters are proposed that enter profoundly into the subject and his bunch and continually apply the issue of the interaction between man and reality, with successful measures to construct a common world and more facilitated offer assistance. (Marques et al., 2020).

## CONCLUSION

In this research, first by examining the theoretical literature

in the field of third place and environmental perception, the study of the literature defined in these fields from the point of view of experts and the knowledge of the variables examined in research and global experiences has been done, and then by creating a theoretical framework that the relationship between these two components and The considered variables in this research has been done and the variables that are to be investigated in this research have been introduced, these final variables include:

1-Experience & habit, 2- Dependency, 3-Attitude, 4-Sense of Belonging 5-Society interaction

In the following, using the MAXQDA software, the relationship between the variables of these components was investigated from the information collected from the results of the questionnaire, and the results of this research show that conversations in a third place are an effective way to raise awareness and awareness of environmental issues and perceptions. Third places are social spaces where people can engage in meaningful conversations that stimulate their thinking about environmental issues. In such places, people can learn from each other, share their experiences, and offer new perspectives and solutions to environmental problems. Considering the effect of the feeling of dependence on the third place on a person's ability to know and understand the surrounding environment, it can be said that dependence can have positive and negative effects. On the one hand, frequent visits to the third place can increase familiarity with the environment and better understand its unique features. On the other hand, dependence can lead to a narrower view of the environment and limit one's ability to recognize and

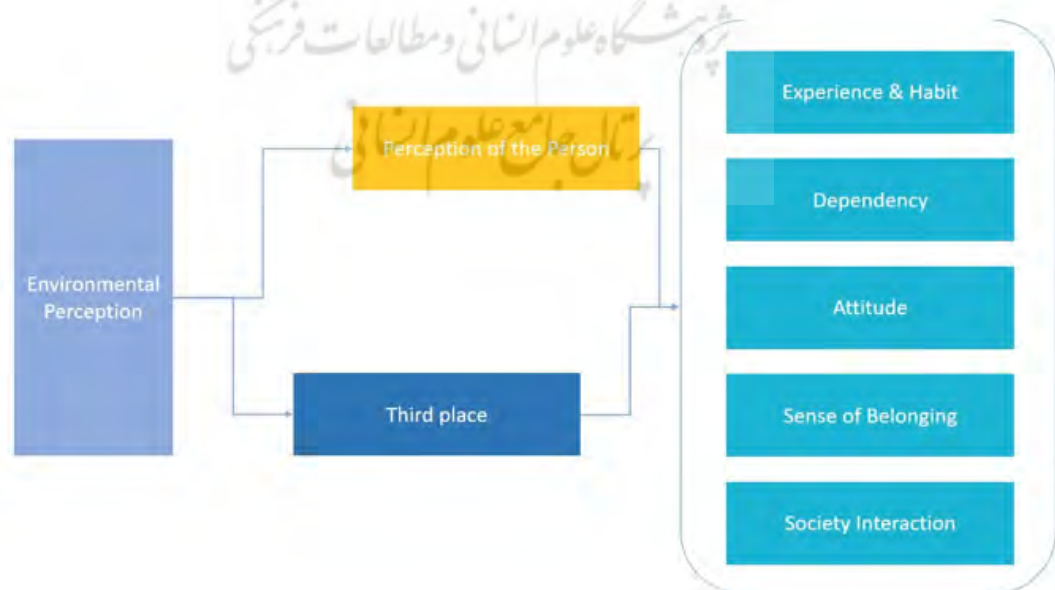


Fig. 8: Relationships between influencing variables of the third place in environmental perception

understand its broader environmental and social consequences. In the following figure, the relationships between the influential variables between the components examined in this research are placed for better understanding. (Fig. 8)

### AUTHOR CONTRIBUTIONS

Performing literature Review, collection of raw data, design, and distribution of questionnaires work with related software for data processing, and preparation of manuscript text and manuscript edition have been done by M. Mohammadi Vosough. (including substantive translation), and The research methodology was designed with the participation of M. Mohammadi Vosough and T. Hanaee.

T. Hanaee has also participated in reviewing the research and making some corrections.

### ACKNOWLEDGEMENT

This manuscript is extracted from the thesis of M. Mohammadi Vosough.

### CONFLICT OF INTEREST

The authors declare no potential conflict of interest regarding the publication of this work. In addition, the ethical issues, including plagiarism, informed consent, misconduct, data fabrication or falsification, double publication and, or submission, and redundancy, have been completely witnessed by the authors.

### REFERENCES

- Altman, I., & Wohlwill, J. F. (2012). *Human Behavior and Environment: Advances in Theory and Research* (Vol. 2). Springer Science & Business Media.
- Alves, S. C. V. (2016). *Estado da arte dos estudos sobre percepção ambiental no Brasil no período entre 2008 e 2015*.
- Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development*. Sage. 1-183
- Braund, M. J. (2008). *The structures of perception: an ecological perspective*. *Kritike*, 2(1), 123-144.
- Bronfenbrenner, U., & MORRIS, P. (1996). *A ecologia do desenvolvimento humano* (Vol. 80). Porto Alegre: Artes Médicas.51-88
- Corbin, J., & Strauss, A. (2014). *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory* (Fourth edition ed.). Thousand Oaks, California: SAGE Publications, Inc, 131
- Denzin, N. K., Lincoln, Y. S., Giardina, M. D., & Cannella, G. S. (Eds.). (2023). *The SAGE Handbook of Qualitative Research* (Sixth Edition ed.). Thousand Oaks, California: SAGE Publications, Inc.
- Frith, H., & Gleeson, K. (2004). Clothing and Embodiment: Men Managing Body Image and Appearance. *Psychology of Men & Masculinity*, 5(1), 40-48.
- Gangestad, S. W., & Tybur, J. M. (2016). *Editorial overview: Evolutionary psychology* (Vol. 7, pp. v-viii): Elsevier.
- Gehl, J. (2011). *Life between buildings: Using Public Space*. Washington: Island Press.
- Gibson, J. J. (1986). *The ecological approach to visual perception*. Hillsdale, NJ: Lawrence.
- Hall, E. T. (1966). *The Hidden Dimension*. New York: Doubleday & Company.
- Holloway, I. and Todres, L. 2003: The status of method: flexibility, consistency, and coherence. *Qualitative Research*, 3, 345/57.
- Hutchby, I., & Wooffitt, R. (2008). *Conversation Analysis* (2nd edition ed.). Cambridge, UK: Polity.
- Kaplan, S. (1979). *Perception and Landscape: Conceptions and Misconceptions*. In: Elsner,
- Maia, E. d. C. (2020). *Percepção ambiental de adolescentes sobre o manejo do pirarucu (Arapaima gigas) no interior do Amazonas*.
- Marks, D. F., & Yardley, L. (Eds.). (2003). *Research Methods for Clinical and Health Psychology*. Thousand Oaks, California: SAGE Publications Ltd, 30
- Marques, V., Ursi, S., Silva, E. L., & Katon, G. (2020). Environmental Perception: Notes on Transdisciplinary Approach. *Scientific Journal of Biology & Life Sciences*, 1(3), 1-9.
- Miles, M. B., Huberman, A. M., & Saldana, J. (2019). *Qualitative Data Analysis: A Methods Sourcebook* (4th Edition ed.). Thousand Oaks, California: SAGE Publications, Inc.
- Murray, M. (2015). Narrative psychology. In J. A. Smith (Ed.), *Qualitative Psychology: A Practical Guide to Research Methods* (p. 312). Thousand Oaks, California: SAGE Publications Ltd.
- Oldenburg, R., (1997), Our Vanishing Third Places, *Planning Commissioners Journal*, 25(4), PP. 6-10.
- Piga, B., & Morello, E. (2015). *Environmental design studies on perception and simulation: an urban design approach*. *Ambiances*. Environnement sensible, architecture et espace urbain (1-24).
- Roulston, K. (2001). Data analysis and 'theorizing as ideology.' *Qualitative Research*, 1(3), 279-302.
- Ryan, G. W., & Bernard, H. (2000). *Data Management and Analysis Methods*. In N. K. Denzin, & Y. S. Lincoln (Eds.), *The SAGE Handbook of Qualitative Research* (2nd Edition ed., pp. 1143: 769-802). SAGE Publications, Inc.
- Saunders, C. D. (2003). The emerging field of conservation psychology. *Human ecology review*, 137-149.
- Smith, J. A., & Osborn, M. (2015). *Interpretative phenomenological analysis*. In J. A. Smith (Ed.), *Qualitative Psychology: A Practical Guide to Research Methods* (third edition ed., p. 312). SAGE Publications Ltd.
- Thibaud, J. P. (2015). The sensory fabric of urban ambiances. *The Senses and Society*, 6(2), 203-215.
- Thibaud, J. P., & Siret, D. (2012). *Ambiances in action-ambiances en acte* (s).
- Ursi, S., & Towata, N. (2018). environmental perception about marine and coastal ecosystems: evaluation through a research instrument based on model of ecological values. *Problems of Education in the 21st Century*, 76(3). 393-405
- Smith, J. A. (2015). Qualitative psychology: A practical guide to research methods. *Qualitative psychology*, 1-312.
- Ohno, R. (2018). Studies on environmental perception during locomotion—a review of empirical studies by the Ohno laboratory. *Japan Architectural Review*, 1(2), 194-206.

