# The History of Applied Psychology in Japan

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#### 1. Introduction

This review describes the history of "applied" psychology in Japan as it developed during the 100-year period from the 1860s through the 1960s within the social and political contexts unique to Japan. The first section of the review covers the process of development of modern Japanese society and the second section reviews the process of introducing psychology to Japan.

Table 1 A Chronology of Important Historical Events in Japanese History (1867-1952)

1867-68 Meiji Restoration

1889 Meiji Constitution

1894-95 First Sino-Japanese War

1904-05 Russo-Japanese War

1914 Japan Enters World War

1915 The issue of Twenty-One Demands to China

1931 Mukden Incident (Manchurian Incident; Second Sino-Japanese War begins)

1937 Start of World War

1941 Attack on Pearl Harbor

1945 The first atomic bomb is dropped on Hiroshima, the second on Nagasaki.

Japan surrenders: Occupation of Japan begins.

1951 San Francisco Peace Treaty is signed

1952 Occupation ends

The Meiji Restoration, which actualized in 1868, was a joint product of two different movements, one towards modernization of the nation and the other towards the restoration of imperial rule, whereas the Edo period, prior to the Meiji Restoration was an age of feudalism. The Meiji government united these two

movements and governed the nation under an imperialistic system. The new national policy following the Meiji Restoration was to make Japan a rich and a powerful country capable of resisting an invasion by Western powers. Emphasis was placed on building a strong military and strengthening industries. The resulting ascendance of Japan to world power status was reinforced by the victories in the Sino-Japanese (1895) and Russo-Japanese (1904-1905) wars. With the victory in the Sino-Japanese War (1894-1895), Japan was granted an enormous indemnity. It moved from an observer to participant status in the diplomacy of imperialism in East Asia. It had also come to possess a formal empire of its own that included Taiwan (as of 1895) and Korea (as of 1910). By 1914, Japan had become what might now be called a "newly industrializing country" (NIC). After a brief period of liberalization during the Taisho Era (1912-1926), military-run cabinets made imperialistic inroads to China. The first half of the Showa Era was a period of ultra-nationalism. After the end of the Second World War, Japan's economic recovery was triggered by the Korean War (1950-53) and it gained in strength during the 1960's.

# 2. Introduction of Pre-Modern Psychology (1877-)

As summarized by Sato and Mizoguchi (1997) and others (Azuma and Imada, 1994; Kido 1961; Oyama, Sato and Suzuki, 2001) after the Meiji Restoration, "modern" psychology was introduced to Japan from western countries through two routes: the university, and the normal school (teacher's colleges). Psychology as a university curriculum commenced at the Tokyo Kaisei School (the predecessor of Tokyo University) in 1873. In 1877, the university of Tokyo was founded as the first western-style university in Japan. There, Toyama Masakazu taught psychology in the general education department using texts written by Alexander Bain, William Benjamin Carpenter, and Herbert Spencer (Kuwata, 1942; Oyama, Sato and Suzuki, 2002). From 1887, psychology was also taught at the Normal School (the predecessor of Tsukuba University).

The Ministry of Education (Mombusho) published the first book on "shinrigaku" (psychology) in 1875, a Japanese translation of "Mental Philosophy Including Intellect, Sensibilities, and Will" (Haven, 1869). Psychology taught in Japan at that time could not be considered modern (i.e., experimental) psychology. Rather, it was more similar to mental philosophy. Modern psychology was introduced to Japan by Motora Yuzero in 1888.

# 3. Introduction of Modern Psychology by Motora and Matsumoto (1888-)

Two psychologists worked actively in the early stages of introducing modern (i.e., experimental) psychology to Japan; Motora and Matsumoto who was a student of the former. Motora Yuzero (1858-1912) was the first person to hold a professorship in psychology in Japan. He went to the United States to study psychology under G.S. Hall and earned his Ph.D. degree in 1888. After he returned to Japan, he began teaching psychology, holding the chair created for him at the Imperial University in 1890. In 1903, he organized the first Laboratory of Psychophysics in Japan, and in 1912, he helped to inaugurate the journal "Psychological Research."

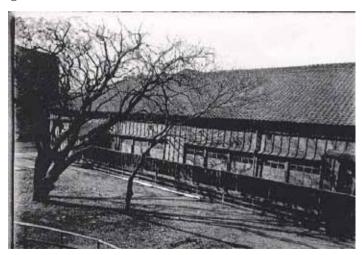


Figure 1 The first psychophysics laboratory in Japan (1903)

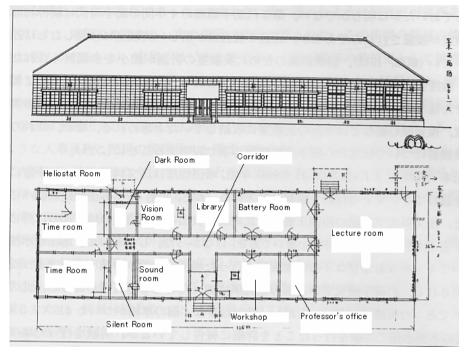


Figure 2 The floor plan of the psychophysics laboratory (Hidano, 1998; Sato and Sato, 2005)

Motora was interested in three areas of research: psychophysics, educational and clinical psychology, as well as in the philosophical theory of the mind. Many of Motora's students later distinguished themselves, and some of them went abroad to study psychology under the supervision of well-known psychologists. Matsumoto Matataro (1865-1943) was among these students (Sato, Namiki, Ando and Hatano, 2004), who learned psychology under a number of eminent psychologists around the world, including Motora (Japan), Ladd and Scripture (U.S.A) and Wundt (Germany). His interests included both experimental and applied psychology.

# 4. Development of Applied Psychology (1900-)

# 4-1. Educational Psychology

Of the various areas of applied psychology, educational psychology was the first to develop in Japan, and thus educational psychology can be considered the oldest field of applied psychology in Japan. This is because psychology had been taught at teacher's colleges (normal schools) since 1877, and therefore many books including translations of foreign books with titles such as "Psychology: Applied to Education" and "Educational Psychology" were published in the 1880's. For example, Nagao Ariga translated and edited Sully's "Outlines of Psychology" into Japanese. Another example is the Japanese book "Kyoiku Tekiyo Shinrigaku," which translates into English as "Psychology Applied to Education." The above efforts were only the beginnings of applied psychology in Japan and they resulted in the application of psychological theories to education by replacing the more traditional educational methods that were used previously. However, no empirical research on psychology was conducted in the field of education.

Matsumoto Matataro, the student of Motora who had gone abroad to study psychology returned to Japan in 1900, whereupon he was appointed professor at the Higher Teacher's College to lecture on experimental psychology. Motora who is considered by most to be the first Japanese psychologist had a strong interest in educational psychology and he pursued investigations into word association practices of children, as well as into the sense of morality in adolescents. He also investigated the readability of Japanese characters (kana and katakana) and invented devices to train preliminary school children to better keep their attention during lessons. In 1902, Motora and his students organized the Association of Child Study and Motora became its first president. He attempted to apply psychological theory and technology to education, being interested in both the theory and practice of psychology. The influences of Hall can be clearly seen in Motora's work. In 1911, he published "Ein Experiment zur Einübung von Aufmerksamkeit" (Training for Attention) in the journal

(Zeitschrift für Kinderforschung), Vol. 16. This was the first Japanese publication in clinical psychology.

In the appendix, there are details on the life of both scholars. Because the names of the two eminent founders of Japanese psychology, Motora and Matsumoto are similar, the two people have often been confused (Sato and Sato, 2005)

# 4-2. Industrial Psychology

Kirihara (1959) has pointed out that the rise of industrial psychology in Japan was influenced by economic, social, and psychological forces similar to those that were present in Europe and America during the same period. The efficacy movement in industry was introduced to Japan in the 1910's. Taylor's "Principles of Scientific Management" was translated into Japanese in 1912. In 1913 Ueno Yoichi (1883-1957), who was a student of Motora, published his "Lectures on Increasing Efficacy" in "Shinri Kenkyu" (Psychological Research). Many social and labor problems arose immediately following the Second World War. Moreover, with the enlargement of enterprises and increase in productivity, the number of workers in industry increased enormously and the welfare of workers became an important social problem in Japan. In major industries, the organization of personnel departments and other labor related activities also increased rapidly.

Industrial psychology under its current name began in Japan in 1920. At the Efficacy Research Institute, a number of studies on employment testing were undertaken. Many psychologists conducted job analyses and motion studies at industrial plants. At the Aeronautical Research Institute, Matsumoto and other psychologists conducted experimental studies on the functional effect of low-pressure environments on mental activity. The main period of growth for industrial psychology in Japan was between 1930 and 1945. Various kinds of aptitude tests were devised in psychology departments in universities. Child counseling as well as research on job security also developed during this time. In

1942, the two-volume book "Industrial Psychology" was published (Awaji et. al., 1942).

Although psychiatrists in Japan first reported the Binet-Simon Intelligence Test, it was a group of psychologists who first standardized a Japanese edition of the Binet Type Intelligence Test in 1918. They included Kubo Ryoei (a student of Motora; a professor of Hiroshima Bunrika University), Suzuki Harutaro (a school teacher), and Tanaka Kanichi (a student of Matsumoto; a professor of Tokyo Bunrika University). Paper and pencil type intelligence tests such as the "Army test" were also developed and used by the Japanese army.

# 4-3. Abnormal and Clinical Psychology

The psychologist Fukurai Tomokichi of the Imperial University was the most renowned abnormal psychologist in Japan during the Meiji Era. However, his research interests gradually changed and he eventually chose to study para-psychology instead of abnormal psychology. Furthermore, he insisted on the existence of clairvoyance. Fukurai believed that an able person could project the contents of his/her thoughts on a dry plate of photographic film without using a camera. Fukurai coined this newly discovered phenomenon "thought-graphy", and later Nengraphy. Nen is a Japanese word meaning a psychic sense or feeling. Although many scientists doubted the validity of such psychic phenomena, he continued to insist on their authenticity. Though details are not clear, Fukurai was ordered to take leave of absence from his job (see Sato and Sato, 2005). As a result, psychiatrists and non-academic psychologists were the main facilitators of Japanese clinical psychology prior to the Second World War.

# 4-3-1. Psychoanalysis

Although it is difficult to pinpoint the exact date when psychoanalysis became known in Japan, we do know of two people who met Freud and Jung at an important symposium held in Clark University in 1909. One of them was Kaise

Hikozo, who had graduated from the Imperial University under the supervision of Motora. Kakise studied psychology at Clark University under the supervision of Hall and probably attended lectures by both Freud and Jung (Figure 3). After returning to Japan, he gave a lecture on the use of Jung's "free association method" of uncovering unconscious thoughts. The pioneer psychoanalyst among Japanese psychiatrists was Marui Kiyoyasu (Anzai, 2000b; Blowers & Yang, 1997, 2001; Kaketa, 1958).



Figure 3 Kakise (Second from the right in the middle row) with Freud and other psychologists.

# 4-3-2. Morita Therapy

Morita Masatake (1886-1957) who was a psychiatrist founded a unique form of psychotherapy based on Zen that became known as Morita therapy. Morita suffered neurotic symptoms from the age of sixteen and he probably turned to psychiatry because of his own psychological problems. He thought that the most effective means of dealing with neurotic symptoms was to rely on the state of "arugamama" (taking things "as they are") in order to gain an insight into the problems of the self. In order to achieve such an insight, it is necessary to

orient one's attitude such that it harmonizes with the universe by not opposing nature and accepting it and living in peace with it (Sahakian, 1975). Morita therapy can also be categorized as a type of rest therapy.

# 4-3-3. The Uchida-Kraepelin Psychodiagnostic Test

The Uchida-Kraepelin Psychodiagnostic Test was developed by Uchida in the 1920s and it has been one of the most widely administered tests in Japan. A psychologist, Uchida Yuzaburo, devised the test known as the Kraepelin Mental Addition Test, which was a "Test of Working Ability." In this test, successive pairs of digits arranged in long rows are added and the integer in the unit column of each sum is noted. The examinee works continuously for one minute until he is stopped and directed to the next row of digits. It is "the pattern of response" that is more important than the accuracy of each calculation. The Rorschach test, a projective test of personality was also introduced to Japan by Uchida in 1925, only four years after its publication in Germany (Oyama, Sato and Suzuki, 2002).

# 5. Psychology before and During the Second World War (1927-1945)

In 1927, the Japanese Psychological Association was established as a national scientific organization, and Matsumoto was chosen as its first president. The Kansai Association of Applied Psychology was also established around the same time. Though the Kansai association was limited in its charter, it was very active and held conventions twice a year. From the middle of the 1930's and continuing through the war, the demands of the Japanese military encouraged applied research in areas such as aptitude assessment, group management, and human-machine interfaces. As the war progressed, psychologists were asked to work on the psychological effects of continuous strain and stress in the war front, leadership in combat, aviation aptitude, and propaganda psychology, among others (Azuma and Imada, 1994). During the war, associations related to psychology combined to cooperate with the war effort, and as a result, a new,

united association of psychology with six divisions was created. These divisions were basic, educational, industrial, legal, wound and sickness protection, and military. Thus, five of the six divisions of psychology in the association were "applied" divisions.

# 6. Applied Psychology after the Second World War (1945-)

# 6-1. Educational Psychology from the USA.

After Japan's defeat in the Second World War in 1945, and during the period of the occupation, many aspects of Japanese government were reformed under recommendations of the US Army General Headquarters. Reforming the Japanese education system was one of its most important agendum. All education based on Shintoism, as it had been before the war, was abolished, and a new scientific and democratic educational system was built. Psychology was given a prominent place in the new system as a fundamental part of scientific education. Counseling, guidance, group dynamics, and educational measurement among other disciplines, were introduced from the USA. New psychological technologies and multidimensional personality tests such as the MMPI, as well as new types of mental tests such as the WAIS, were also introduced. As a result of these changes, the number of psychologists in Japan and their areas of activity increased dramatically. Also, a number of new psychological associations were founded after the Second World War (Table 2).

Table 2 Psychological Associations Founded after the Second World War.

1949 Japanese Group Dynamics Association

1952 Japanese Educational Psychology Association

1960 Japanese Social Psychology Association

1963 Japanese Criminal Psychology Association

1963 Japanese Association of Education for the Handicapped

# 6-2. Trends in Contemporary Applied Psychology

In 1988, the 13-volume "Course on Applied Psychology" was published (Misumi et al., 1988). The contents of this "course" illustrate the current trends of applied psychology in Japan (Table 3).

Of course, the domains covered by applied psychology in Japan are not limited to those listed here. Certain fields of psychology that are not included Table 3, such as environmental psychology, criminal psychology, political psychology, and cross-cultural psychology are also being actively perused in Japan. The development of applied psychology culminated in the 22nd International Conference of Applied Psychology that was held in 1990 in Kyoto, Japan.

Table 3 Contents of the 13-Volume "Course on Applied Psychology"

Volume 1: Behavioral Science of Organizations

Volume 2: Behavioral Science of Accident Prevention

Volume 3: Behavioral Science of Natural Disasters

Volume 4: Behavioral Science of Signs and Information

Volume 5: Behavioral Science of Law

Volume 6: Spatial Mobility Psychology

Volume 7: Perception Engineering

Volume 8: Sport Psychology

Volume 9: Behavioral Science of Teaching-Learning

Volume 10: Current Clinical Psychology

Volume 11: Human Ethnology

Volume 12: Life Science and Psychology

Volume 13: Medical Treatment and Health Psychology

# 7. Some Concluding Remarks

Applied psychology in Japan has grown steadily since the 19th century and modern applied psychology has adapted itself to important social changes. For example, in 1995, Japan was shaken by the Great Hanshin-Awaji Earthquake that hit Kobe and caused the loss of over 6000 lives. In April, the fanatical

religious cult named "Aum Shinrikyou" became notorious after its devastating Serine gas attack on the Tokyo underground. After both events, mental care of the survivors (victims) was an important social problem that Japanese psychologists eagerly undertook to perform.

Today, psychology is one of the most popular subjects with university students. However, the number of students that are majoring in psychology is not large enough to fulfill the needs of high school students. Figure 4 shows the total number of graduate schools' programs related to psychology in the period after the war. As can be seen from Figure 4, this number has grown consistently from 1950 to 1970s.

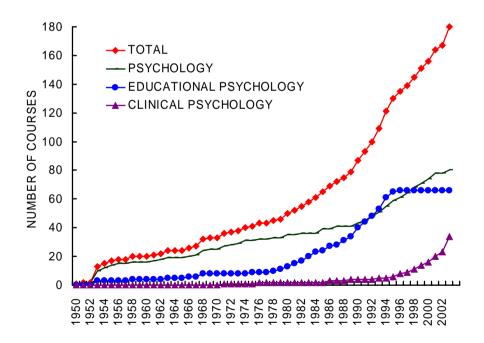


Figure 4 Changes in the number of graduate schools from 1950-2003 (Fumino, 2005).

We can see two periods of rapid growth in the total number of psychology courses in Japanese universities: around 1952 and after 1990. Figure 4 makes it clear that courses in psychology were the main contributor to the former growth spurt (around 1952), whereas those in clinical psychology were the main contributor to the latter growth spurt (around 1990). Specially, the number of courses related to clinical psychology has grown after 1990. Before approximately 1990, clinical psychology tended to be taught as a part of educational psychology, but since recently, independent course of clinical psychology have been inaugurated in graduate schools. Courses in areas of applied psychology other than clinical psychology and mental-care services, such as ergonomics, environmental psychology, traffic psychology, and legal psychology have also increased during this decade.

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# Appendix

# Relationship between the Two Eminent Founders of Japanese Psychology; Motora and Matsumoto (Sato, 2005)

year	Motora	Matsumoto
1858	born	
1865		born
1883	goes to Boston University to study moral philosophy using private funds	
1885	goes to the Johns Hopkins University to study mainly psychology supervised by Hall.	
1888	earns a Ph.D. at the JHU. returns to Japan.begins to lecture on psychophysics at the Imperial University.	
1890	is appointed the professor of philosophy at the Imperial University.	enters the department of philosophy at the Imperial University, studying psychology under Motora.
1894	is appointed as a professor at the Tokyo higher normal school (till 1900) concurrently continuing the professorship at Tokyo Imperial University.	
1896		goes to the USA under Ladd's advice and assistance using private funds.
1897		earns a Ph.D. degree from Yale, supervised by Scripture.
1898		leaves the USA and goes to the Leipzig University in Germany at Japanese government expense.
1900		returns to Japan. is appointed as a professor at the Tokyo higher normal school.
1903	establishes the laboratory with Matsumoto's assistance.	
1904	establishes a department of psychology.	
1905	presents "Concepts of EGO in Eastern-Asian Philosophy" at the 5th International Congress of Psychology (in Rome)	
1905	First B.A. in psychology is awarded to Kuwata and six other students of Motora.	
1906		is appointed a professor at the Department of Psychology in Kyoto Imperial University.
1908		establishes the second psychology laboratory in Japan at the Kyoto Imperial University.
1912	passes away.	
1913		is appointed as a professor in Tokyo Imperial University.
1927		assumes the position as the first president of the Japanese Psychological Association.
1943		passes away