

Title	Study on behaviour of schizophrenics
Sub Title	
Author	中井, 忠男(Nakai, Tadao)
Publisher	慶應義塾大学体育研究所
Publication year	1970
Jtitle	体育研究所紀要 (Bulletin of the institute of physical education, Keio university). Vol.10, No.1 (1970. 12) ,p.101- 102
JaLC DOI	
Abstract	
Notes	Abstract
Genre	
URL	https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=AN00135710-00100001-0101

慶應義塾大学学術情報リポジトリ(KOARA)に掲載されているコンテンツの著作権は、それぞれの著作者、学会または出版社/発行者に帰属し、その権利は著作権法によって保護されています。引用にあたっては、著作権法を遵守してご利用ください。

The copyrights of content available on the KeiO Associated Repository of Academic resources (KOARA) belong to the respective authors, academic societies, or publishers/issuers, and these rights are protected by the Japanese Copyright Act. When quoting the content, please follow the Japanese copyright act.

Study on Behaviour of Schizophrenics

*By Tadao Nakai**

There seem to be some problems for physical education for schizophrenics. One of them is an abnormal behaviour of schizophrenics.

To observe a tendency of this abnormal behaviour a "Ball Throwing Test" was tried. This test was originated by Utena and his collaborates. The method of this test is that eleven patients form a circle grasping hand by hand together and throw a ball (for volley ball) each other freely at optional directions.

This time, the same test was tried by us increasing the number of throwing balls from one hundred to five hundred.

The statistical method is to make a matrix from a locus of the number of balls and based on this matrix, the mean and scatter of entropy for the individual and the group has been calculated.

$$\sum_{i=1}^n ai = T \dots\dots\dots (1)$$

$$\frac{ai}{T} = Pi \dots\dots\dots (2)$$

$$\sum_{i=1}^n \frac{ai}{T} = 1 \dots\dots\dots (3)$$

$$E = - \sum_{i=1}^n Pi \log_2 Pi$$

$$E_v = \sum_{i=1}^n Pi (\log_2 Pi)^2 - E^2$$

These patients are inmates of the Sakuragaoka Asylum, who are mainly

* Full-time Lecturer of the Institute of Physical Education, Keio University.

schizophrenics. The control group are the students of the Kosei Joshi-Gakuin attached to the Medical Department of the Keio University.

The result shows that each member of the control group throws a ball in every direction on the average, while any of the experimental group, though different in respective symptoms, throw a ball to a particular person and their throwing tendency is characteristic of throwing to a person in front of them. Moreover, this tendency could be observed among patients of less symptoms.

If we examine the process of five hundred throws by every one hundred throws, the mean of control group is 3.44 at the first one hundred throws, then 3.44, 3.44 and 3.42 keeping constant value. On the contrary the mean of the experimental group was 3.32, 3.27, 3.28, 3.37 and 3.37.

Judging from the above result, behaviours of schizophrenics, as is pointed out by Utena and his collaborates seems to be characteristic of fixation phenomenon and echophenomenon, but further examination would be necessary because their behaviours are considered to be connected with the easiness of throwing balls and the stereotyped behaviour characteristic of schizophrenics.