Comparative Analysis of Socio-Cultural Environment Development of Kazakhstan's Regions

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ABSTRACT

This study conducts a comparative analysis of the socio-cultural environments across the regions of Kazakhstan, focusing on indicators of cultural infrastructure. The authors focus on considering the indicators of the cultural infrastructure of the regions. Utilizing data from the Bureau of National Statistics of the Republic of Kazakhstan, this research explores the dynamics and structural characteristics of these indicators from 1995 to 2022. The authors proposed using the multidimensional comparative analysis method to obtain a comprehensive rating assessment of the sociocultural environment of the regions. The central place in the study is the determination of regional ratings, reflecting the relative position of each region based on the development of its socio-cultural environment. These rankings offer valuable information to policymakers, stakeholders, and researchers alike, enabling informed decisions and targeted interventions to promote balanced socio-cultural progress across Kazakhstan. This study contributes to the understanding of the socio-cultural development of Kazakhstan by providing a detailed analysis of regional differences and the dynamics of changes in their leading indicators. The author's approach to assessing the development of the socio-cultural environment of the regions of Kazakhstan proposed in the article can be considered by researchers in this field as a convenient and reliable analysis tool. The results of the study emphasize the importance of a multidimensional approach to assessing and solving socio-cultural problems and open up opportunities for an inclusive approach in developing a strategy for the development of the socio-cultural environment of the regions of Kazakhstan.

1. INTRODUCTION

In the diverse mosaic of Kazakhstan's socio-cultural landscape, each region weaves a unique thread contributing to the nation's rich tapestry of heritage, traditions, and development. As the country strides forward in the 21st century, understanding the intricate dynamics of socio-cultural evolution across its regions becomes imperative for policymakers, scholars, and stakeholders. The socio-cultural development of Kazakhstan's regions reflects historical legacies and mirrors contemporary challenges and aspirations. Kazakhstan stands at a pivotal juncture in its history, marked by rapid economic growth, urbanization, and socio-cultural transformations. In this dynamic landscape, the socio-cultural fabric of its regions emerges as a crucial arena for investigation. Understanding the nuances of the socio-cultural development of Kazakhstan's regions can provide deep insight into the driving forces of regional development, differences, and the potential for harmonious growth. Moreover, the scientific interest in exploring Kazakhstan's socio-cultural environment extends beyond academic curiosity. This is consistent with broader sustainable development and social and cultural policy agendas.

A particular region's socio-cultural environment is shaped by various factors including the local traditions, customs, and social norms passed down through generations (Bekbossinova et al., 2023). These elements influence how people interact, their attitudes towards work, family dynamics, and overall lifestyle choices. Additionally, the socio-cultural environment is also impacted by the region's history, language, religion, and the arts, all of which contribute to shaping a unique identity for the community (Belikova et al., 2021). This amalgamation of influences plays a crucial role in defining the values and behaviors of the inhabitants, ultimately creating a distinct socio-cultural landscape for the region.

Kazakhstan's vast expanse encompasses a kaleidoscope of regions, each characterized by its distinct history, geography, and socio-cultural heritage. Disparities in economic prosperity, infrastructure, educational resources, and cultural preservation efforts underscore the need for a nuanced understanding of regional development. While some regions thrive as economic hubs, attracting investments and fostering innovation, others grapple with socio-economic challenges, striving for sustainable development and equitable opportunities. Exploring these variations sheds light on the underlying factors shaping regional trajectories and informs strategies for balanced regional development.

The need for a comparative analysis becomes evident amid the complexity of Kazakhstan's regional dynamics. By juxtaposing different regions' socio-cultural indicators and development trajectories, researchers can discern patterns, identify best practices, and pinpoint areas requiring targeted interventions. Furthermore, a comparative approach fosters cross-regional dialogue and knowledge exchange, fostering solidarity and mutual learning among diverse communities. By recognizing and celebrating each region's unique strengths while addressing shared challenges collectively, Kazakhstan can harness the full potential of its socio-cultural diversity as a catalyst for sustainable development and societal resilience.

This article aims to conduct a comprehensive and multidimensional comparative analysis of the socio-cultural development across various regions of Kazakhstan. By employing a range of indicators and metrics, the article aims to provide insights into the diverse socio-cultural landscapes within the country, shedding light on the factors influencing development and progress across different regions. A key focus will be establishing a rating estimation system to assess and compare the relative socio-cultural advancements of each region, facilitating a deeper understanding of the disparities and potentials for growth within Kazakhstan's diverse societal fabric. Through this analysis, policymakers, researchers, and

stakeholders can gain valuable insights to inform strategic decision-making, resource allocation, and targeted interventions to foster inclusive and sustainable socio-cultural development across the nation.

2. LITERATURE REVIEW

"Sociocultural environment" is a crucial concept of modern society, defining its cultural and spiritual components. The dynamic development of the sociocultural environment is an essential condition for a person's correct socialization and harmonious spiritual development.

The socio-cultural environment of a region is shaped by a myriad of factors, including its social issues, cultural resources, and prevailing values. These elements collectively influence the developmental trajectory of the region, as outlined in the works of several scholars. For instance, Belikova et al. (2021) and Bekbossinova et al. (2023) have highlighted the comprehensive role of the socio-cultural environment in fostering regional development. Similarly, Polyudova and Olesina (2019) point to its critical role in crafting the identity and cohesion of territorial communities. Morozova et al. (2022) further illustrate the broad impact of the socio-cultural environment on various development strategies that affect health, education, leisure, and overall quality of life. According to Vinnikova (2019), the socio-cultural landscape of a region encompasses a rich tapestry of historical, social, and cultural components that collectively shape human communities. This includes the interaction among individuals, society, and cultural norms. Gregori (2012) delves deeper into the dynamics within this environment, describing it as an interplay of events, symbols, artifacts, and individuals that significantly influence cultural production and the formation of institutions. These studies underscore the profound and multifaceted impact of the socio-cultural environment on regional development and community identity.

The socio-cultural environment of a region encapsulates a unique amalgamation of culture,

self-awareness, and values that collectively shape the social dynamics and identity of a specific territorial area. Khrapova (2020) posits that this environment is forged by a confluence of local traditions, customs, and social norms inherited across generations. These cultural elements are pivotal in influencing interpersonal interactions, attitudes towards work, family dynamics, and the broader lifestyle choices prevalent within the community. Further, the socio-cultural landscape of a region is deeply influenced by its historical, linguistic, religious, and artistic legacies. These factors not only contribute to a community's distinct identity but also continuously interact to mold the values and behaviors of its members. Necenko and Grenaderova (2022) enhance this view by emphasizing the importance of regional culture, which includes elements such as dialect, rhetoric, literature, and shared historical narratives, in shaping the socio-cultural milieu. They argue that these cultural artifacts play a crucial role in defining and perpetuating the socio-cultural norms of a region. Additionally, Belikova et al. (2021) discuss the dynamic interplay between tradition and modernity within regional socio-cultural environments. They highlight how communities navigate the challenge of preserving cultural heritage while adapting to modern influences, a process that is crucial in the contemporary redefinition of regional identities. Both external pressures, such as global economic conditions, and internal challenges, including local threats and problems further influence the socio-economic development of a region. These multifarious factors collectively contribute to the shaping of a region's socio-cultural environment, ultimately influencing its path of social and economic development.

In turn, the socio-cultural environment significantly impacts other important aspects of society. According to Proskurina (2022), culture is also identified as a critical resource for increasing labor productivity and the efficiency of state institutions, with socio-cultural factors influencing economic

development. The urban environment, as a socio-cultural space, is shaped by various factors, including philosophy, religion, science, aesthetics, and socio-economic relations, and in turn, influences the well-being, worldview, and culture of its citizens (Shabatura et al., 2018). Toader (2022) discusses the impact of socio-cultural factors on business performance, including social factors like education and government spending and cultural factors like corruption and innovation. Evmenov et al. (2019) consider the relationship between the socio-cultural environment and the economic and innovative development of the region to be significant. Their research examines the innovative development of the socio-cultural sphere of the region, including factors influencing innovation and gaps in development. Puscasu (2010) analysis highlights the importance of social and cultural factors in entrepreneurship, as the evolution of entrepreneurial activity varies from country to country based on culture, values, and norms. Akhter and Sumi (2014) also believe that sociocultural factors play a significant role in the region's economic development and entrepreneurial activity. Kruzmetra et al. (2015) analyze the cultural environment as a potential for the renewal of society and reveal the development of the cultural environment, which can give rise to new social and economic structures and serve as conductors of smart development of territories.

A literature review on the socio-cultural environment of regions reveals the dynamic interplay between tradition and modernity and the balancing act between historical heritage and contemporary influences. Kotradyová and Ontkóc (2022) emphasize the significance of regional identity and its modern manifestations as crucial to social sustainability. Conversely, Nabela et al. (2022) highlight a prevailing trend where local cultures are overshadowed by globalization, advocating for the preservation of cultural identities.

Various methodologies have been adopted to analyze the socio-cultural landscapes of regions. For instance, Bekbossinova (2023) employed a SWOT analysis to delineate the strengths and weaknesses of Kazakhstan's socio-cultural framework. Andriyanova (2021) examined the interplay between regional and urban territories, applying an integral approach to scrutinize management practices. Espartaco (2014) utilized qualitative research to evaluate environmental issues linked to socio-cultural practices in a rural setting. Meanwhile, Vinnikova (2019) investigated the sociocultural and sociological approaches to understanding the interactions among individuals, society, and cultural elements.

In summary, the term "socio-cultural environment" refers to the composite of social, cultural, economic, and political elements that shape our experiences, perceptions, and behaviors. The socio-cultural environment influences public participation, creativity, inclusivity, and societal renewal. Analyzing long-term changes in key indicators of a region's socio-cultural environment is essential for assessing the integration of new trends and for the sustainable development of the region.

The review also points out a gap in the development of a universal approach for comparative analysis and assessment of the socio-cultural development levels across regions. This underscores the need for a more refined methodological framework to effectively evaluate and compare socio-cultural environments.

3. RESEARCH METHODS

In this investigation, evaluating the socio-cultural milieu within Kazakhstan's regions entailed a comprehensive analysis by the authors, consolidating diverse methodologies. The focal point of this analysis involved the meticulous scrutiny of secondary data concerning the abundance and distribution of socio-cultural entities across Kazakhstan's regions. To rigorously analyze the socio-cultural dynamics within Kazakhstan's regions from 1995 to 2022, this study employed a methodology centered around the evaluation of absolute growth for each socio-cultural entity. This method involves a detailed time series analysis, allowing the authors to capture the

growth trends of various facilities across different periods.

Absolute growth is quantified as the difference between the count of each entity in the current year and the count in the base year (1995). The formula used is (1):

$$\Delta Y = Y_i - Y_0 \qquad (1)$$

Y_i – level of the current period indicator
Y_0 - level of the base period indicator

The absolute growth values are then analyzed to identify trends, patterns, and outliers. Statistical tools such as time-series analysis are employed to assess the trajectory of growth across the years, helping to understand whether growth is steady or declining.

Table 1 presents the main components of the socio-cultural environment based on a summary of the literature.

TABLE 1. Components of the socio-cultural environment

No.	Component	Characteristic
1	Social institutions	These are established social structures and organizations that regulate the behavior and interactions of people. Social institutions include families, schools, government, religious organizations, health care, and economic institutions. These institutions define norms, values, and expectations influencing people's behavior.
2	Culture	Culture is a set of shared values, beliefs, norms, customs, traditions, and symbols passed on from generation to generation. It includes language, art, music, literature, religion, and other aspects that reflect the ways of life and identity of a particular group of people or society.
3	Social classes and groups	People in a socio-cultural environment are organized into various social classes, strata, and groups, following their status, wealth, profession, ethnicity, and other factors. These classes and groups may have values, norms, and customs that influence their behavior and interactions.
4	Social connections and networks	In a socio-cultural environment, people interact with each other through various social connections and networks. This may include family, friends, colleagues, neighbors, communities, and other groups we interact with. These connections and networks are essential in transmitting information, support, social support, and forming our social connections.
5	Infrastructure and physical environment	This includes the physical infrastructure and environment, such as cities, homes, roads, parks, workplaces, public spaces, and other elements influencing our lives and interactions. The physical environment can influence our behavior, communication, and availability of resources.

Note: compiled by authors

Absolute growth (chain method), which characterizes the difference between the value of the current and previous periods (2):

$$\Delta Y' = Y_i - Y_{i-1} \qquad (2)$$

where:
Y_i – level of the current period indicator;
Y_{i-1} – level of the indicator of the previous period.

Growth rate (primary method), characterizing the ratio of a given level to the basic one (3):

$$t = \frac{Y_i}{Y_0} \qquad (3)$$

Growth rate (chain method), characterizing the ratio of this level to the previous one (4):

$$t' = \frac{Y_i}{Y_{i-1}} \qquad (4)$$

Gain rate (primary method) - a value showing how many percent the current level is more or less than the base one (5):

$$r = \frac{Y_i}{Y_0} \times 100 - 100 \quad (5)$$

Gain rate (chain method) - a value showing by what percentage a given level is more or less than the previous one (6):

$$r' = \frac{Y_i}{Y_{i-1}} \times 100 - 100 \quad (6)$$

In addition, an analysis of the existing cultural objects was carried out in the context of the regions of Kazakhstan. That is, the specific weight of the region for each indicator was determined.

The multidimensional comparative analysis method for the rating assessment of regions, which allows us to conduct a comparative analysis of several objects according to several criteria and obtain a comprehensive assessment of the characteristics being studied. A review of available research on this issue showed that there is no single approach to a comprehensive analysis of the socio-cultural environment of the regions.

Stage 1. The system of indicators by which the region's economic potential will be assessed is substantiated, data on these indicators is collected, and a matrix of initial data is formed.

Below is a table that outlines the designated indicators used to assess the region's potential through its socio-cultural infrastructure (Table 2).

TABLE 2. Variables used in the study

No.	Variable	Description
1	THR	Number of theaters
2	MZM	Number of museums
3	CRI	Number of cultural and leisure institutions
4	CNM	Number of cinemas
5	LBR	Number of libraries
6	CNT	Number of concert organizations
7	PRK	Number of parks
8	ZPK	Number of zoological parks (zoos)
9	CRS	Number of circuses

Note: compiled by authors

Stage 2. The date in Table 2 determines the maximum element in each column, which is taken as one. Then, all elements of this graph (a_{ij}) are divided by the maximum element of the reference region (max a_{ij}). As a result, a matrix of standardized coefficients (x_{ij}) is created, presented in formula (7):

$$x_{ij} = \frac{a_{ij}}{max a_{ij}} \quad (7)$$

If the minimum value of the indicator is the best, then the calculation scale should be changed so that the lowest result corresponds to the highest value of the coefficient.

Stage 3. All elements of the coordinate matrix are squared. With a differentiated approach to the contribution of each indicator to a comprehensive assessment, the resulting squares are multiplied by the value of the corresponding weighting coefficients, usually determined by experts. As a result, the results are summarized by row (8):

$$R_i = K_1 x_{1j}^2 + K_2 x_{2j}^2 + \cdots + K_n x_{nj}^2 \quad (8)$$

Stage 4. After receiving rating scores (Rj), they are ordered by rank, determining the place of each region in the context of the socio-cultural environment's development level. The region with the highest total score is ranked first, followed by the region with the closest total, and so on.

Some of the advantages of the proposed method of multidimensional comparative analysis are as follows: Firstly, the proposed methodology is based on an integrated

multidimensional approach to assessing a region's economic potential, making it possible to take into account its complexity. Secondly, it takes into account the actual achievements of all regions and the degree of their similarity with the indicators of the reference region. Thirdly, the proposed method makes it possible to quantitatively measure the level of development of the socio-cultural environment of the region based on the results of past and current development, which helps to analyze the dynamics of change in the characteristics being studied.

4. FINDINGS AND DISCUSSION

Analysis of the development of the socio-cultural environment of the regions of Kazakhstan from 1995 to 2022. During the analyzed period from 1995 to 2022, the number of theaters in the country as a whole increased by 65.9% (from 44 in 1995 to 73 in 2022),

theater attendance increased by two times (k) (from 1321.1 thousand to 2695.6 thousand), the number of events held by theaters increased by 2.28 times (from 6760 to 15396), the number of new productions in theaters increased by 95.6% (k') (from 204 to 399).

In the context of Kazakhstan's regions and the quantity of theater events hosted, Almaty leads with 26% of all events in 2022, trailed by Astana at 13%, the Karaganda region at 11%, and Shymkent at 7%.

Based on data from the Bureau of National Statistics of the Republic of Kazakhstan, the authors analyzed the dynamics of changes in the main indicators of the country's cultural infrastructure over the period under study. The dynamics of attendance and events held by cultural institutions show that a sharp decline was observed in 2020 due to restrictive measures during the pandemic when most cultural institutions were closed (Figure 1).
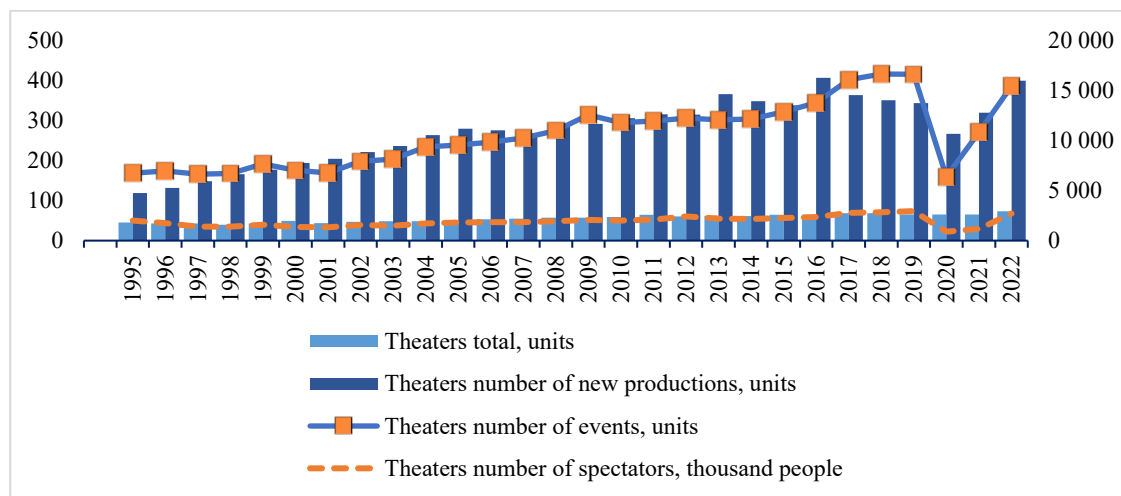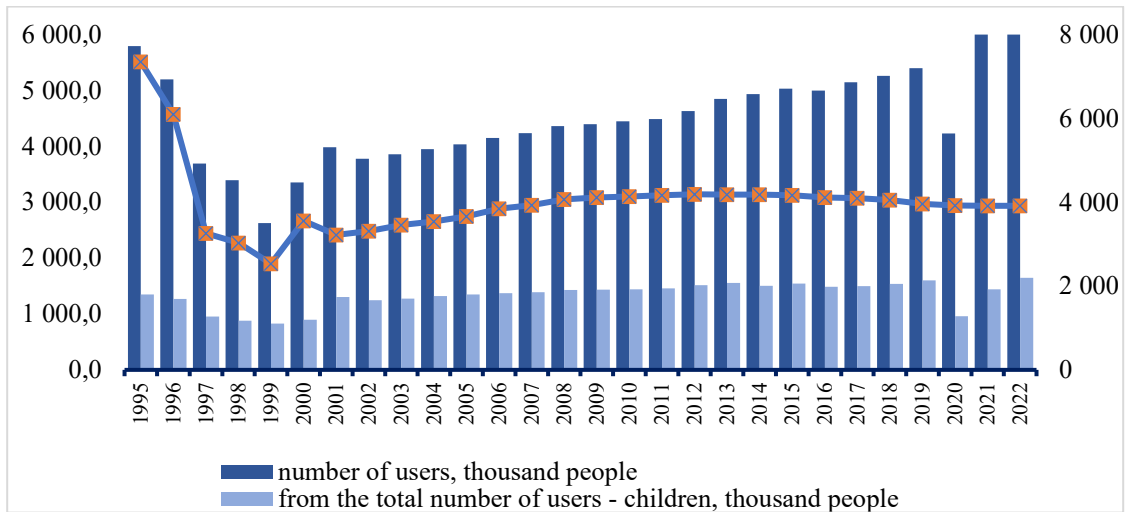

FIGURE 1. Dynamics of performance indicators of theaters in the Republic of Kazakhstan from 1995 to 2022

Note: compiled by authors

During the analyzed period from 1995 to 2022, the number of libraries in the country decreased by 46.7% (from 7352 in 1995 to 3917 in 2022), while the library collection increased by 12.5% (from 99,237 thousand units to 111,607 thousand units), of which in the state language increased by 106.2% (from 14504 thousand units to 29913 thousand units), the number of users increased by 6.6% (from

5795 thousand people to 6178.4 thousand people), of which child users increased by 22% (from 1350.7 thousand people to 1648.8 thousand people), the number of library visits increased by 69.9% compared to 2001.

Thus, the visual representation captures trends, developments, and significant changes in library metrics over the designated period, as described in Figure 2.
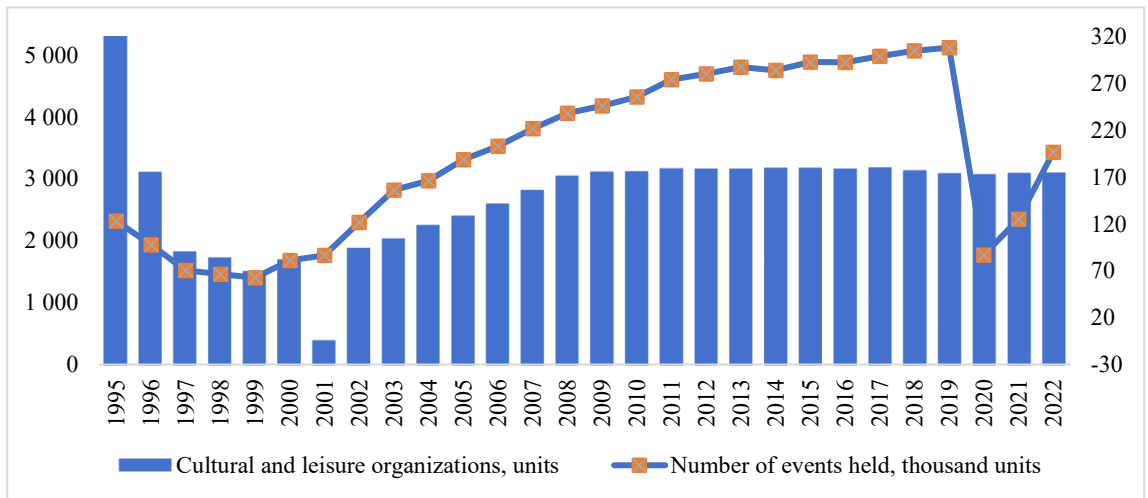
FIGURE 2 – Dynamics of library performance indicators in Kazakhstan for 1995 – 2022

Note: compiled by authors

In terms of the regions of Kazakhstan, the leader in the number of libraries is the Turkestan region (395 libraries) - 10% of the total number of libraries in the country, followed by Kostanay (340) and Akmola regions (339) - 10%, North Kazakhstan region (318) - 8%. In terms of the number of library users, the leaders are Astana (755,189 people) - 12% of the total number of users in the republic, Almaty (515,459 people) - 8%, Jambyl region (345,750 people) – 5,6%.

The number of cultural and leisure organizations in the Republic of Kazakhstan for the period from 1995 to 2022 decreased by 42% from 5342 to 3102, while the number of events held increased by 59% from 123.3 thousand units in 1995 to 196.7 thousand units, the number of amateur art groups increased by 30% from 10,704 units to 13,891 units, the number of amateur art participants increased by 37% from 129,543 people to 177,433 people (see Figure 3).
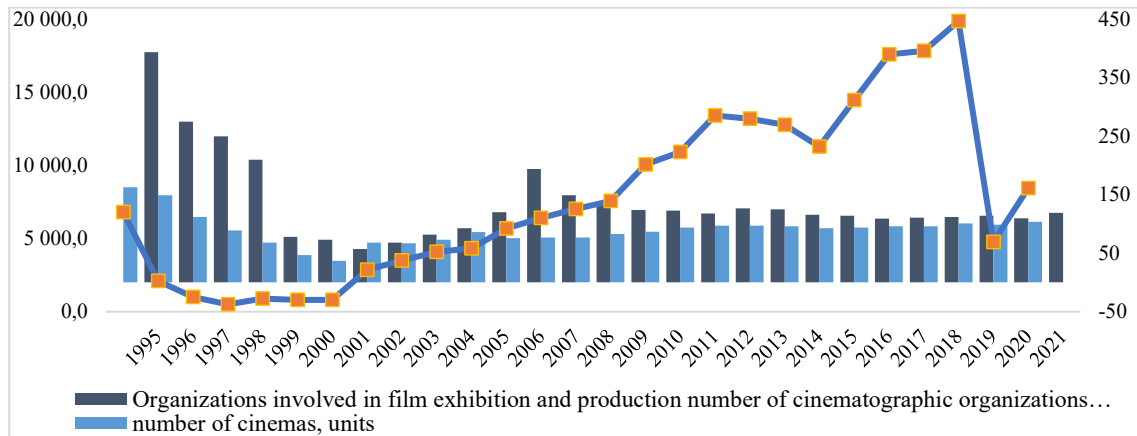

FIGURE 3. Dynamics of performance indicators of cultural and leisure organizations for 1995 -2022

Note: compiled by authors

An analysis of regions by the number of cultural and leisure organizations showed that in 2022, the leaders were Pavlodar (280 units) - 9%, West Kazakhstan (269 units) - 9%, Akmola (261 units) - 8%. During the analyzed period from 1995 to 2022, the number of cinema organizations exhibiting films decreased by 70% from 394 to 118 units, the number of cinemas decreased by 35.6% from 163 to 105 units, the number of visits to film shows increased by 150% from 6800 thousand people up to 17047.5 thousand people (see Figure 4).

FIGURE 4. Dynamics of performance indicators of organizations engaged in film exhibition and production of films for 1995-2022

Note: compiled by authors

Compared to 2010, the number of cinematographic organizations producing films increased 3.7 times from 18 to 67 units, and the number of films created increased 2.3 times from 144 to 331 units.

In terms of the number of cinemas among the regions of Kazakhstan, the leaders are Almaty (21 units) - 20%, Astana (11 units) - 11%, West Kazakhstan region (9 units) - 9%. Almaty (6,233,139 people) - 37%, Astana (3,551,979 people) - 21%, and Shymkent (1,264,694 people) - 7% are among the regions in the number of visits to film shows in 2022.

Next, Figure 5 visualizes various performance indicators for museums for 1995-2022.
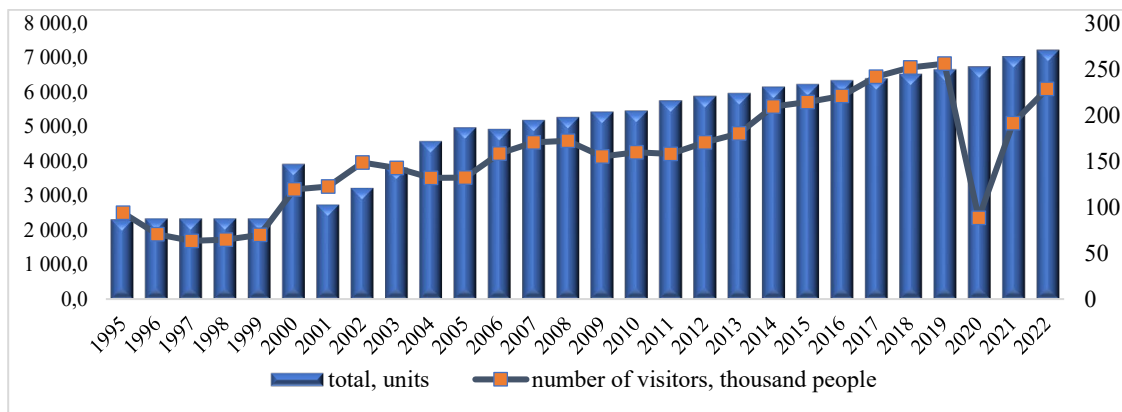
Figure 5. Dynamics of museum performance indicators for 1995-2022

Note: compiled by authors

Analyzing the activities of museums in 2022, the following conclusions can be drawn: the number of museums increased by 3.1 times from 87 units in 1995 to 271 units in 2022, the number of museum visitors increased by 2.4 times from 2500 thousand people to 6097,3 thousand people, the number of exhibits of the leading fund increased by two times from 1295.8 thousand units to 2619.2 thousand units, of which the number of exhibits that were exhibited during the year increased by 2.3 times from 148.2 thousand units to 347 thousand units.

Among the regions of Kazakhstan in the number of museums, the leaders are the Turkestan region (27 units) - 10%, the Aktobe region (20 units) - 7%, the West Kazakhstan region, and the city of Almaty (19 units each) - 7% each. In terms of the number of visits to museums in 2022, among the regions of Kazakhstan, the first positions are taken by the Turkestan region (1492.5 thousand people) - 24%, Astana city (643.1 thousand people) – 11%, East Kazakhstan region (564.8 thousand people) - 9%, Almaty (470.5 thousand people) - 8%.

Table 2 presents statistical data on selected indicators of the socio-cultural environment by region of Kazakhstan as of January 1, 2023. The maximum value was selected as a reference indicator for each evaluated parameter.

TABLE 2. Availability of objects of the socio-cultural environment as of January 1, 2023

Region	THR	MZM	CRI	CNM	LBR	CNT	PRK	ZPK	CRS
Abay region	1	8	125	3	137	1	6	1	0
Akmola region	2	15	261	2	339	0	3	0	0
Aktobe region	2	20	202	2	237	1	9	2	0
Almaty region	2	16	118	0	133	0	11	0	0
Atyrau region	1	16	82	4	143	2	9	0	0
West-Kazakhstan region	2	19	269	9	362	3	11	0	0
Jambyl region	3	17	199	5	275	1	13	0	0
Zhetisu region	0	14	134	2	149	3	1	0	0
Karaganda region	4	16	255	8	257	1	19	1	0
Kostanay region	4	9	244	7	340	1	9	0	0
Kyzylorda Region	1	14	172	2	209	2	3	0	0
Mangistau region	2	7	42	6	68	1	10	0	0
Pavlodar region	2	12	280	5	228	1	4	0	0
North-Kazakhstan region	3	13	240	4	318	1	6	2	0
Turkestan region	3	27	252	3	395	0	27	0	0
Ulytau region	0	6	43	0	57	1	2	0	0
East Kazakhstan region	1	9	172	3	170	1	5	2	0
Astana city	9	9	1	11	23	4	22	0	1
Almaty city	23	19	1	21	33	17	20	2	1
Shymkent city	6	5	10	6	44	1	18	1	1
Reference value	**23**	**27**	**280**	**21**	**395**	**17**	**27**	**2**	**1**
Weight coefficient	0,2	0,2	0,2	0,2	0,2	0,1	0,1	0,05	0,05

Note: compiled by authors based on Bureau of National Statistics (2022)

The values of the standardized coefficients presented in Table 3 and calculated using formula (7) reflect the degree of proximity to the reference value: the closer the value is to unity, the better the region's value for the corresponding attribute. The values of the standardized coefficient vary from 0 to 1. Based on the values of the standardized coefficients, we can determine how close the position of each region is to the reference value. The use of standardized coefficients allows you to include different characteristics in the analysis and obtain a generalized assessment. Weighting coefficients determine the degree of importance of each indicator in a comprehensive assessment of the socio-cultural environment of the regions. The authors determined their values subjectively since there are no studies of this kind in the literature based on multivariate comparative analysis.

TABLE 3. Matrix of standardized coefficients

Region	THR	MZM	CRI	CNM	LBR	CNT	PRK	ZPK	CRS
Abay	0,043	0,296	0,446	0,143	0,347	0,059	0,222	0,500	0,000
Akmola	0,087	0,556	0,932	0,095	0,858	0,000	0,111	0,000	0,000
Aktobe	0,087	0,741	0,721	0,095	0,600	0,059	0,333	1,000	0,000
Almaty	0,087	0,593	0,421	0,000	0,337	0,000	0,407	0,000	0,000
Atyrau	0,043	0,593	0,293	0,190	0,362	0,118	0,333	0,000	0,000
West-Kazakhstan	0,087	0,704	0,961	0,429	0,916	0,176	0,407	0,000	0,000
Jambyl	0,130	0,630	0,711	0,238	0,696	0,059	0,481	0,000	0,000
Zhetisu	0,000	0,519	0,479	0,095	0,377	0,176	0,037	0,000	0,000
Karaganda	0,174	0,593	0,911	0,381	0,651	0,059	0,704	0,500	0,000
Kostanay	0,174	0,333	0,871	0,333	0,861	0,059	0,333	0,000	0,000
Kyzylorda	0,043	0,519	0,614	0,095	0,529	0,118	0,111	0,000	0,000
Mangistau	0,087	0,259	0,150	0,286	0,172	0,059	0,370	0,000	0,000
Pavlodar	0,087	0,444	1,000	0,238	0,577	0,059	0,148	0,000	0,000
North-Kazakhstan	0,130	0,481	0,857	0,190	0,805	0,059	0,222	1,000	0,000
Turkestan	0,130	1,000	0,900	0,143	1,000	0,000	1,000	0,000	0,000
Ulytau	0,000	0,222	0,154	0,000	0,144	0,059	0,074	0,000	0,000
East Kazakhstan	0,043	0,333	0,614	0,143	0,430	0,059	0,185	1,000	0,000
Astana city	0,391	0,333	0,004	0,524	0,058	0,235	0,815	0,000	1,000
Almaty city	1,000	0,704	0,004	1,000	0,084	1,000	0,741	1,000	1,000
Shymkent city	0,261	0,185	0,036	0,286	0,111	0,059	0,667	0,500	1,000

Note: compiled by authors

The resulting rating scores (Ri), calculated using formula (8), are presented in Table 4. These assessments, taking into account all the analyzed factors, make it possible to determine the ranking places of the regions according to the level of development of the socio-cultural environment. As a result of the study, it was revealed that the leading positions in the socio-cultural environment are occupied by the city of Almaty, Turkestan and West Kazakhstan regions. These regions exhibit high levels of cultural diversity, educational development, accessibility to cultural events, and social infrastructure networks. While, on the contrary, Abay region, the Mangystau region and Ulytau region turned out to be the least developed in terms of the socio-cultural environment, demonstrating low rating scores.

TABLE 4. Rating scores of the regions of Kazakhstan according to the level of development of the socio-cultural environment

| Region	THR	MZM	CRI	CNM	LBR	CNT	PRK	ZPK	CRS	Ri	Rank
Abay	0,000	0,018	0,040	0,004	0,024	0,000	0,005	0,013	0,000	0,10	18
Akmola	0,002	0,062	0,174	0,002	0,147	0,000	0,001	0,000	0,000	0,39	6
Aktobe	0,002	0,110	0,104	0,002	0,072	0,000	0,011	0,050	0,000	0,35	8
Almaty	0,002	0,070	0,036	0,000	0,023	0,000	0,017	0,000	0,000	0,15	15
Atyrau	0,000	0,070	0,017	0,007	0,026	0,001	0,011	0,000	0,000	0,13	16
West-Kazakhstan	0,002	0,099	0,185	0,037	0,168	0,003	0,017	0,000	0,000	0,51	3
Jambyl	0,003	0,079	0,101	0,011	0,097	0,000	0,023	0,000	0,000	0,32	10
Zhetisu	0,000	0,054	0,046	0,002	0,028	0,003	0,000	0,000	0,000	0,13	17
Karaganda	0,006	0,070	0,166	0,029	0,085	0,000	0,050	0,013	0,000	0,42	4
Kostanay	0,006	0,022	0,152	0,022	0,148	0,000	0,011	0,000	0,000	0,36	7
Kyzylorda	0,000	0,054	0,075	0,002	0,056	0,001	0,001	0,000	0,000	0,19	13
Mangistau	0,002	0,013	0,005	0,016	0,006	0,000	0,014	0,000	0,000	0,06	19
Pavlodar	0,002	0,040	0,200	0,011	0,067	0,000	0,002	0,000	0,000	0,32	9
North-Kazakhstan	0,003	0,046	0,147	0,007	0,130	0,000	0,005	0,050	0,000	0,39	5
Turkestan	0,003	0,200	0,162	0,004	0,200	0,000	0,100	0,000	0,000	0,67	2
Ulytau	0,000	0,010	0,005	0,000	0,004	0,000	0,001	0,000	0,000	0,02	20
East Kazakhstan	0,000	0,022	0,075	0,004	0,037	0,000	0,003	0,050	0,000	0,19	12
Astana city	0,031	0,022	0,000	0,055	0,001	0,006	0,066	0,000	0,050	0,23	11
Almaty city	0,200	0,099	0,000	0,200	0,001	0,100	0,055	0,050	0,050	0,76	1
Shymkent city	0,014	0,007	0,000	0,016	0,002	0,000	0,044	0,013	0,050	0,15	14

Note: compiled by authors

Despite the identified differences, it is essential to note that each region of Kazakhstan has the potential for the dynamic development of the socio-cultural environment. Focusing on improving educational programs, supporting cultural and arts initiatives, and developing social infrastructure can help lift the rankings of lower-level areas.

Ensuring uniform development of cultural infrastructure across all regions of Kazakhstan is imperative for fostering national unity, preserving cultural heritage, and promoting social cohesion. A balanced distribution of cultural resources and facilities enriches residents' lives and contributes to the nation's overall development and prosperity.

Figure 6 presents the rating scores of Kazakhstan's regions according to the socio-cultural environment's level of development, based on the results of a multidimensional comparative analysis.

Regional disparities in cultural infrastructure can exacerbate social and economic inequalities, creating barriers to access and participation in cultural activities. By investing in theaters, museums, libraries, and other cultural institutions in every region, the government can stimulate economic growth, and enhance the quality of life for all citizens.Furthermore, a comprehensive approach to cultural development promotes diversity and inclusivity, allowing each region to showcase its unique identity and heritage. This not only strengthens the nation's cultural fabric but also fosters a sense of pride and belonging among residents.
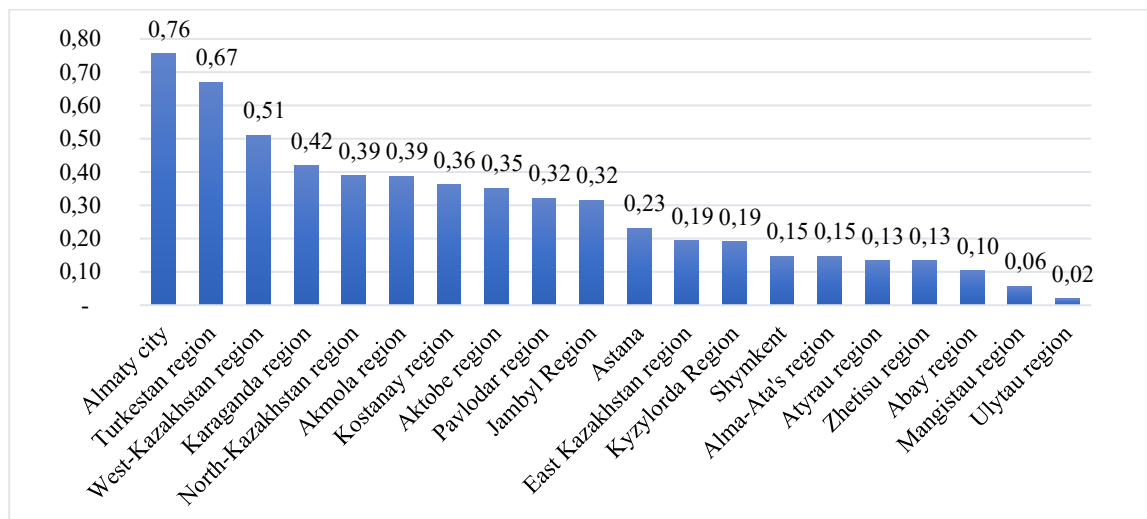
FIGURE 6. Rating scores of the regions of Kazakhstan according to the level of development of the socio-cultural environment

Note: compiled by authors

Moreover, equitable access to cultural infrastructure facilitates cultural exchange and dialogue, fostering mutual understanding and respect among diverse communities. It creates opportunities for collaboration and creativity, driving innovation and progress across all sectors of society.

In conclusion, achieving uniform development of cultural infrastructure in the regions of Kazakhstan is essential for building a vibrant and resilient society. By prioritizing cultural investment and promoting inclusivity, Kazakhstan can realize its full cultural potential and create a more prosperous and harmonious future for all its citizens.

5. CONCLUSIONS

In conclusion, it can be noted that the method of multidimensional comparative analysis used by the authors as a method of comprehensive analysis and rating assessment of the socio-cultural environment of the regions of Kazakhstan made it possible to conduct a detailed analysis of the regions according to selected factors and obtain the rating positions of the regions. This study found marked differences in sociocultural benefits between regions, with notable differences such as the predominance of cinemas and theaters being more pronounced in large urban centers compared to the presence of libraries and museums, which show less differentiation.

Through careful analysis, the study provided insight into each region's relative strengths and weaknesses, resulting in a comprehensive ranking of their level of sociocultural development. Based on the results of multidimensional comparative analysis, Almaty, Turkestan region, and West Kazakhstan region they were emerged as the leaders. In contrast, Abay, Mangistau, and Ulytau regions scored lower, indicating areas requiring close attention and strategic intervention at the state level to strengthen their cultural infrastructure. Furthermore, increase your sociocultural activity.

In further research, the authors plan to expand the scope of analysis, considering the versatility of the sociocultural environment. Thus, expanding the range of studied characteristics will allow us to understand cultural dynamics in more detail and contribute to adopting informed political decisions aimed at promoting balanced sociocultural development in all regions of Kazakhstan.

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