

Summary of the “Research Report on the Development of Non-cognitive (Socio-emotional) Skills and Scientific Examination Methods”

1. Purpose and Summary of the Research Study

(1) Purpose of the research study

Traditionally, interest has mainly been focused on cognitive skills as typified by IQ as support for a person’s life-long adaptability. However, in recent years, many research findings have been taking a closer look, and the importance of non-cognitive aspects, the so-called non-cognitive skills, has been gaining attention. Nonetheless, these skills have not been sufficiently organized so as to address exactly what non-cognitive skills are. In this research project, two goals were established so as to be able to obtain results that would contribute to the development of specific discussions on what are described as non-cognitive skills. First, the study aimed to show the exact contents of non-cognitive skills by examining the literature of related academic fields. Furthermore, the study set out to investigate methods of conducting scientific examinations taking into account the current situation where in the related research fields, non-cognitive skills are seen not only as an abstract concept but as the subject of measurements and descriptions. As a second goal, we measured and described some of the non-cognitive skills of Japanese children, and set out to study the development and actual situation of the children.

(2) Summary of the research study

In the research, with regard to the various characteristics of human beings, which are referred to as non-cognitive skills, the focus, in particular, was on “socio-emotional competence”. This refers to the actions and attitudes which lead to “social adaptability in relation to the relationship between self and others and with groups” and “mental and physical health and growth”, and also the psychological traits that make them possible. Psychological traits here include recognition, awareness, understanding, beliefs, knowledge, skills, attributes, and so on.

For the first goal, we collected a wide range of research findings and conducted a literature survey in the areas of developmental psychology, educational psychology, developmental science, and other areas where there has been a lot of research on the development and content of socio-emotional competence; and on the effects of non-cognitive skills in the field of economics and other fields. In order to organize the exact contents of socio-emotional competence for each stage of development, the research was carried out according to three groups: “infancy period”, “early childhood”, and “childhood and adolescence”. Moreover, with regard to socio-emotional competence, since multiple large-scale longitudinal studies have been conducted spanning a number of developmental stages to study the relationship between development and environmental factors, as well as the relationship with

the various consequences, such research findings were categorized in the “long-term longitudinal studies group”.

For the second goal, we measured the socio-emotional competence of infants, preschoolers, children and students. For infants and preschool children, measurements and descriptions were conducted on a small scale using methods such as behavioral experiments, observations, and questionnaires to parents. For children and students, we conducted a large-scale, two-year survey of elementary school students, lower secondary school students and upper secondary school students and their families and school teachers with the cooperation of the local governments, schools and others.

Project Period: 2015 - 2016, Research Project Leader: Toshihiko Endo (Senior Visiting Fellow)

Summary of the Research Outcomes

(1) Research trends for non-cognitive skills ... Part 1

The study presented research trends for non-cognitive skills and socio-emotional competence in the fields of economics and psychology as well as research conducted by international organizations. We also discussed what led to the interest in focusing our research on the competencies that people possess, what these research results signify, and the perspective of utilizing these competencies in society and education, and in addition, the points to bear in mind when discussing and utilizing the competencies in the teaching field on the basis of our organization of the research findings.

(2) Literature survey on socio-emotional competence ... Part 2

In Part 3, Chapters 1 to 4, we compiled a list based on the findings of the contents of the socio-emotional competencies in which significant development and use were noted for each developmental stage of infancy, early childhood, childhood and adolescence. As well as the name, definition and methods used to measure socio-emotional competence (experiments, observations, tasks, questionnaires, etc.), we compiled our research findings on the factors (characteristics of the social and physical environment and other characteristics of the individuals) predicting the development of the competencies, and consequences (cognitive ability, physical and mental health, psychological variables, socio-economic conditions, etc.) which are related to or predict the state of competence. Furthermore, each competence was divided into the three categories of “behavior and attitude related to oneself, and psychological traits” (e.g., self-awareness, the development of emotions and control over them, behavior control, motivation, disposition, personality); “behavior and attitude, towards people with whom one has a relationship, and psychological traits” (e.g., awareness and understanding of the feelings of others, and understanding the relationship with the actions and feeling of others), and “interpersonal relationships, behavior and attitude relating to social and environmental relationships, and psychological traits” (e.g., attachment, use of emotional words and skills related to communication

and sociability). Based on this organization of the findings, Table 1 shows the flow of the development of competence for easy understanding, and Table 2 is given at the end as a summary of the definition, measurement methods, predictive factors, and consequences of each competency.

Chapter 5 of Part 2 presents the results of literature surveys for large-scale longitudinal studies on socio-emotional competence. In particular, in other countries, the surveys use a large sample to examine the long-term development of competence, the impact on competence from the physical environment and context, and the relationship between the state of competence and various consequences, and in addition, conduct multiple long-term follow-up surveys. In addition to summarizing the findings obtained from these large-scale studies, such content as the project names, objectives, subjects, and the principal variables of the long-term longitudinal research projects which have been carried out thus far are listed in the table at the end of Chapter 5.

(3) Measuring the Socio-emotional Competence of Children ... Part 3

In Part 3, Chapter 1, the focus was on the development of social communication and behavior as socio-emotional competence in infancy, and empirical research was conducted through experiments and observations. The characteristic of sensitivity towards others measured in early infancy is recognized to be related to communication and behavior in the late infancy period. In Chapter 2, we conducted an empirical research on the development of self-control in infancy and the understanding of other's feelings and beliefs. From a series of experiments, observations and measurements using questionnaires, we were able to show that these socio-emotional competencies see remarkable development in early childhood, and moreover, that there is a need to further study the influence of a nurturing environment on development. It should be noted that the empirical research on infants and young children was a preliminary study based on a small sample, and therefore the results of the measurements and analyses obtained here are somewhat limited, but the study indicates procedures and measurement methods of empirical research for infants, which may be used as information that will contribute to the design of later larger-scale research.

In Part 3, Chapter 3, as a fact-finding survey into socio-emotional competence relating to childhood and adolescence, we present the methods and some of the results of the survey conducted of elementary, lower secondary and upper secondary school students. Bearing in mind the age at which the children would be capable of answering the questionnaires for themselves, a survey was conducted of 4th and 5th grade elementary school students, 1st and 2nd grade lower secondary school students, and 1st and 2nd grade upper secondary school students. After the first survey was conducted in FY2015, a second survey was carried out in FY2016 as a follow-up survey at a time when the respondents would have gone up a grade. The survey questions covered a broad range using questions used in previous surveys in Japan and abroad as a means of measuring socio-emotional competence, as well as surveys which attempted to grasp the children's lives both inside and outside of school. As well as the children, we also conducted a survey of their parents and school teachers in order to obtain information on the

characteristics of the environment considered to be related to the socio-emotional competence of the children.

From the results of the first stage of the survey analyzed thus far, we have been able to obtain basic data indicating the actual state of the various socio-emotional competencies of the children. In the context of Japan, empirical data to be used in determining policies on nurturing the socio-emotional competence of children is clearly lacking. Amid such a situation, although this survey targeted schools which had been selected by the boards of education, the results are not necessarily representative of the whole of Japan, but the significance of the survey is great in that empirical data was obtained through a survey measuring a large number of variables for a large sample. By conducting a survey with such a large sample size, we were able to give descriptive statistics and reliability indicators of the scaled scores that measured socio-emotional competence, and to show reference values for the actual situation of children in Japan, and to obtain valuable data showing that the measurement scale of socio-emotional competence can be used in the future for Japanese children and adolescents. In addition, through an analysis of the relationship between the measured competencies, the functions of the emotional intelligence of the children, and the attachments built with their teachers and friends are seen to have a correlation with the efforts and motivation of students towards learning.

In the future, we will continue to conduct an analysis at the second stage of the survey, and with regard to the results of the measurements of the socio-emotional competencies, we will be studying the points in common and differences with the values indicated by previous research in order to examine the actual state of Japanese children. We are also planning to analyze the development of socio-emotional competence, the relationship between the competencies and academic and school adaptation, the degree of happiness and other aspects as well as conducting an analysis to gain insight into the characteristics of the social and physical environment related to the competencies.