Evaluation of Physical Factors Affecting Cultural Consumption Patterns in Shopping Centers; Case Study: Palladium, Kourosh, and Tirajeh Shopping Centers in Tehran*

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ABSTRACT

In recent decades, the nature of cities has been indebted to a set of territorial factors and integrated and multi-layered connections between their constructive factors. However, now a significant part of this nature has been reduced to the presence or absence of signs, functions, and bodies. One of the results of these changes is the increasing formation of functionalist centers such as shopping centers; centers that are introduced as a platform for consumerist events. Evidence suggests that a cultural change has occurred in the function of shopping centers that has led to the emergence of new kinds of cultural consumption and thus, physical changes in these centers. Therefore, by selecting three shopping centers, the present study, based on the attitude obtained from the literature of the related studies, compares the considered indicators in them. This study is applied descriptive-analytical research, in which theoretical data are collected using library research method, and the field data are collected by observation and using questionnaires. After studying the theoretical literature on cultural consumption, 21 criteria are extracted to examine case studies in terms of 10 physical factors. Also, the information required to investigate the samples is obtained by using purposeful observation and completing 300 questionnaires by the clients, and then, processed using data mining technique in IBM SPSS Modeler software. The study results suggest that the proposed hypothesis on the impact of physical factors on consumption patterns in many cases can explain the process of changes. Also, it seems that shopping centers are part of the temporary culture of people who spend their time there; and the spaces in them are not only parts of consumption, but also are consumed themselves.

Keywords: Physical Factors, Cultural Consumption Patterns, Shopping Centers, Tehran.

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1. INTRODUCTION

Today, consumption has become one of the most fundamental concepts for understanding modern society such that it has been discussed from different dimensions by experts. Although the initial conception of consumption was an activity to meet the needs or an economic activity, the twentieth-century thinkers have mostly emphasized cultural form of consumption and have considered cultural consumption to be the most important component of the modern society. The next decade, more than anything else, can be described as the decade of living on the basis of dignity-based consumption, i.e. consumption that is intangibly progressing in the form of a megamall pattern in all the visible and invisible aspects of modern human life (Hosseini, 2016, p. 35). The consumer culture sells you not only a commodity for consumption, but also a social sign, meaning, and identity (Nojoumian, 2016, p. 295). Although the basic strategy of shopping centers has been to make individuals and citizens purchase, due to lack of sufficient public space in the city, they have provoked some kind of roaming which is different from the aim of the buyer (Kazemi, 2009, p. 44). Users of shopping centers include a wide range of capital owners, buyers, and roamers each of whom consumes in some kind (Kazemi & Rezaei, 2009, p. 4), and these changes have changed the nature of consumption.

It seems that the macro trends of value changes (individualization, commercialization, and privatization) as well as structural changes in society, both affected by macro global processes (such as the growth of information and communication technologies or the increase in geographical mobility) and due to the internal developments and dynamics of Iranian society, have seriously influenced the priorities and importance of components of consumption. In recent years, Tehran City also is facing a significant trend of the creation of modern shopping centers. Although these changes initially changed the face of life in Tehran very slowly, today, with the help of architectural constructions of these centers, they have affected the whole living process of the citizens. Therefore, it is necessary to pay attention to such structures and how they are formed and evolved in the dialectic of people and the city in order to achieve a vision.

The present study, aiming to recognize the changes in shopping centers in terms of how they are used, looks at shopping centers through the lens of cultural consumption, and by examining shopping centers, first explains an aspect of people's social and cultural presence in this modern space and then by examining the mutual and dynamic relationship between cultural consumption and development of urban shopping centers in Tehran, evaluates the physical factors affecting cultural consumption patterns in modern shopping centers in Tehran. This study seeks to answer the question of how much physical characteristics of shopping centers and commercial spaces affected cultural consumption patterns.

2. REVIEW OF LITERATURE AND THEORETICAL FOUNDATIONS

The history of social studies of shopping centers in Iran is very short, and the first research in this field dates back to the mid-2000s. During these years, different approaches and orientations have been formed in the relevant field of research; but despite the increasing expansion of construction of shopping centers and the increasing interest of researchers in social studies in Iran, few studies have been done on physical changes of shopping centers in terms of cultural consumption.

2.1. Consumption

The use of the term "consumption" has a long history. It involves various meanings from the historical meanings of "wear out", "destruct", and "overuse" to negative implications such as referring to the outbreak of a deadly disease in the 1950s in industrial societies. On the other hand, consumption means to have a right to choose, buy, and to have goods and services (Campbell, 2005, p. 104). It also refers to a set of actions that indicate an individual's identity, dependence on specific social groups, accumulation of resources, expression of social distinctions, and confirmation of participation in social activities (Warde, 2005, p. 304), and on the other hand, to the methods of construction, experience, interpret, and use of spaces and locations (Hillier, 2007, pp. 121-125), all of which can be explained. Consumption is an ideological phenomenon and, in other words, it plays a fundamental role in maintaining social relations and the relationships between people and their physical environments. As Estory states, ideology has an important cultural concept and this concept is doubly important in the study of urban life. Ideology can be thought of as a way according to which, specific cultural texts and practices present distorted images of reality. Therefore, the study of "consumer cities" depends upon acknowledging that the impact of consumption on cities may in some way impose or induce certain ways of group thinking on us as citizens of that contemporary society (Miles & Malcom, 2016, p. 17). In other words, consumption means a social process of allocating goods by people or the same social classes. From the perspective of social classes, consumption is both a kind of expression and a tool. In other words, it is a social function that is objectified by a particular (ideological) theme and distribution relations, as well as contradictions determined by production relations (Castells, 1977, p. 454). Accordingly, the product itself is part of the consumption process.

Nowadays, consumption is more considered as a

pleasurable practice, which often includes shopping in big stores and stylish boutiques, going to restaurants, etc. (Zokaei, 2012, p. 98). It is clear that consumption exists in all aspects of our lives, including in advertising, television, entertainment, and shopping, and forms the basis of images, sounds, smells, and landscapes of the contemporary world. Thus, for many theorists, increasing and distinct consumption opportunities are among the determinant elements of the 21st century life. Also, consumption does not just apply to goods that are produced and supplied, but beliefs, services and knowledge, places, shopping, eating, fashion, leisure time and entertainment, signs, and sounds can also be consumed (Jayne, 2006, p. 5). Any action can be considered as an object for the verb "to consume".

Consumption is the cornerstone of new cultural laws in a world where the social classification of people is no longer based on fixed categories such as class, gender, and ethnicity; a place where everything such as meaning, truth, knowledge, identity, and individuality is a consumption item. For example, Mike Featherstone in his book entitled Consumer Culture and Postmodernism (Featherstone, 1991) states that in the postmodern world, everything is possible and people, dependent on their consumption power, are able to shape their individuality. This is made possible by beautification of everyday life, where styles, tastes, and fashions are part of people's daily lives and cultural agents such as advertising, marketing, and the media present a world that shows that people are able to build themselves, their lives, and their identities and reflect it through consumption (Jayne, 2006, p. 69).

2.2. Cultural Consumption

Although the initial conception of consumption was an activity to meet the needs or an economic activity,

the twentieth-century thinkers have mostly emphasized cultural form of consumption and have considered cultural consumption to be the most important component of the modern society. Cultural consumption is a daily social and behavioral activity. It is through these actions that we call cultural consumption that culture is produced or fertilized. Cultural consumption shapes our lifestyles, regulates our needs and desires, provides the materials to produce our imaginations and dreams, reflects social differences and distinctions, and ultimately, represents our secondary productions in the use of existing tools (Featherstone, 1991). The present section is an attempt to categorize different and diverse theories of cultural consumption.

In today's sociological analyses, consumption activities are considered the modern source of identity structure, and this is the result of the change in the pace of life and leisure of today humans. The extensive and expressive concept of lifestyle is a powerful tool for analyzing consumption patterns and determining the boundaries of similarity and distinction between different social groups, and today, sociological literature increasingly emphasizes the importance of cultural consumption in shaping social status and relationships (Khademian, 2008, p. 9). The widespread presence of diverse types in shopping centers prevents the formation of distinct identities, as roamers show themselves as buyers. Therefore, one of the most important reasons for wanting to be present in these consumption spaces is the elimination of social and class distinctions. Increasing consumption and luxury is an urban phenomenon and therefore, according to studies in the field of consumption, recreational industries as well as cultural goods lead to increasing and quantitative growth of mass culture (Chaney, 1996, p. 97). In general, there are four theoretical approaches to cultural consumption.
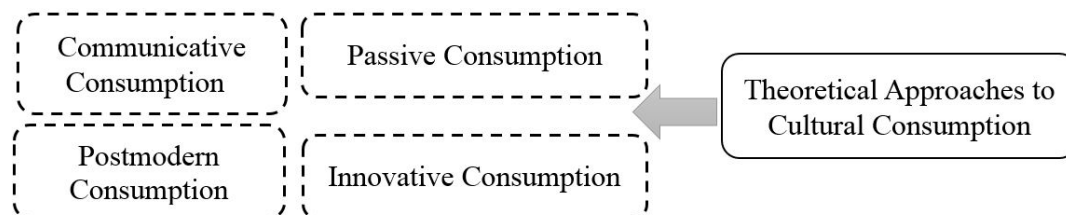

Fig. 1. Theoretical Approaches to the Field of Cultural Consumption

Here, an overview of theoretical approaches to cultural consumption is presented in the form of the following table. The argument of this section is that the Western conceptualization and theoretical approaches to consumption culture, although in some cases facilitator and producer of theoretical sensitivities, but they have shortcomings in understanding the conditions of Iranian society. Table 1 shows some of the scholars' views in the field of cultural consumption, including

Karl Marx (Marx, 1977; Castells, 2015), Friedrich Engels, Marx Horkheimer, Theodore W. Adorno, Herbert Marcuse, Walter Benjamin (Walter, 2002; Walter, 1969), Thorstein Veblen (Veblen, 2005), Georg Simmel (Simmel, 2001; Simmel, Sennett, Gerth, & Mills, 1969), Frederick Douglass, Christopher Isherwood, Pierre Bourdieu, John Fiske (Fiske, 2000), Michel de Certeau, Peter Kivisto, John R. Gibbins, and B Reimer.

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Table 1. Scholars' Views on Cultural Consumption

	Scholars	Key Points and Theories
Passive Consumption	Karl Marx & Friedrich Engels	Humans recognize their identity in the consumption of goods for which they pay money, and goods are distinct and objectified identities. Consumerism ideology serves both to legitimize capitalism and to stimulate people- either in imagination or in reality- to become consumers.
	Marx Horkheimer & Theodore W. Adorno	Expanding the non-economic Marxist approach to consumption. The culture industry is a means by which any potential revolutionary power is destroyed. Above all, they emphasized uniformity of culture through mass consumption, and focused on uniform and predictable consumption. Culture has become a good that just like any other industrial product is bought and sold for profit.
	Herbert Marcuse	Consumerism ideology creates false needs that act as a form of social control. Goods and experiences that are consumed have turned into pre-packaged goods and experiences that have been coded to create and receive specific responses.
	Walter Benjamin	Benjamin's goal in the Malls Project was to bring these hidden truths into the self-awareness of the contemporary generation. The simplest way to achieve self-awareness is to show that these images are false claims. People are trapped in an ecstasy-like state; that is, a situation in which they are stimulated to consume much and to see demonstrative scenes of goods. Consumption consequences cannot be reduced to only the nature of the good; just as the consumer cannot be limited to the process by which the good is obtained.
Innovative Consumption	John Fiske	Goods are produced incompletely, but it is the consumers who complete the goods. In the nature of consumer behavior, there is a kind of resistance and production. In late capitalist consumer societies, everyone is a consumer, and consumption is the only way to gain benefits for life. Every consumption action is a kind of cultural production action, because consumption is always a production of meaning.
	Michel de Certeau	The general culture of everyday life implies the product consumption methods imposed by the dominant economic order. Users and consumers avoid dominant rules. The production itself can be understood as a form of widespread consumption. Consumption means making and making is also a kind of hidden production. Consumption is not revealed through the production of products, but rather more displays itself through "methods of application" of products imposed by the dominant economic order.
Postmodern Consumption	Peter Kivisto	People should be considered consumers instead of producers. Higher culture artists use the ideas of public culture, and the masses try to use higher cultural symbols.
	Gibbins & Reimer	All the evidence shows the blurring of the boundary between popular culture and higher culture. People easily move between the two cultures and combine them. Cultural lifestyle or the same cultural consumption, the traditional view emphasizes the distinction between cultural consumptions of upper and lower classes.

2.3. Urban Shopping Centers

The history of the impact of consumption on urban life is closely related to the history of the emergence of shopping centers; a fact that has attracted the attention of commentators in many ways. Shopping centers are an integral part of modern urban life. Thus, many cultural behaviors and social interactions are shaped in them. Shopping, like most modern phenomena, is an ambiguous and equivocal behavior that is both work and leisure and entertainment and is essentially a consumer experience (Abazari & Kazemi, 2005, p. 173). Shopping malls were prominent urban spaces that emerged in the early nineteenth century in Paris and other major cities around the world. Shopping malls were architecturally large spaces designed for new forms of urban consumption. The development of such types of shopping malls was based on the growth of metropolitan areas such as industrial, manufacturing, and commercial centers that enabled entrepreneurial classes to create specific markets for luxury goods and to maintain the growing middle class that presented themselves by pretending to consume. Shopping malls were full of luxury shops and restaurants that created a new consumer experience that did not just focus on daily consumption needs, but also displayed stunning goods and increased the desire to buy goods (Mohamadi, Jahangiri, & Pakdaman, 2015, p. 291). This new magical world was made possible by new architectural designs, large flat glass windows, steel structures, and spectacular showcases. In addition, the glass ceilings of shopping malls and the presence of cast-iron structures and gas lamps distinguish malls from other parts of the city (Jayne, 2005, p. 45) and they have been introduced as alternatives to a variety of consumer spaces in streets.

Shopping centers, on the one hand, are part of the daily life of society and are basically defined by consumption: both consumption of the goods that are offered within them and consumption of the spaces themselves (Kazemi, 2009, p. 16). Now, the question to be answered is how these centers are consumed and what the role of physical factors in cultural consumption of the audiences is. The foundation of this close relationship is the reorientation of shopping centers from the logic and organization of production and supply of goods to a situation in which consumption is considered an organizational feature. While the process of political, economic, social, cultural, and spatial reconstruction does not take place solely in shopping centers, but such changes in these centers occur in their most centralized form (Hall, 2006). Shopping centers are places where collective and individual consumptions occur in their large scale. In fact, in order to compete in urban hierarchy, which is characterized by competition between cities to attract capital, employment, and tourism industry, urban officials must create consumer spaces for the new city that are economically and symbolically very important (Jayne, 2005, p. 5).

Although the process of visualization and miraculous emergence of goods within the buyer is not clear such that we know what (who) is the object of consumption and who (what) is the consumer (Coser & Bauman, 1989, p. 174), in recent decades, the touristic view of shopping and shopping centers has been encouraged and the body of these centers has changed in such a way that people will be kept inside shopping centers. So, the buying process is not just material consumption but also is fun and enjoyment. In the dialectic of this view, shopping becomes enjoyable and leisurely and can be viewed as a cultural matter.

Some sociologists define it in terms of social classes and ethnic groups. Others even talk about the subcultures of criminals, the poor, the youth, women, and so on. In compound societies, different groups, while participating in the general culture of the society, can also have their own ways of thinking and acting. Walter Benjamin is the most famous theorist who has paid attention to the economic, social, and cultural importance of shopping malls. He sees these malls as producers of a small world that creates artificial behaviors. Benjamin considers malls as a dream world (an ideal and imaginary space) which is built better than the real world. Thus, he believes that malls indicate ideological admiration of enormous productive capacities of capitalism and, while being spectacular, such spaces hide the increase in polarization of wealth in the city (Jayne, 2005, p. 45). Thus, the experience of consuming and supplying goods in shopping malls indicates a general dream for a stylish and comfortable life.

Therefore, markets and shopping centers are not just an economic space, but also a social entity and a cultural heritage that is effective in regulating social relations, and the intertwining of various relationships between marketers and buyers has created different social and economic roles in it. The structure of the interaction between the seller and the buyer creates multiple and different cultural spaces that create a suitable context for anthropological studies (Chavoushian, 2015, p. 53). According to the above, the present study tries to study and dialectically examine the architectural body of space and cultural and social issues in shopping centers; and for this purpose, three shopping centers of Tirajeh, Kourosh, and Palladium in the city of Tehran have been selected.

3. METHOD

The present study is applied-developmental research which uses qualitative methods (Groat & Wong, 2007, p. 177) and quantitative mapping to collect the required data. The theoretical data were collected through the library method; and field studies were done using questionnaires, routing, and observation tools. First, in the theoretical literature section, by examining the texts on consumption and the resulting culture, this phenomenon was deeply explored and

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the influential factors in this field were categorized. In the next step, in order to identify the physical factors and the effective cultural consumption and to prioritize these factors, a survey study method and a researcher-made questionnaire were used in the selected statistical population. The selected statistical population firstly consisted of experts in architecture, sociology, and anthropology. In order to increase the validity of the study results, the population included those experts who had the necessary mastery and scientific and professional experience in the field of cultural consumption. Considering the low number of professional experts in the issue and the probability of elimination of some samples, in order to increase the validity of the research, the sample was totally selected from among the whole statistical population of experts. So, the research sampling method is a non-random targeted sampling method. In this sampling method, instead of obtaining information from those who are easily accessible, certain types of people who are able to provide the desired information or meet some of the criteria developed by the researcher are used (Danaeifar, Alvani, & Azar, 2017, p. 409). Among the population, by eliminating those who were not accessible and also, the defected questionnaires, the answers of 20 people were finally analyzed. Also, the validity of the research was assessed based on Lawshe's model (Lawshe, 1975, p. 571). In order to test the criteria, first, the shopping centers that are among the Lifestyle Shopping Centers according to International Council of Shopping Centers (ICSC)[1] and consumption is their obvious feature, were selected, and then among the remaining options, three shopping centers were selected randomly (Norman, 2006). In the analysis section, given the wide sizes of the shopping centers and in order to identify the most accurate gathering points that have the highest diversity of people and thereby, the highest diversity of accountability, Space Syntax method and AGraph Software were used. One of the foundations of space syntax method is the existence of a mutual relationship between space and socio-cultural patterns (Bahrainy & Taghabon, 2012, p. 6). Preliminary surveys were done through direct observation, development of a list of basic activities (such as shopping, eating, drinking, meeting appointments, going to the cinema, holding exhibitions, entertainment, doing some administrative affairs, barbering, differentiation, watching, being seen, etc.), daily notes, and taking photographs from events in the space.

As this study seeks to evaluate the impact of physical components affecting cultural consumption patterns in shopping centers, the second statistical population consisted of a diverse range of shopping center clients and 300 people were selected through non-random convenience sampling and then, studied. This type of sampling ensures gathering information from those population members who are easily accessible in order to provide information. For example, if an interview is done in a shopping center with buyers who are willing to interview about the superiority of product A over B, this type of sampling is called convenience sampling (Danaeifar et al., Alvani & Azar, 2017, p. 408). It should be noted that before proposing the qualitative questions, general data such as the age, gender, level of education, income of the clients, the reason for the visit, and time intervals of visits were collected through a preliminary questionnaire. Through targeted observation of behaviors through tracking in the spaces and completing 300 questionnaires by clients in gathering points, the required data for data mining analysis were obtained by IBM SPSS Modeler software[2]. The type of relationship and the amount of correlation between the factors were classified as three groups of weak, medium, and strong, and the outputs, using Grasshopper plugin, were visualized as conceptual models and finally, through reasoned interpretation, some attempts were made to explain the relationship between physical variables of shopping centers in terms of cultural consumption.
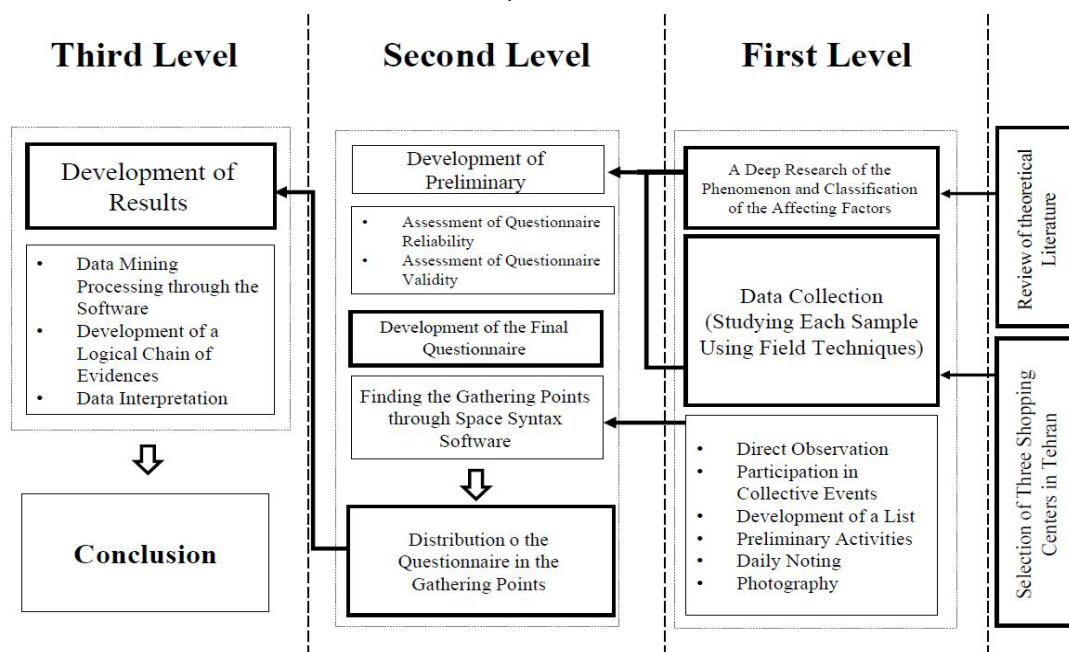
Fig. 2. Conceptual Model of Research

4. TESTING PROCESS

According to what was mentioned in the research method section, after initial examinations through direct observation, development of the list of primary activities, daily noting, and photography of events in the space, in order to prioritize the measurement variables, first the research indicators were determined and then the draft questionnaire was developed based on articles and studies existing in this field. Then, in order to evaluate the content validity of the questionnaire, guidelines were set regarding the method of evaluating the questions. In this regard, a text was prepared in which points such as the place of designing the questionnaire and the necessity of its compliance with scientific materials related to the field of cultural consumption and shopping centers and descriptions of the observations leading to asking the question were mentioned. Then, 20 experts related to the fields of architecture, consumption sociology, and cultural anthropology were asked to rate the appropriateness of each question with knowledge and attitude based on "essential", "useful, but not essential", and "unnecessary" scales, according to the goals of designing the Questionnaire (Sackman, 1974) which were described in the guideline. Also, they were asked to read each question, and explain their opinion about the relevance of that question with the relevant sectors by choosing one of the options of A) Unrelated (with a score of 1), B) Slightly related (with a score of 2), C) Very relevant (with a score of 3), and D) Fully relevant (with a score of 4). In addition, they were asked to mention useful questions from their own point of view in this regard that were not considered in the questionnaire. Finally, the final version of this step was prepared. After receiving the experts' opinions, using the formula

$$CVR = \frac{N_e - N/2}{N/2}$$

and Lawshe's Table, questions with CVR[3] higher than 0.62 were maintained in the questionnaire and the rest were eliminated. In this formula, CVR refers to the content validity ratio; Ne is the number of experts who consider the question as necessary; and N is total number of experts. CVI was also calculated for each question such that the number of experts who gave a "Fully relevant" (3) or "Very relevant" (4) opinion on that question divided by total number of experts was stated in percentage.
Content Validity Index (CVI) = Number of experts with "Very relevant" or "Fully relevant" opinion/ Total number of experts for the questionnaire × 100
Qualitative face validity was determined in a 20-member panel of architects (12 people), sociologists (4 people), and anthropologists (4 people) to find the level of difficulty, the amount of disproportionateness, ambiguity of phrases, or inefficiency in the words' meanings, and their opinions were applied in the questionnaire as slight changes. The test-retest method

was used to assess the reliability of the questionnaire. At least two weeks after the initial review, the questionnaire was resubmitted to 11 people. By entering the data of both steps in the computer, the reliability of the questionnaire was confirmed.
In the next step, to test the criteria, the questionnaire was measured in the interior spaces of the case samples (three shopping centers of Palladium, Kourosh, and Tirajeh) to determine the physical factors affecting cultural consumption in shopping centers. Given the wide sizes of the shopping centers and in order to identify the most accurate gathering points that have the highest diversity of people and therefore, diversity of accountability, space syntax method and AGraph Software were used. The space syntax method has been shaped based on the studies by Christopher Alexander and Philip Steadman. In this sense, the shape of cities is a reflection of citizens' way of life, and cities can be considered the objective manifestation of historical, economic, social, cultural contexts (Hillier & Hanson, 1989). This method also seeks to define space and prove its independence (Hillier, 2005). This theory holds that urban spaces are the product of social relations, and that the relationship between urban spaces pursues social goals.
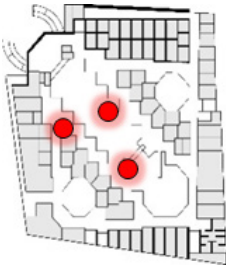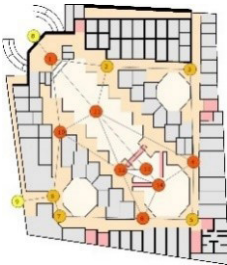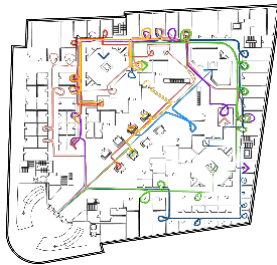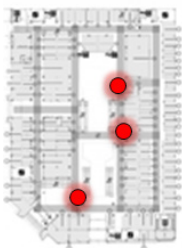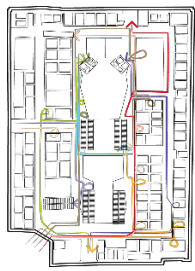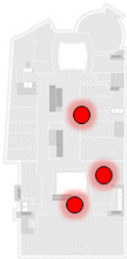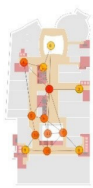In this regard, understanding the relationship between urban spaces can help to understand behavioral patterns and quantitative and qualitative analyses. This theory is based on the belief that space configuration and the composition of urban spaces are the main factor in the distribution pattern of socioeconomic activities such as distribution pattern of commercial uses, distribution pattern of different ethnic groups, as well as distribution pattern of movement throughout the city (Hillier, 2007, pp. 121-125). This program by creating a spatial matrix shows the relationship between nodes and calculates the initial parameters of space syntax of each node. The selected points have the highest value of integration which is the main indicator of space syntax method. It should be noted that this method is only able to predict gathering points. Therefore, in order to ensure the points specified by the software, the shopping centers were carefully examined by the survey method and observation tool. Table 2 shows the gathering points on the ground floor of the three respective shopping centers. It should be noted that the ground floor is chosen because, firstly, most visitors to shopping centers, both those who come to these centers by private cars and those who use public transportation, become present in this floor, because access to other floors is from the ground floor and thus the highest presence rate and the highest diversity in answering the questions are provided in this floor. Secondly, this floor was selected as the sample floor, and given that the purpose of the study was independent of the number of floors and how users use the space, new variables could be added to the study, that were beyond the scope of this study. The effect of 10 physical factors affecting the design of shopping centers on consumption pattern indicators which include 4 economic- political,

cultural-social, functional-managerial, and lifestyle factors were evaluated through the questionnaire. It should be noted that each of the key factors in this area includes the main sub-factors that were first extracted from the research literature. In order to perform modeling, a number of about 10 samples were considered for each of the variables considered in the model. The questionnaires were then distributed in the gathering points of the centers, and their results were processed in SPSS MODULAR IBM software, and, using Grasshopper plugins, were visualized as conceptual models. The type of relationship and the degree of correlation of the factors were categorized into three groups of weak, medium, and strong.

Table 2. Gathering Points in the Studied Samples

Name of the Shopping Center	Characteristics	Gathering points	Behavioral map	People's Routing
	Methodological explanations	The most prominent points in the communicative graph which have been selected for the questionnaire	Drawing the communicative graph of public space of the complex through space syntax method (Hillier, 1997)	Routes for passage of people, recorded by targeted observation of William Whyte (Whyte, 1980)
Tirajeh shopping center	• Building date: 2002 • Area: 35000 m2 • Number of stories: 7 • Located in district 5			
Kourosh Shopping Center	• Building date: 2004 • Area: 23000 m2 • Number of stories: 15 • Located in district 5			
Palladium Shopping Center	• Building date: 2004 • Area: 100000 m2 • Number of stories: 19 • Located in district 1			

5. DATA DESCRIPTION AND ANALYSIS

In order to characterize the concept of cultural consumption, its main dimensions were defined in the theoretical literature section, including four economic-political, cultural-social, functional-managerial, and lifestyle factors. The indicators of each of these factors were operationally defined by some indicators; for example, an economic-political factor with the indicators of emergence of salaried class, emergence of upstart class, and transformation of place into a commodity; a cultural-social factor with the indicators of seeing and being seen, femininity of shopping process, diversity of audience typology, norm-breaking and representation of subcultures, roaming and shopping tourism, fashion-orientation and brand-orientation, and the effect of media and advertisement; a functional-managerial factor with the indicators of multi-functionality, type and amount of shared spaces, and enjoyment of support services; and a lifestyle factor with the indicators of value of the concept of leisure, elimination of differentiation, enjoyment and desire to consume, feeling of power, and process of keeping up with the Joneses; and the agents were formulated as weighted with equal coefficients. For each indicator, about two or three questions were developed in the questionnaire and the respondents chose their answers within a range of specific options. The questionnaires were administered in person and on site, and any doubts that the respondents had about the question were explained and clarified.

Table 3. Classification of the Variables Studied in the Present Study

Evaluation of the physical factors affecting cultural consumption patterns in Palladium, Kourosh, and Tirajeh shopping centers	Physical variables	Size of commercial units, vertical and horizontal communication elements, horizontal openness (view), attention to details of interior spaces and lighting, geometry of circulation space, trade mix, accessibility and parking, the amount of service and support uses, creation of leisure spaces, diversity of audience typology
	Cultural consumption variables	Economic-political: emergence of salaried class, emergence of upstart class, and transformation of place into a commodity
		Cultural-Social: seeing and being seen, femininity of shopping process, diversity of audience typology, norm-breaking and representation of subcultures, roaming and shopping tourism, fashion-orientation and brand-orientation, and the effect of media and advertisement
		Functional-managerial: multi-functionality, type and amount of shared spaces, and enjoyment of support services
		Lifestyle: value of the concept of leisure, elimination of differentiation, enjoyment and desire to consume, feeling of power, and process of keeping up with the Joneses

The results obtained from data processing by the relevant software can be demonstrated as Figure 3. Scoring has been done based on the three-mode pattern of strong, medium, and weak according to the opinions of users of the three studied shopping centers, between 0 and 10. Figure 4 shows a comparison between all variables of the problem separated by each shopping center. As can be seen in this figure, Tirajeh Shopping Center has gained the highest score in 5 factors of diversity of people, femininity of shopping process, shopping tourism, emergence of the salaried middle class, legibility of the route and circulation, among which three factors are in cultural-social group. This shows the importance of this issue in this shopping center. Palladium Shopping Center has the highest score in four out of the seven consumption factors, while Tirajeh Shopping Center has no share in the ranking of consumption factors. Although palladium has the highest score in most of the 12 physical factors, in terms of "creation of recreational and leisure spaces", it has a lower score than Kourosh Shopping center, and also in terms of "typology of present people" and "legibility of routes and movement circulation", it has a lower score than Tirajeh Shopping Center. The shopping centers of Kourosh and Palladium which are both considered modern buildings may seem to be very similar to each other; this perception can be confirmed given the diagram of these two shopping centers in physical factors such that the blue and red diagrams rise and fall almost with each other, but as it reaches to other factors which are in consumption, culture, politics, etc. groups, this similarity of the diagrams changes.
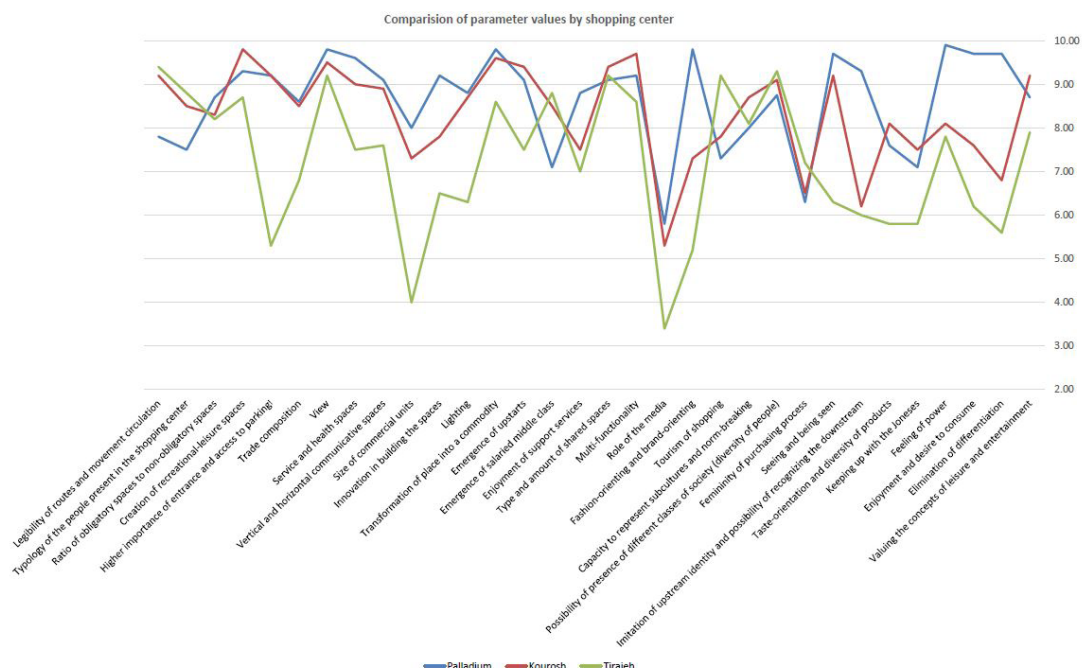
Fig. 3. Comparison of the Results Obtained From Values of the Problem Variables for Each Shopping Center

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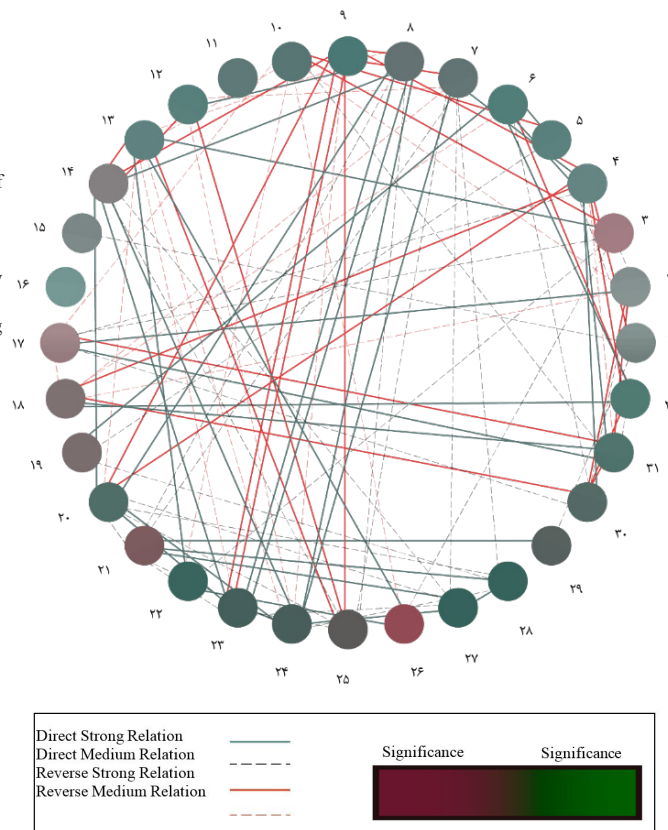
6. DISCUSSION

Due to construction restriction laws in developed cities a new form of intra-urban commercial spaces has emerged which are classified under the general title of new typologies. One of the types of new typology is Lifestyle Shopping Centers, which includes a balanced combination of product portfolio along with services and entertainment with a focus on family institution. In other words, in these centers, despite the existence of commercial spaces, recreational and leisure spaces are more dominant, and the body of the centers has changed in such a way to keep people inside the shopping centers. Therefore, the buying process is not just material consumption, but also fun and enjoyment. In the dialectic of this view, consumption of space and commodities becomes enjoyable and leisurely and it can be seen as a cultural matter. In the present study, we tried to select case studies that have the most features of Lifestyle Shopping Centers so that through research on these centers, we can deeply study cultural consumption patterns along with physical factors affecting them. Therefore, the three shopping centers of Tirajeh, Kourosh, and Palladium were studied. Below is a brief monograph.

As was examined, many factors are involved in the evaluation of shopping centers in terms of consumption. However, the greatest effect that these two have on each other and is related to the field of architecture can be classified into four groups. After producing the data for each of the factors and comparing them with each other by SPSS software, Grasshopper software was used for visualization and production of interpretive model. In Figure 4, the degree and correlation between consumption and physical factors, as well as the importance of each can be seen. As the structural model of the data mining software related to the research hypothesis shows, not only the hypothesis proposed on the effect of physical factors on consumption patterns has been confirmed given the significance level of 0.5, but also it seems that there is a dialectical relationship between the formation of such phenomena, and it cannot be claimed that consumption policies alone have led to the emergence of the typology in shopping centers or physical factors have changed just because of the change in consumption pattern. Rather, the two factors of physical changes and changes in consumption pattern over the studied time period have direct strong and weak and on the other hand, reverse, relationships which are shown in the figure below. As the study results show, the physical factor of multi-functionality (commercial, leisure) has the greatest effect on the intensification of consumption patterns, and the physical factor of size of commercial units has the lowest effect in the intensification of this pattern.

Guide:
1. Valuing the concepts of leisure and entertainment
2. Elimination of differentiation
3. The enjoyment and desire to consume
4. Feeling of power
5. Keeping up with the Joneses
6. Taste-orientation and diversity of products
7. Imitation of upstream identity and possibility of downstream recognition
8. Seeing and being seen
9. Feminization of the buying process
10. Possibility of presence of different classes of society (diversity of people)
11. Capacity to represent subcultures and norm-breaking
12. Roaming and shopping tourism
13. Fashion-orientation and brand-orientation
14. The role of the media
15. Multi-functionality
16. Type and amount of shared space
17. Enjoyment of support services
18. Emergence of salaried middle class
19. Emergence of the upstarts
20. Transformation of place into a commodity
21. Lighting
22. Innovation in creating spaces
23. Size of commercial units
24. Vertical and horizontal communication space
25. Service and health spaces
26. View
27. Trade composition
28. More important entrance and parking access
29. Creation of entertainment and leisure spaces
30. The ratio of obligatory to non-obligatory spaces
31. Typology of people present in the shopping center
32. Legibility of the route and movement circulation

Fig. 4. Comparison of Correlation between the 32 Analyzed Variables and the Model Obtained by Pair Comparison (Direct Correlation More Than 0.5: Green; Reverse Correlation Less Than -0.5: Red; Weak Correlation: Dashed Line; Weak Reverse Correlation: Red Dashed Line)

7. CONCLUSION

Based on the analyses, it seems that the changes in some variables have no coherent relationship with others. Therefore, physical factors have not played any role in changing some consumption patterns, or their relationship has been exclusively related to changes within the relevant domain. Based on this, the variable of the size of commercial units, type and area of vertical and horizontal communication space, and enjoyment of support services that the widest relation exists between them and other variables can be identified as the most important factors, and the variables of accessibility of the complex, creation of service and health spaces, and trade composition as the least effective variables in this area. If the above analyses are the basis for identifying shopping centers, the most widespread form of cultural consumption can be found in Palladium Shopping Center and the lowest one in Tirajeh Shopping Center. It should be noted that since the above variables have been selected based on the theoretical literature and history of similar studies and using the opinions of elites in this field, this group of variables cover the variables studied in other researches well. Thus, the conducted analyses can be generalized to other commercial complexes which follow Lifestyle pattern, and the type of relationship (direct and reverse) and the effect of each of these factors (strong, medium, and weak) can be evaluated as a factor independent of the field of architecture on the factors of consumption field (the second interpretive model in Figure 5). The results of this evaluation indicate that some physical factors are more important than others in terms of effectiveness.

Finally, the study results can be generally classified into the following statements:

1. The factors affecting cultural consumption can be categorized into three physical, users, and use type groups.

2. None of the variables of cultural consumption alone can express how space and its events are used.

3. Those shopping centers effective in changing cultural consumption and necessarily attracting people with different typologies and through functional diversity, lead to their staying for a longer period of time in shopping centers.

4. Physical factors are one of the most important factors in the field of cultural consumption of commercial complexes and shopping centers, and therefore, by paying close attention to architectural design issues from the perspective of cultural consumption, the reception of these centers after being established can be predicted.
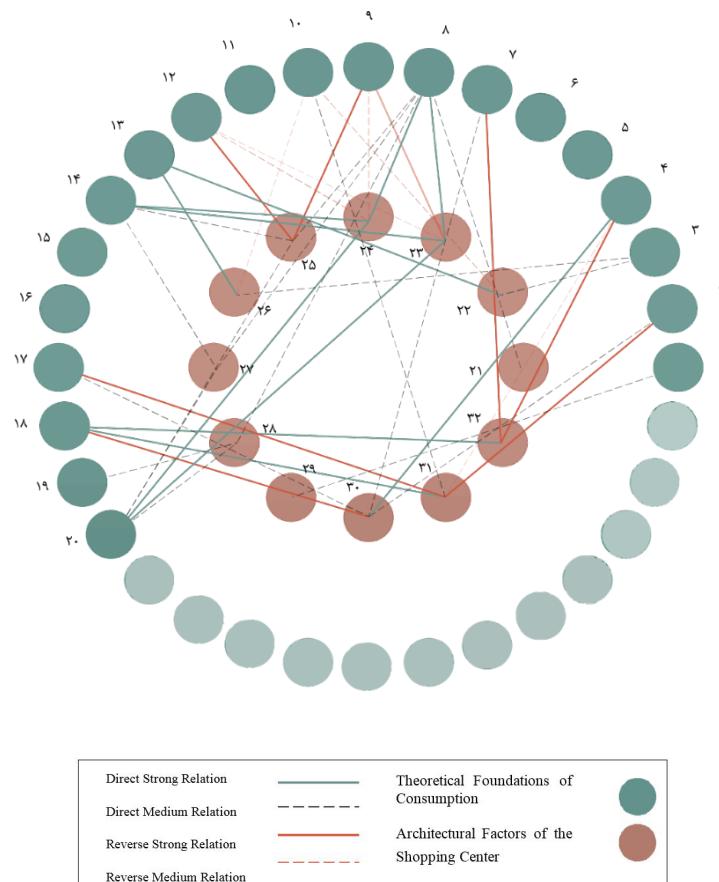
5. It seems that through cultural consumption of shopping centers, the public and private arenas in urban space are mixed with each other; thus, roaming in shopping centers has increased the vitality of public spaces and intensified cultural consumption.

6. Shopping centers are places for drinking, eating, being alone, socializing, reading, gossiping, meeting people, negotiating, planning, ogling, roaming, bargaining, avoiding, hiding, etc.; so, it can be concluded that shopping centers are part of the temporary culture of people who spend their time there, because they allow for doing a variety of things, from shopping to roaming, while many other public spaces in the city do not provide an appropriate space for the continuance of such things especially for cultural minorities such as women and adolescents.

7. Shopping centers and the spaces and places in them not only are parts of consumption, but also are consumed themselves. Representations of the city in the virtual world of consumer society in the form of shopping centers and the course of physical and programming developments of shopping centers are the evidence of the change in consumption of space in these centers.

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Guide:
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Direct Strong Relation		Theoretical Foundations of Consumption	●
Direct Medium Relation	- - - -	Architectural Factors of the Shopping Center	●
Reverse Strong Relation			
Reverse Medium Relation	- - - -		

Fig. 5. Evaluation of the Physical Factors Affecting Cultural Consumption Patterns in Shopping Centers; Physical Factors

END NOTE

1. International Council of Shopping Centers: ICSC is an institution that in 2000 has classified shopping centers based on the new typologies into seven categories one of which is Lifestyle Shopping Centers that their prominent feature is a balanced combination of product portfolio_ with a focus on clothing- along with services and entertainments such as cinemas in shopping malls with a focus on family institution. In fact, it can be considered the developed form that in addition to traditional store uses provides more entertainment facilities for consumers. Among the other categories include The Big Box, The Retail Podiom/ Plaza, The Department Store, etc.

2. This software is an analytical tool to research data which offers descriptive and predictive models. Using this software the data can be analytically and statistically examined from different perspectives. In fact, this tool provides data mining algorithms without any need for programming skill and offers imagery diagrams for gaining hidden knowledge in the data.

3. Content Validity Ratio.

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