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Specifics of population psychodiagnostics on the example of Kazakhstan, China, and Japan: a comparative analysis

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ABSTRACT

This research aimed at analyzing the history of psychological testing in three Asian countries (Kazakhstan, China, and Japan) in a comparative chronological aspect. A modern trend of interest in population psychodiagnostics was examined, considering a sample of university professors from the studied countries. The study had two stages: theoretical (cross-cultural analysis of the chronological development of psychodiagnostics in three countries) and experimental (in-depth interviews with professors). The study population was 72 respondents. As a result, two periods of psychodiagnostics were distinguished in each country: pre-scientific and scientific. The general factors influencing the historical development of psychological testing were: i) country's history and influence of wartime; ii) positive and negative influence of ideology (communist and capitalist) on the psychometrics' development; iii) the history of psychology and testing in particular, its methodology and methods; iv) the emergence of regional trends in the cooperation and countries' level of publicity. Consequently, based on the interview, the testing of career interests and individual career guidance significantly dominated in China (4.8) while in Japan it was testing of interpersonal relationships (4.9). The present study may be in demand in future research to develop specific questionnaires and methods for studying the population considering national and historical characteristics.

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1. INTRODUCTION

Since the end of the XX century, globalization and publicity of science have been significantly accelerating the development of psychological science and psychometric practice. The regional and global vectors are currently colliding in the polycentric paradigm of the history of psychology [1]. Thus, for example, the comparison shows the influence of Japan as a leader of the Asian region on the development of regional psychometrics, in particular, the study and adaptation of Japanese tests in China. The projective Japanese tests of "kokology" (the study of the spirit and mind) by Isamu Saito are being used in Kazakhstan and worldwide [2].

The scientific paradigm of psychodiagnostics directly relates to the designing of various tests: from knightly tournaments to employment in a corporation. The popularization of psychodiagnostics began in the XX century due to the development of experimental and differential psychology and the use of statistical

methods of individual professional training [3]. The task of psychodiagnostics is to bridge the gap between diagnostic and implicit psychodynamic indicators. The psychological results of several test procedures can be implemented both in a small sample of respondents and for wide use contributing to multiple approaches to the complex unity of a person [4]. Questioning the population is one of the most popular forms of obtaining public opinion about a global problem. Since ancient times, humanity has tried to determine the basic value orientations of individuals, and classify people into separate populations [5].

The global popularity of psychodiagnostics has necessitated the consideration and understanding of differences in approaches to testing across various cultural contexts. Hence, three Asian countries have been selected where cultural, historical, and social peculiarities may influence the development and utilization of psychodiagnostic tools. This study opts for Kazakhstan, China, and Japan as objects of analysis due to the need for a deeper understanding of the regional specificities of different countries, particularly concerning national mentalities. Despite existing research in the field of psychodiagnostics, only a limited number of publications are dedicated to cross-cultural reviews of specific methods examining societal mentalities. The research aims to elucidate the cross-cultural paradigm of national testing ideology in Kazakhstan, China, and Japan. Through a lens of comparative-chronological analysis of the history of psychodiagnostics, the study aims to identify commonalities and distinctive features in the development of psychodiagnostic methods in the aforementioned countries.

Particular attention is given to an interest in population psychodiagnostics, which is based on a sample of university professors from the investigated countries. This approach enables the identification of trends in contemporary testing culture through in-depth interviews with educational psychologists. Such an approach not only helps determine which methods are employed but also reveals the peculiarities of their application and perception within the educational environment. As a result, the purpose of this study was to analyze the history of psychological testing in three Asian countries (Kazakhstan, China, and Japan) in a comparative chronological aspect.

At the same time, the study considered a modern trend of interest in population psychodiagnostics, which was based on a sample of professors from universities of the studied countries. The objectives of the study were as: i) Form a cross-cultural paradigm of the national testing ideology in Kazakhstan, China, and Japan; ii) Synthesize common and distinctive features of the chronological formation of psychodiagnostics in three countries; iii) Identify current trends in a testing culture using an in-depth interview with educational psychologists.

2. LITERATURE REVIEW

2.1. Peculiarities of psychological testing in China

According to modern studies, the history of Chinese psychological testing goes back to ancient times. Psychological testing in China is associated with the formation of the paradigm of the Chinese national ideology [6]. Thus, in ancient China, the term “psychological testing” did not exist, but there were ways of measuring the psychological characteristics of people. Western textbooks for students emphasize that this Chinese tradition is about 4,000 years old [7]. On the other hand, after the foundation of the People’s Republic of China in 1949, Chinese psychodiagnostics and its research were temporarily suspended due to certain restrictions [8], [9]. In the 1950s, higher education was heavily influenced by the Soviet Union for ideological reasons. Among the methods of population psychodiagnostics in the 80-90s, adapted Western European and Soviet tests prevailed. Most of them were aimed at examining the basic personality traits, for example, and temperament or self-esteem [10].

In the late 1990s and 2000s, Chinese scientists began to develop their own (autonomous) scales for assessing the mental health of schoolchildren. The most widely used and well-known Chinese Middle School Students’ Mental Health Scale (MSSMHS) is a questionnaire with general demographic information and a mental health scale. In 2006, Mingjin *et al.* [11] developed the life satisfaction (LS) scale for elementary school students; later, compiled a mental health self-report scale for secondary school students; and in 2016, a mental stability questionnaire for secondary school students was developed [12].

2.2. Peculiarities of psychological testing in Kazakhstan

The history of Kazakhstan points to a large number of psychological selections in a variety of activities, from political to economic [13]. Interestingly, despite the testing restrictions in 1936, psychological training and research continued [14]. Moreover, under the guidance of psychologists, a department of logic and psychology was opened in 1947 at the only university in Kazakhstan at that time, Kazakh State University, to train teachers for gymnasiums in psychology and logic (the rest of the universities of the Kazakh SSR had the status of institutions). Training of the first professional psychologists continued until 1954 when the subject of psychology was excluded from the school curricula. It should be noted that psychology was not a separate field of science, but only a practical requirement for the education

system development. Despite this, in 1958, under the leadership of T. Tazhibaev, the Kazakhstan Society of Psychologists of the USSR was established [15].

The revival of psychological diagnostics and testing in the Soviet Union began in the late 1960s. Thus, in March 1969, in the Central Committee of the Union of Specialists in Psychology and Practical Diagnostics, psychodiagnostics was one of the less-developed areas of psychology in the country. Since then, the studies have been applied to psychic research. In 1987, Bodalev *et al.* wrote "General Psychodiagnostics", the second in the USSR (first in 1936) textbook on psychodiagnostics for psychology students [16]. As a result, Russian tests were implemented for schoolchildren, mainly including intelligence and career guidance tests.

Intelligence tests (IQ, Wexler, and Raven matrices), personality questionnaires Minnesota multiphasic personality inventory (MMPI), 16PF, and projective tests were translated into Russian and adopted for Soviet practice. In the 90s of the XX century, the majority of the country's population spoke Russian since there were about 40% ethnic Kazakhs in the country during the dissolution of the USSR. In urban schools, education was mainly in Russian; in rural schools, Russian was taught from the 2nd to the 10th to 11th grades [17]. Psychological testing in the newly independent states of Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan) is insufficiently represented in studies in English. The curricula of psychology in Uzbekistan and Kyrgyzstan are part of the pedagogical and social sciences, and the departments of psychology are new with a small number of doctors in psychology [2], [18].

2.3. Peculiarities of psychological testing in Japan

The analysis of the development of applied psychology allows delving into the contexts of regionally significant psychological testing. Sato chronologically delineates certain stages of historical development in Japan [19]. In 1877–1888, pre-modern psychology associated with the adaptation of Western psychology by universities and teacher training colleges. The starting point was 1877 when the University of Tokyo was founded as a model of a Western university. Before that, the curriculum of psychology (1873) was introduced into its predecessor, the Tokyo Kaisei School. In 1875, the first book on "*shinrigaku*" (psychology) was published. At the same time, psychology mainly developed within philosophy, "it was more like mental philosophy" [19].

In 1888, it was the promotion of modern experimental psychology by US-educated professional psychologist Yujiro Motora (1858-1912), Doctor of Psychology, and later by his student Matsumoto. In 1890, the Department of Psychology was established by Motora at the Imperial University of Tokyo; in 1903, the laboratory of psychophysics was opened; in 1912, the first journal "Psychological Research" appeared. Thus, 1903 is considered the starting point for the history of psychology as an independent field of science in Japan.

Since the 1900s, applied psychology has been actively developing, forming the following branches: educational, industrial, and clinical psychology. Psychological testing included adding consecutive pairs of digits arranged in long rows and marking an integer in the unit column of each sum. This "response pattern" was more important than the accuracy of each calculation. A psychologist Uchida used Rorschach projective personality tests in 1925, just four years after his publication in Germany [20]. In the 1920s, tests were used in military research, career guidance, and personnel selection. During this same period, Japanese psychology begins to develop autonomously. Simultaneously, Morita Masatake (1886-1957), a psychiatrist, created a unique form of ethnic psychotherapy based on Zen.

Around 1927-1945 is the period of psychology on the eve of and during the war. The development of psychology and testing was associated with the military industry. For example, military pilots were selected by testing. Furthermore, 1927 was the year when the Japanese Psychological Association was founded as a scientific organization.

Since 1945, post-war development has been associated with the psychology of education and the development of tests from the USA. In 1945-1952, the country was occupied by the United States after World War II; as a result, its development was influenced by the USA. Multivariate personality tests such as the MMPI were introduced as well as new types of mental tests such as the WAIS. Consequently, the number of Japanese psychologists in Japan and has increased dramatically.

Since 1952, contemporary Japanese psychology intensively developed [20]. Numerous professional psychological associations appeared and research on pedagogical, social, criminal, political, and intercultural psychology was carried out. In 1990, the 22nd International Conference on Applied Psychology was held in Kyoto [19], [21].

The research noted two points of rapid growth in Japanese psychology: after 1952 and after 1990 (clinical psychology) [19]. The Big Five tests and independent methods of Japanese authors were developed. Besides, a method of cultural relations of psychological characteristics was devised based on a 30-year statistical study of the Japanese national character [22]. Concerning the formation of Asian psychology and

according to research, Japanese psychology had the earliest professional development, the contribution of the XIX century scientists towards a psychological education and the institutionalization of its development as shown in Table 1.

Table 1. The first institutional and professional organizations of psychology

Country/population in 2020	Year	Institutions/personalities
Japan	1903	Imperial University of Tokyo
128 million people	1926	Japanese Psychological Association
	First psychologists	Yujiro Motora (1858-1912)
		Matsumoto Matataro (1865-1943)
		Yon Sugisaki (1877-1943)
China	1920	Southeastern University
1.4 billion people	1921	Chinese Psychological Society (resumed in 1977 after more than ten years of forced stagnation)
	First psychologists	Chen Daqi (1886-1983)
		Tang Rong (1891-1987)
		Zhang Yaoxiang (1893-1964)
Kazakhstan	1947	Kazakh National University
18 million people	2003	Kazakh Psychological Association
	First psychologists	Tolegen Tazhibaev (1910-1964)
		Majit Mukanov (1920-1985)

*Adapted from Blowers and Turtle [23].

Japan is a leader in the development of psychology in the Asian region. Thus, the academic discipline "History of Psychology" divides Japanese psychology experience into three periods. Research by Sato *et al.* [24] distinguished three periods of Japanese psychology development based on the historiographical approach: i) the preliminary stage (without historiography), ii) the transitional stage as a movement towards documentary and historical activity; iii) the authentic (genuine) stage, the development of psychology since 1997 as an independent academic discipline [24], [25].

3. METHOD

3.1. Participants

The study sample was 72 respondents (24 participants from each country). The professors from the following universities were invited to participate in the study: Hosei University (Faculty of Sociology), Japan; Al-Farabi Kazakh National University (Faculty of Philosophy and Political Science, Department of Psychology and Department of Pedagogy), Kazakhstan; Soochow University (School of Society, School of Education), China. Only professors with a Ph.D. degree (higher than a Candidate of Science) participated in the interview as presented in Table 2.

Table 2. Sample characteristics (N=72)

Characteristics	Criterion	Quantity	%
Gender	Male	21	29.2
	Female	51	70.8
Age	>25	6	8.3
	35-45	24	33.3
	>45	42	58.4
Field of study	PhD	72	100

3.2. Research design

Theoretical analysis of materials and relevant national methods were provided to identify clear cross-course trends for a given research topic. With this aim, chronological materials were synthesized based on advanced literature on the psychodiagnostics analysis of three selected countries, mainly concerning the XX-century. The assessment of the psychodiagnostics development in the studied countries was carried out as well.

Before commencing the interviews, an important stage was conducted - the selection and allocation of respondents into groups reflecting the chosen Asian countries. Each group consisted of 3-4 professors representing Kazakhstan, China, or Japan. Within the interviews, the significance of 5 interests was discussed at different levels for each group testing at the national level of application and at the level of their interests.

Qualitative and quantitative determination about these interests in diagnosing individual regions: career skills and professional preferences, stress factors, mass testing on global issues, self-esteem and self-perception, and interpersonal relationships. Initially, the discussion focused on the importance of each factor in psychodiagnostics, followed by respondents rating each factor on a Likert scale (at the national level and in personal achievements).

The interview started in March 2022 and lasted three weeks. A group consisted of professors from the same country. The interview was conducted via Zoom and took 20 minutes for one group on average. Each group participated separately. The interview questions were adjusted to the specifics of professors' communication in the group. The key questions of the interview related to the assessment of the current state of population psychodiagnostics, the most relevant methods for assessing students and the current career ambitions of participants. All respondents participated in the interview. Based on the interview records, a brief and summarized report was compiled regarding the sample regions.

3.3. Statistical tool

The interdependence of the evaluated criteria was analyzed using the correlation coefficient (paired Student's t-test). Pearson's Chi-squared test was used to analyze the research's reliability and validity. Google Excel and Statista were used for program formation.

3.4. Ethical issues

The respondents were informed about the study's specifics and progress in detail and gave their consent to the personal data processing in Google Forms. The ethics committees of each participating university also allowed personal data processing regarding their professors' responses. The authors declare that the work is written with due consideration of ethical standards. The study was conducted in accordance with the ethical principles approved by the Ethics Committee of Al-Farabi Kazakh National University (Protocol No 401 of 04.07.2024).

3.5. Research limitations

The study covered a small group of respondents (three universities from three countries). Therefore, it cannot be used to scale the results. The findings may contain subjective opinions due to the specifics of in-depth interviews.

4. RESULTS AND DISCUSSION

4.1. Comparison of the historical development of psychological testing in Kazakhstan, China, and Japan

A cross-cultural analysis of the psychodiagnostics history in selected countries has shown that in the XX century, the testing system developed the most actively in all countries (Kazakhstan, China, and Japan) as shown in Tables 3-5, respectively. The analysis showed that during the early XX century, there was a rapid development of testing in the USSR, China, and Japan. This was mainly due to the growing international cooperation between countries to compete with the findings of other Asian countries and various foreign tests (for instance, Binet-Simon). The French Ministry of Education commissioned the development of a test to reveal children's learning abilities and implement an educational strategy for universal education. For the Soviet Union and Japan, the adaptation and widespread use of exams promoted a strategy for universal education. Thus, the Western science of testing is the source of (pioneer) testing practice and has contributed to the introduction of testing practice.

Conventionally, Figure 1 can be considered as a comparative map of the psychological testing development in the three countries. The compilation of such maps and their analysis help to compare the pace of historical events and identify the synchronization and influence of world trends. Tempo is the speed of movement, rhythm is intensity, and rhythmicity is a cyclical movement. The concept of tempo-rhythm, in addition to music, linguistics, and neurosciences, is currently used in synergetic, globalistics, and the theory of social dynamics. The tempo-rhythms of dynamics vary in different countries or different areas of social and industrial activity [26]. However, scientists identify synchronization and reveal correlations in processes even in the field of economics. Synchronization is considered a coincidence in time of ascending and descending developmental trends [27], [28].

The analysis of the Figure 1 demonstrates a clear cyclic development of psychological testing in Kazakhstan and China: explosive growth–cessation of the practice–recovery from the 70s and 80s. The first cycle of development took 16 for Kazakhstan and about 30 years for China, respectively. The second breakthrough was partly related to the global trend of mental health assessments. The global rapid development of psychological testing in the 70-80s of the XX century became possible due to the expansion of the "health" concept by the World Health Organization, the inclusion of mental and social health in it and

the respective reports of international experts, as well. Comparison of the chronological development vividly illustrates the synchronization of psychodiagnostics development in the three countries at the beginning of the XX century, including significant growth in the 80-90s.

Table 3. Periods of the development of psychological testing and psychodiagnostics in Kazakhstan

Pre-scientific period (insufficiently studied): conducting a series of tests for election of Biys, selection of Sarbazes, Batyrs, Akyns, and Kyuishi. Admission to medieval madrasahs was also based on special testing (Otyrar, Sauran)	
Period	Development of psychological testing as a scientific area
The 1920s – until 1936	Using the achievements of Western testology adapted from Soviet pedology. Educational tests, development of practical testology. Application of the adapted Binet-Simon test, IQ. N.P. Arkhangelsky "Psychological research at school" (1923).
1937 – the 1950s	Psychological tests were not used.
1960 – the 1980s (until 1991)	Restoration of the science and practice of psychological testing and psychodiagnostics. Soviet development of psychodiagnostic science and its practice. M.M. Mukanov "Identification and development of abilities in children" (1960). USSR textbooks were used in psychodiagnostics trainings and testing.
1991 – the 2000s	The country's Independence caused both the intensive development of psychological testing and psychodiagnostics, adaptation and validation of tests by foreign scientists. A wide publication of Kazakh textbooks on psychodiagnostics. IQ, Wechsler tests, Raven matrices, MMPI, 16PF, projective methods and others were used. Wide application of psychodiagnostics in education, professional and military selection and in health care for mental health tests.

Table 4. Periods of the development of psychological testing and psychodiagnostics in China

Pre-scientific period (4,000 years): Ancient China –abilities identification, the system for selection of officials and novices/students	
Period	Development of psychological testing as a scientific area
1910–1930	Using the achievements of Western testology. Binet-Simon test. Psychological courses were run at universities. Publication of books, journal articles.
The 40s of the XX century	Wide use of the tests was influenced by the war.
1949 – 1978	After the foundation of the PRC, due to political changes and the Cultural Revolution, psychological testing was not used.
1980 – the 1990s	Restoration and rapid development of psychological testing and psychodiagnostics as a practical activity and science. 1984: Committee for Diagnostic Work of the Chinese Psychological Society. 1983: Institute of Statistics and Diagnostic Research of the Chinese Education Society. Wexler test, MMPI, 16PF, EPQ and others were adapted. In the 90s, Japanese MHT and other tests were also adapted.
The 2000s	Development of Chinese psychological tests. Dynamic development of mental health tests, the adaptation of foreign tests (Western, Japanese)

Table 5. Periods of the development of psychological testing and psychodiagnostics in and Japan

Pre-scientific period	Development of psychological testing as a scientific area
1903 – the 1920s	Using the achievements of Western testology. Binet-Simon test's adaptation. Uchida-Kraepelin test (validated Kraepelin test). Applied Rorschach test, projective personality tests. Corresponding books and journals publications. Psychological courses were run.
1927 – 1945	The development of testing was associated with the military industry. Pilot selection tests.
1945-1952	Post-war development under the US occupation. Intelligence tests were introduced, including WAJS (influence of the American school of technology); multidimensional personality tests (MMPI).
1952 till today	The rapid growth of Japanese psychology and testology. Various professional psychological associations were opened. 1954: Ikuzawa developed the Kyoto Scale of Mental Development for preschool children with further extension for children up to 13. 1993: Kaufman K-ABC test was adopted. The Big Five tests were adapted. Independent methods by Japanese authors were also being developed, including the Hayashi method of cultural relations and psychological characteristics of Japanese.

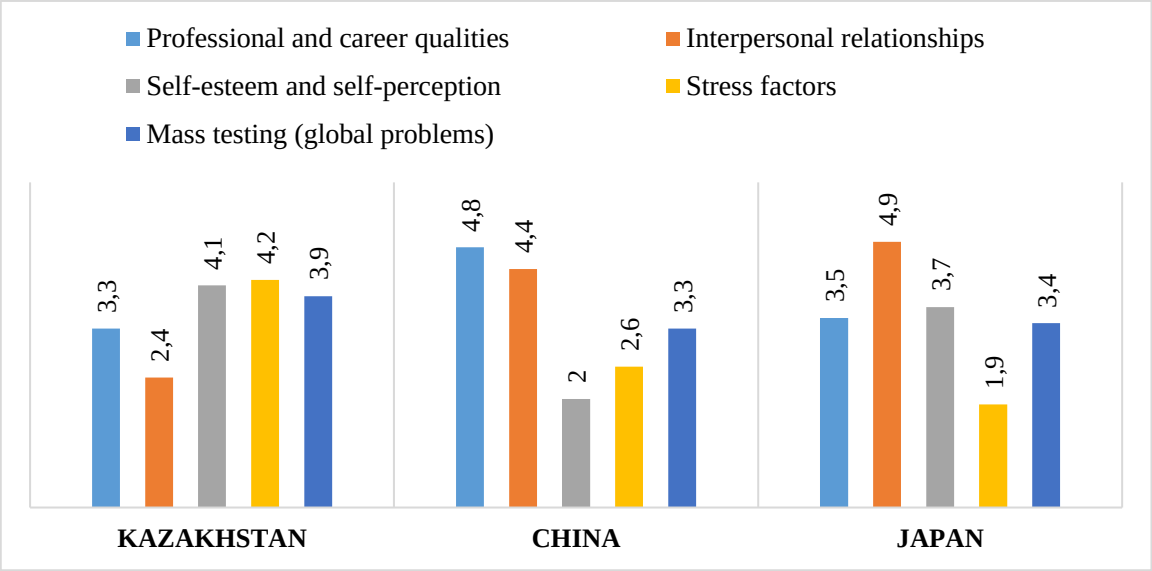

Figure 1. Averaged assessment of countries according to the current interests of the population survey trend

4.2. Current trends in population psychodiagnostic in Kazakhstan, China, and Japan

The interview results show significant differences in the formation of the population psychodiagnostics paradigm. Consequently, 58% of Kazakhstan professors interviewed indicated the insufficient effectiveness of the theoretical base for the survey in their country. There were 49% of them claimed that the majority of methods for practical application were of Soviet origin, i.e., outdated. On the contrary, almost all respondents (94%) of the Chinese university indicated that the highest priority in the research on testing methods was the formation of an online psychodiagnostic system. Therefore, any questionnaire would be available at any time in any part of the world. In addition, the Japanese usually tend to assess their internal psycho-emotional states, even when applying for a job or college. Considering the importance and gradual decrease of Zen religious practice in Japan, educators noted that there is not an established survey practice in the country due to the distorted perception of psychodiagnostics.

Figure 1 shows the averaged assessment of the current population survey trend considering both national interests and the educators themselves. Consequently, the career interests and career guidance tests were significantly prevalent in China (4.8) while in Japan it was testing of interpersonal relationships (4.9). At the same time, in Kazakhstan, respondents mentioned stress assessment tests and a self-esteem survey as the most demanded.

The development of psychology and psychological testing not only improves production and management but also promotes deeper national self-determination. Research has revealed that the Chinese psychological dimension has highly evolved since ancient times and it is a crucial factor of present and future development. However, comparing the development of psychological testing with Western countries, research noted that “general development is relatively slow and there is still a gap. However, fundamental research requires attention; on the other hand, new directions of psychological measurement should be discovered. Moreover, it is necessary to strengthen international cooperation in psychodiagnostic and psychometric research, expand the scope of psychometrics to enrich and develop the discipline of psychometrics and provide effective practice.”

Psychodiagnostics in Kazakhstan has also developed strongly since the 1990s; however, its development mainly relates to practical activities [29]. Thus, more than 7,000 schools in the country permanently use the methods of psychodiagnostics and since the 2000s, HR services and recruiting agencies have actively used testing methods in companies. On the other hand, large-scale basic studies in psychodiagnostics and psychometrics in Kazakhstan have not been sufficiently designed yet. The development of psychodiagnostics in education is mostly represented by the use and adaptation of universal research methods. Thus, during the last decades, active adaptation and translation of popular methods and sample surveys to Kazakhstan’s conditions have been observed. Currently, there is a lack of both psychodiagnostic personnel and scientists engaged in a narrowly focused field. The establishment of mental testing practices surpasses the doctrine formation in Kazakhstan [30].

The undisputed leader of the Asian region is the Japanese tradition of psychological testing. Compared to Japan, Kazakh psychodiagnostics require greater specialization in this field. Additionally, a positive attitude of the country's researchers and scientific schools to parallel adaptation and validation of tests is important [13]. The second direction, the monitoring of China's modern achievements in psychometrics, aims at the active implementation of various tests, including children's mental health tests in schools, national tests of human mental health and others. This is especially relevant in the post-pandemic period worldwide and the country in particular [22].

On the other hand, a comparison of the mentioned countries with the formation of the psychodiagnostics paradigm in Europe should consider that the vast majority of studies focus on general research on socially important topics. Thus, according to some studies, the issue of migration in Europe remains one of the most demand [31]. At the same time, for Kazakhstan and China, the Soviet tradition of rejecting psychometrics had a great influence. Therefore, the research on psychometrics formation peculiarities in China reveals some similarities to Kazakhstan's trends. At the same time, in contrast to China, Kazakhstan had been part of the USSR and became an independent state only in the 90s of the previous centuries. Thus, there were the following common factors influencing the formation of population psychodiagnosis paradigm for most countries of the world: i) A country's history and the impact of wartime; ii) A positive and negative ideological (communist and capitalist) influence on the psychometrics development; iii) History of psychology and psychometrics, its methodology and its influence on the historical development of psychological testing in particular countries. The impact of Western psychology as a global source is obvious and synchronized with the development of three countries at the beginning of the XX century. The second largest increase in psychological testing development was in the 80s and 90s and contributed to synchronization for Kazakhstan and China; iv) Emergence of regional trends against the cooperation and state's publicity. Soviet and Japanese regional leadership has been affecting the recent development of psychometrics and psychology in general.

5. CONCLUSION

The article provides an analysis of the psychological testing development in three Asian countries (Kazakhstan, China, and Japan) in a comparative chronological aspect. The infographic visually presented specifics of psychological testing development in Kazakhstan, China and Japan to identify similar trends and distinctive features. The theoretical analysis emphasized the exceptional superiority of Japan over China and Kazakhstan considering the national methods of the mental identity of the population. Each country had two distinguished periods: pre-scientific and scientific. The general factors influencing the historical development of psychological testing were: i) a country's history and the impact of wartime; ii) communist and capitalist ideology that positively or negatively influenced the psychometrics development; iii) the history of psychology and psychometrics in particular, its methodology; iv) emergence of regional trends against the cooperation and publicity. The results of in-depth interviews with university professors showed that the field of career interests and individual career guidance was mainly demanded in China (4.8). The testing of interpersonal relationships was commonly used in Japan (4.9). At the same time, Kazakhstan's respondents stated population stress factors tests and self-esteem surveys as most demanded.

This unique study distinguishes itself by offering a profound cross-cultural analysis of the development of psychodiagnostics in three Asian countries: Kazakhstan, China, and Japan. The attention given to the interplay between cultural and psychometric aspects constitutes a significant contribution to understanding the impact of globalization on psychological science. The research underscores the importance of identifying specific psychodiagnostic characteristics as a stimulus for further detailed examinations of psychometric and cultural factors influencing psychological profiles. Insights drawn from the analysis of the history of psychodiagnostics in each country yield important information conducive to a deeper understanding of the cultural and psychological peculiarities of the regions. The utilization of a combination of quantitative and qualitative methods, such as Likert scales and in-depth interviews, endows the research with complexity and depth, unveiling various aspects of psychodiagnostics in the participating countries.

This study can contribute to the future development of testing methods in Kazakhstan, China and Japan. The present study may be valuable for the formation of a psychodiagnostic paradigm for separate population groups according to both regional and historical specifics of the assessment of society. The comparison of the testing in Asian countries with the fundamentality of European psychodiagnostics may be practical for considering national psychodiagnostics. Future research endeavors may expand the worldview of cross-cultural psychodiagnostics, focusing on examining the impact of globalization on methodologies and definitions of mental health in various cultural contexts, as well as on the development and adaptation of innovative tools for assessing mental processes in different regions of the world.

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REFERENCES

[1] A. C. Brock, "What is a polycentric history of psychology?," *Estudos e Pesquisas em Psicologia*, vol. 14, no. 2, Sep. 2014, doi: 10.12957/epp.2014.12565.
[2] M. Sellbom and A. Tellegen, "Factor analysis in psychological assessment research: Common pitfalls and recommendations," *Psychological Assessment*, vol. 31, no. 12, pp. 1428–1441, Dec. 2019, doi: 10.1037/pas0000623.
[3] H. Varina and S. Shevchenko, "The peculiarities of using the computer complex HC-psychotests in the process of psychodiagnosis of the level of development of future specialists' mental capacity," *E3S Web of Conferences*, vol. 166, p. 10025, Apr. 2020, doi: 10.1051/e3sconf/202016610025.
[4] I. Mohîrţă, "New perspectives in stress psycho-diagnosis," *New Trends in Psychology*, vol. 1, no. 1, pp. 88–100, 2019.
[5] M. Zhou and J. Zhang, "Personality psychology in China," in *The Wiley Encyclopedia of Personality and Individual Differences*, B. J. Carducci, C. S. Nave, J. S. Mio, and R. E. Riggio, Eds., Hoboken, New Jersey, U.S: Wiley, 2020, pp. 317–322. doi: 10.1002/9781118970843.ch317.
[6] L. A. Miller and R. L. Lovler, *Foundations of psychological testing: A practical approach*, 6th ed. Thousand Oaks, California: SAGE Publications, 2018.
[7] R. M. Kaplan and D. P. Sacuzzo, *Psychological testing: Principles, applications, and issues*, 9th ed. Boston, Massachusetts, United States: Cengage Learning, 2017.
[8] M. Zmysłowska, "Current possibilities of psychological and pedagogical assistance in therapy for dyslexic students," *Problemy Opiekuńczo-Wychowawcze*, vol. 589, no. 4, pp. 33–44, Apr. 2020, doi: 10.5604/01.3001.0014.0909.
[9] V. Lazurik, N. Styervoyedov, and N. Varlamova, "Information processing psychodiagnostic system: Designing and implementation," *Eastern-European Journal of Enterprise Technologies*, vol. 2, no. 9 (110), pp. 45–54, Apr. 2021, doi: 10.15587/1729-4061.2021.230042.
[10] L. M. Ashour, "Major mental disorders in society during COVID-19," *Social Work in Mental Health*, vol. 20, no. 2, pp. 226–239, Mar. 2022, doi: 10.1080/15332985.2021.2001408.
[11] X. Mingjin, Y. Xinguo, F. Zhiyuan, and H. Xiani, "The structure of resilience scale for high school students and development," *Chinese Journal of Health Psychology*, vol. 24, no. 2, pp. 260–263, 2016.
[12] M. Sijbrandij *et al.*, "The effect of psychological first aid training on knowledge and understanding about psychosocial support principles: A cluster-randomized controlled trial," *International Journal of Environmental Research and Public Health*, vol. 17, no. 2, p. 484, Jan. 2020, doi: 10.3390/ijerph17020484.
[13] S. C. Hayes, S. G. Hofmann, and J. Ciarrochi, "A process-based approach to psychological diagnosis and treatment: The conceptual and treatment utility of an extended evolutionary meta model," *Clinical Psychology Review*, vol. 82, p. 101908, Dec. 2020, doi: 10.1016/j.cpr.2020.101908.
[14] K. B. Zharikbayev, *Collection of selected works in ten volumes: Textbook. Formation and development of Kazakh psychological thoughts*. Almaty: Evero, 2017.
[15] K. B. Zharikbayev and M. K. Akhmetova, "Kazakh psychological thought," in *The main stages of its development*, Almaty: Nur-Print, 2016.
[16] L. F. Burlachuk, *Psychodiagnostics*. St. Petersburg: Peter, 2017.
[17] C. Montag and H.-J. Rumpf, "The potential of digital phenotyping and mobile sensing for psycho-diagnostics of internet use disorders," *Current Addiction Reports*, vol. 8, no. 3, pp. 422–430, Sep. 2021, doi: 10.1007/s40429-021-00376-6.
[18] M. R. Arpentyeva, *Psychodiagnostics, counseling, and mediation in professional and non-professional relationships*. Canada: Altaspera Publishing & Literary Agency Inc, 2018.
[19] T. Sato, "The history of psychology in Japan," *Japanese Psychological Research*, vol. 47, no. 2, pp. 47–51, May 2005, doi: 10.1111/j.1468-5884.2005.00272.x.
[20] T. Suzuki, "History of psychological testing from the perspective of test developers in Japan," *Japanese Psychological Research*, vol. 63, no. 4, pp. 340–354, Oct. 2021, doi: 10.1111/jpr.12361.
[21] O. Samura *et al.*, "Current status of non-invasive prenatal testing in Japan," *Journal of Obstetrics and Gynaecology Research*, vol. 43, no. 8, pp. 1245–1255, Aug. 2017, doi: 10.1111/jog.13373.
[22] L. Zhang, Y. Ge, and D. Li, "The features and mission of sport psychology in China," *Asian Journal of Sport and Exercise Psychology*, vol. 1, no. 1, pp. 45–53, Jul. 2021, doi: 10.1016/j.ajsep.2021.03.008.
[23] G. H. Blowers, A. M. Turtle, P. M. Hac, and H. A. Begum, *Psychology moving east: The status of western psychology in Asia and Oceania*. New York: Routledge, 2019.
[24] T. Sato, H. Mizoguchi, A. Arakawa, S. Hidaka, M. Takasuna, and Y. Nishikawa, "History of 'History of Psychology' in Japan," *Japanese Psychological Research*, vol. 58, pp. 110–128, Jun. 2016, doi: 10.1111/jpr.12120.
[25] N. Li *et al.*, "Identifying periods of susceptibility to the impact of phthalates on children's cognitive abilities," *Environmental Research*, vol. 172, pp. 604–614, May 2019, doi: 10.1016/j.envres.2019.03.009.
[26] O. N. Yanitsky, "Globalization: From the theory to measurement," in *Russia under reform*, M. K. Gorshkov, Ed. (in Russian), 2018. doi: 10.19181/ezheg.2018.7.
[27] E. Kurushina, "On the integration and synchronization of the economic development," (in Russian), *Vestnik Volgogradskogo gosudarstvennogo universiteta. Serija 3. Ekonomika. Ekologija*, no. 3, pp. 142–153, Nov. 2015, doi: 10.15688/jvolsu3.2015.3.15.
[28] E. Stokoe, "Psychological matters in institutional interaction: Insights and interventions from discursive psychology and conversation analysis," *Qualitative Psychology*, vol. 7, no. 3, pp. 331–347, Oct. 2020, doi: 10.1037/qup0000162.
[29] E. Adilova, O. Aimaganbetova, L. Kassymova, Z. Sadvakassova, M. Ryskulova, and T. Sagnayeva, "Value orientations of modern Kazakhstanis," *The Open Psychology Journal*, vol. 14, no. 1, pp. 150–162, Aug. 2021, doi: 10.2174/1874350102114010150.
[30] N. Kostiani and M. Galanakis, "Organizational psychology in the 21st century: the big five theory contribution in the modern workplace," *Journal of Psychology Research*, vol. 12, no. 6, pp. 323–328, Jun. 2022, doi: 10.17265/2159-5542/2022.06.002.
[31] H.-J. Andreß and R. Careja, "Sampling migrants in six European countries: how to develop a comparative design?" *Comparative Migration Studies*, vol. 6, p. 33, Dec. 2018, doi: 10.1186/s40878-018-0099-x.

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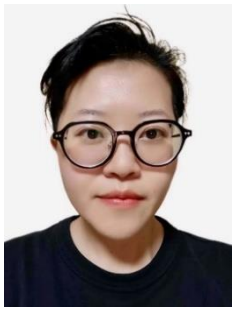

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