

Psychology in Bangladesh: Progress, Prospects, and Challenges

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Abstract

While existing documentation on the history of Psychology in Bangladesh provides some insights, it often lacks a comprehensive and current perspective on the discipline's progress, prospects, and challenges. This paper aims to address these gaps by offering a thorough and up-to-date overview of Psychology's development in Bangladesh, from its early 20th-century origin to its present state. It examines the development of Psychology through the historical contexts of British India, Pakistan, and modern Bangladesh, which are shaped by various socio-political, cultural, educational, and psychosocial factors. The paper is based on an extensive review of literature and insights from key stakeholders across various institutions to evaluate the early foundations of Psychology education, research, and practice in Bangladesh. It highlights significant milestones, the contributions of pioneering figures, and the progress of academic programs while addressing the challenges of integrating Psychology within the country's sociocultural context. The paper also explores future opportunities for growth in areas such as mental health awareness, policy development, professional training, and the broader application of Psychology in fields like recruitment, licensing, forensic assessment, etc. Despite notable progress, Psychology in Bangladesh continues to face challenges, including inadequate infrastructure, limited funding, insufficient professional recognition, and cultural stigmas surrounding mental health. The paper concludes with strategic recommendations for overcoming these barriers and promoting a more robust and inclusive development of Psychology in Bangladesh, aligning with global standards and local needs.

Keywords: Psychology in Bangladesh, Historical Development, Mental Health Stigma, Growth Opportunities, Policy Development, Global-Local Integration

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Origin and History of Psychology in East Bengal

Psychology began in the first quarter of the 20th century as an academic discipline in the then East Bengal (now Bangladesh), since the inception of the University of Dhaka in 1921, when this region was a part of undivided India under British rule. The University of Dhaka established a Psychology Laboratory in the Department of Philosophy headed by Professor G. H. Langley, the first Psychology laboratory in East Bengal and the second such laboratory in the entire undivided India (University of Dhaka Annual Report, 1921-1922). At first, this laboratory was located in three rooms on the ground floor of the central building of the University of Dhaka (at present, Dhaka Medical College). Then, in 1923, the Psychology laboratory was moved to Curzon Hall (the Science Faculty Building of the University of Dhaka). It is worth noting that the University of Calcutta (now Kolkata) established a Department of Psychology in 1916, becoming the first university in India to start an independent Department of Psychology. Thus, in the first quarter of the 20th century, the University of Calcutta and the University of Dhaka pioneered Psychology's birth and growth as a science and profession in undivided India (Singh, 1984).

During the initial stage of Psychology's development, there was close cooperation between the University of Dhaka and Calcutta University. For instance, Professor Sen Gupta (the then Head of the Department of Psychology of Calcutta University) and Professor Haridas Bhattacharya (the then Head of the Department of Philosophy of the University of Dhaka) were engaged in a close productive collaboration to ensure the development of Psychology (Bose, 1991). As a result, in June 1926, Mr. Sudhir Kumar Bose, a Laboratory Assistant at the Psychology Department of Calcutta University, was spared and lent to the Department of Philosophy of the University of Dhaka. Mr. Sudhir Kumar Bose joined the Department of Philosophy of the University of Dhaka as a Junior Lecturer, and he assisted Professor Haridas Bhattacharya (the then Head of the Department of Philosophy of the University of Dhaka) in equipping the Psychology laboratory (University of Dhaka Annual Report, 1927). Therefore, within a short period, the University of Dhaka Psychology Laboratory earned the recognition and reputation as one of the oldest and best-equipped psychological laboratories in the Indian subcontinent (Marx and Hillix, 1973).

Since the development of Psychology in Bangladesh mainly revolves around the establishment of Psychology departments in different universities, a brief overview of the history of Psychology in these institutions is given below:

Psychology Department at the University of Dhaka

As noted earlier, Psychology started its journey in East Bengal (present Bangladesh) as an academic discipline at the University of Dhaka, since the inception of the University in 1921. At the University of Dhaka, Psychology was initially formed as a part of the philosophy department, and it lasted for about 44 years (1921-1965). Professor G. H. Langley was the founder Head of the Department of Philosophy. In 1960, the Department of Philosophy was renamed as the 'Department of Philosophy and Psychology', headed

by Professor Ghulam Jilani. Professor Jilani left the University of Dhaka and joined the University of Punjab, Lahore, where he opened the Department of Applied Psychology in 1962. After the departure of Professor Jilani, Professor G.C. Dev became the Head of the Department of Philosophy and Psychology at the University of Dhaka. The task of teaching Psychology at that time was entrusted to Dr. Abdur Rahman and Mr. B. Anam Khan. In the session of 1960-61, the M. A. course in Psychology was introduced for the first time in the Department of Philosophy and Psychology at the University of Dhaka. The faculty strength of Psychology increased when Mr. Oscar V. Rouck (USA) joined the Department in the 1961-1962 session. The faculty strength of the Department further increased when some other renowned scholars joined the Department in the 1962-63 session, including among them Mrs. Linda Rouck, and Mrs. Vallery as full-time teachers and Dr. M.K. Ali as a part-time teacher. Moreover, Mr. H. Schuman of the University of Harvard also joined the Department in the 1962-1963 session as a visiting teacher (BPA Proceedings, 1980).

The introduction of child Psychology into philosophy in 1940 marked a shift towards applying psychological principles to child development. Despite these advancements, Psychology's infancy within philosophy constrained its growth as an independent scientific discipline (Begum, 2021).

Psychology became an independent department in 1965 with Dr. M. F. Zaman as its first Head of the Department. In 1967, a 3-year B. Sc. (Honors) program was started. The master's degree program was further strengthened with the opening of advanced courses in Industrial and Organizational Psychology, Clinical Psychology, and Educational and Counselling Psychology. Later, the graduate program was further expanded with the introduction of M. Phil. and Ph. D. Programs. However, in 1997, the Department of Clinical Psychology and in 2011, the Department of Educational and Counseling Psychology became independent departments.

The development of the M.A. and M.Phil. programs in Clinical Psychology at the University of Dhaka was initiated by Professor Anisur Rahman, who collaborated with Professor G. Powell and other international experts to create a robust curriculum tailored to the needs of Bangladesh. This initiative was designed to address the increasing demand for mental health professionals capable of dealing with a wide range of psychological issues. The eligibility criteria for these programs required applicants to have an undergraduate honors degree in Psychology from a recognized institution, ensuring that candidates had a solid academic foundation before undertaking advanced clinical training.

In addition to Clinical Psychology, the University of Dhaka also played a key role in introducing specialized training in Educational Psychology. In 2005, the university launched a Master's program followed by an M.Phil. course, which was supported by faculty and a UK-based educational psychologist. This program focused on the psychological aspects of education, equipping students with the tools to address learning challenges, educational assessments, and interventions for students with special needs. Professor Anisur Rahman,

already a significant figure in Clinical Psychology, also contributed to this initiative's success, leveraging his expertise to shape the Educational Psychology curriculum.

The momentum created by these programs was further accelerated in 2009 by incorporating Counselling Psychology into the academic offerings. This addition reflected the growing recognition of the need for specialized counseling services in various contexts, including schools, workplaces, and community settings. By 2011, these efforts culminated in establishing a dedicated Department of Educational and Counseling Psychology at the University of Dhaka. This department became a hub for research and training in counseling Psychology, while other universities in Bangladesh continued to offer similar courses as part of their broader Psychology programs.

In 1974, the Department of Psychology was placed under the Faculty of Science, because of the persistent efforts of Dr. M. R. Ali, a renowned experimental psychologist and the then Chairman of the Psychology Department. Later, in 1982, Psychology was placed under the Faculty of Biological Sciences. The Department of Psychology is concurrently offering three master's Programs— One-Year M.S. in Psychology, and One-and-Half Year Professional M.S. in School Psychology and Industrial-Organizational Psychology. A two-year M. Phil. and three-year Ph.D. degrees are also offered in the Department. Since 1972, the Department has been annually publishing a journal named the 'Dhaka University Journal of Psychology'.

From the year 2024, under the special initiative of Dr. Md. Kamal Uddin (Chairman of the Department of Psychology, University of Dhaka from 2021 to 2024), students of other disciplines are also being allowed to take part in MS in Psychology and Professional MS in Psychology by taking the admission test in the Department of Psychology of the University of Dhaka. Students come to study Psychology from various disciplines such as Philosophy, Geography and Environment, Economics, Sociology, Education and Research, etc. Professionals are also found to pursue MS here as there is no age limitation or professional boundary; hence, the course admits learners, including Doctors, Teachers, Bankers, Corporates, Businessmen, etc. enabling a multidisciplinary flavor. It is a pioneering and groundbreaking step in Bangladesh's Psychology history. More information about the recent development of Psychology at different universities is given in the following sections.

Psychology Department at the University of Rajshahi

The first independent Department of Psychology in Bangladesh was established at the University of Rajshahi in 1956. Professor S. M. Moghni was the founder Head of the Department of Psychology at the University of Rajshahi. Initially, the Department of Psychology at the University of Rajshahi began its teaching program at the master's degree level and B.A./B.Sc. (Honors) course in Psychology was introduced in 1963.

In 2015, the Department of Clinical Psychology was established, initially under the Faculty of Life and Earth Science, and later becoming part of the Faculty of Biological

Sciences. This department offered a four-year B.Sc. Honors degree aimed at developing Clinical Psychology professionals equipped to meet the mental health needs of the country.

In 2018, the department expanded its offerings to include a one-year master's program, supplemented with a six-month internship designed to provide practical, hands-on experience in clinical settings. Recognizing the need for more in-depth training, the program duration was extended to one and a half years from the 2020–2021 academic session, providing students with greater opportunities to engage in research and clinical practice.

Psychology Department at the University of Chittagong

The Department of Psychology at the University of Chittagong, established in 2005 under the Faculty of Biological Sciences, offers a comprehensive range of programs, including a four-year Bachelor's Honors, one-year Master's, two-year MPhil, and three-year PhD. With around 200 students enrolling annually, the department provides a well-rounded curriculum that balances theory and practical application. Supported by 18 faculty members, the department plays a vital role in advancing both academic and professional Psychology education in Bangladesh.

Psychology Department at Jagannath University

The Department of Psychology at Jagannath University, originally part of Jagannath College, was established as an independent department in 1966. It was initially offering a two-year B.Sc. Pass course, the department expanded significantly with the introduction of its first M.Sc. course in 1986. A significant milestone came in the 2002–2003 academic session with the launch of the Bachelor's Honors Degree, further solidifying its status as a full-fledged department. Since 2005–2006, the department has offered a four-year B.Sc. program and a one-year M.Sc. program. In 2011, the department launched the Jagannath University Journal of Psychology, furthering its academic contributions. With around 360 students enrolled across various programs, including specializations in Clinical and Counselling Psychology, Educational and Developmental Psychology, and Industrial and Organizational Psychology, the department continues strengthening its impact on Psychology education and research in Bangladesh.

Psychology Department at the National University

The establishment and growth of Psychology as an academic discipline in colleges across Bangladesh, particularly under the National University, highlight its increasing prominence in higher education. Rajshahi College led the way by introducing an honors course in Psychology in 1972, followed by a master's final course in 1992. In the private sector, Sheikh Burhanuddin College in Dhaka launched an honors course in 1995-96 and a master's course in 1996-97. Today, Psychology honors programs are offered in over 50 public and private colleges affiliated with the National University, with master's programs available in 10 colleges, including six government and four private institutions. This expansion reflects the growing demand for psychological education and its importance in various sectors.

Table 1

Distribution by Division of 50 Affiliated Colleges of National University where Psychology is taught at Bachelor's level

Sl.	Divisions	No of Colleges
1.	Dhaka	11
2.	Chattogram	3
3.	Rajshahi	22
4.	Khulna	4
5.	Sylhet	1
6.	Barishal	0
7.	Rangpur	4
8.	Mymensingh	5

Table 2

Distribution by Division of 50 Affiliated Colleges of National University where Psychology is taught at Master's level

Sl.	Divisions	No of Colleges
1.	Dhaka	3
2.	Chattogram	2
3.	Rajshahi	2
4.	Khulna	1
5.	Sylhet	1
6.	Barishal	0
7.	Rangpur	1
8.	Mymensingh	0

Table 3

Affiliated Colleges of the University of Dhaka where Psychology is taught at Bachelor's and Master's levels

Sl.	Name of the Colleges
1.	Dhaka College
2.	Eden Mohila College
3.	Begum Badrunesa Govt. Girls College
4.	Govt. Titumir College

Psychology Department at the Bangabandhu Sheikh Mujibur Rahman Science and Technology University, Gopalganj

The Department of Psychology at Bangabandhu Sheikh Mujibur Rahman Science and Technology University officially began its journey in 2018 by introducing a 4-year B.Sc. (Honors) program. This milestone was achieved through the persistent efforts of Dr. Muhammad Kamal Uddin, Professor in the Department of Psychology at the University of Dhaka, with the gracious support of Dr. Khondoker Nasiruddin, Former Vice-Chancellor of the university. Initially, the department enrolled 129 students with three faculty members. Recognizing the increasing demand for specialized education in Psychology, the department expanded in 2021 to include a 1-year professional M.Sc. program in both Developmental Psychology and Counseling Psychology. The Developmental Psychology branch is notable as the first in Bangladesh. This substantial growth underscores the department's pivotal role in advancing the field of Psychology education in the country.

Psychology Department at the Bangabandhu Sheikh Mujibur Rahman Science and Technology University, Pirojpur

Bangladesh's youngest Department of Psychology to offer a 4-year, 8-semester B.Sc. program began its journey in the 2023-2024 academic session. The B.Sc. (Honors) program, launched under the Faculty of Science, marks a significant step in the university's academic offerings. This initiative was spearheaded by Professor Dr. Kazi Saifuddin, the university's first Vice-Chancellor and former Chairman of the Department of Psychology at Jagannath University. With this, the department continues strengthening its impact on Psychology education and research in Bangladesh.

The Application of Psychology in Bangladesh

Numerous institutions have shaped the development of Psychology in Bangladesh over the years, particularly in mental health, personnel recruitment, developmental disabilities, and educational guidance. These institutions have pioneered psychological services, contributing to the broader application of Psychology across different sectors.

Pabna Mental Health Hospital

Established in 1957, Pabna Mental Health Hospital is the largest psychiatric facility in Bangladesh, with a capacity for 500 patients. It provides inpatient and outpatient psychological care and rehabilitation programs. The hospital has been a pioneer in mental health care in the country.

Inter Services Selection Board (ISSB)

The Inter Services Selection Board (ISSB), established in 1974, plays a pivotal role in the recruitment process for officers in the Bangladesh Armed Forces by integrating the country's first specialized psychological assessments in personnel selection. These assessments, conducted by psychologists from all three services—Bangladesh Army, Navy, and Air Force ensure that candidates possess the mental and emotional capabilities required for

military service, underscoring the importance of Psychology in analyzing personality traits and job suitability.

Colonel Arshad Ali, a pioneering psychologist, introduced psychological tools to the officer selection process, focusing on assessing cognitive abilities, personality traits, and emotional stability. Since then, numerous distinguished military psychologists have contributed to advancing applied Psychology in Bangladesh, particularly in personnel recruitment.

Bangladesh Public Service Commission (BPSC)

The Bangladesh Public Service Commission (BPSC) uses psychological assessments as part of its recruitment process to evaluate cognitive abilities and emotional stability. This practice reflects the importance of Psychology in public administration, ensuring that selected civil servants are mentally prepared for high-responsibility roles.

BRAC Developmental Program

BRAC's Developmental Program focuses on providing mental health services to marginalized communities, especially in rural areas. The program offers mental health education and care, expanding access to underserved populations in the country.

Buddhi Protibondhi Rehabilitation Center

Founded in the 1970s, the Buddhi Protibondhi Rehabilitation Center offers training and care for individuals with intellectual disabilities. The center focuses on equipping individuals with the skills needed to live more independently.

Center for Students' Counseling and Guidance at the University of Dhaka

The Center for Students' Counseling and Guidance, founded in 1963, provides free psychological services to University of Dhaka students and faculty. It addresses issues such as academic stress and mental health challenges, which diversify the growth of Psychology.

Government Hospitals

The government hospitals in Bangladesh have played a crucial role in enriching Psychology services and providing mental health care across the country. These hospitals offer a range of services, from psychological assessments to therapy and psychiatric treatments, contributing significantly to the mental health infrastructure.

The National Institute of Mental Health and Hospital (NIMH), located in Dhaka, is the country's largest government-run mental health facility. Established to provide comprehensive care, NIMH offers outpatient and inpatient services, including individual and group counseling, psychiatric evaluations, and medication management. The hospital serves as a primary referral center for complex mental health cases and works closely with medical colleges to train future psychologists and psychiatrists. NIMH also engages

in research and advocacy efforts to destigmatize mental health issues, making significant contributions to the field of Psychology in Bangladesh.

In addition to NIMH, public medical colleges such as Dhaka Medical College and Chittagong Medical College have established Psychiatry and Clinical Psychology departments that cater to a broad range of mental health issues. These departments provide both psychiatric and psychological services, including psychotherapy, cognitive behavioral therapy (CBT), and crisis intervention. They are instrumental in offering psychological support to individuals from diverse socioeconomic backgrounds, many of whom would not have access to private mental health care.

Child Development Centers (CDC) located in several government hospitals also offer psychological services, focusing on developmental disorders and pediatric mental health. These centers provide assessments and interventions for children with autism, ADHD, and other developmental challenges, highlighting the government's commitment to addressing mental health from an early age.

Government hospitals also collaborate with NGOs and international organizations to improve mental health services. For example, the Psycho-social Counseling Unit at Ain O Salish Kendra (ASK) works in conjunction with public hospitals to offer free counseling services to vulnerable populations, including victims of violence and trauma.

Overall, Bangladesh's government hospitals, particularly through institutions like NIMH and public medical colleges, have been pivotal in providing accessible psychological services. They offer direct patient care and contribute to research, education, and the development of the next generation of mental health professionals in the country. These efforts continue to enhance the psychological services landscape in Bangladesh, making mental health care more inclusive and widespread.

Private Clinics

Private clinics and organizations have significantly contributed to the development of psychological services in Bangladesh, providing much-needed mental health care, research, and awareness. These institutions cater to a wide range of psychological needs, from therapy and counseling to specialized mental health support, playing a vital role in promoting mental well-being across the country.

Monobikash Kendro, established in 2006, is a renowned mental health clinic and observation center. The center offers comprehensive mental health services, including psychological counseling, psychiatric care, and rehabilitation for various mental health disorders. Monobikash Kendro takes a holistic approach to treatment, offering individual and group therapy, as well as therapeutic interventions like music therapy and yoga.

LifeSpring, founded in 2010, employs over 200 professionals dedicated to psychological counseling, corporate wellness services, and child development programs. Their integration

of psychological care into schools and workplaces has earned them a reputation as a leader in promoting mental well-being across sectors. LifeSpring has expanded its services to online platforms, ensuring mental health support is accessible to a larger demographic.

Moner Bondhu, established in 2016, has played a significant role in making mental health care affordable and accessible in Bangladesh. Offering both online and offline services, they provide counseling, corporate wellness programs, and psycho-social support. Their 24/7 helpline, group therapy, and workshops have helped raise awareness about mental health, particularly through partnerships with organizations like BGMEA.

PHWC (Psychological Health and Wellness Clinic, Established in 2017 under the Sajida Foundation, PHWC offers a broad range of services, including Employee Assistance Programs (EAPs), crisis intervention, and corporate wellness initiatives. They also provide specialized training in mental health first aid and para-counseling, extending mental health support to underserved communities. They focus on holistic mental health care, blending Clinical Psychology with preventive wellness measures.

While relatively newer in the mental health landscape, Mind Sheba has quickly established itself as a trusted name due to its commitment to accessibility. They provide therapy for individuals, couples, and children, both online and in-person, offering flexible appointments. Their dedication to making mental health services accessible has made them a key player in Dhaka and beyond.

Moner Doktor is a telepsychiatry platform that offers psychiatric consultations, psychotherapy, and mental health assessments tailored to Bangladesh's cultural context. Its focus on delivering online services ensures that mental health care reaches remote and underserved populations. The platform plays a significant role in expanding access to psychological services across Bangladesh.

Chum Wellness provides psychological counseling and therapy services aimed at tackling issues like anxiety, depression, and relationship problems. Their services are available both online and offline, making them a flexible mental health support provider.

These organizations offer specialized care, raise awareness, and provide access to mental health services across different regions and demographics. By addressing gaps in mental health care and advocating for greater awareness, they are helping to build a more inclusive and supportive mental health system in Bangladesh.

In addition to private clinics, several government-sponsored institutes and centers in Bangladesh provide training and support in mental health. These include the Bangladesh Management Development Centers, Industrial Relations Institutes, and Bangladesh Industrial Technical Assistance Centers. These institutions, with the assistance of psychologists, offer practical training on labor-management relations, focusing on enhancing employee motivation, job satisfaction, morale, and mental health.

Moreover, several non-governmental organizations (NGOs) in Bangladesh employ psychologists for research and training in human resource development and poverty alleviation programs.

Various Associations of Psychology

The field of Psychology in Bangladesh has witnessed significant growth, largely thanks to the contributions of various professional associations and societies. These organizations have promoted psychological education and research and played a crucial role in applying psychological principles to improve societal well-being.

Bangladesh Psychological Association (BPA)

Established in 1972, the Bangladesh Psychological Association (BPA) is a voluntary professional organization of Bangladeshi psychologists. Its primary objective is to promote and disseminate psychological knowledge and its application to human welfare, both locally and globally. The BPA has consistently organized conferences attended by psychologists from home and abroad, enriching psychology as a scientific and professional discipline in Bangladesh. A significant milestone in BPA's history is its affiliation with the International Union of Psychological Science (IUPsyS) in 1996, during Professor Abdul Khaleque's presidency. This affiliation marked Bangladesh's integration into the global psychological community.

Bangladesh Clinical Psychology Society (BCPS)

Founded on October 26, 1999, as the Bangladesh Clinical Psychology Association (BCPA), the organization was later renamed the Bangladesh Clinical Psychology Society (BCPS) on February 23, 2010. BCPS is dedicated to improving mental health in Bangladesh through clinical psychology practices. Its vision statement, "Clinical Psychology for Quality of Life," reflects its commitment to promoting research, education, and high professional and ethical standards for clinical psychologists. Over the years, BCPS has grown into a leading organization in the field.

Bangladesh Educational and Counselling Psychology Society (BECPS)

Established in 2015, the Bangladesh Educational and Counselling Psychology Society (BECPS) is a professional organization dedicated to advancing educational and counseling psychology within Bangladesh. It was founded to address the growing need for psychological support and development in educational settings. BECPS works to promote mental health awareness and academic growth among students, educators, and communities.

Bangladesh School Psychology Society (BSPS)

Founded in 2017, the Bangladesh School Psychology Society (BSPS) aims to improve educational environments and student well-being in Bangladesh. Affiliated with international organizations, BSPS promotes ethical practices for school psychologists serving students in schools, colleges, and universities. It provides resources and training

on assessment, intervention, and collaboration. BSPS's vision, "School Psychology for Quality Citizen," underscores its mission to empower school psychologists to advocate for student mental health and well-being.

Bangladesh Psychometric Society (BPS)

Established in 2020, the Bangladesh Psychometric Society (BPS) was founded by a group of dedicated academics and professionals with a vision of developing a skilled workforce in the field of psychometrics. Recognizing the existing knowledge gap in various sectors due to a lack of understanding of psychometric principles, BPS aims to provide accessible and comprehensive psychometric education to students, educators, and policymakers both locally and internationally.

The Society's guiding vision, "Work for Fairness, Justice, and Elimination of Discrimination," reflects its commitment to fostering equality through the ethical application of psychometric tools. BPS plays an essential role in promoting fairness by building a team of skilled psychometricians who specialize in collecting, analyzing, and interpreting psychometric data to ensure that individuals are judged equitably across all fields, including education, employment, and health.

BPS has taken significant steps to raise awareness and advance the field of psychometrics in Bangladesh. One of the key milestones was the international conference held on January 21-23, 2022, which brought together experts and professionals from various sectors to discuss the advancements and applications of psychometrics in building a fairer society. This conference highlighted society's efforts to bridge the gap in psychometric knowledge and promote its ethical use across the globe.

These organizations collectively contribute to the advancement of psychology in Bangladesh, each focusing on specialized areas to address the diverse psychological needs of the population.

Bangladesh Journal of Psychology (BJoP)

Since its inception in 1972, the Bangladesh Psychological Association has been publishing a journal named, 'Bangladesh Journal of Psychology (BJoP)'. This journal is being published primarily bi-annually, almost regularly. The journal has substantially contributed to disseminating psychological knowledge in the South Asian regions, including Bangladesh, India, and Pakistan. When the first author of this article (Abdul Khaleque) became the Editor of three continuous issues of the Bangladesh Journal of Psychology (i.e., Volumes 13 (1992), 14 (1993-94), and 15 (1995-96)), he persistently tried for international recognition and reputation of this journal. His effort was fruitful as the Bangladesh Journal of Psychology obtained the International Standard Serial Number (ISSN: 1022-7466) in 1995. In addition, this journal was listed in the Ulrich International Periodical Directory for the first time, and the Swets Subscription Service of the Netherlands started distributing the Bangladesh Journal of Psychology worldwide. Moreover, in 1996, the Abstracting Service

of the American Psychological Association (APA) published all the abstracts of volume 15 of the Bangladesh Journal of Psychology. The Bangladesh Journal of Psychology was indexed in the PsycInfo Database of the American Psychological Association. However, it is sad but true that when Professor Khaleque left the University of Dhaka and joined the University of Connecticut, USA, in 1996, the subsequent Editors of the Bangladesh Journal of Psychology kept no contact with the Abstracting Service of the APA. Consequently, the Bangladesh Journal of Psychology was dropped from the APA's Abstracting Service. That was a significant setback in the progress of international recognition and reputation of the Bangladesh Journal of Psychology.

Progress, Prospect, and Challenges of Psychology

Psychology in Bangladesh is still largely perceived as being synonymous with mental illness, but globally, the field encompasses far broader applications that can significantly contribute to the nation's development. Beyond its clinical applications, Psychology plays an essential role in recruitment, education, organizational development, human resource management, forensic investigations, marketing, policymaking, sports, and disaster management. By broadening the understanding and application of Psychology, Bangladesh can unlock diverse opportunities that position the discipline as a key contributor to national progress.

For example, in the *United States*, the *American Psychological Association (APA)* has promoted a wide array of psychological fields beyond clinical and mental health. Industrial-Organizational (I-O) Psychology is a prominent area where psychologists focus on improving workplace efficiency, employee well-being, and organizational leadership (APA, 2021). In Bangladesh, this branch could be crucial in enhancing productivity and optimizing human resource management across various sectors, including corporate businesses, government, and manufacturing industries

Similarly, the *British Psychological Society (BPS)* highlights Educational Psychology and Forensic Psychology as key branches that have contributed significantly to UK public policy and legal systems. In Britain, educational psychologists help design inclusive educational systems that cater to students with special needs, while forensic psychologists support criminal investigations and provide expert testimony in courts (BPS, 2020). These branches can be vital in Bangladesh, where education reform and criminal justice improvements are high priorities

In Australia, the *Australian Psychological Society (APS)* has been pivotal in advancing Cyberpsychology, which examines the psychological effects of digital environments, social media, and online behaviors. With the rapid rise of technology in Bangladesh, cyberpsychology could be essential in addressing challenges related to digital well-being, cyberbullying, and the psychological impact of constant connectivity

By expanding the scope of Psychology beyond mental health, Bangladesh can harness the potential of other branches like Business Psychology, Sports Psychology, Disaster

Psychology and so on. For instance, business Psychology could help local companies understand consumer behavior and improve marketing strategies. Sports Psychology, already emerging globally, can play a role in athlete performance and team dynamics as sports gain popularity in Bangladesh. Finally, disaster Psychology, drawing from experiences in nations like the U.S., can be crucial in offering psychological support during natural disasters, an area of pressing need given Bangladesh's vulnerability to floods and cyclones.

Areas of Progress

Psychology in Bangladesh has made significant strides in various domains, showcasing its growing impact across multiple fields. The increasing number of psychologists pursuing PhDs and engaging in meaningful research has elevated the academic and professional landscape. Publications now reflect a broader interest in applied research, addressing social issues such as gender, mental health, education, recruitment and community-based interventions. Indigenous psychological approaches are also gaining prominence, as more research focuses on culturally relevant practices and mental health solutions tailored to the local context.

Collaboration between academic institutions, professional bodies, and international organizations has fostered cross-cultural studies and innovative research. Active professional bodies such as the Bangladesh Psychological Association (BPA), Bangladesh Clinical Psychology Society (BCPS), and the Bangladesh Psychometric Society (BPS) have been instrumental in promoting research, establishing service centers, and engaging in various professional activities aimed at advancing Psychology. Additionally, the adaptation and development of psychometric tools for research have gained widespread attention, contributing to more accurate assessments in recruitment, clinical evaluations, and human resource management.

In recent times, mental health support, has flourished largely in Bangladesh with branches like –

Clinical Psychology is perhaps the most established branch of Psychology in Bangladesh. It addresses mental health issues such as anxiety, depression, and trauma. The University of Dhaka has been a pioneer in this field, offering clinical Psychology programs that train professionals to provide therapy, counseling, and psychiatric care. Clinical psychologists in Bangladesh work in hospitals, clinics, and private practice, playing an essential role in mental health care. Organizations like Moner Bondhu and LifeSpring provide accessible mental health services, making clinical Psychology more available to the wider population.

Counseling Psychology provides mental health support to individuals dealing with stress, grief, relationship issues, and life transitions. Counseling psychologists in Bangladesh are found in educational institutions, clinics, and NGOs. They work closely with clients to provide therapy and counseling, often addressing issues that are less severe than those

treated by clinical psychologists. This branch is essential for providing emotional support and improving overall well-being, helping individuals cope with everyday challenges.

In recent times, other than mental health, many more fields of Psychology have flourished in Bangladesh like –

School Psychology plays a critical role in addressing the psychological and developmental needs of students. In Bangladesh, this field has grown as schools increasingly recognize the importance of mental health in educational success. School psychologists work alongside educators to assess learning difficulties, manage stress, and support students with emotional or behavioral challenges. Although still developing, school Psychology in Bangladesh has the potential to address not only individual student needs but also systemic educational challenges, contributing to a more supportive and inclusive learning environment.

Educational Psychology focuses on improving learning outcomes through the application of psychological principles. In Bangladesh, educational psychologists help design curricula, develop learning strategies, and assess student progress. This field is growing, particularly in urban areas where schools are integrating psychological services to better understand how students learn and what factors influence their academic performance. Educational Psychology helps teachers and administrators implement research-based teaching methods, thereby supporting cognitive and emotional development.

Industrial and organizational (I/O) Psychology is gaining traction in Bangladesh, particularly in the corporate and public sectors. I/O psychologists help businesses optimize employee performance, improve job satisfaction, and enhance leadership development. Psychometric assessments are being increasingly used in recruitment processes, ensuring that candidates selected for jobs have the necessary emotional and cognitive competencies. I/O Psychology in Bangladesh is contributing to a more efficient and productive workforce, especially in large organizations and government services. Organizations such as the Inter Services Selection Board (ISSB) rely heavily on psychological testing to select candidates for the Bangladesh Armed Forces. Psychological tools help evaluate cognitive abilities, emotional stability, leadership potential, and mental fitness, ensuring that the right individuals are placed in key roles. In the corporate sector, human resource departments utilize psychological assessments to improve employee performance, job satisfaction, and overall productivity, highlighting the value of Psychology in organizational development.

Challenges and Future Needs

Psychology in Bangladesh faces several challenges that hinder its growth and effectiveness across multiple specialized fields. One of the most pressing issues is the concentration of psychological services in urban areas, particularly Dhaka, with a heavy emphasis on mental health services. While mental health remains critical, other important psychological fields like recruitment, forensics, human resource management, school, and Sports Psychology lack the expertise and widespread application they require.

Limited Expertise in Specialized Fields

Despite the rising demand for Psychology in recruitment and organizational settings, there is a shortage of qualified professionals in Psychometrics, psychological testing, and employee selection. Many organizations, particularly in the corporate sector, are beginning to use psychological assessments for hiring and performance management. However, expertise in these areas remains concentrated in a few institutions, such as the Inter Services Selection Board (ISSB), which uses psychological tools for military officer selection. Broader implementation in sectors like business, human resources, and education is still minimal.

Similarly, Forensic Psychology, which plays a vital role in the legal system, particularly in criminal profiling, evaluating defendants' mental health, and assisting law enforcement, is underutilized due to a lack of trained professionals. Criminal Psychology, an offshoot of Forensic Psychology, also struggles to gain recognition, limiting its potential in aiding crime prevention and the rehabilitation of offenders.

Inadequate Infrastructure and Resources

Classroom facilities across universities have failed to keep pace with the growing interest in Psychology. With an increasing number of students enrolling in Psychology programs, resources such as laboratories, up-to-date equipment, and access to journals remain severely limited. Research in Psychology is constrained by outdated methodologies and a lack of technological resources for modern psychometric testing or clinical research.

The scarcity of research grants further exacerbates this problem, with few opportunities for students and academics to pursue cutting-edge research in specialized areas such as Sports Psychology, School Psychology, or Positive Psychology. Although some progress has been made, research priorities are often unclear, and applied research that addresses the country's unique social and psychological issues remains insufficient.

Educational Gaps and Public Awareness

Bangladesh currently has only seven tertiary institutions offering Psychology programs, despite having over 200 public and private universities. This limited academic infrastructure restricts the number of qualified professionals entering the field. Additionally, Psychology is not introduced at the secondary education level, and it remains an elective at the higher secondary (HSC) level. As a result, many students are unaware of the subject until they enter university, often opting for Psychology as a secondary or third-choice field of study, which impacts their long-term commitment and performance.

The lack of awareness about Psychology's role in non-mental health fields—such as recruitment, sports, and forensic setting—among the general public and policymakers also hampers its growth. Mental health remains the focal point for Psychology-related services, leaving other fields underdeveloped.

Socio-economic Barriers and Job Opportunities

Psychologists in Bangladesh face limited job opportunities outside traditional roles in academia and mental health services. While human resource management and corporate

wellness are emerging fields, many businesses are still unaware of the benefits that Psychology can bring in improving employee satisfaction and productivity. Similarly, school psychologists, industrial psychologists, and so on can make a significant impact on the psychological field, but they are not yet standard in most educational institutions.

The socio-economic conditions of the country also pose a challenge. Many individuals cannot afford psychological services, even in essential areas such as clinical counseling and therapy. The lack of public funding for psychological services in sectors like education, law enforcement, and sports further restricts the growth of these fields.

Prospects

Despite the challenges facing Psychology in Bangladesh, the field shows promising potential for growth and development. Recent efforts to enhance teaching standards, improve laboratory facilities, and increase research publications have laid the groundwork for a brighter future. The demand for mental health services, alongside the increasing application of Psychology in various sectors like recruitment, education, sports, and law enforcement, presents vast professional opportunities. As well as fields like Psychometrics, Industrial Psychology, Forensic Psychology, Family Psychology, Sports Psychology, Cyberpsychology and Geriatric Psychology hold significant potential due to their applicability to Bangladesh's evolving social landscape.

To fully realize these prospects, collaboration between psychologists and supportive agencies, both governmental and non-governmental, is crucial. Professional bodies like the Bangladesh Psychological Association, Bangladesh School Psychology Association, Bangladesh Psychometrics Association, and other related organizations must continue to advocate for the role of Psychology across different sectors. With strategic investments in education, research, and public awareness, Psychology in Bangladesh can advance rapidly, providing solutions to the country's pressing social and behavioral challenges.

Expansion of Psychology

While mental health and Clinical Psychology continue to lead in addressing the nation's pressing mental health needs, Psychology in Bangladesh has much broader applications with the potential to significantly impact various sectors. Fields such as School Psychology, supporting educational environments, and recruitment and human resource management, where psychometric evaluations enhance hiring and employee development, are gaining relevance. The rise of Sports Psychology highlights its importance in helping athletes improve mental resilience and performance. Similarly, Forensic and Criminal Psychology plays a growing role in the legal system, assisting in criminal investigations and rehabilitation efforts.

Beyond these already established branches, Bangladesh could explore several other promising areas where Psychology can expand its footprint like -

Health Psychology can play a key role in understanding how psychological factors impact physical health. Psychologists specializing in this area can help manage chronic illness, promote healthy lifestyles, and integrate mental health into general healthcare initiatives, particularly in rural and underserved communities.

Environmental Psychology focuses on the relationship between individuals and their physical surroundings, including how urban planning, architecture, and green spaces affect mental health. With rapid urbanization in Bangladesh, this field can help guide the development of more sustainable, healthier living environments that promote well-being.

As the population ages, Gero Psychology will become increasingly important in addressing the mental health and quality of life of older adults. This branch offers support in areas such as cognitive decline, depression, and social isolation, while also aiding caregivers in managing the complex needs of aging populations.

Consumer Psychology is key to understanding consumer behavior and decision-making processes, which is particularly relevant in Bangladesh's growing consumer market. Businesses can leverage insights from this field to design more effective marketing strategies and products that resonate with consumers' psychological motivations.

Cyberpsychology explores the psychological effects of technology and digital environments, which are particularly relevant in today's increasingly connected society. This field studies online behavior, the impact of social media on mental health, and how digital interactions shape identity, social relationships, and mental well-being.

Neuropsychology bridges Psychology and neuroscience by studying brain-behavior relationships. This field can play a crucial role in diagnosing and treating individuals with cognitive impairments, brain injuries, and neurodevelopmental conditions, contributing significantly to the integration of psychological and medical care in Bangladesh.

Business Psychology is becoming increasingly relevant in Bangladesh's corporate sector. Understanding human behavior in business settings can enhance leadership, management, and organizational efficiency. Psychologists working in this field apply behavioral insights to improve decision-making, marketing, consumer engagement, and overall business performance.

Crisis Management Psychology addresses how individuals and organizations handle high-stress, high-stakes situations like economic crises, pandemics, or natural disasters. In Bangladesh, this field could provide essential guidance for government agencies, NGOs, and communities to prepare for and respond to crises more effectively.

As Bangladesh continues to grow its defense sector, Military Psychology could contribute significantly to the mental well-being and performance of armed forces personnel. This branch focuses on enhancing resilience, leadership skills, and psychological health in high-pressure environments, while also supporting veterans in their reintegration into civilian life.

Rehabilitation Psychology focuses on helping individuals recover from physical, emotional, or cognitive impairments resulting from injury, illness, or disability. In

Bangladesh, this field can play a key role in supporting individuals with disabilities, offering therapeutic interventions, and improving their quality of life through adaptive techniques and psychological support.

Forensic Psychology is another rapidly growing area, with professionals contributing to criminal investigations, legal cases, and rehabilitation programs. Forensic psychologists provide expert testimony in court, assist law enforcement agencies in profiling criminal behavior, and evaluate defendants' mental health. This field is crucial in developing an evidence-based approach to legal and criminal matters in Bangladesh, addressing issues like criminal responsibility and offender rehabilitation.

Emerging fields like Positive Psychology focus on enhancing well-being and personal growth in educational and corporate settings. In Bangladesh, where mental health is often viewed through the lens of addressing illness or dysfunction, Positive Psychology presents a powerful opportunity to shift the narrative towards enhancing quality of life.

Family Psychology addresses the dynamics and relationships within families, offering strategies to improve communication, resolve conflicts, and build stronger bonds. In Bangladesh, where family is often the cornerstone of social life, the potential for family Psychology is vast. Issues such as intergenerational conflict, marital discord, and parenting challenges are common, and family psychologists can play a crucial role in providing support and guidance.

Sports Psychology focuses on enhancing athletic performance and well-being by addressing mental and emotional aspects of sports. In Bangladesh, where sports such as cricket, football, and athletics are increasingly popular, Sports Psychology offers an untapped potential to enhance both individual and team performance. Sports psychologists work with athletes to improve mental resilience, focus, and stress management, all of which are essential for peak performance.

Community Psychology is another branch that has played an integral role, focusing on enhancing community well-being, particularly in underserved areas. This branch can be instrumental in addressing mental health issues at the community level in rural Bangladesh, where access to healthcare remains limited.

Enrichment of Psychology

To further enrich the field of Psychology in Bangladesh, it is crucial to standardize clinical, counseling, school, industrial, and organizational psychological services nationwide. Standardizing the Bangla versions of psychological tests, which are widely used by researchers, requires further refinement to meet international standards. Additionally, enhancing the research skills of both teachers and students through quality education and advanced training in research methods is essential. Upgrading the Bangladesh Journal of Psychology (BJoP) to meet global academic and research standards is another critical step. This would involve focusing on publishing high-quality, impactful research that can gain

international recognition and elevate the country's academic contributions. Expanding the scope of Psychology is equally important to address Bangladesh's psycho-social quality of life comprehensively.

Currently, the University of Dhaka offers only four subfields for specialization in its MS program, despite a pressing need for more diverse options. Introducing specializations such as forensic Psychology, which can assist in legal processes and criminal investigations, and aviation Psychology, which is crucial for improving safety and performance in the rapidly growing aviation sector, is vital. Additionally, fields like child and adolescent Psychology, focusing on developmental challenges, and environmental Psychology, addressing the mental health impact of urbanization and climate change, must be developed. Expanding these specializations will ensure that the discipline caters to the growing demand in various sectors and contributes to solving pressing societal challenges.

The Bangladesh Psychological Association (BPA) must take a more active and dynamic role in improving the quality of research, psychological services, and professional engagement. This includes establishing robust systems for counseling, licensing, and clinical practices to uphold high ethical and professional standards among practitioners. By addressing these challenges and opportunities, Psychology in Bangladesh can align with global trends, ensuring its progress while significantly improving the nation's overall mental health and social well-being. Such efforts will position the discipline as a vital contributor to addressing the complex psycho-social needs of a rapidly evolving society.

Strategic Recommendations for Advancing Psychology in Bangladesh

Despite notable advancements, Psychology in Bangladesh stands at a crucial juncture, facing significant challenges such as inadequate infrastructure, limited funding, insufficient professional recognition, and cultural stigmas surrounding mental health. A comprehensive strategic approach must be implemented to overcome these barriers and foster a more robust, inclusive, and contextually relevant discipline. Addressing these issues is not only vital for the discipline's growth but also for enhancing public well-being and national development.

Strengthening the institutional infrastructure for Psychology in Bangladesh is essential. This includes establishing more advanced Psychology departments across universities nationwide and upgrading existing facilities with modern laboratories, testing centers, and digital resources. Such improvements will enable more comprehensive research and education in both traditional and emerging areas of Psychology. Partnerships between academic institutions and mental health facilities can provide practical training, internships, and clinical supervision, ensuring students gain hands-on experience to complement their theoretical learning. Moreover, fostering interdisciplinary collaboration within these institutions can further enhance the relevance and application of psychological knowledge.

Securing sustainable funding is another critical step. The government must increase its financial support for Psychology programs and mental health services, recognizing their role in national development. Additionally, involving the private sector and non-governmental

organizations in sponsoring mental health initiatives, research projects, and public awareness campaigns is crucial. Encouraging grant-writing and international collaborations can open doors to global research funding, enabling Bangladeshi scholars to contribute to and benefit from the international body of psychological knowledge. Increased funding will also ensure the discipline's capacity to address contemporary challenges effectively.

Enhancing professional recognition for psychologists is urgently needed to elevate the field's status and functionality. Establishing a national accreditation body to standardize training, licensing, and ethical guidelines will ensure professionals meet the highest standards. Psychologists should be integrated into multidisciplinary teams in hospitals, schools, and corporate environments, broadening their roles and showcasing their contributions. Public awareness campaigns can shift perceptions of Psychology, promoting it as both a science and a profession, thereby increasing demand for psychological services. Addressing cultural stigmas surrounding mental health through school curricula, public media, and collaboration with community and religious leaders is also essential to normalizing psychological well-being.

Efforts to contextualize Psychology to address Bangladesh's unique cultural and social dynamics are paramount. This involves developing culturally relevant psychological assessment tools and therapeutic approaches tailored to local needs. Community-based mental health services should be prioritized, especially in rural and underserved areas where access to care is limited. Encouraging research on Indigenous psychological concepts will contribute to global knowledge from a non-Western perspective, enriching the international understanding of human behavior. Simultaneously, aligning Psychology in Bangladesh with global standards through international collaborations, publishing in global journals, and adopting modern technologies such as telehealth and artificial intelligence can ensure its relevance on a broader scale.

Expanding educational opportunities is vital for raising awareness and interest in Psychology. Introducing Psychology at the secondary school level and making it a mandatory subject at the higher secondary level could significantly increase understanding of the field. Increasing the number of universities offering Psychology programs, particularly in underserved areas, is necessary to meet growing demand. Specialized training programs in fields like Forensic Psychology, Sports Psychology, School Psychology, and Organizational Psychology will diversify applications beyond mental health services, addressing a wider range of societal needs. National research grants for areas such as Positive Psychology, Family Psychology, and Criminal Psychology can also significantly advance these emerging fields.

Finally, public awareness campaigns and policy advocacy must go hand in hand to create an environment conducive to the growth of Psychology. Strengthening professional networks among psychologists, educators, and policymakers through organizations like the Bangladesh Psychological Association and Bangladesh Clinical Psychology Society can drive policy changes and enhance service delivery. Government policies mandating the inclusion of school psychologists, forensic psychologists, and sports psychologists in their respective

sectors will ensure the systematic application of psychological expertise. Workplace mental health legislation and insurance policies covering mental health care are also necessary to make psychological support more affordable and accessible, benefiting employees and the general public alike. By addressing these challenges through coordinated and strategic efforts, Psychology in Bangladesh can evolve into a more inclusive, well-recognized, and contextually relevant discipline. This will not only enhance its contribution to the country but also strengthen its role in the global advancement of psychological knowledge and practice.

References

- Ahmed, M. U. (1944). *Learn to hypnotize and cure* (Seba Prokashony Publication). Seba Prokashony.
- Ali, M. R., Sorcar, N. R., & Uddin, M. K. (2001). Psychological tests and viva voce for the selection of civil servants in Bangladesh. *The Bangladesh Journal of Psychology*, 19, 69-77.
- Annual Report of University of Dhaka. (1921-1922). *University of Dhaka Publication*.
- Annual Report of University of Dhaka. (1927). *University of Dhaka Publication*.
- American Psychological Association. (2020). A century of advancing psychology to benefit society. *American Psychological Association*. <https://www.apa.org/about/apa/archives/apa-history>
- American Psychological Association. (2021). *Introduction to industrial-organizational psychology*. APA Publishing.
- Australian Psychological Society. (2021). *Applied psychology and its growing branches in Australia*. <https://www.Psychology.org.au>
- Australian Psychological Society. (2021). *Cyberpsychology and community well-being: Expanding horizons*. APS Publications.
- Begum, H. A. (2004). Social psychological research in Bangladesh. *Unpublished manuscript*.
- Begum, H. A. (2021). History of the development of psychology in Bangladesh. In G. Misra et al. (Eds.), *Psychology in modern India* (pp. 119-136). Springer Nature.
- Bose, S. K. (1991). In retrospect: Career of an old student of the psychology department of Calcutta University. *Psychological Research Journal*, 15, 19-30.
- British Psychological Society. (2020). *Educational Psychology: A historical perspective*. *British Psychological Society*. <https://www.bps.org.uk>
- British Psychological Society. (2020). *History of Educational Psychology in the UK*. *British Psychological Society*. <https://www.bps.org.uk>
- Khaleque, A. (1996). Psychology in Bangladesh. In M. R. Ali & A. Khaleque (Eds.), *Psychology in South Asia* (pp. 28-63). Shakil Prokashoni, Inc.
- Marx, M. H., & Hillix, W. A. (1973). *Systems and theories in Psychology*. McGraw-Hill.
- Proceedings of the Bangladesh Journal of Psychology. (1980). *Bangladesh Psychological Association*.
- Saha, A. K. (2022). Applied Psychology in Bangladesh: Progress and prospect. *Mind and Society*, 11(2), 109-114. <https://doi.org/10.1007/s10560-022-01090-5>
- Shirin, S., & Adair, J. G. (1989). Psychology in Bangladesh: The first twenty years. Paper presented at the Canadian Psychological Association annual meeting, Halifax, Nova Scotia.
- Singh, R. M. P. (1984). *Souvenir (Part-A) IPA Conference, Magadh University, Bodh Gaya, India*.