

Interdisciplinary Area



Title of Project : Adolescent Mind & Self-Regulation

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【Purpose of the Research Project】

The most distinguished characteristic of human mental function is the ability of self-regulation, which is based on language acquisition and social reciprocity. Humans can utilize the self-regulation function to regulate their own mind & brain to pursue establishment of ego.

The self-regulation of mental function is unique to humans, which is realized by the highly developed prefrontal cortex, and is established in adolescence. Adolescence is the life stage where the prefrontal cortex matures and thus is the important period for establishing ego. In turn, an inappropriate maturation of the self-regulation in adolescence could lead to serious mental health problems prevailing in modern society.

Our research area proposes to establish a new interdisciplinary science by investigating the mechanism of self-regulation of the mind & brain in adolescence and developing the support strategy.

【Content of the Research Project】

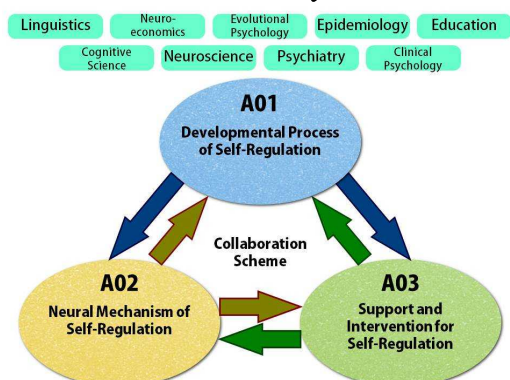


Figure 1. The Research Strategy

Our research area consists of three branches; A01: investigating developmental process of self-regulation in adolescence by management of teen cohort; A02: investigating neural mechanisms of self-regulation development in adolescence by comparative cognitive sciences; A03: developing support and intervention strategy through molecular, neural modulation, and psychosocial approaches.

【Expected Research Achievements and Scientific Significance】

We will contribute to the society by providing evidence for education from the teen cohort and developing real-world strategy for supporting self-regulation maturation in adolescence. We will realize previously unmet challenge toward establishing interdisciplinary human science through intensive collaboration of various scientific fields.

【Key Words】

Adolescence: the life stage relatively unique to humans where the maturation of prefrontal cortex occurs to establish ego.

Self-regulation: The most distinguished characteristic of human mental function which enables regulation of their own mind & brain to pursue establishment of ego.

【Term of Project】 FY2011-2015

【Budget Allocation】 1,145,200 Thousand Yen

【Homepage Address and Other Contact Information】

<http://npsy.umin.jp/amr/index.html>