SUNTEXT REVIEWS

SunText Review of Neuroscience & Psychology
ISSN: 2766-4503

Open Access
Commentary Article
Volume 3:3

New Edition of Tokyo University Egogram (TEG) Along With Social Changes as Transactional Analysis (TA)

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Received date: 18 December 2022; **Accepted date:** 20 December 2022; **Published date:** 25 December 2022

Citation: Bando H, Yokoyama T (2022). New Edition of Tokyo University Egogram (TEG) Along With Social Changes as Transactional Analysis (TA). SunText Rev Neurosci Psychol 3(3): 153.

DOI: https://doi.org/10.51737/2766-4503.2022.053

Abstract

Transactional analysis (TA) theory was introduced by Burne and Dusay and TA has been important psychological battery. Members of European Association for Transactional Analysis (EATA) are involved in TA research so far. In Japan, Tokyo University Egogram (TEG) was known as reliable test for long. It showed revision as 1st in 1984, 2nd in 1993, new Ed TEG ii in 2006, and 3rd in 2019. Latest version included 1221 healthy subjects. Authors have reported TEG pattern in university students. As a recent result, Nurturing Parent (NP) becomes lower values suggesting worse morality of recent social life in younger generations.

Keywords: Transactional analysis (TA); European Association for Transactional Analysis (EATA); Tokyo University Egogram (TEG); TEG version 3; Nurturing Parent (NP); Computerized adaptive testing (CAT)

Commentary Article

The concept of transactional analysis (TA) theory was introduced in 1950s and it was used for years. Consecutively, various psychometric instruments were developed for actual TA practice. Among 6 thousand members from European Association for Transactional Analysis (EATA), about 14% participants were involved in the research and development of psychometric batteries [1]. Rather common questionnaires include Joines Personality Adaptation Questionnaire (JPAQ), ESPERO 2000, Drivers questionnaire, Script Questionnaire and others. These batteries are helpful to select most adequate method and to integrate the practices. Furthermore, these batteries may help clients to bring self-insight, notice their psychosomatic changes and provide feedback to the therapists.

Tokyo University Egogram (TEG, 1st edition) was published in 1984, which was developed by a new method of creating a standardized scale using 4042 healthy adults. A second edition was published in 1993 [2]. Subsequently, in 2000, new TEG version was announced with significant changes in the items. Unlike the previous exploratory factor analysis, it was a new analysis method using a measurement equation model. TEG II was later published in 2006, which did not include reversal items for convenience in scoring. This version was also standardized using data from 1221 healthy subjects. Until now, TEG has been used not only in the medical field, but also in a wide range of fields such as education and industry. In this way, TEG has been repeatedly revised and verified for reliability and validity. However, all conventional TEGs were created based on previous classical examination theory. In such case, it was not easy to add, delete, or replace several question items.

Recently, a new TEG ver3 was developed associated with new items replaced using item response theory. It has been known as a modern examination theory that is easier to revise and more reliable. Current TEG ver3 has some characteristics. Taking advantage of the analysis using item response theory, new system of computerized adaptive testing (CAT) was also applied at the same time [3]. Some problems may be present by the questionnaires based on classical test theory. This is because to answer all items every time is required, all items are weighted the same, and then the power to detect change is weakened [4]. On the other hand, when CAT is performed, it is possible to select and

present the most appropriate question items in response to the answers. Along this process of examination, highly accurate measurements can be conducted with a smaller number of items, leading to reduced burden on respondents [5]. As mentioned above, TEG ver3 has these beneficial strong points.

The new TEG ver3 was developed under the following circumstances. A group of specialists in psychosomatic medicine in Japan selected questions for the new version of TEG II and investigated adequate new or novel items [6]. As a result, CP 30, NP 33, A 29, FC 31, AC 32 items were listed for the five ego categories. At the same time, a validity scale (low frequency scale, L scale) was also adopted, which was following the new version of TEG II. As a result, L11 items have become possible candidates. The appropriateness of each item was examined independently by several specialists of psychosomatic medicine. During the research processing, the modified Delphi method was adopted. Finally, 96 items (CP 19, NP 16, A 17, FC 16, AC 21, L 7 items) were selected. Standard subjects were recruited from each age group so that the age composition becomes the same prevalence as Japanese population pyramid. There were 1033 males (48.5+/- 16.9 years) and 1034 females (49.0+/- 17.2 years). The most frequent cases were 482 male office workers (46.7%) and 425 female housewives (41.1%). These protocols were approved by the Ethics Committee of the Tokyo University. As a result of whole data, average points of 5 egos in male/female are as follows: CP 11.1/11.0, NP 9.7/10.9, A 14.3/13.3, FC 10.6/11.0 and AC 10.0/10.8. Significant difference was found in NP, A, FC and AC. Current version has two types of egogram study, which are usual paper questionnaire and CAT. For CAT, several studies were included such as generalized partial credit model (GPCM) [7], expected a posteriori (EAP), maximum LH weighted information (MLWI), low frequency scale (LFS) and question scale (QS).

For decades, our lifestyle has been drastically changed associated with social structure and information and communication technology (ICT) [8]. Anyone has felt various stressful matters, and suffered from mental and psychological problems. Then, the role of psychology and behavioral science have been crucial [9]. Among them, actual research and practice on personality and communication would be required [10]. In the field of human relationship, TA has been developed as a personality novel theory by a supreme psychiatrist Burne [11]. It was psychoanalysis and also psychotherapy that may change our behavior and mind associated with encouraging impressive growth. He advocated the model of parent, adult and child (PAC). After that, novel concept of egogram was almost completed by Dusey [12]. It included 5 types of ego as egogram with CP (Critical Parent), NP (Nurturing Parent), A (Adult), FC (Free Child) and AC (Adapted Child).

Authors and co-researchers are involved in egogram research for long. TEG has been trustworthy battery in Japan for psychological research. It is convenient for perform egogram study taking within 10 minutes to get the current situation for the subjects [2]. We have adapted TEG for various occasion such as music therapy and teenager students [13,14]. Teenager students can obtain significant learning from TEG seminar and workshop [15]. Consequently, TEG would be impressive and meaningful psychological tool for lots of subjects and patients to recognize their daily lives and to improve the way of lives [16]. Our long-term research data have been observed on university students. They are 502 cases over several years [17]. Recent tendency includes NP reduction, which suggests the worse morality of daily social life in the campus period of younger generations.

In conclusion, latest topic for TEG ver3 for TA was described. This article would be hopefully useful reference for future research.

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