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Psychological science in Mongolia: its history, development, and future prospects

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ABSTRACT: This review paper explores the history, development, current state, and future prospects of psychological science in Mongolia. The establishment of the first department of pedagogical psychology in 1954 and the publication of the first Mongolian psychology textbook in 1960 marked the initial steps in the field's development. Dr. Sanjjav Damdinjav's pioneering PhD in 1966 and subsequent international representation paved the way for further growth. Currently, most Mongolian psychologists work across both public and private sectors. Education, healthcare, and justice/military services are the key employer groups in the public sector. Promising research has emerged in recent years, focusing on child and youth development, social support and wellbeing, psychological factors and financial credit risk, and tool adaptation for psychological assessment. Despite these advancements, significant challenges remain. These include a need for nationally licensed graduate programs, limited research funding, an outdated academic system, political interference in public university governance, a shortage of specialised personnel, and high research infrastructure costs. The most pressing issue is the need for graduate programs and corresponding job opportunities for major specialities like clinical, cognitive, and developmental psychology. Potential solutions include introducing graduate programs in key specialities, establishing licensure regulations, addressing systemic gaps, and increasing financial support for research institutions and universities. These steps would lay a strong foundation for the field, fostering its sustained growth and enabling meaningful contributions to Mongolian development.

Keywords: Psychology; Mongolia; History; Perspective

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1.0 INTRODUCTION

The development of psychology in each country is influenced by various cultural, historical, and social

factors, which leads to unique perspectives and approaches in the field. Despite the growing interest in psychology worldwide, more research is needed on the

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current state and development of psychology in Mongolia. This gap highlights the need to explore and clarify psychological science trends and progress in Mongolia.

This review paper aims to partially fulfil this need by providing a comprehensive overview of Mongolian psychology, including its history, current state, and perspectives. The paper will examine the latest trends in psychology in Mongolia and discuss the need for further development and future directions of psychology in Mongolia. Through this review, we hope to shed light on the unique aspects of Mongolian psychology and contribute to the global understanding of this field.

2.0 HISTORY OF PSYCHOLOGICAL SCIENCE IN MONGOLIA

In Mongolia, there is a scarcity of archival documents related to psychological science, and the available information has been compiled from documents recorded since the establishment of Mongolia's first university. **Figure 1** provides a chronological overview of the main events in Mongolia's initial development of psychological science.

The establishment of the first university in Mongolia in 1942 laid the foundation for developing the science of psychology. The Department of Pedagogical Psychology was established at the National University of Mongolia (NUM) in 1954. The State Pedagogical University was renamed by the Mongolian National University of Education (MNUE) in 1957.

According to the history of education in Mongolia, psychological science has progressed in coordination with pedagogy, specifically from the 20th century (Sharav, 2010). At that time, Mongolian students travelled to the former Soviet Union and Germany to study psychology, which laid the foundation for developing the field in Mongolia (Guruuchin et al., 2022). Many researchers agree that the training of Dashkhuu Dorj and Nina Tseren in the Soviet Union in the 1966s was a special event in the independent development of the current science of psychology.

The first psychology specialist came to be trained abroad in 1967 and worked as a psychology teacher at the university. 1992, the first undergraduate program was offered, and psychology specialists were trained at the NUM and MNUE. Since 2001, applied psychology has been developed, and psychologists have started working in other fields. One of the most significant

contributions to the development of psychology in Mongolia was Professor Sanjjav Damdinjav, who had the first PhD in psychology in the Soviet Union. The topic of his defended degree was The Psychological Basis for the Development of Intellectual Independence in Mongolian Children from Grades 5 to 8 in General Education Schools. He published a psychology book in 1963 titled "Problem of Psychology" and established the first research unit at MNUE in 1991 (Ministry of Education and Science, 2021a). This research unit marked the beginning of regular training of professional psychologists in Mongolia, which started in the 1992-1993 academic year at NUM and MNUE.

Subsequently, in 1998, the Mongolian Association of Psychologists was established following the founding and expansion of private universities dedicated to training specialists in the field of psychology. There is also evidence that the first textbook on psychology in Mongolia was published by Professor Dashjamts Dulam, who titled the textbook "Physical and Psychological Characteristics of Childhood" in 1960 (Dulam, 1960). The textbook is now kept in the National Central Library. Considering the child's age and physical characteristics, this manual guides parents, guardians, and teachers on their children's proper upbringing and appropriate education.

It should be noted that Oryol Namdag specialised in psychiatry in the 1980s. In 1974-1975, he participated in the professional training of abnormal psychology and psychotropic drugs in Moscow through the World Health Organization and mastered two specific specialities. Since he was an undergraduate program student, Oryol Namdag chose the speciality of abnormal psychology analysis and established the Department of Pathological Psychology. The analysis he developed serves as the foundational tool for diagnosing and differentiating mental diseases. This approach is now an integral part of daily practice in professional institutions.

Furthermore, since 2002, computerised psychodiagnosis has been implemented, contributing to the international standardisation of mental disorder diagnosis. In recent years, significant developments have occurred in the field of psychology, attributable to the support provided to the scientific community by the Mongolian government. A person who made a great contribution to psychology in Mongolia is the president of MPA, Professor Batsukh Shairii, who initiated and implemented the "School Psychologist" project that was implemented in collaboration with the Ministry of Education and Science, the Government Implementing

Agency, the General Department of Education, the MPA, the "Education for Sustainable Development-II" project of the Swiss Development Agency, Badamlin NGO, and

universities that train psychologists, and practical psychology organisations (<u>Ministry of Education and Science</u>, 2021b).

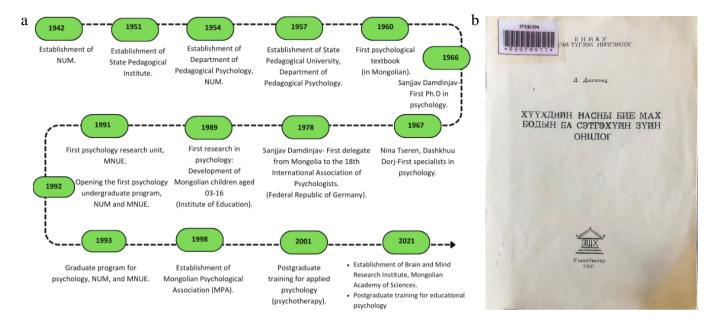


Figure 1. History of psychology in Mongolia. **(a)** Timeline of the development of psychological science in Mongolia. **(b)** The first Mongolia textbook in psychology was published.

The increased employment of psychologists in schools indicates the government's efforts to provide psychological support to students and promote mental health in the education system. Approximately 241 psychologists work in public and private schools in Mongolia, representing 19% of all schools in the country. This shows that psychologists now account for 20% of all students in Mongolia, indicating the increasing importance and recognition of the field of psychology in the country.

In line with this, the Brain and Mind Research Institute was recently established under the Mongolian Academy of Sciences (MAS) in September 2021, according to Resolution No. 299 (Brain and Mind Research Institute, 2022). This is an essential step in developing the education system and scientific research in Mongolia, as no new institute has been established in the last 30 years in the history of the MAS. Moreover, the interdisciplinary nature of the Brain and Mind Research Institute provides an opportunity for students to study psychology at the multidisciplinary level, facilitating collaboration with other fields and research areas. This development is expected to contribute to the continued growth and advancement of psychology in Mongolia.

3.0 THE CURRENT STATE OF PSYCHOLOGY

The field of applied psychology has been rapidly developing in Mongolia since 2000, mainly due to increasing social needs. As psychological centres began operating independently, people in Mongolia gained access to professional psychological services, creating a culture of seeking help for psychological problems and needs. The positive aspect of the development of psychological science in Mongolia is that psychologists are now working in various fields, such as the healthcare sector, justice and military sector, and educational sector. **Figure 2** demonstrates the distribution of psychologists by the employer sectors across Mongolia.

The Minister of Education and Science established a working group to study the legal framework for the employment of psychologists in general education schools and develop short and medium-term planning and maps for their employment. As a result, professional psychologists have been enrolled in 12 credit hours or 320-hour training in "School Psychology" with certification or license, and one out of every three state secondary schools in Mongolia now has a qualified psychologist (Ministry of Education and Science, 2021b).

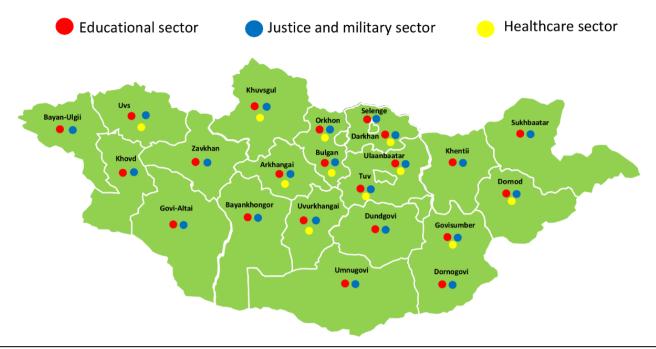


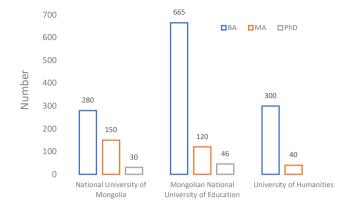
Figure 2. Distribution of psychologists across the country by employer sectors in 2022. Psychologists work in three main sectors: education, justice and military, and healthcare.

Innovative initiatives such as the "Chatbot service" provided invaluable support to students, showcasing the profession's societal impact. As these sectors have experienced substantial growth, independent associations and societies in psychology have expanded their activities in recent years. However, it is worth noting that a need for a legal framework exists for psychologists to operate within Mongolia. Psychologists also work full-time in law enforcement agencies, the military, and the police nationwide (Border Protection Agency, 2023; The 6th IBRO-APRC Ulaanbaatar Associate School, 2023). It should be noted that the data and functions of psychologists working in law enforcement agencies in Mongolia are classified as confidential information.

In recent years, there has been a significant shift in social attitudes towards psychology in Mongolia, leading to an increased interest in studying the field. This growing demand has resulted in introducing new psychology programs in various universities. For example, the Mongolian University of Science and Technology (MUST) started training organisational psychologists in 2019, and MNUE began training school psychologists in the 2021-2022 academic year. The number of students studying psychology has also increased significantly, with 470 students at NUM and 665 students at MNUE, including 70 students majoring in school psychology in 2022.

The field of psychology is experiencing growth in Mongolia, as evidenced by the increasing number of students studying psychology in the country. **Figure 3** shows the current number of students studying psychology in Mongolia and the count of experts graduating with a psychology major. As illustrated in the figure, the data from the most experienced university in Mongolia, which trains psychologists, indicates a growing number of psychological students in Mongolia (Mongolian National University of Education, 2022; National University of Mongolia, 2022; University of Humanities, 2023).

Training specialists with higher education in psychology is crucial for developing any country, including Mongolia. To meet this need, the National University of Mongolia and the Mongolian State University of Education have been offering psychology programs for bachelor's, master's, and doctorate degrees. The bachelor's program lasts 4-4.5 years, with 128-144 academic hours. In Mongolia, master's and doctoral programs in psychology began in 1997 at the NUM and MNUE (Mongolian National University of Education, 2022; National University of Mongolia, 2022). The master's program, which includes research work, takes 2.5 to 3 years to complete. Earning a doctorate in psychology takes 3.5 to 4 years (Mongolian National University of Education, 2022; National University of Mongolia, 2022).



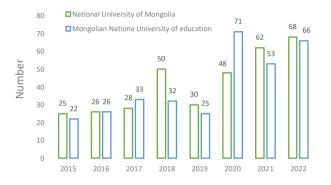


Figure 3. The number of undergraduate and graduate students in psychology in Mongolia. **(a)** The number of students in psychology at the National University of Mongolia, Mongolian National University of Education, and University of Humanities in 2022, n = 1631. BA: Bachelor's degree; MA: Master's degree; PhD: Doctorate degree. **(b)** The number of graduate students in psychology at the National University of Mongolia and Mongolian National University of Education, n = 665.

The University of the Humanities is the largest representative of the private university that trains psychologists. Since 2007, the University of Humanities has been preparing applicants for the profession of behavioural scientist, whereas for psychologists since 2012. The Department of Psychology was established in April 2021. The psychology laboratory was inaugurated in 2010, and the psychology department is in charge of the laboratory and is using it for teaching and research purposes. The laboratory includes an experimental area, an observation room, and a psychological counselling room. There are about 30 pieces of equipment for studying cognitive processes, emotions, and behaviour, as well as psychological tests and questionnaires that are widely used in school. Also, the Neuropsychology Laboratory was established in 2014 in our school, and it conducts psychological experiments and scientific research with the help of EEG equipment (University of Humanities, 2023).

4.0 RESEARCH IN PSYCHOLOGY

Briefly described, psychology research in Mongolia has focused on the educational sector's needs, influencing the direction of many research projects. Since 1990, several research projects have been carried out to determine the normative indicators of the psychological development of Mongolian children.

The first research project conducted between 1991-1993 was a survey on the psychophysiological development of preschool children. The second project in 1993 aimed to develop tests to determine children's general level of intellectual development. The third survey was conducted between 2000 and 2002 and focused on elementary school students' mental development and maturity (Ministry of Education and Science, 2021a).

In 2010, another survey investigated Mongolian children's psychophysiological, physical, and socio-cultural development. The fifth survey was conducted between 2014 and 2017 to determine the indicators of the development of children and youth in Mongolia. Additionally, since 2013, a basic research project has been carried out at the national level to determine the characteristics of Mongolians. These research projects have contributed significantly to developing psychology as a science in Mongolia. They have provided valuable information about the psychological development of Mongolian children and youth and helped identify their psychological development's normative indicators.

We summarised recent articles in the field of psychology which were published in peer-reviewed journals. Mongolian psychologists have the experience of studying abroad and defending their academic degrees. In recent years, among the researchers who obtained their doctors by conducting research in foreign countries, Yonsei University in Korea, the study "A Cultural Orientation Approach to Work Orientation: Mongolian Workers' Jobs, Careers, and Callings" was published (Park et al., 2021).

Researchers at the Mongolian University of Life Sciences conducted a systematic review of studies investigating the impact of social support and pregnancy on subjective well-being. The review analysed data from various studies conducted across countries, including Mongolia, and found that social support and pregnancy are essential predictors of subjective well-being among pregnant women (Battulga et al., 2021).

Researchers of NUM carried out the relationship between psychological factors and credit risk in microlending services in Mongolia. The study uses quantitative research methods to analyse the data obtained from a survey of borrowers in the microfinance sector, and the results suggest that psychological factors, such as self-esteem and locus of control, significantly affect credit risk (Ganbat et al., 2021).

Researchers of BMRI carried out a nationwide cohort study that included research on the translation, reliability, and structural validity of the Hospital Anxiety and Depression Scale (HADS), the abbreviated version of the World Health Organization Quality of Life (WHOQOL-BREF), and the Brain Overwork Scale (BOS) in the general population of Mongolia. The results suggest that the HADS, WHOQOL-BREF (Bat-Erdene et al., 2023), and BOS (Lkhagvasuren et al., 2023) are a reliable and valid tool for assessing anxiety, depression, quality of life, and mental distress in the Mongolian population (Tumurbaatar et al., 2021).

The publication of the studies mentioned above marks the beginning of the recognition of the works of Mongolian psychologists at the international level. Additionally, on top of publishing psychology textbooks in their native language, Mongolian psychologists also translate the classics of psychological science into the Mongolian language. Moreover, Mongolian psychologists actively organise and participate in domestic and international academic conferences, symposiums, activities, and professional training.

5.0 CHALLENGES AND FUTURE PERSPECTIVES OF PSYCHOLOGICAL SCIENCE

The field of psychology in Mongolia faces several challenges critical to improving the quality of psychological counselling and services. The lack of a legal framework, regulation of the licensing system for psychologists, development of training programs, diversification of professional class programs, and the need for a professional code of ethics are significant challenges that must be addressed. In addition, developing a non-governmental organisation in psychology and expanding research resources and infrastructure are also essential for the field's growth. We identified the current challenges at the discussion of scientists in the field of psychology-2022 in Mongolia, held on February 28, 2022, at BMRI, which are discussed below.

The first challenge is the need for a legal framework for the field of psychology and psychologists to work. A legal framework is necessary to regulate the field and ensure qualified professionals can practice without legal barriers. Creating a legal framework requires collaboration between stakeholders, including the government, professional associations, and universities.

The second challenge is regulating the system that provides professional licenses for psychologists through thorough qualification. Ensuring that only qualified professionals can provide psychological counselling and services requires a robust and effective regulatory system. However, developing such a system requires resources, expertise, and stakeholder collaboration.

The third challenge is to design training programs for specialisation and implement them with the help of teachers from foreign countries. This requires significant investments in resources and infrastructure to develop and implement these programs effectively.

The fourth challenge is renovating and diversifying the professional class programs of universities. This requires significant resources and expertise to develop programs that give students a more comprehensive understanding of psychology.

The fifth challenge is granting the right to train teachers at universities and professional courses. This requires collaboration between stakeholders to develop policies and regulations that enable qualified professionals to train others effectively.

The sixth challenge is to approve and enforce a professional code of ethics for psychologists. Ensuring professionals adhere to ethical standards requires a robust regulatory system, stakeholder collaboration, and resources to enforce ethical standards.

The seventh challenge is to monitor and evaluate the activities of organisations that provide psychological counselling and services to grant licenses in specialised fields. This requires significant investments in resources such as expertise to develop and implement effective monitoring and evaluation systems.

The eighth challenge is to increase the number of books, textbooks, and manuals, especially to create databases of psychological diagnostic tests that have been officially approved and adopted. Expanding psychology's basic research and analysis requires

significant resources, infrastructure, and expertise investments.

Finally, the ninth challenge is the development of a non-governmental organisation in psychology. Developing a professional organisation that can advocate for the field, provide training and support for professionals, and collaborate with stakeholders requires significant resources, expertise, and collaboration.

Overall, the absence of graduate programs and corresponding job opportunities for major specialities like clinical, cognitive, and developmental psychology creates a critical gap in training and job opportunities. Further challenges include limited research funding, outdated academic systems, political interference in public universities, and insufficient specialised personnel and research infrastructure (Lkhagvasuren & Jamiyansuren, 2021).

The continued development of psychological science in Mongolia depends on identifying key priorities for the field. The three main areas of focus for future development are establishing ethical rules and regulations, developing a psychological research laboratory, and creating a research methodology to determine the psychological characteristics of Mongolians.

The development of experimental psychology research using brain science technology is an opportunity for further development. Implementing ethical rules and regulations for psychologists is necessary to protect the public and professionals in the field. Establishing a legal environment for psychologists and introducing a licensing system would ensure that individuals working

in psychology are held to high standards of practice and accountability. Developing a psychological research laboratory that meets international standards is essential for advancing psychological research in Mongolia. The laboratory would provide a platform for researchers to conduct studies and experiments and enable them to collaborate with international researchers to produce high-quality research.

Taken together, potential solutions include introducing graduate programs in key specialities, establishing licensure regulations, addressing systemic gaps, and increasing financial support for research institutions and universities. These steps would lay a strong foundation for the field, fostering its sustained growth and enabling meaningful contributions to Mongolian development.

6.0 CONCLUSION

In conclusion, this review paper briefly overviews psychological science in Mongolia, including its history, current state, research, challenges, and prospects. By addressing the challenges and focusing on key areas of development, psychological science in Mongolia can significantly impact the country's development.

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