

gathering age, second is the agricultural and stock breeding age and third is the industrial age. But most of we human being life have been the first age. During that we had acquired the various human adaptabilities to their environment, especially nature. For example, heat and cold tolerance, bipedalism etc. However, since the industrial revolution, that is, after about 1760, the life environment of human being have changed essentially.

We physiological anthropologists had to research the physiological functions and functional changes of human adaptability to the new industrial environment. Especially, we had to investigate the mechanism of visual recognition to the electro devises including the displays of many industrial instruments

### **Changing environment and health in island communities in western Japan**

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There are nearly a hundred island communities in the Eastern China Sea of Nagasaki Prefecture located at western end of Japan. The traditional subsistence economies in these islands are fishing and/or agriculture. Coalmining had developed on a number of coastal islands for several decades but all the mines have now closed because of high costs and low benefits of mining in Japan. The populations of the islands have rapidly decreased through closure of the mines as well as by shortage of other industries and by unpopularity of fishing.

Physiological and behavioural characteristics of dwellers have been studied to evaluate human adaptability in such changing environment. Physiological anthropological characteristics and other characteristics, such as body build, blood pressure and serum lipid concentrations, prevalence of HTLV-1 (human T-cell leukaemia virus type-1) infection and HBV (Hepatitis type-B virus) infection, dietary habits such as the amount of vegetable intake, the preference of salty taste, and acceptance of commercial foods differed from the mainland dwellers, and also varied among communities which have different historical backgrounds. Distinguishing factors were differences in religion (Buddhist communities *versus* Catholic communities) and in industrial structure (where once coalmining was there and large numbers of immigrants settled *versus* where traditional agriculture and fishery were conducted within relatively closed communities).

The relationship between human behaviours and physiological characteristics seems to be essential for the study of human adaptability in changing environments and also for the study of health in changing environments.

### **Behavioral indicators of Internet Addiction: Transformation of Self identity and development of new life styles in Cyberspace**

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This study has attempted to examine the Internet using behaviors among Koreans, which are equivalent to 61% of men and 49.1% of women in using the Internet (Information Culture Center for Korea, 2001). The study was conducted in one of the most popular portal sites in Korea, called Daum, in which the registered users are more than 26 million. The total number of participants was 13,588, including 7,878 males (58%) & 5,710 females (42%). The mean age of participants was ( $M=26.74/SD=7.27$ ). Based on the Young's internet addiction criteria, the groups were divided into three groups; such as Internet Addicts (IA), Possibly Internet Addicts (PA) and Non-Addicts (NA).

The addicted group (IA) was 3.5% (male: 3.5% female: 3.5%), while the possible addicts (PA) were 18.4% (males: 18.7%, females: 17.8%), non-addicts (NA) was 38.9% (Males: 38.9%, Females: 38.9%) at this sample. Both IA and PA more than NA reported to access to Internet when they were stressed by people (IA: 21.2%, PA: 14.3%, and NA: 8.6%). In a stress situation, IA reported the highest rate on the Internet use among three groups, and that was more than double of NA (NA: 52%, PA: 40.7% and IA: 20.4%). By contrast, NA reported a higher rate of watching TV or Video than PA and IA (NA: 11.3%, PA: 9.2% and IA: 6.6%). Loneliness, depressive mood, & compulsiveness were significantly different among the three groups.