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The Effect of Establishment of Music Center on Promotion of Persian and Islamic Traditional Music

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Abstract: *Music is the expression of state in the form of sounds and architecture is the expression of state in the form of objects and dimensions, both of which have a long history as much as human life. These two transcendental arts influence human body and spirit from different aspects. In the present study, the linkage between music and architecture has been studied using the descriptive-analytical method. The data were collected by field study, library study and a researcher-made questionnaires. The questionnaires were filled up by 393 elites and experts in music in Golestan Province, Iran. The data were analyzed using the SPSS software and the nonparametric binomial test. The results show that the establishment of the music center can be effective in promotion of the Persian traditional music. Also, according to the music elites, it is possible to design and establish a music center in combination with Persian traditional music by applying the approach of climate-responsive architecture and considering cultural factors.*

Keywords: *Music Center, Persian Traditional Music, Vernacular Architecture*

INTRODUCTION

Historically, human beings have always attempted to express their beliefs and ideals in various forms and convey them to others. For instance, music, poetry, painting, architecture, and sculpture, which are considered as the ways of expressing knowledge and passion (Haeri et al., 2004). The human's need for architecture and music necessitates recognizing and exploring the common characteristics of these two arts (Sadiq Akbari and Kazemi, 2014). If the design of any beautiful building is converted to the notes, the resulting music will be beautiful to be listened and vice versa, if the notes of a beautiful melody is converted to points and lines, the resulting design will be beautiful to be seen (Soheili, 2001).

Music is the most abstract man-made art. Music conveys the artist's feelings and ideas to others with no intermediary. For example, in painting, lines, shapes and colors convey the symbol to an observer. On the other hand, architecture is known as the most practical man-made art. The first objective of architecture is to act in the way of application rather than abstraction. It should also be considered that architecture requires an intermediary element, called building, to express itself. This intermediary element is the distinction between the two arts of architecture and music.

The relationship between architecture and music has been studied many times, and many have reflected on it. Such approaches began in classical Greece; Pythagoras and Plato were among the first people who developed some theories on beauty. Music is a purely mechanical, ordered, and harmonized perception of

sound wave in space. When it leads to the movement of humans in a certain space and affects the human spirit and his inner emotional atmosphere, it manifests the direct reflections of sound waves on the human body (Ghobadian, 2011).

The main role of music is to influence the spirit through feelings and emotions. Therefore, the effects of music are specially a function of the composer, but have relationship with other factors such as the musician, the listener, the environment, the musical instrument and the song. Environment, which is one of the functions of the effects of music, consists of two parts of space and place. By understanding the above issues and believing that there are connections between music and soul, and the soul and God, the architect develops his domain of thought in which the music goes beyond the technical and artistic application and he finds out that this art is in all levels of creation in various forms, so through this motivation, the architect can think of a suitable space in a suitable place (Haeri et al., 2004).

Architectural space, like music, will be able to play various, happy, orphic, harmonious songs, or in contrary, monotonic, annoying, strident songs. This ability depends on how the components and angles of space are created, or the components are arranged in space in relation with each other (Massoudi, 2003). Therefore, music and architecture have a common feature in placing us in an emotional space, different from where we normally live in (Blesser & Salter, 2009)

When architecture and music are at the highest level of subtilization, take human beyond materiality and lead him to spirituality. One of the features of single art is that it transcends the soul. This feature is greatly obvious in music and less obvious in architecture. Particular examples of this are the psychological effects of church music and church architecture, or religious music and religious architecture. Another aspect which is investigated in the study on architecture and music is the fact that these two arts are used as a means for communication by humans, in general, every artist has the goal of communicating with other humans through his art. With the induction of emotions, music can induce his artist to the listener without intermediary. On the other hand, with his architectural work, the architect also induces his thoughts and ideas to the viewer or the consumer, and in some cases, imposes them. Accordingly, the present study aims to investigate the effect of the establishment of a music center on the promotion of Persian and Islamic traditional music.

Theoretical Foundations

Space in music and architecture

Space, meaning of an area in an astral principal, will obtain a quality after being gradually inhabited by humans and obtaining spatial-temporal identity and as a result, it influences people's behaviors (Falamaki, 1990). The elements giving identity to the space in the material world are time and space. Music is to give identity to time in space, that is, the expansion of space in terms of the dimension of time creates music and the expansion of it in terms of the dimension of place creates architecture. Each architectural work is a result of the architectural space that architect imagines, and, likewise, any musical work is originated from mysterious space that the composer imagines before creating any work. As a result, each space represents its own particular architecture and music (Falamaki, 1990).

Both of these arts define a space. One can obtain a sense of space through the perception of an architectural space and a piece of music can also induce the same sense of space. A house in the desert which is surrounded with shifting sands, along with the bass of plectrum instruments specific to Baluchistan and combination of plectrum instruments, could play a key role in shaping that rural space with all its deprivations (Dehlavi, 1990). Considering the "space" as the main factor linking architecture and music, it can be said that after the architect or musician (composer) create a space through his work, after finding a desirable space for creating his work in his mind. That is why by creating different spaces, the architect is able to induce the emotional effects same as those created using instruments and songs by a musician. Like a piece of music which can create a spiritual space full of spiritual attractions due to being influenced by the

phonosphere-an archetype space, the construction of a mosque or tall minarets, and the elongation of the sides of a church also inspire a sense of ascension and spirituality (Mallah, 1990).

Music and architecture

Architecture and music are two artistic arenas that are created and understood by human beings. Music becomes more meaningful in the dimension of time and architecture in the dimension of space. Although these two arts have different raw materials, they are organized in the same mental space and by the same specific intellectual means. These tool are in fact the principles and rules that an artist applies when using his work. It can be said that although architecture and music are in two different artistic arenas and emphasize a particular aspect of human emotions and perception, certain rules and principles are governing them that exist in both and the artist can use them as tools to create the artistic work to express and convey the same feelings and perceptions.

Music is expressed by sound and architecture by matter. Is it possible to create a relationship between sound and matter without any intermediary? How do music and architecture have relationship with each other? This intermediary is space such as living space, geometric space, space of thought and fantasy, physical space, musical space, architectural space, and so on. Human dominance on architecture is defined with recognition (geometry) and its rules, and "defining their forms and putting them together" on a paper with the name of "architectural design and map", and human's exploration in nature also gives him the material required for creating a good architectural work. Musical states follow certain rules extracted from mathematics and physics. Architecture is the geometry of place and music is the mathematics of time, and it can also be said that the architecture is the mathematics of place and music is the geometry of time! Music is not static while the architecture is static. In the case of painting, the static is introduced at the core of the work. Meeting of the two sciences with common basis (geometry and mathematics), which are intellectual arts derived from nature, creates a consistency in music and architecture in such a way where the "sense of being common of architecture and music" is strengthened and evaluation of these two arts becomes possible.

Methodology

In the present study, in addition to the library method, a researcher-made questionnaire was used to collect the data. To confirm the validity, the comments of the supervisor and some of the experts in human resources and organizational behavior in the organizations were used. To estimate the reliability, Cronbach's alpha was estimated in SPSS software. After distributing 20 questionnaires for initial test, the final values of this coefficient were obtained for the examined variables to make necessary changes to modify the questionnaire, as listed in Table 1:

Table 1. The Cronbach's alphas of research variables, which were used to examine the questionnaire's reliability

Variable	Cronbach's alpha
Promotion of Persian traditional music	0.819
Design of music center	0.843

In the current research, the statistical population included those who were interested in music and musicians. Given the fact that members of the population were unknown, the number of members was considered unlimited for sampling. Samples were selected using simple sampling method. The sample size was estimated 391.5 using the Cochran formula. In order to increase the validity of the research, the researcher has considered the sample size to be 393 people. In the present study, given that the hypotheses are relational, the correlation coefficient and regression model seem to be suitable methods to be used.

Results

Table 2. Distribution of respondents against gender

Gender			
Gender	Male	Female	Total
Frequency	204	189	393
Percent	51.9	48.1	100

As seen in Table2, 51.9% (204 persons) of respondents were male and 48.1% (189 persons) of them were female.

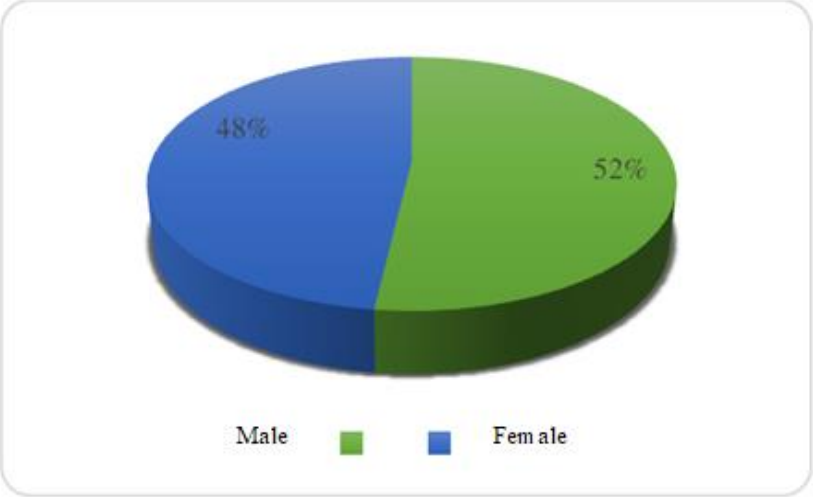

Figure 1. frequency of respondents against gender

Table 3. Distribution of respondents against education

Education								
Subjects	Diploma and associate's degree		Bachelor's degree		Master's degree and higher		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Male	65	31.9	102	0.50	37	18.1	204	100
Female	102	54.0	73	38.6	14	7.4	189	100
Total	167	42.5	175	44.5	51	13.3	393	100

As seen in Table3, in the male group, most of the respondents (50% or 102 persons) had bachelor's degree. 37 (1.18%) respondents had master's degree and 65 (31.9%) respondents had diploma and associate's degree. In the female samples, most of the respondents (54.0% or 102 persons) had bachelor's degree. 51 (13.3%) respondents had master's degree and 167 (42.5%) respondents had diploma and associate's degree. In general, 175 (44.5%) respondents had bachelor's degree, 51(13.3%) respondents had master's degree and 167 (42.5%) respondent had associate's and diploma.

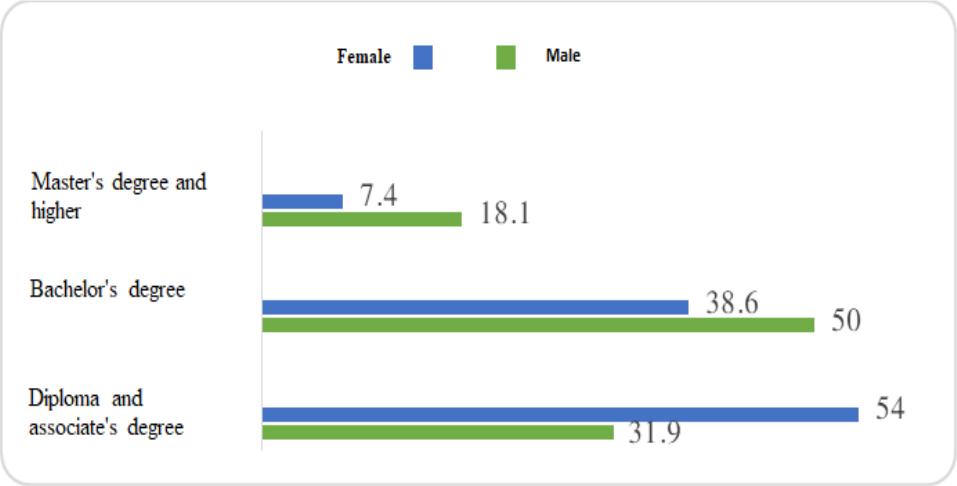

Figure 2. frequency of respondents against education

Table 4. Measures of central tendency and dispersion index of age

Variable	Gender	Mean	Mode	Minimum	Maximum	Standard deviation
Age	Male	26.68	27.0	18.0	38.0	3.518
	Female	26.75	27.0	20.0	39.0	3.096
	Total	26.71	27.0	18.0	39.0	3.318

As seen in Table 4, the average age of men was 26.68±3.518 years and while the average age of women was 26.75± 9.096 years.

Table 5. Frequency of respondents against type of instrument

Specialized instrument						
Type of instrument	Male		Female		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Tar	28	13.7	33	17.5	61	15.5
Setar	33	16.2	7	3.7	40	10.2
Santure	33	16.2	7	3.7	40	10.2
Tanbur	11	5.4	0	0.0	11	2.8
Dutar	37	18.1	51	27.0	88	22.4
Kamancheh	17	8.3	2	1.1	19	4.8
Ney	19	9.3	9	4.8	28	7.1
Other	33	16.2	59	31.2	92	23.4

As seen in Table 5, in the male group, most of the respondent played Dutar (18.1%), followed by Tar (13.7%), Santur (16.2%), Setar (12.7%), Kamancheh (8.3%), Tanbur (4.5%) and Ney (3.9%), respectively. It should be noted that 16.2% of male respondents did not report their own specialized instruments. In the female group, most of the respondent played Dutar (27.0%), followed by Tar (17.5%), Setar (14.8%), Ney (4.8%), Santur (8.3%), Tanbur (3.7%) and Kamancheh (1.1%), respectively. It should be noted that 23.4% of female respondents did not report their own specialized instruments. In general, most of the respondent professionally played Dutar (22.4%), followed by Tar (15.5%), Setar (13.7%), Santur (10.2%), Ney (7. 1%), Kamancheh (4.8%) and Tanbur (2.8%), respectively, and 4.23% of respondents did not report their own specialized instruments.

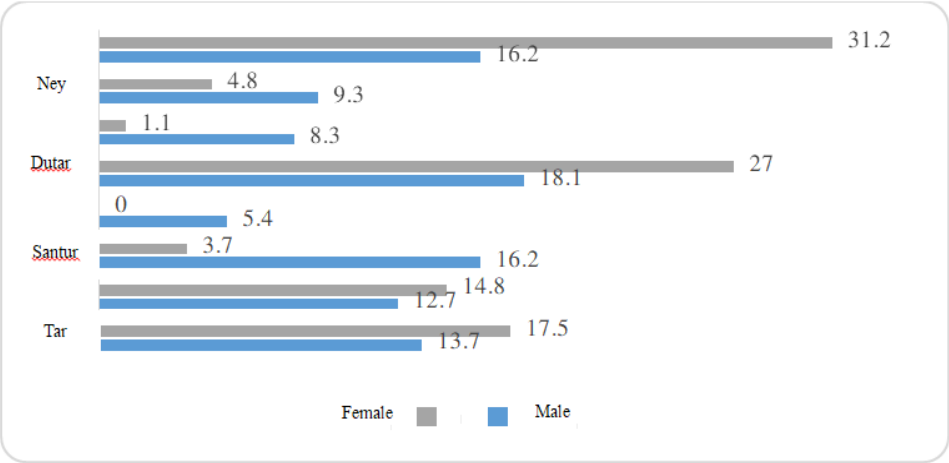

Figure 3. frequency of respondents against the type of instrument

Table 6. Results of Kolmogorov–Smirnov test

Variable	K-S static	Sig.	Distribution
Promotion of Persion traditional music	180.0	0.000	Abnormal
Climate-responsive architecture	140.0	0.000	Abnormal

As seen in Table 6, the null hypothesis of the normal distribution of quantitative variables is not confirmed (P <0.05); in other words, all quantitative variables have abnormal distribution; therefore, parametric method cannot be used to test the research hypothesis, and its non-parametric alternative, i.e. binomial test, should be used.

Hypothesis 1: Establishment of a music center is effective in the promotion of Persian traditional (and Islamic) music.

Table 7. Results of binominal test

Characteristic	Groups	Number	Ratio	Test ratio	Sig.	Effective/ineffective
Promotion of Persian traditional (and Islamic) music.	≤3	17	0.0	6.0	0.000	Effective
	>3	376	0.1			

As seen in Table 7, the hypothesis of the equality of the ratios of scores less than 3 with the test ratio (6.0) is not verified (P<0.05). Investigating the ratios shows that the ratio $P \geq 0.6$ is confirmed, which means that according to the musicians participating in the study, the establishment of a music center could be effective in the promotion of Persian and Islamic traditional music. Therefore, the first hypothesis is confirmed.

Second hypothesis: Using vernacular architecture approach is effective in establishing a building in combination with traditional music.

Table 8. Results of binominal test

Characteristic	Groups	Number	Ratio	Test ratio	Sig.	Effective/ineffective
Effect of vernacular architecture approach on…	≤3	115	3.0	6.0	0.000	Effective
	>3	278	7.0			

As seen in Table 8, using the non-parametric binomial test, the hypothesis of the equality of the ratios of scores less than 3 with the test ratio (6.0) is not verified (P<0.05). Investigating the ratios shows that the ratio $P \geq 0.6$ is confirmed, which means that according to the musicians participating in the study, it is possible to design and establish a music center in combination with Persian traditional music by applying climate-

responsive approach to architecture design and considering cultural factors. Therefore, the second hypothesis is also confirmed.

Conclusion

According to the results of present study, most of the respondents were male. Of 393 people participated in present study, 204 respondents were men (51.9%) and 189 women (48.1%). The second feature studied in present research was education. 175 (44.5%) respondents had bachelor's degree, 51(13.3%) respondents had master's degree and 167 (42.5%) respondent had associate's and diploma. Most of the participants are in the 31-35 age group (43.6%), followed by the age group of older than 40 years (28.8%) and 26-30 age group (21.3%), respectively. The average age of men was 26.68±3.518 years and while the average age of women was 26.75± 9.096 years.

The last demographic characteristic was description of the respondents against the type of instrument. In general, most of the respondents played Dutar (22.4%), followed by Tar (15.5%), Setar (13.7%), Santur (10.2%), Ney (7. 1%), Kamancheh (4.8%) and Tanbur (2.8%), respectively, and 4.23% of respondents did not report their own specialized instruments.

First hypothesis

As seen in Table 7, using the non-parametric binomial test, the hypothesis of the equality of the ratios of scores less than 3 with the test ratio (6.0) is not verified ($P<0.05$). Investigating the ratios shows that the ratio $P\geq0.6$ is confirmed, which means that according to the musicians participating in the study, the establishment of a music center could be effective in the promotion of Persian and Islamic traditional music. Therefore, the first hypothesis is confirmed.

Architecture is constructed in material form and with tangible materials and defines a functional space, but music has non-material and supernatural nature; architecture is static and music is dynamic; architecture inherently relies on objective ways to be imagined and motivates emotions and feelings, but music inherently relies on the subjective way and is perceived only through listening and affects the inner world in human; music expresses feelings using sound, and the architecture states feelings with the help of matter; architecture creates material and spiritual spaces, but music has only a spiritual space; architecture is three dimensional, but music has one dimension; music expresses feelings explicitly and with no mediatory, facilitating the conveying of artists' message, mental ideas, emotions and feelings to others, while in the architecture, the artist's mental message must be conveyed using an intermediary called building. Although there are distinct differences, as mentioned earlier, between architecture and music as two apparently distinct artistic fields, there are similarities between them, which indicate a profound linkage between the two. This profound linkage comes from the common space which can be created by both a musical piece and an architectural work, since one can obtain a sense through the perception of an architectural space that a piece of music can inspire a sense similar to that space. So, within this common space and using this profound linkage, one can extract common concepts and elements and use them as a principals (tools) for converting musical works into architectural works and vice versa. Music is the expression of human emotions and thoughts and shows his inner states. The term "music", pronounced "qi" in Arabic language, has a Greek root.

Although in each floor of a building, we can listen to its melody by looking at the windows and openings and empty spaces (calm space), we can simultaneously perceive two or three floors as a harmony for a landscape by looking at the one side of a building. In other words, as our knowledge of harmony informs us about the characteristics of the chords and the linkages between them, given their structural, melodic and weighty values, the researcher can also understand the harmony of the musical texture. All the arts connect to each other transversally, because the source of all of them is the manifestation of beauty. This beauty takes place in the form of ratios between length, width and height in architecture and sculpture. In a face, there are proportions that create beauty. Sometimes color proportions create beauty, where a set of optical frequencies

creates pleasant proportions. In music, sound proportions create beauty. Proportion is sometimes perceived by the sense of sight, and sometimes with sense of hearing. In the case of senses of smell and touch, somethings are also mentioned, so all the arts have one aspect, and that is what previously design with the geometry in ourselves.

Second hypothesis

Using the nonparametric binominal test and examining the observed ratios, it can also be shown that the ratio of $P \geq 0.6$ is verified, it means that according to the musicians participating in the present study, it is possible to design and establish a music center in combination with Persian traditional music by applying climate-responsive approach to architecture design and considering cultural factors. Therefore, the second hypothesis is also confirmed.

Iranian music aims to balance human spirit and soul, through more awareness and thought. The more artistic the music is organized, the greater the balance is created in the human soul and spirit so that one's spirit becomes fresh when he hears music, but how? The organization of tune and the formation of Iranian musical patterns are not based on the beginning and the end points, but on milestones or points of reference that have no end and if time, based on the limitations of human life, requires it to have the beginning and end points, this should not be considered as the beginning and the end of it. This discussion is of great importance about the musician and his audience. In Iranian music, the milestones are certain states which are referred to say that where we are and then we get away from it in such a way that we have never been there and in such closing and getting away, there are no beginning and end points. Among different modes of musical patterns, a group of them can be referred and some not. The referencing mode is precisely what we mentioned in the creation of balance, the same milestone. All of these possibilities have been historically formed and developed based on a social agreement and a general test. For example, among seven Dastgah (musical modal) and five Avazes and hundreds of Maqams, daramad (introductions) and falls are reversible and referable modes. Milestones and reference modes in the Iranian music refers to a musical state that leads to a sense of balance and equilibrium in people. Here, it can be referred to the Isfahani, Afshari, Abu Aata's daramad modes, and opposition maqam in Sigah, Chahargah and Homayoun. These states can be presented in different forms. For example, in the maqams of Kereshmeh and Hazin, they can be combined with other modes. In Iranian music, introduction is considered as a support and reference; after going to the maqams and other secondary modes, we are away from that support and reference, and by playing Avaz and the other tracks, we get away from it as if there was no support at all. Although architecture and music manifest in two seemingly different fields and each of which emphasizes and puts particular emphasis on particular dimension of human perception, there is a linkage between them and they have commons. An architectural or musical work passes through special passages at the time of being created, these passages originate from the common ground of these two artistic arenas, i.e. space. Both composers and architects do not unknowingly develop a product that can be recognized as a valid work at global scale. In fact, the two stages of recognition and analysis are influenced by an artist's culture. His culture is an impartial part of his works. Those artists activating in these two arenas use the same mental space when creating their artwork. It seems that the commons existing between these two artistic arenas can be considered as special tools by which the artwork in these two arenas can be converted into each other.

These tools include rhythm, emphasis, themes, harmony, color, symmetry, and so forth. Accordingly, by recognizing the common mental space and using these tools, one can create a kind of architecture by which an emotion conveyed to the audience, looks like the corresponding music, and vice versa.

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