Mental Health of College Students — Dysfunctional Families and Adult Children —

Tomohisa SASANO and Takako TSUKAHARA

This study was carried out to screen the mental health of nursing college students. Fifty-six nursing students underwent psychological testing using the Dysfunctional Family Scale (DFS) and Adult Children Scale (ACS) . DFS and ACS were correlated statistically. The statistical DFS scores were as follows : median 1.000, mean 3.125, standard deviation 4.121, skewness 1.670 and kurtosis 5.766. Therefore, it is suggested that students with a DFS score above 4 points should be interviewed by a psychiatrist or clinical psychologist. The statistical ACS scores were as follows : median 7.000, mean 7.196, standard deviation 4.757, skewness 0.518 and kurtosis 2.708. Based on these results, it is suggested that students with an ACS score above 12 points should be interviewed. Also, there appears to be a heterogeneity between the two groups : the ACOA type and the ACOD type.

Friendship Expectation and Experienced Friendship in Adolescents

Motoko SUZUKI, Masaharu TERASAKI and Yoshihiro KANEMITSU

The present study examined the interactive relationships between friendship expectation and other variables of friendship satisfaction, self-esteem and affects. In Survey 1, 184 female university students rated the 65 items of friendship expectations on a 4 point scale ranging from 'very important' to 'little importance'. As the result of a factor analysis, 9 factors were extracted. Based on these factors, 19 items were selected to construct 5 subscales of friendship expectations. These subscales were called Acceptance, Sociability, Autonomy, Similarity and Leadership. In Survey 2, 130 female students were asked to respond to an inventory of friendship expectation and satisfaction, self-esteem scale and affects scale. Covariance structure analysis was used to test the causal relations of these constructs. The results showed that friendship expectation improved friendship satisfaction, and this satisfaction enhanced self-esteem and positive affects. The findings suggested that raising friendship expectations could contribute to developing psychological adjustment.

The Relationship between Interpersonal Interactions and Affects in Everyday Life — A Longitudinal Survey of Freshmen's Adaptation to University Life —

Manabu MIZUKO, Masaharu TERASAKI and Yoshihiro KANEMITSU

The present study examined longitudinally the relationship between interpersonal interactions and positive and negative affects in 30 freshmen. Interpersonal interactions were determined by

experience sampling methodology, and affects were measured using the Multiple Mood Scale-State and Trait.

The results indicated that the quantity and quality of interpersonal interactions did not change over time, but the relationship between the quantity and quality of interpersonal interactions and affects were different depending on the time of year. It is possible that freshmen's interactions with their families in April and June influenced their adaptation to daily life. Also, the quality of interpersonal interactions is more related with affects in October than in April. This result means that more open and positive interpersonal interactions with close friends inhibit negative affects.

ID Lookup System: An Elemental Technique for Maintaining Electronic Patient Records

Masaaki TANAKA and Yukiko UEMATSU

A system was developed which enables physicians to share patients' clinical information stored at different hospitals. The system, called the ID Lookup System, consists of an ID Lookup Server and an ID Lookup Interface Server. The former maintains a record of all hospitals visited by the patient concerned and the latter both provides and gives access to clinical information which is encoded as a MML format. This system is an indispensable elemental technique for maintenance and dispensing of electronic patient records.

A Numerical Solution of the Three-Dimensional Laplace Equation by the Boundary Element Method

Kohji ISHII and Hiromichi YAMAMOTO

In the present paper, an attempt was made to find a numerical solution of the Laplace equation by boundary element methods in 3-dimensional space R^3. First, we considered the exact and numerical solutions of the Dirichlet problem for the concentric ring domain in R^3. In the boundary element method, the boundary of the sphere is approximated by the plane triangles. We compared numerical solutions with the exact solution and got the best approximation of the sphere denoted by G_n^*.

Next, we considered the mixed boundary problem of the Laplace equation for the unbounded domain where its boundary consists of the spheres. The exact solution of this problem is unknown. We obtained numerical solutions for the best approximation G_n^*, and give the graphic curve of these solutions. Moreover, we give the numerical solution of the 2-module for the curve family in R^3.