



Comparison of the Characteristics of Endowment-educational Complexes in Ilkhanid and Timurid Period of Iran

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ARTICLE INFO	ABSTRACT
<p>Received: 09 September 2020 Revised: 20 December 2020 Accepted: 24 January 2021 Online: 14 January 2022</p>	<p>At the international level, the evolution of higher education in Muslim countries has not received much attention from educational scientists. The purpose of this study was to compare the characteristics of endowment-educational complexes in the two dynasties of Ilkhanid and Timurid kingdoms of Iran. The research method is historical comparative and researchers used documentary method to collect data and internal and external critique for content analysis. Findings showed that there are similarities in eight features between the endowment-educational complexes of the Ilkhanids and the Timurids. These features include: the influence of Iranian culture, social origin of the founders, role of endowment, curricula and content of courses, common teaching methods and welfare / educational facilities. Findings also indicate that the Ilkhanid period in terms of factors such as less influence of the religious system on the educational system, more modern spaces of educational complexes, academic freedoms, diversity in teaching methods, more scientific progress in sciences - such as mathematics, astronomy and Medicine - and use of more famous and creative scientists, has prevailed over the Timurid period. The findings of this research revealed the need for politicians and educational planners of Iran and Muslim countries to reconsider the role of endowment phenomenon and public participation to reduce the economic challenges of educational system.</p>
<p>KEYWORDS</p> <p>Educational Complexes Endowment Ilkhanid Timurid</p>	

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1. Introduction

The establishment of educational centers in Iran can be divided into two historical periods of pre-Islamic and post-Islamic. Before the Arab invasion, there were primary schools in Iran mainly for the children of the noblesse, and the most important and famous center of higher education was Jundishapur University. After the arrival of the Arabs in Iran and during the period of the Abbasid caliphs, schools (primary schools) and seminaries were established in many areas (Akhtar, & Rawat 2018, Ghanimeh 1992). However, the expansion of higher education centers began mainly in the fourth century and at the same time as the establishment of non-Arab dynasties in Iran. In fact, after the arrival of Islam in Iran, mosques were the first centers of religious education for children. As the number of children increased, the first primary schools called "*Maktab Khaneh*" were established by different people near mosques (Sarabi, & Molanaei, 2016). Also, as the age of the students increased, more education was offered in centers called "*Madrasa*" (School). In fact, schools can be considered as centers of higher education that have been mentioned in historical sources with various names such as seminaries, military, Dar al-Hikma and educational complexes (Anzar 2003; Soltanzadeh, 1985,). Also, only those who had previously completed basic education could enroll in *Madrasa*.

In historical sources, the city of Neishabour, which was the largest city of Khorasan in the fourth century, is considered the birthplace of the first schools in Iran. Other cities such as Balkh, Bukhara and Herat are also considered as scientific centers of this period. During the Seljuk rule (1140-1194) and with the establishment of Nazamiyeh *Madrasa* by Khajeh Nizam-ol-Molk Tusi (1018-1092) - scientist and minister of the Seljuk period (1018-1092) - various *Madrasa* were established throughout Iran (Meri, 2005, Kasaei, 2004). After Genghis Khan (1158- 1227) invaded Iran in the sixth century, his successors ruled for a century under the name "Ilkhanids" (Aigle, 2008). The Ilkhans initially had a Buddhist religion but gradually converted to Islam. Through history of science, it can be seen that during the rule of the Ilkhans and at the same time with the establishment of schools, Iran witnessed the emergence of a group of its greatest scientists (Modares Razavi 2004; Mortazavi, 2006). In fact, one of the important scientific-educational activities of some Mongol rulers, their Iranian ministers, as well as aristocrats and merchants, was the establishment of "educational complexes" (Parvin Turkmani, 2007). The main feature of these centers is their complex state, which was located in a large complex of centers such as school, Dar al-Shifa (Hospital), Dar al-Siyadeh (Center for Supporting the Poor and Children of Shiite Imams), mosque, monastery, and library.

A century after the fall of the Ilkhanids and the rule of various dynasties, the kings of the Timurid dynasty (1404-1507) were able to create a broad territorial unity in Iran. The founder of this dynasty, Timur (1336-1405) with the invasion of Iran was able to expand his monarchy in addition to India, Central Asia and Transoxiana, to the shores of the Mediterranean Sea and Moscow (Mirjafari, 2016). One of the most prominent features of the Timurid rule was the great interest of some kings in the development of science, literature and the construction of educational centers. In fact, Timur's successors - especially Shah Rukh (1405-1447) and Ulugh Beg Mirza (1394-1449) - established numerous schools and centers such as libraries, hospitals, and observatories.

The Timurid sultans sought to gain legitimacy for their government by providing the necessary educational facilities for professors and students (Amirkhani 2004). Thus, it can be seen that in terms of attention to science, the two dynasties of Ilkhanids and Timurids had two things in common: First, the establishment of scientific centers and support for scientists, and second, the use of the tradition of endowment. The first point was briefly explained in the previous paragraphs. Regarding the second common denominator, it should be said that "*waqf*" (Arabic word for endowment) as an Islamic tradition has been the source of many positive effects in the history of science and education in Iran (Mehdinejad & Moghimi, 2017). In fact, various people have donated their property to establish schools, higher education centers, hospitals, libraries, orphanages, mosques, student dormitories, and financial aid to teachers and students.

It is natural that more than 7 centuries after the collapse of the Ilkhanid and Timurid dynasties, this fundamental question arises as to "what is the need for the present study". The present researchers pay attention to this point: First, the current state of education systems in Iran - with more than 14 million students and 1 million teachers, is currently facing many financial challenges - such as dilapidated school buildings, lack of facilities, and inadequate teacher salaries. Also, at the higher education level, many universities face financial crisis, lack of suitable dormitories for students and lack of motivation in faculty members (Gholami, 2019; Mahdavi-Nasab 2020; Rakhshani-Mehr, 2018; Shahri, 2020). Naturally, the experience of establishing educational complexes in the two periods of the Ilkhanids and the Timurids can include lessons from the past for Iran today. The second reason is the need to pay attention to the Islamic tradition of "*waqf*" to increase people's participation in scientific and educational affairs. In fact, the expansion of public participation in all upstream documents of the Iran educational system has been repeatedly emphasized (Supreme Council of the Cultural Revolution 2010, 2011; Research Center of Islamic Parliament of Iran, 2015, Organization for Privatization, 2005).

Therefore, the experience of the two historical periods of the Ilkhanids and the Timurids can show those involved in the current Iranian education system how to use the wealth of politicians, industry owners, businessmen, various private sectors and parents to meet the economic challenges of schools. Also, another advantage of the present study is to adopt a comparative approach to determine the similarities and differences of an educational experience (establishment of educational complexes) in two historical periods. According to this brief introduction, the purpose of study was to compare the function of endowment-educational complexes of Ilkhanids and the Timurids period. The research questions according to the mentioned purpose are:

- What were the characteristics of endowed educational complexes in the Ilkhanid period?
- What were the characteristics of endowed educational complexes in the Timurid period?
- What are the similarities and differences between the characteristics of the endowed educational complexes of Ilkhanids and the Timurids period?

2. Research Method

This research method was a comparatively historical type, which in some scientific sources is also referred to as comparative history (Sweeting, 2007). One of the goals of historical research is to discover the process of issues and phenomena in different time periods (Plenge, 2020). The method of data collection is documentary by examining primary documents (books) and secondary documents (articles). Also, these resources are mainly obtained by searching university centers (libraries) and information bases such as Google Scholar and official websites of government organizational and centers. The research process was based on the stages of historical comparative research, including subject expression, data collection, and thematic classification by main components, comparison and explanation (Naderi & Seif Naraghi, 2006). Also for data analysis from the principle of induction (search of sources) and to evaluate the validity of the data, both external and internal criticism were used (Sarukhani, 2009).

3. Findings

According to the research questions, the findings of the study of primary and secondary sources are described in three sections: the characteristics of educational complexes in the Ilkhanid and Timurid periods and the comparison of these characteristics.

1. The Ilkhanid period

The Ilkhanid period, apart from its first decades, has been one of the most fruitful periods in the history of Iran in terms of the number and variety of scientific-educational centers. Lack of inclination and general adherence of the Ilkhans to a particular religion led to the growth and fertility of all religious and cultural groups in Iran and a kind of equality and relative freedom in the study of science was established for all people (Parvin Turkmani, 2007). This situation also prepared a suitable ground for growth of prominent scientists such as Khajeh Nasir al-Din Tusi, philosopher and theologian; Sayyid Ibn Tawus, jurist and historian; Najmuddin Katabi Qazvini, physician and chemist; Ibn Maysam Bahrani, jurisconsult and theologian; Zakaria Qazvini, geographer and astronomer; Abolkhair Ghazi Beizavi, jurist and theologian; Bahauddin Arbab, poet and writer; Baba Afzal Kashani, mystic and poet; Allameh Qutbuddin Shirazi, physician and astronomer, Allameh Hali, jurisconsult and theologian; Sheikh Safi al-Din Ardabili, mystic and poet and Kamaluddin Abdul Razzaq Kashani, mystic and jurist (Kamola, 2013).

One of the scientific-educational features of the Ilkhanid period, which was imitated in later periods, was the establishment of "endowed educational complexes". Endowment-Educational complexes were centers in which a variety of complexes such as mosques, schools, libraries, dormitories, hospitals, restaurants, warehouses, and entertainment space are built by an individual or a family as a "public endowment" for the use of all people (Alamdari, 2012). Maragheh Observatory, Shanb Ghazan Complex, *Rab'-e Rashidi* and *Soltanieh School* were among the endowment-educational complexes in the Ilkhanid period (Fazlullah Hamedani, 1994). According to the purpose of the research, the most important features of these complexes in the Ilkhanid period are briefly examined:

A) Characteristics of the founders

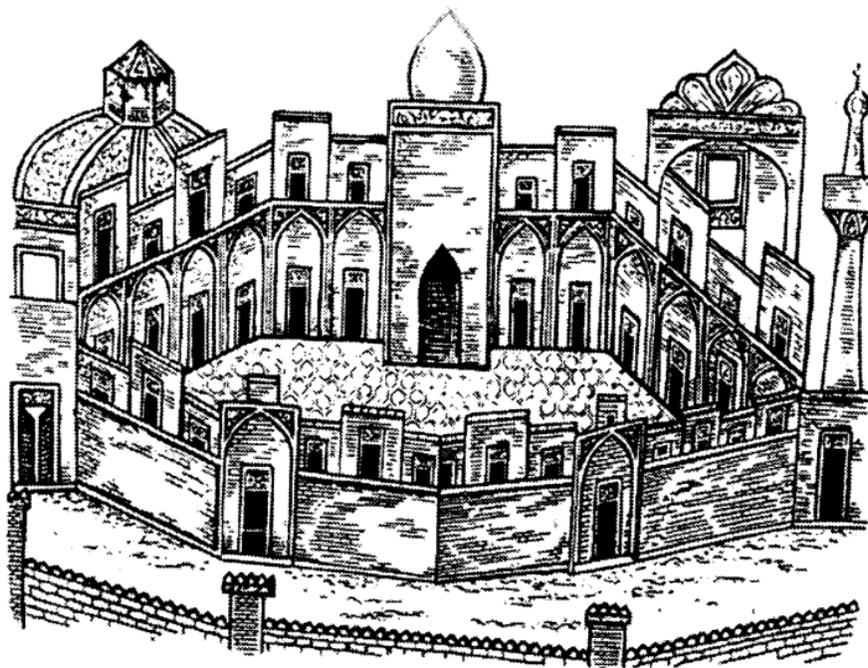
In most cases, the king, members of the royal family, ministers, regional rulers and government officials were the founders and dedicator of the endowment-educational complexes. Also, the majority of these dedicators had high political power, economic wealth and social status. Of course, in the meantime, one can also find dedicators who had economic power but did not have a strong relationship with the political system. These people mainly wanted to preserve the benefits of their property for their children and future generations by donating it (Abrahimi & Rostami Nesab, 2008). In fact, according to Islamic law, land or a building that is dedicated to a religious or educational or public benefit center - such as a hospital - can no longer be bought, sold and seized

and only the dedicator and trustee can manage it (Darabpour, 2011). Therefore, by building endowment-educational complexes - while doing a good job - the dedicator could enjoy its benefits to some extent and prevent its occupation by governments (Aminian Modarres, 2002; Samarkandi, 1993). Of course, this is not true of all Endowment-Educational complexes, and many of the founders did so only to promote science and the reward of the Hereafter. However, during this period, each complex had endowments for financing, which were dedicated by the dedicator. In a document named "Endowment Letter", usually dedicator specified the property, assets, endowment buildings and method of use them and managing the school (Sultanzadeh, 1985). The administration of the schools was often in circulation between teachers and Trustees and sometimes the sultans. In addition, it often happened that the dedicator interfered in the school programs and method of teaching or in the endowment letter stated the conditions for hiring teachers and students (Durrani, 1997). Of course, one of the reasons for construction of endowment-educational complexes also was the economic goals of the founders. Due to the variety of endowment competitions and their high income, these complexes can be considered as an "economic holding" or a kind of semi-public or semi-private educational business (For example, *Rab'-e Rashidi* Complex and Amir Alishir Navai Complex).

B) Features of Building

As mentioned before, the Endowment-Educational complexes included several buildings such as mosque, school, library, dormitory, hospital, restaurant, warehouse, and a recreational space that were completely connected to each other through stairs, corridors, courtyards, alleys, domes and roofs (Figure 1). Schools were the most important scientific part of these complexes because they caused the construction of other spaces such as hospitals, dormitories, and libraries to be rationally justified (Memarian, & Ranjaberkarmani, 2011). In addition to the educational-scientific role, schools had a very strong religious role - by educating religious students, writing religious books and propaganda to attract new followers - (Karimi, 2015). The dome was a place of worship and preaching that was used by the people and the students at the same time (Vasegh & Gharamaleki, 2016; O'Kane, 2007). In addition to the mosque, another feature of the endowment-educational complexes during the Ilkhanid period was the construction of monasteries and the placement of many endowments for them. In monasteries, in addition to religious education, the main emphasis was on providing mystical education (Durrani, 1997).

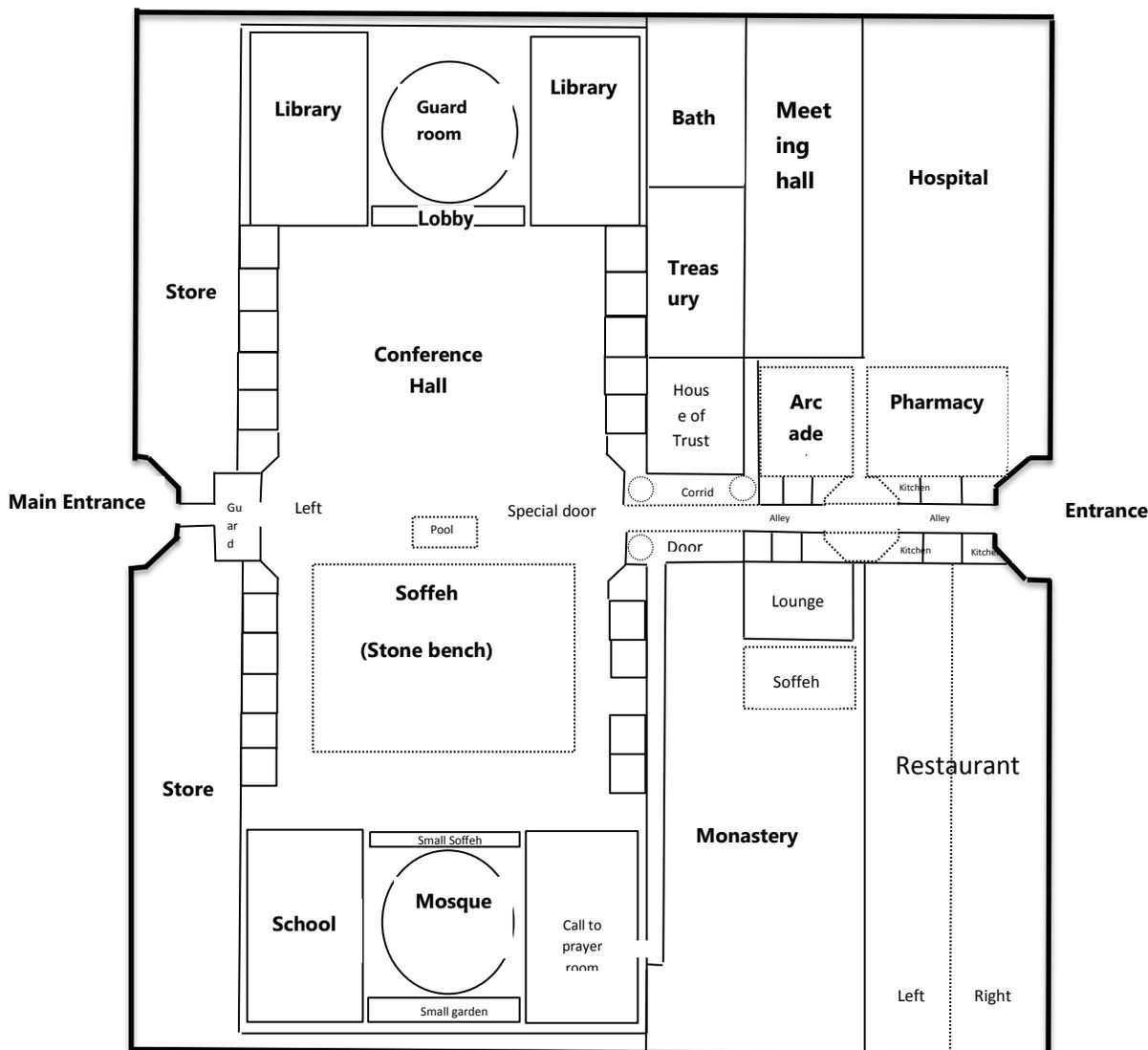
Figure 1: Miniature view of Ghazan Shanb



Source: Shekari& Nairi, 2005, 77

Dar Al-Shifa, as one of the dual-purpose educational-medical places, was another part of the complexes, which in addition to treating patients, also provided medical education. The library is one of the main pillars of education and in some complexes it was considered as a main cultural element by the founders. For example, Library of Rab'-e Rashidi had sixty thousand books in various sciences that were collected from different regions of Iran, India, China, Russia, Egypt, Morocco, Greece and Rome (Hamedani, 1979).

Figure 2. A comprehensive diagram from Rab'-e Rashidi



Source: Saeidnia, 2000, 56

C) Educational programs and content

One of the important topics in the complexes was the programs and their diverse educational content. In fact, the variety of educational programs was directly related to the scientific status of each course and the intentions of the founders. However, since the basis of education in this period was generally religious in color, subjects such as Quranic interpretation, hadith, jurisprudence,

theology, ethics and literary sciences were mainly taught in schools (Mehdinejad & Moghimi, 2017). Before the Mongol invasion, the teaching of Arabic language was very prosperous in Iran, but in the schools of the Ilkhanid period, this language lost its place and the teaching of Persian language and literature became common (Rasouli, 2011). These schools were often run by religious scholars or teachers who were mentioned in the text of the endowment letter, or they were chosen by trustees (Mehdinejad & Moghimi, 2017). Also, separate classes or schools were sometimes used to teach religious sciences - especially teaching the principles of the Hanafi, Shafi'i or Shiite sects (Kasaei 1999). In addition, in some schools, classes were held to teach sciences such as medicine, astronomy, and industry. Another important point in this period was the reconsideration of the rational sciences. After a long hiatus, these sciences once again came to the attention of professors and students. For example, Khajeh Nasir al-Din al-Tusi set a daily allowance of three *dirhams* for each philosopher, two dirhams a day for each physician, one dirham per day for each jurist, and half a dirham per day for each *Muhaddith* (Traditionist) (Ibn Athir, 1965). The last point is that in the Ilkhanid period, due to the change in attitude in the nature of educational programs, the need to prepare new curriculum became apparent. Therefore, the preparation of textbooks was very important for scientific centers and summarizing books, writing descriptions and margins on them, and writing short and voluminous books in various sciences became common among the majority of scholars (Gerami, 2014). In this regard Ibn Khaldun (1974) says: "The multiplicity of books and the increase of information in different sciences in this period is so much that one person's life is not enough to learn all the contents and terms". The establishment of observatories and gatherings of scientists of different nations in these scientific centers opened a new chapter in Islamic astronomy. Writing and translating works related to astronomy, making astronomical tools and criticizing the Ptolemaic system have been among the achievements of patriarchal scientists in astronomy (Keramati, 2006).

D) Teaching method

One of the important features of schools in Endowment-Educational complexes was the teaching method of teachers. In most cases, teachers used the lecture method, although the "group discussion" and "question and answer" methods were also very common. Sometimes students read the lessons from the text and memorized what the teacher had said. Kasaei (2004: 555-554) writes, "The preferred method in this period was free dialogue between teachers and students, and the subject of the course or textbooks was chosen by students. Also, due to the large number of students, teaching was the responsibility of professors and *Moeid* (Assistant teacher). Professors

were selected from among first-rate scientists and therefore, like other distinguished persons in the country, had a high social status. *Moeid* was a person who repeats lesson to make sure that all students had learned it (Naghostin, 1988).

E) Welfare facilities

Welfare facilities and social services were common in all complexes. There were also several competitions for fixed and running costs of these facilities. In addition to professors and students, these endowment-educational complexes also provided facilities for ordinary people. For example, in *Shanb-e-Ghazan Khan*, the preparation of clothes for the poor, goat and sheep wool for women's spinning, and finance support for burials of the poor were considered (Ali Asl & Yousefifar, 2011). Another example is related to *Rab'-e Rashidi*. In this complex, separate accommodation was provided for physicians, teachers and students (Hamedani, 1977).

2. Timurid period

Due to the relatively high social security and political stability that emerged in Iran during the Timurid period, a good opportunity for scientific and cultural development was provided through the establishment of numerous schools, libraries and educational centers (Subtelny, 1997). Of course, it must be acknowledged that in Iran, there has always been a close relationship between the prevalence of building schools and political conditions of society (Allahyari, Fayyaz Anoush & Goodarzi, 2015). The important endowment-educational complexes of this era are *Ghiasieh*, *Goharshad Begum*, *Ikhlasih*, *Soltani*, and *Amir Alishirnavaei Schools*. These complexes had a school for orphans, monastery, Madrese, hospital, library and publishing house. According to the purpose of the research, the most important features of these complexes in the Timurid period are briefly examined:

A) Characteristics of the founders

According to the documents and sources remain from the Timurid period, it can be said that the methods of supporting culture and knowledge were not very complicated at that time. This support has been mostly through reconciliation, construction of schools, monasteries and libraries, and the establishment of endowments for these places, along with financial and social support for scholars and students. The Timurids continued the Ilkhanid tradition in terms of building endowed educational complexes. The interest of the Timurid sultans, especially *Shahrokh*, in culture and art,

as well as their devotion to the *Ulema*, caused them to be diligent in the flourishing of science and education, so that one of the important cultural features of this period is school building. During the Timurid rule, many educational centers were established by kings, women of the royal family, and ministers (Amirkhani 2004). Considering the political and social base of school founders, it should be noted that political authorities have built the largest number of educational complexes compared to other sections of society. Of course, although the ruling class was more active in building educational facilities, the construction of these facilities was mainly funded by public property, and this class took such measures to gain cultural acceptance. However, due to the political and social influence of the founders, in these schools, famous scholars were taught at these schools. Scholars like Maulana Saad al-Din Taftazani, jurist and logician, Hafez Abro, historian and geographer, Maulana Hossein Vaez Kashefi, writer and mathematician and Abdol Rahman Jami (Eshpuler 2007).

B) Features of Building

The existence of various facilities in endowment-educational complexes such as mosques, hospitals, baths and dormitories was also common during the Timurid period. Also, the allocation of numerous competitions to different sections of educational complexes during the Timurid period had increased sharply (Menz, 2014). In this period, the participation of aristocratic women in the construction of endowment-educational complexes was more common than in the Ilkhanid period. For example, in the city of Yazd, the ruling wife named "*Bibi Fatemeh Khatoon*" - in addition to cooperating with her husband in public welfare - devoted many villages and farms (Sajjadi, 2014). Also, many founders built small family tombs in educational complexes for themselves, thus showing their permanent presence to the future (Mostofi Bafghi, 2006). In general, the most important functions of educational complexes are:

- Integrating the function of educational buildings with religious affairs
- Placement of buildings between gardens
- Schools located within the city walls without separate borders
- Cultural functions
- Social functions

Monasteries (*Khanqah* in Farsi) were one of the existing buildings in endowment-educational complexes that had two educational and religious functions simultaneously (Durrani, 1997). In fact,

the main emphasis in the monastery was mainly on moral education and self-cultivation (Khandmir, 1999). During his trip to Iran, Ibn Battuta (1304–1368) saw many of these monasteries, which he sometimes mentioned as a school or monastery (Ibn Battuta, 1980). In the Timurid era, the school and monastery were built next to each other and the competent scholars who could attend the school as jurists were also Sufis in the monastery and therefore taught in both places (Wilber et al., 1995). *Dar al-Shifa* was considered as one of the dual-purpose medical-educational places in the Timurid period. In *Rab'-e Rashidi*, separate teaching place and welfare facilities were provided for professors and students (Khandamir, 1993).

C) Programs and content of training

In this period, education was pursued in three less coordinated stages of primary, secondary and higher education. In primary school, reading, writing, and reciting the Qur'an — learning simple letters and words — were taught in groups, and students were required to memorize short chapters of the Qur'an. High school courses included topics such as grammar and meaning, the science of *hadith*, the science of *rijal* (Biographical evaluation), and the basics of arithmetic and geometry. Higher education materials included advanced Arabic grammar, interpretation of the Qur'an, hadith, jurisprudence and principles of religion, logic and philosophy, natural sciences, and mathematics. The method of education in the complexes is fundamentally different from each other in terms of their structure and goals. For example, in *Shanb-e Ghazan*, the teachings of the *Shafi'i* and *Hanafi* sects and in the *Rokniyeh School*, only the teachings of the *Shafi'i* sect were taught (Pourmousavi & Rajabi, 2014). Also, in some educational complexes - such as *Afagh Begum Complex* - students were divided into three groups in terms of level of knowledge: senior, intermediate and weak.

D) Teaching method

Students sometimes read the lessons from the text and somewhen remembered the teacher's words (Kasaei, 2004). During the teaching, the professors would sit on a chair and say what they thought was useful for learners, and the students would take notes. Then they would argue in pairs and scrutinize the lessons. Of course, there were some differences between the complexes. For example, the teaching method in *Rab'-e Rashidi* was a combination of induction and practical training (Alamzadeh & Riahi, 2009). Also, the duration of study in *Rab'-e Rashidi* was 5 years, after which the student with no academic progress was expelled. In addition, there was strictness and

supervision of the individual and social ethics of professors and students. The most important educational point in *Rab'-e Rashidi* is the division of students into two groups of religious and medical students and special emphasis on teaching non-religious subjects. In the meantime, mutual questions and answers between professors and students as well as the students themselves were very common (Nemati Limaie, 2006). Most schools had libraries, and students could borrow different books. One of the important educational features of complexes was how to choose a teacher. It seems that until the ninth century, "*teachers' permission*" was the most important document for new teachers to take permission of teaching in schools (Kasaei, 2004). In a conclusion, it can be said that although the teaching of intellectual and narrative sciences was common in the Timurid period, but basically the situation of science in this period did not have the depth of previous periods because of shortage of competent teachers and scientists (Najari, 2014). However, in this period, significant growth is observed in the field of astronomy and history (Goodarzi, 2011).

E) Welfare facilities

In the Timurid period, the tradition of *waqf* provided educational facilities for scholars in a way that it can be said that all educational complexes and schools were managed from the income of endowments (Sultanzadeh, 1985). The endowments written by the benefactors at that time were like the statutes that are prepared for educational centers nowadays. In some endowment letters, the conditions of using the rooms, the maximum length of stay of the students and how to use the facilities of the complex were mentioned (Rafiei Mehrabadi, 1973). How teachers and students were paid depended on the informed decision of the benefactor and the financial resources determined by her/him. Due to the physical structure of these complexes, it was possible for people and residents of them to use all the facilities at the same time. The structure of welfare facilities in the endowment-educational complexes of the Timurid period was different from that of the Ilkhanids. During the Ilkhanid period, educational and welfare facilities were located around the city and were specified for different people separately. For example, the residences of physicians, teachers, and students were separate, while in the Timurid period, schools were built inside the cities and the residence of teachers was predicted inside them (Hamedani, 1977). In *Rab'-e Rashidi*, the presence of students and professors on a 24-hour basis was accompanied by the provision of living supplies. Students' needs, including food, clothing, housing, baths, medical care and scholarships, were also paid for through endowment income (Omidiani, 1999). These complexes also had many employees. These employees were hired according to the type of endowment and

the special needs of different parts of the complex, such as accountants, servants, security guards, librarians, storekeepers and cooks.

3. Comparison of Ilkhanid and Timurids periods

The first point to be noted in this section is the many similarities between the two dynasties of the Ilkhanids and the Timurids and their slight differences in most political, cultural and educational dimensions (Table 1).

Table 1: Similarities and political, cultural and educational differences between the Ilkhanids and the Timurids

Dynasty/Characteristic	Ilkhanids	Timurids
Political origin	Mongol	Mongol
Political influence	Iranians	Iranians
Impact of political system on education through	Politicians	Politicians
Religious Origin	Acceptance of Islamic culture	Acceptance of Islamic culture
Religious phenomenon affecting education	Endowment	Endowment
Effect of religious system on education	Slight superiority of religious sciences over content of educational courses	Supremacy of religious sciences over content of educational courses
Cultural and linguistic origin	Persian language scientists	Persian language scientists
Founders	Variety	Variety
Building	Extroverted	Introverted
Program and educational content	Rational and narrative	Narrative
Teaching method	More control and freedom	Relative control and freedom
Welfare amenities	widespread	widespread

The analysis of the data of the previous sections and information contained in Table 1 show the similarities and differences between the endowment-educational complexes in the two dynasties of Ilkhanids and Timurids. The first similarity is that the founders of both dynasties first invaded Iran to establish their government and then their successors accepted the religion, culture and customs of the Iranians. Another common denominator of both dynasties can be considered the influence of Iranian culture on the court of the sultans through the presence of scientists, scholars and writers who were Iranian. By influencing the political system, these people expanded their desired educational system through establishing various schools. Another common denominator of the endowment-educational complexes of the Ilkhanid and Timurid periods is the influence of the religious system on the educational structure, programs and content of books, and teaching methods and evaluation. It is obvious that the administration structure of complexes has been influenced by the phenomenon of endowment in such a way that endowment letters as the "statute" of the endowment, trustees, teachers, students, government officials and ordinary people are very clear. Also, endowment letters have compiled and specified the sources of financial income of the complexes and how they are allocated. Another notable feature is how the religious system affects the content of education and sciences in the complexes. In both periods, the main subjects were religious subjects such as commentary, jurisprudence, theology, and hadith. However, the domination of traditional sciences over schools was more prevalent in the Timurid period than in the Ilkhanids. Another feature that makes the two historical periods similar is the weakness of the Arabic language and the increase in the strength of the Persian language - as the main language for education. In fact, Iranian scholars in both periods tried to strengthen the Persian language against the onslaught of foreign languages - such as Mongolian and Arabic-. For this reason, writing and teaching scientific books in Persian has become more common in the educational complexes of these two period than in previous schools - for example in *Nezamiyeh Schools*.

Also, in the previous sections, we examined the endowment complexes of the Ilkhanid and Timurid periods from the perspective of five educational features. The first aspect referred to the characteristics of the founders of the complexes. The available data showed that there are similarities between the two periods in terms of political and economic origins of the founders. It was also found that the most important method for the founders to establish educational complexes was to follow the jurisprudential principles governing "*waqf*". This indicates that educational complexes, without exception, have been non-profit, non-private and non-governmental institutions. The second feature refers to the geographical location of educational complexes in

such a way that in the Ilkhanid period, most of the founders tended to establish these complexes in beautiful and fun spaces - such as gardens and away from the noise of cities. In fact, these complexes were themselves a factor in creating small and new academic cities. During the Timurid period, the founders wanted to establish educational complexes within the traditional urban context.

The third educational feature is the difference between the two historical periods in terms of programs and educational content. The Ilkhanids, as Genghis's successors, were largely devoid of religious bigotry, and the court of kings and schools was largely a space for the exchange of teachings of various religious sects. For this reason, in addition to teaching the traditional sciences, close attention was paid to the teaching of the intellectual sciences - such as mathematics, astronomy, logic and philosophy - a trend that had declined sharply during the Timurid period. This feature also influenced the teaching method. In fact, historical data show that academic freedom - both in endowment letters and in practice - was more prevalent in Ilkhanid-era educational complexes than in the Timurid period. Also, content of the endowment letters shows that in the Timurid period, the founders and endowments were more carefully involved in topics such as the characteristics of teachers and students and the content of textbooks. Of course, the strong involvement of politicians and founders in the teaching-learning process in *Nezamiyeh Schools* has also been common. However, in the Ilkhanid era, this involvement was weakened, but intensified during the Timurid period and reached its peak in the Safavid dynasty. For this reason, in terms of scientific progress, the Ilkhanid period was superior to its later periods.

The last feature refers to the amenities in the complexes. In this regard, a few points can be noted: First, the educational complexes in both eras were like a "university city" and had a wide range of facilities that used by both students and ordinary people. Second, financial and material support for the construction and management of the complexes in both periods was provided through the allocation of revenue from various properties - such as shops, baths, farmland, orchards, and houses. According to these results, Table 2 shows the similar and different dimensions between educational complexes in the two periods.

Table 2: Similarities and differences between Ilkhanian and Teymourian endowment-educational complexes

Dynasty/Characteristic	Ilkhanids	Timurids
Political origin	*	*
Political influence	*	*
Impact of political system on education	*	*
Religious Origin	*	*
Religious phenomenon affecting education	*	*
Effect of religious system on education	*	✓
Cultural and linguistic origin	*	*
Founders	*	*
Building	*	✓
Program and educational content	*	✓
Teaching method	*	✓
Welfare amenities	*	*

The results of Table 2 show that there are similarities between the endowment-educational complexes of the Ilkhanids and the Timurids in eight features. In interpreting this similarity, we can say that due to the chronological precedence, naturally the Ilkhanids were good teachers for their later successors, the Timurids. Of course, it should not be left unsaid that many educational innovations can be considered as influenced by the thoughts and ideas of Khajeh Nizam-ol-Molk Tusi in establishing of *Nezamiyeh Schools*. In fact, both the Ilkhanids and the Timurids have somehow taken the example of *Nezamiyeh Schools* in establishing educational complexes, while it seems that the facilities of educational complexes have been more than the *Nezamiyeh*. The findings of the table also indicated the existence of four important differences between the educational complexes of the Ilkhanid period and the Timurids. Considering these four differences, it seems that the Ilkhanid period in terms of factors such as less influence of religious system on educational system, more modern spaces with distances from cities, academic freedoms, more diversity in teaching methods, more scientific progress in science - such as mathematics, astronomy, and medicine - and the hiring of more famous and creative scientists was superior to the Timurid period.

4. Conclusion

The tradition of *waqf* has long been practiced among Muslims. This tradition has various positive consequences - including educational and scientific consequences. Iran's history shows that kings, politicians, and ordinary people were interested in building public places such as

mosques, schools, libraries, and hospitals. The financial empowerment of the sultans during the Ilkhanid period gave rise to the idea of "establishing endowment-educational complexes". In fact, instead of establishing separate public welfare centers, in the Ilkhanid period we see university cities that provided the educational, medical and scientific needs of the society in an interconnected spatial complex. The first findings of the study indicated that the majority of the founders of these complexes had a strong political and social base as well as economic power. This finding has also been emphasized in researches of Abrahimi & Rostami Nasab (2008) , Omidiani (1999); Durrani, (1997); Sultanzadeh, (1985); and Alamdari (2012). The second research finding indicates the strong role of Islam and especially the tradition of "*waqf*" in the establishment of complexes. The research findings showed that all the complexes were non-profit organizations. This finding is consistent with research findings of Alamdari (2012); Ali Asl and Yousofifar (2011); Kasaei (2004); Gerami (2014) and Naghostin (1988) shown the role of endowment in establishment of scientific and educational centers in different historical periods of Iran. The third finding reveals the role of endowment letters as the "statute" of educational complexes. Sultanzadeh (1985); Hamedani, (1977); Omidiani (1999), Veshig, & Ghramalaki (2016) and Ghanimeh (1992) have also shown how founders and scholars have been involved in issues such as teacher recruitment, student activities, teaching methods and subjects. The fourth important finding of the research is the role of endowment's properties in meeting the economic needs of educational complexes. This finding supports research of Ektar and Raut (2018), Anzar (2003), Darabpour, (2011); Parvin Turkmani,(2007); and Allahyari, Fayyaz Anoush & Goodarzi, (2015). They have highlighted that public participation in the construction of educational centers - through endowment - has reduced the economic challenges of Iran's schools. Findings of the present study have also been observed regarding the educational features of endowment-educational complexes in research of Alemzadeh & Reyahi, 2009; Sajjadi, 2014; Camola, 2013; Mehdi Nejad and Moghimi, 2017. All these researchers indicated the positive and negative impact of the involvement of the founders in matters such as content of teaching, teacher selection, administrative and organizational structure, and permission or prohibition of teaching intellectual and narrative sciences. According to the research findings, it seems that the most important suggestion that can be made for educational planners and policy makers in Iran and other Muslim countries - Like Iraq, Pakistan, Afghanistan, Syria, Yemen, Egypt, Libya, Lebanon, Indonesia, Bangladesh, Nigeria, Somalia, Chad, and Sudan - is the need to reconsider the role of the "*waqf*" tradition to increase public participation and reduce financial challenges of schools. While many schools in Muslim countries lack adequate facilities, the tradition of *waqf* can fill many of education system financial gaps.

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