

Function Feasibility Analysis of Theme Parks for the Realization of a Learning City (Case Study: Mellat Park of Zanjan)

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Abstract

Education is not limited to chalk and talk in the 21st century, but learning science is possible through different formats and methods. Meanwhile, visual representations of a city could be considered by a system of signs and based on the opposition between emotional motivation and the visible structure of the material world and through a complex system of signs, as well as social, economic, and cultural characteristics of the communities. Hence, these visual representations of the cities play an important role in the metamorphosis of urban spaces; besides reproduction or elimination and decline of semantic values during time. With this approach, the main purpose of this paper is to study the function feasibility of theme parks in the realization of learning city. This topic is important for urban planning studies, more than ever in respect to the concepts and theoretical and practical configurations. In regard to its purpose and nature this study is an applied research and based on its method it is a descriptive-analytical study. The study was carried out in September 2017. Thus, 34 items with seven components and four indicators have been identified to check the thematic parks for the realization of a learning city. Mental model software is used to analyze the performance of the indicators. Confirmatory factor analysis was used in SMART PLS software to confirm or reject the performance findings of the indicators. The research results showed that the items have been effective in the theme parks with different coefficients (from high to low impacts) and with an increasing trend in the realization of learning city, in this way, the indicators of continuity in activities, creating conditions for healthy competition, identifying competencies and moral excellence have had the greatest impacts and centrality with effect 11.21, 10.58, 10.45 and 10.41, respectively. Also, the findings of confirmatory factor analysis showed a strong relationship between the performance of theme parks and the learning city by confirming the relationship among the indicators, in Mellat Park of Zanjan.

Keywords: Theme Park, Behavior Quality, Learning City, Zanjan.

چکیده

تعلیم و تربیت در جهان قرن بیست و یکم دیگر تنها در مفهوم کلاس درس و تخته و گچ خلاصه نمی‌شود، بلکه دانش‌اندوزی در قالب‌ها و روش‌هایی گوناگون مورد توجه قرار دارد. در این میان بازنمایی‌های تصویری شهر به واسطه نظامی از نشانه‌ها و بر پایه تقابل میان انگیزش احساسی و ساختار قابل‌رؤیت جهان مادی عمل و از طریق نظام پیچیده‌ای از نشانه‌ها، ویژگی‌های اجتماعی، اقتصادی و فرهنگی جوامع خویش را به منصف ظهور رسانده و در دگرپسندی خوانش فضاهای شهری و بازتولید و یا حذف و زوال بارهای معنایی در طول زمان نقش مؤثری ایفا می‌کند. با این رویکرد آبخشور نظری پژوهش حاضر؛ هم‌پوندی پارک‌های موضوعی در تحقق‌پذیری شهر یادگیرنده است تا به اتکای مفاهیم و پیکربندی تئوریک و عملی آن، بیش‌ازپیش به حوزه‌ی مطالعات برنامه‌ریزی شهری غنا بخشد. پژوهش حاضر از نظر هدف کاربردی و از نظر ماهیت و روش توصیفی-تحلیلی و به لحاظ قلمرو زمانی، مقطع حاضر (شهریور ۱۳۹۸) بوده است. جهت بررسی عملکرد پارک‌های موضوعی در تحقق شهر یادگیرنده اقدام به شناسایی ۳۴ گویه با هفت مؤلفه و چهار بعد شده است که جهت تحلیل چگونگی عملکرد شاخص‌ها از نرم‌افزار متال مدل بهره برده شده است و جهت بررسی تأیید یا رد یافته‌های عملکرد شاخص‌ها از تحلیل عامل تأیید در محیط SMART PLS استفاده شده است. نتایج تحقیق نشان داده است گویه‌های پارک موضوعی با ضرایب متفاوت (اثرگذاری زیاد تا کم) با روند افزایشی بر تحقق شهر یادگیرنده اثرگذار بوده‌اند. در این میان شاخص‌های استمرار در فعالیت‌ها، ایجاد بستر رقابت سالم، شناسایی توانمندی‌ها و تعالی اخلاقی به ترتیب با مقادیر اثر ۱۱٫۲۱، ۱۰٫۵۸، ۱۰٫۴۵ و ۱۰٫۴۱، دارای بیشترین اثرگذاری و مرکزیت بوده‌اند. همچنین یافته‌های حاصل از تحلیل عامل تأییدی با تأیید رابطه بین شاخص‌ها، رابطه قوی بین عملکرد پارک‌های موضوعی و شهر یادگیرنده را در پارک ملت شهر زنجان نشان داده است.

واژه‌های کلیدی: پارک موضوعی، کیفیت رفتار، شهر یادگیرنده، شهر زنجان.

Introduction

The emergence and consolidation of the theme park industry in recent decades is a symbol of the increasing role of leisure and entertainment, which has played an important role in the development of the global economy since the second half of the twentieth century (Cabanas, 2019, 2). During this period, theme parks were integrated as an important economic and cultural phenomenon, which mainly focused on tourism, consumption, employment, spatial behavior, population control, spatial and artistic design, management, security, marketing, environment, etc. (ibid.). Nowadays, theme parks are considered as world-famous and well-known brands in the world as attractions and destinations. The Walt Disney Park, for example, attracts approximately 138 million visitors over the world annually and is considered a good and positive attraction for citizens (Milman & Tasci, 2018). Theme parks are the fastest growing of all types of parks and amusement parks. These parks each have a story and are focused on a concept. They are formed in different ways for example some of them revolve around characters of stories, movies, TV series or cartoons, such as Universal Hollywood Studios or Dubai Bollywood, some with a theme or attribute such as speed, such as Ferrari World Abu Dhabi and some ones with a central concept of creating a small world, such as The Hague Madurodam or Global Dubai Village etc. According to the World Center for Amusement Parks and Theme Parks, the growth of theme parks will be doubled from 2010 to 2020. Nowadays, if theme parks are aimed at entertainment, as well as teaching and learning (Zheng, 2020). Hence, it is now widely accepted that the need to transform urban green spaces into learning environments can have psychological, environmental, educational development, development of sense of independence, development of physical skills and self-confidence, creative development and social development reasons (Shahrampour, 2011). However, such parks have not developed much in Iran. Water and Eram Amusement Parks in Tehran, Water Waves Land in

Mashhad, and Flower Park in Isfahan are the most important theme parks in Iran (Ali Akbari, 2016). Meanwhile, educational parks are far removed from tourism planning and investment. Obtaining a design pattern in green space that is derived from the required design features from the perspective of citizens, as well as increasing the connection between citizens and the natural environment around them and encouraging citizens to learn through experience are the goals of this article. Meanwhile, Mellat Park in Zanjan, due to the high number of users in this city, is one of the most important parks for citizens and has a better location than other parks located in this city. On the other hand, this park is not only suitable for the residents of Zanjan city, but also due to the strategic location of Zanjan city, which is the crossing point of Kurdistan, East and West Azerbaijan and Ardabil provinces with Tehran, is useful for travelers to use the park. Therefore, the main purpose of this study is to assess the performance of theme parks in the realization of a learning city in the context of places where the population is present. According to the mentioned topic, the mental gap of the research is what conditions and methods should be considered based on the fact that the ability to reproduce a learning city space in the context of theme parks in Zanjan Nation Park?

Research Background

The idea of creating a nature school in Iran was presented by the famous Iranian Ecologist Dr. Abdolhossein Vahabzadeh and the first school was built by him under the name of Konj Nature Search School in Mashhad in 2014. Therefore, in order to reduce the harmful effects of humans on nature and provide sustainable environment, education is one of the main pillars (Rouhipour et al., 2020). Moreover, Wei., Zhang (2020), in his paper “the impact of virtual reality on the experience and behavior of visitors to theme parks: the presence perspective”; indicated that positive effects of the sense of presence of virtual reality on the re-experience of visitors to theme parks based on linear regression results. Also, such parks compared to other ones can attract customers who are creative.

Besides, Eun Oh et al (2020), in his article “how nostalgic animations bring tourists to theme parks: Hayao Miyazaki works”, showed that there was a strong motivation to visit the theme park due to the characters, narratives, aesthetics, cultures, and traditions portrayed in the animations, which had a positive effect on tourists’ attitude and behavioral intention to visit the park in the future. The findings emphasize empirical evidence to support nostalgia as a multidimensional concept and its vital role.

The article entitled “temporal-spatial behavior patterns of tourists in theme parks” was presented in 2020 by Huang et al. The paper introduced a new way to better understanding of the temporal-spatial behavioral patterns of tourists based on GIS software and therefore concluded that in tourism management and enhancing the tourist experience, theme parks can facilitate attraction for tourists and citizens. On the other hand, (Milman & Tasci, 2018)., in their article entitled “evaluation of Experimental and Sociological Drivers of Satisfaction in Theme Park Locations”, showed that these parks have been able to act as absorbing tourist attractions for citizen and tourists and rising their loyalty in returning to these areas. Furthermore, Mohebbi Nasab (2020), in his work entitled “designing an educational center in Isfahan (Behavior Park) with the approach of increasing self-esteem in child labor”, stated that the purpose of his study was to identify the injuries and dangers lurking around child labor and also to achieve ways to improve mental conditions in order to improve self-esteem and meet the living needs of these children, as well as designing appropriate spaces for them. Therefore, the design of Educational and Training Center of child labor of Isfahan (Behavior Park) in that study was done by considering spaces to improve the quality of life, better individual and social cognition, appropriate education of child labor, personality and financial independence, a space for selling children's works and also, a space for strengthening the family institution which the combination of these spaces will culminate in and provide an effort for children to achieve intellectual maturity, self-knowledge, self-confidence, self-esteem, social situation, and finally better living conditions and a brighter future.

Rahnamaei (2017), in his article entitled “designing an educational park with the approach of training to reduce carbon emissions (reducing climatic effects) (case study: district 3 of Tehran-Northeast side of the Intersection of Chamran-Hemmat Highway)”, stated that the design of urban green spaces such as green roads, parks and other spaces to reduce the adverse effects of pollutants and even reduce them to zero by using methods was for the intention to sustain the urban environment, which nowadays are known as green, clean, carbon-free cities. Thus, urban green spaces as sub-climates can be very effective in creating favorable conditions and reduce the severity of these pollutants. In other words, these green spots and corridors are considered as lungs for cities which are vital. Designing parks as part of urban green spaces with an approach to reducing carbon emissions along with its leisure and entertainment aspects that provide both leisure and entertainment for citizens and it can be an effective step towards achieving this goal. In order to deal properly with nature and how to protect it, human beings must know it precisely, and this knowledge and familiarity requires training. In fact, proper education to raise the awareness of different walks of society, especially students, can lead to the formation of a solid cultural structure in relation to humans and their ecosystem and as a successful model to be passed on to the future generations. It is hoped that with the help of principled planning and design to reduce carbon emissions and education-based culture, a small step can be taken to return to the concept of human friendship with nature and respect to prevent further destruction and restore the lost balance to nature by creating a collective understanding and global unity.

Ghanbari (2016) wrote a dissertation entitled “designing an educational-recreational park for children under six years with emphasis on the growth of children's creativity” (case study: Lar city). The statistical population in Ghanbari’s study was 50 children in five kindergartens that were selected by stratified random sampling method. Finally, the children were given a visual questionnaire and asked to prioritize their favorite spaces. The results showed that children were more interested in spaces where cheerful colors were used, and

that spaces and activities that were adventurous and led to the discovery of unknowns had been more likely to be approved.

Tulaei et al. (2015), in their work entitled “study of the role of green space in educational environments with emphasis on promoting learning”; expressed patterns and landscape elements based on children's views by examining the theory of mind concentration and based on the three patterns of mental reconstruction such as hidden attraction, input, creating a sense of confinement. The findings of this study showed that all the three patterns had been considered by the children, but the input pattern and sense of confinement were more attractive to the children than the pattern of hidden attraction, so it could be done by dividing the space and creating a sense of confinement and defining input for these spaces and hence encouraging children to go outdoors and learn from the environment by using elements of hidden charm based on their opinions.

Mahboubi (2013), in a work entitled “increasing learning interactions based on increasing social interactions by using physical space”; indicated that the most important indicators influencing learning interactions included teaching in a well-lit landscape with appropriate window lighting, green spaces around learning environments, classrooms with direct access to the outside, public environments to increase social feeling, students' access to technology and media in the learning environment, the environments pass inside the learning environment, the height of the buildings varies for more comfort and intimacy, and a healthy learning environment inside.

Lotfi Atta (2008) in a study entitled “the effect of environmental factors on learning and behavior in educational (elementary) environments in the city;” concluded that education and consequently educational environments had the greatest impact and role on the mentality and civilization of societies. The need to reform the structure of education is to create spaces related to student activities; spaces that have suitable conditions for the physical, mental, emotional and social development of children, which are possible by designing the details of the spaces according to the behavioral patterns of

children.

The Learning City

Learning is an integral part of life. Learning means accumulating, thinking, and applying complex knowledge, skills, and perspectives; in such a way that the individual or group can actively adapt to their changing environments. Today's city has in fact been the result of the accumulation of experiences and learning from life, its requirements and needs throughout the history of urbanization (Yousefi et al., 2020). In other words, in the era of fluid modernism, the types of traditional capabilities that have already been or are being offered by higher education institutions (education system in general) are obsolete or are becoming obsolete (Arasteh & Amiri, 2012). Lifelong learning finds spatial objectivity in the learning community. A city, county or region that uses all its resources in all parts of the city to bring the people of that city to personal, social, cultural, political and economic growth and to increase social cohesion and make citizens successful (Yousefi et al., 2020). A learning city, town, or region recognizes and understands the key role of learning in the development of public welfare, social stability, and personal satisfaction; and mobilizes all its human, physical and ultimate resources creatively and sensitively in order to fully develop the human capacity of all citizens to understand and respond positively to change (ibid.).

Brody (2005) has proposed the theory of learning in nature, which has been in order to create a solid conceptual framework for awareness in the field of environmental education. He wrote (Simply put, my understanding of the theory of learning in nature is that meaningful learning in nature is the result of direct experience or experimentation all the time that social and personality knowledge and value systems are created to express a combination of motivational and cognitive stages). In his article, he discussed the evolution of learning theory in nature, explained the rational principles of theory in informal learning, including cognition, motivation development, meaningful and experiential learning, and describes the extraction of a comprehensive theory of learning in nature because nature, along with being inspiring, arouses excitement, curiosity, fear and competition,

and helps to develop personality and emotional maturity. Moreover, green space is considered as an effective factor on the sense of belonging to the environment and nature, as well as teaching natural life and acquiring related skills (Mahboubi, 2013). In addition, education is considered as a cultural service, including ecosystem services that provide green infrastructure. Mell, however, saw education as an excuse to spread the concept, and also saw the concept as more understandable to the public in taking practical steps in urban landscape ecology. Green infrastructure as an environment and landscape that is ecologically designed in all layers and

urban scales, itself educates people and increases their sensitivity to the environment and landscape (Ramyar & Zarghami, 2016). In the United Kingdom, experimental studies have shown that green infrastructure has had the following benefits:

- Making the environment more comfortable and livable,
- Reducing flood risk;
- Creating opportunities for training;
- Increasing people's health and providing spaces for leisure;
- Creating solidarity among local communities (Ramyar & Zarghami, 2016).

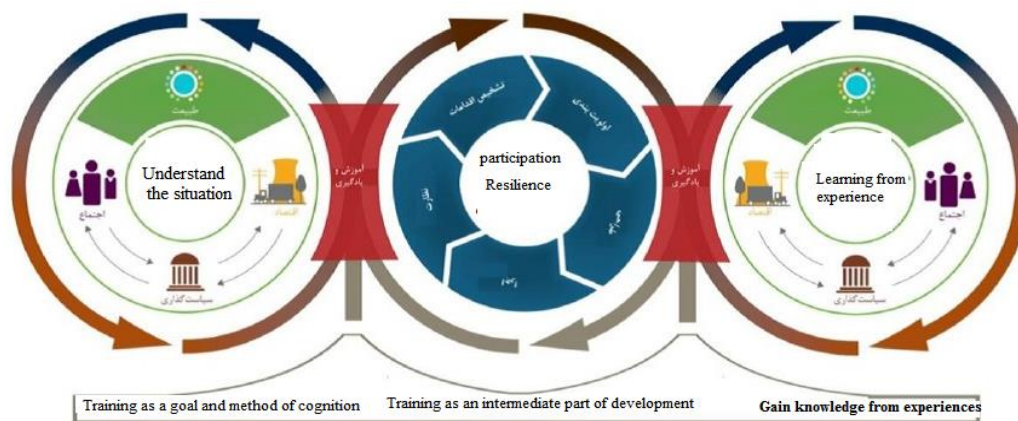


Figure 1. Education and Knowledge Cycles in Green Infrastructure Theory (Ramyar & Zarghami, 2016)

Theme Park

Theme parks are built on topics such as history, geography and environment, adventure, imagination and dreams, and attract many tourists by creating special attractions. There are two important points about these parks. The first point is their location within or within metropolitan areas and the need to be adjacent to major tourist destinations and attractions, which due to the wide demand, creates a lot of traction for the use of theme parks. Another point is the mutual use of parks, which in addition to tourism, is also used by city residents (Rahmatipour, 2017). While there is no accepted classification for theme parks, these parks can be categorized based on geographic area, annual presence of tourists and visitors, annual revenue, retail and restaurants. In addition, theme parks may be classified according to geographical location, capacity, or resources used to create the theme

(Milman, 2009: 85). According to the research of Wang and Chang (1999), seven categories of subjects have been identified in these parks, such as adventure, futurism, international nature, fantasy, history, culture and movie (Sadat Faghihi, 2016). In fact, the theme park is the same amusement park where the following characteristics can be seen:

1. It has a thematic meaning;
2. Often presents more than one topic;
3. It is located in enclosed areas and access to them is under control;
4. It has a high ability to attract families;
5. Its equipment has the ability to create entertainment between 5 to 7 hours;
6. Generally uses characters or actors to create an atmosphere of entertainment and joy (generally free of charge);
7. There are also places to feed visitors in these parks;

8. Use technology to create memorable experiences.

Additionally, these parks must provide the

necessary quality and standards in maintaining the cleanliness of the complex and providing products and services (ibid.)



Figure 2. An Example of a Theme Park

Methodology

This study is an applied research and also a descriptive-analytical research in terms of method. The study has used mental model software along with confirmatory factor analysis to analyze the performance of theme parks in the realization of a learning city. For this purpose, two methods of desk-based and field studies have been used to collect information and hence to measure the data two questionnaires in two formats - including expert (mental model) and general (confirmation factor analysis using smart-PLS) types - have been used. Thus, for the expert questionnaire, 20 experts in urban affairs were used, it should be noted that for the expert-centered example, according to the researchers' findings, there are no restrictions (Baby, 2013) and no specific formula and

optimal limit has been determined for it (Melillo & Pecchia, 2016). In other studies, according to Mr. Saati, based on the participating experts and the applied methods such as AHP and ANP method sample can be determined with 10 to 20 people (Andalib & Soleimani, 2017). Also, for the general questionnaire (from citizens) based on Cochran's formula with an error value of 0.05, the selected sample consisted of 384 people and the distribution of these samples was determined by Simple Random Sampling based on Probability Sampling. It should be noted that in this research, to analyze the performance of theme parks in order to achieve the learning city, 34 indicators in seven components and four dimensions have been used as described in Table (1).

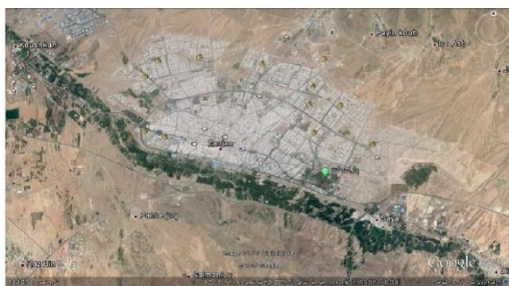
Table 1. Indicators of Theme Park Performance in the Realization of a Learning City

| Dimensions | Components | ID | Items |
|--|--|----|--|
| Facilitating family and community learning | Encouraging collective learning | A | Individual and family learning, motivating the family to learn, formal and informal learning, learning with the pleasure of family companionship, creating a field of questioning-curiosity and critical thinking for members |
| Creating quality of learning | The effect of environmental factors on learning and behavior in learning environments | B | Proportion of space with learning, organizing space with appropriate lighting, color and sound, turning closed learning space into open and green environment, security in learning space, providing learning infrastructure, easy access to learning centers, variety of furniture, charm and vitality in the environment |
| | Learning through culture based on knowing the indigenous history, culture and knowledge of the community | C | Enhancing the power of transmitting information to citizens, turning learning into culture, preserving the environment, accurately identifying the needs of citizens, identifying the capabilities and skills of individuals |

| | | | |
|---|--|---|---|
| | Participating in continuing education and training | D | Urban good governance, promoting a culture of cooperation and teamwork, improving moral excellence, creating a competitive environment, promoting accountability |
| Creating learning culture | Encouraging work-life balance | E | Interaction of sport and learning, continuity of activity, securing the interests of actors, encouraging innovative culture |
| | Cultivating a friendly environment | F | Gaining trust and improving cooperation and social cohesion, relieving stress - inactivity and depression, creating vitality, mobilizing resources and facilities |
| Making flexibility for the learning environment | Creating a multipurpose learning platform | G | Adjusting space inequality and deprivation, creating new opportunities for different strata, flexibility of space with possible changes, creating a job environment |

The Study Area

According to studies, the longevity and antiquity of Zanjan region dates back to the end of the second millennium BC (Ghezlbash, 2008). Some historians associate the city of Zanjan with the city (Aganzana), which Ptolemy had mentioned. This city with a history of more than 1400 years, is one of the cities that have gone through various periods of peak and low in the dynamics of urbanization and nowadays, is one of the most important cities in the region. Genesis with a natural mummy known as “Salt Men”; in the salt mine of Chehrehabad village of Zanjan, which experts have estimated for their life of 2300 to 2500 years, is a manifestation of the appearance of pre-Islamic personality in



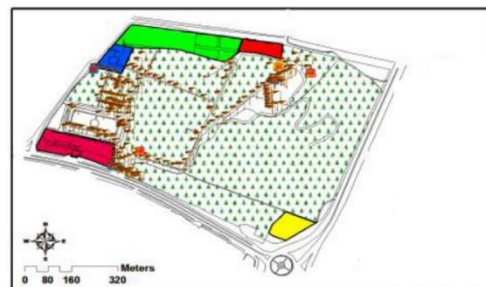
Zanjan region. Clavijo, the famous Spanish traveler and ambassador of that country to the court of Amir Timur Gorgan, had mentioned

Figure 3. Location of Mellat Park in Zanjan

Figure 4. Land use of Mellat Park in Zanjan

in his travelogue that Zanjan was the residence of Darius III of the Achaemenid king (Azimi et al., 2017).

Mellat Forest Park is located in the east of Zanjan city and at the beginning of Tehran road between the longitude (48 degrees, 31 minutes and 8 seconds) to (48 degrees, 31 minutes and 44 seconds east) with metric coordinates 278242 to 279386, and latitude (36 degrees, 39 minutes and 13 seconds) to (36 degrees, 39 minutes and 36 seconds north) with metric coordinates 4059306 to 4060037. The area of the complex is equal to 520531 square meters which 364167 square meters is related to the area of Mellat Park (Azimi et al., 2017: 113). The research area is Mellat Park located in Zanjan. This park was built in 1975 on the outskirts of Zanjan and outside the city limits, but now due to the physical development of the city, it is located inside the city. Figure (4) shows the land use map of Mellat Park in Zanjan.



(Mohammadi, 2015)

Research Findings

Explaining the Effective Factors of Theme Parks in order to Realize the Learning City in the Mental Model Environment

Since the policies of the learning city are influenced by a set of different factors with different degrees, in this study, the functions of the theme parks have been analyzed in order to achieve the learning city. For this purpose, 34 items in different dimensions in the Mental Model environment have been evaluated in terms of effectiveness (externalization), impressionability (internalization) and centrality degree. In this context, the extrapolation intensity of a factor indicates the sum of the effects of that factor on other ones, which also shows the causal power of the factor. Internalization indicates the degree of impressionability of the factor from other elements of the model and the degree of centrality indicates the importance of system elements and the degree of communication of a factor with other elements and its role as a mediator of

influence on other elements (Rasoli et al., 2020). In this regard, the transformation of learning into a cultural model, the possibility of learning individually and socially, and the continuation of the learning process have been most impressionable. In contrast, the continuation of learning at the city level, creating the conditions for competition in the city for learning, paying attention to the capabilities of citizens and planning accordingly to them in the learning process have had the greatest effectiveness. Regarding the centrality of indicators, it should be noted that this group had the most overlap with effective indicators, so that apart from urban good governance, indicators of continuity in learning, creating a competitive environment, and moral excellence were repeated in the first ranks.

Table 2. Impressionability and Effectiveness of Components in the Learning City

| Indicators | ID | Internalization | Externalization | Centrality | Situation | Indicators | ID | Internalization | Externalization | Centrality | Situation |
|--|----|-----------------|-----------------|------------|-------------|---|----|-----------------|-----------------|------------|-------------|
| Continuity in activity | e2 | 8.09 | 11.21 | 19.3 | Incremental | Converting closed space to outdoor learning | b2 | 6.88 | 5.94 | 12.82 | Incremental |
| Urban good Governance | d1 | 8.25 | 9.6 | 17.85 | Incremental | Providing learning infrastructure | b4 | 7.22 | 5.48 | 12.7 | Incremental |
| Creating a platform for competition and excellence | d4 | 6.77 | 10.58 | 17.25 | Incremental | Interaction of exercise with learning | e1 | 6.6 | 5.95 | 12.55 | Incremental |
| Moral excellence | d3 | 6.93 | 10.41 | 17.34 | Incremental | Promoting a culture of cooperation and teamwork | d2 | 6.28 | 6.17 | 12.45 | Incremental |
| Identifying the capabilities and skills of individuals | c5 | 6.84 | 10.45 | 17.29 | Incremental | Creating vitality | f3 | 6.79 | 5.58 | 12.37 | Incremental |
| Charm and pleasantness | b7 | 7.62 | 8.34 | 15.96 | Incremental | Resource mobilization | f4 | 5.93 | 6.09 | 12.02 | Incremental |

| | | | | | | | | | | | |
|--|----|------|------|-------|-------------|---|----|------|------|-------|-------------|
| Formal and informal learning | a3 | 6.39 | 8.06 | 14.45 | Incremental | Adjustment of spatial inequalities and deprivation | g1 | 5.4 | 6.29 | 11.75 | Incremental |
| Easy access to learning centers | b5 | 6.54 | 7.75 | 14.29 | Incremental | Gaining trust and improving collective cohesion | f1 | 6.15 | 5.6 | 11.75 | Incremental |
| Promoting responsibility | d5 | 7.28 | 6.63 | 13.91 | Incremental | Accurate identification of citizens' needs | c4 | 6.58 | 5.03 | 11.61 | Incremental |
| Relieving stress - inactivity and depression | f2 | 7.99 | 5.81 | 13.8 | Incremental | Environmental Protection | c3 | 5.63 | 5.85 | 11.48 | Incremental |
| Individual-social learning | a1 | 8.15 | 5.3 | 13.45 | Incremental | Encouraging a culture of innovation | e4 | 5.39 | 5.99 | 11.38 | Incremental |
| Variety in furniture | b6 | 7.17 | 6.26 | 13.45 | Incremental | Proportion of components - Organizing the state of light, | b1 | 5.93 | 5.14 | 11.07 | Incremental |
| Learning with pleasure | a4 | 7.23 | 6.12 | 13.35 | Incremental | Fast data transfer | c1 | 5.04 | 5.46 | 10.50 | Incremental |
| Transforming learning into culture | c2 | 8.24 | 5.1 | 13.34 | Incremental | Security in the learning environment | b3 | 6.52 | 3.65 | 10.17 | Incremental |
| Creating a context for questioning, curiosity and critical | a5 | 6.39 | 6.92 | 13.31 | Incremental | Flexibility with changes | g3 | 5.46 | 4.47 | 9.93 | Incremental |
| Securing the interests of actors | e3 | 6.52 | 6.74 | 13.2 | Incremental | Stimulating the family institution to learn | a2 | 5.18 | 4.56 | 9.74 | Incremental |
| Encouraging walking in urban spaces | g2 | 6.8 | 6.22 | 13.02 | Incremental | Creating employment opportunities | g4 | 3.35 | 4.85 | 8.2 | Incremental |

Accordingly, it should be acknowledged that theme parks, by creating an atmosphere of interaction between different groups, provide a basis for the exchange of views and perspectives for different occupational-sexual and age groups, as well as the possibility of learning individually and socially to create

activities with the family for different groups. Thus, the learning environment has become an intimate space for individuals and a safe environment with peace of mind for the family; therefore, in such an atmosphere, the activities continue continuously. Also, since there is interaction between different groups

in various situations, an exciting and lively environment is created along with healthy competition.

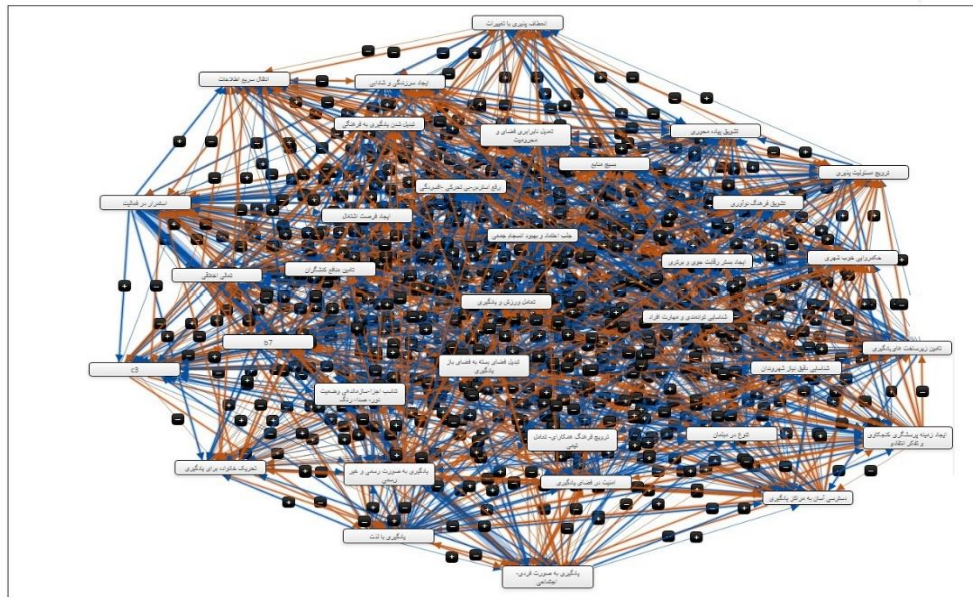


Figure 5. The Effectiveness of Theme Park Components in order to Realize the Learning City Using Mental Model

According to the studies conducted in the model mental environment, it has been determined that theme parks are increasingly effective in the realization of the learning city with different coefficients (high-low impact). In this regard, in order to confirm or reject this type of impact, the findings were reviewed in the Smart-PLS environment.

Examining the Approval or Rejection of the Performance of Theme Parks in the Realization of the Learning City

In the method of structural equations, before analyzing the effectiveness of indicators, the reliability and validity of structures were examined. To evaluate the validity of the structures, Fornell and Larcker introduced the validity of each item, combined reliability, and average variance extracted (AVE). The factor loadings must be greater than 40% to confirm the reliability of the items. The validity and reliability of our research items as described in Table (3) have confirmed the research indicators.

Table 3. Combined Reliability Coefficient and Convergent Validity

| Component | Indicator | Cronbach's alpha | Combined Reliability | Average Variance |
|--|-----------|------------------|----------------------|------------------|
| Encourage collective learning | A | 0.64 | 0.89 | 0.85 |
| The effect of environmental factors on learning and behavior in learning environments | B | 0.60 | 0.91 | 0.88 |
| Learning through culture based on knowing the indigenous history, culture and knowledge of the | C | 0.78 | 0.94 | 0.92 |
| Participating in continuing education and training | D | 0.84 | 0.96 | 0.95 |
| Encouraging work-life balance | E | 0.84 | 0.95 | 0.93 |
| Cultivating a friendly environment | F | 0.72 | 0.91 | 0.87 |
| Creating a multifunctional learning platform | G | 0.62 | 0.86 | 0.80 |

T-value and Components Performance

In Smart-PLS software, the value of *t* indicates the significance of the effect of variables on each other, so that if the *t*-value is more than 1.96, it is significant at the level of 0.05%. In this study, the calculated *t*-value in all cases was more than the specified value, which indicated the significance of the variables. Regarding the performance of the

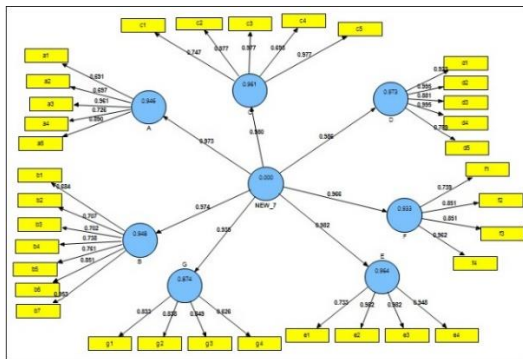


Figure 6.T-value

components, it should be noted that the factor loadings indicate the position of the indicators in measuring the variable. The ideal value is higher than 40%. If the value is reported to be less than 40%, the evaluation should be reconsidered. In our study, the calculated values for all cases were more than 60%, which indicated the optimal performance of the component.

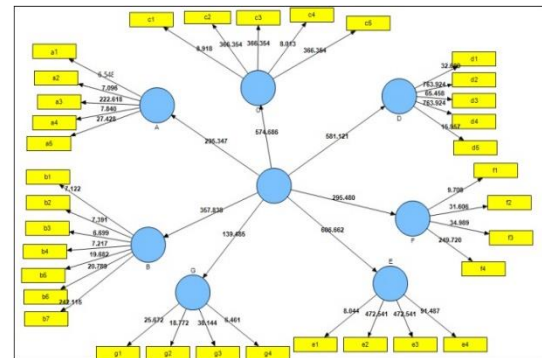


Figure 7. Factor Loadings

In this context, theme parks, by creating the ground for social participation, promote the culture of cooperation and healthy competition, and create a balance between life and work, to ensure the interests of different groups and to create continuity of activities as well. In addition to the above, better understanding of the living environment and the creation of new skills by people, and learning have been gradually becoming a culture, as well as a sense of responsibility in preserving the environment has been strengthening.

Model Fit

In the structural equation model, after examining and confirming the significance level of the variables, it is necessary to evaluate the quality of the internal or structural model. In this research, to evaluate the quality of the model, the indices R2 (variability), G2 (independent variable predictive power) and finally GOF (overall fit) have been used. The ideal value should be 67% or more for the volatility index, 30% for the predictor index and 36% or more for the overall fit.

Table 4. Results of the Components Fit of Theme Parks on the Realization of the Learning City

| Components | R ² | Q ² | GOF |
|------------|----------------|----------------|------|
| A | 0.94 | 0.57 | 1.30 |
| B | 0.94 | 0.77 | |
| C | 0.96 | 0.79 | |
| D | 0.97 | 0.67 | |
| E | 0.96 | 0.83 | |
| F | 0.93 | 0.56 | |
| G | 0.87 | 0.67 | |

The findings of the study for the levels of variability, predictability and overall fit, showed a level above the ideal level, which confirmed the performance of theme parks on

the realization of quality learning city in Zanjan.

Conclusion and Suggestions

Learning means acquiring, utilizing, and rationally using complex skills and attitudes so that individuals and groups can adapt well to their changing environments and make the most of them. Given the rapid changes in technology and the advent of globalization, attention to human capital such as learning is of particular importance, so that in the worldview of regional and local managers, a successful future depends on the development of human and social capital. Therefore, it should be noted that learning is not limited to organizations and departments, but also urban learning is considered a necessity for the realization of the desired future. In this regard, theme parks as an active model in learning try to identify different dimensions affecting learning and resource mobilization. Thus, this study tried to identify and analyze the functions of theme parks in the realization of a learning city in Zanjan by a descriptive-analytical method. In this regard, the research data were collected in two formats by desk-based and field studies. The results of 34-item analysis in 7 components in the Mental Model software environment showed that the greatest impact was related to the indicators of continuity of activities, urban good governance, creating a competitive environment, identifying capabilities, attractiveness and pleasantness, possibility formal-informal learning and the easy access with the highest degree of centrality as well as increasing trend. In this regard, in order to check the confirmation or rejection of the findings of the model, an attempt was made to analyze the items in the Smart-PLS environment. The findings confirmed high validity and reliability and moreover the level of significance was appropriate. Findings also showed that theme parks provide a platform for learning with enjoyment by creating the necessary context for the participation of formal and non-formal institutions as well as individuals, either collectively or individually and families as a whole, where questioning and criticizing were possible. Since teaching and learning takes place in the open and green spaces hence special subjects or topics can be raised, thus appropriate measures are taken to ensure security in such spaces. We made an effort to ensure that the color, sound and furniture fit the subject well so that the

quality of learning provided to the citizens to be at a great extent. In this way, increasing the power of information transfer and learning among citizens and the possibility of identifying the abilities and needs of individuals, were better provided to create a suitable context more accurately for planning goals for the framework of understanding the environment. In this context, citizens were introduced to the importance of team-cooperation and healthy competition with the observance of ethical standards in the urban system. Since the theme parks have combined sports with learning, they have created a multipurpose space for the goals of education, entertainment and learning which in addition to meeting the needs and desires of the participants, thus the field of continuity in activity was realized, which was one of the most basic learning factors, and also in order to achieve freshness and vitality for the citizens, mobility and movement was created which is the basic need of today's human beings. It should be noted that all of the abovementioned issues were achieved in the context of good urban governance by mobilizing resources and facilities in order to reduce space inequality and deprivation, proper public access, and accountability of citizens.

Finally, it should be noted that what distinguishes our study from the other studies can be stated as the following:

In previous researches, the most emphasis was on the quality of theme parks on how citizens behave, how it works in attracting tourism, how it works in terms of citizen satisfaction, how it affects social interactions and finally, the learning process, however there was a kind connecting relationship in each of them. Although theme parks have been studied from different aspects, in none of them the position of key performance indicators of theme parks has been emphasized. While in our study, using Mental Models software, this important step has been determined in the framework of effectiveness, impressionability and centrality degree indicators. Also, in other studies, there was no criterion for measuring the research findings, while in our study, after reviewing and analyzing the findings of the sample of experts, to check the confirmation or rejection of the findings, the

general sample (citizens) in Smart-PLS software was also used.

Finally, in order to improve the performance of Zanzan city theme parks in order to realize a learning city, the following suggestions have been made:

1. Prioritizing security and peace of mind in theme parks to gain collective trust to learn in these parks as much as possible;
2. Paying attention to the variety of learning tools and equipment in the park environment with color, sound, pleasant green space in the environment;
3. Paying attention to the various activities of the park and preventing excessive and nasty monotony in order to create continuity in learning;
4. Paying attention to the abilities of the participants and their responsibility in the framework of urban good governance.

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