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Quality of Life and Self-Esteem of Children

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(1) Introduction

With the advent of science, technology, and education, children are enjoying better physical and mental health.   Yet, children must be equipped not only with knowledge but with social-emotional skills in order to cope with many challenges that are not foreseeable now.

As educators in ECEC, we are well aware that we should change our goals of education from merely enhancing children's cognitive and non-cognitive function to aiming globally so that children will be competent in every domain of the Sustainable Development Goals (SDGs) for the future.

However, if we review what we have been so far achieving, we would notice that we have long been accustomed to viewing children from adults' points of view, and ignoring their inner feeling about themselves. We have of course acknowledged that the most easily visualized functions of children for example cognitive skills, are not at all enough to evaluate our endeavor as educators, and that the importance of non-cognitive skills are now emerging.   Even so we are still hesitant to listen to how they are feeling about themselves.

Emergence of the Concept of Quality of Life (QOL)

Quality of life first emerged as a term in social science as a concept designating happiness or well-being. Quality of life as a medical term, designating the effects of medical treatment, was widely accepted in the mid-1970s. The definition of well-being and quality of life as a general term, pertaining to human life, has remained quite disputable and is still being studied. QOL measurement, being a simple tool to evaluate medical intervention, has been widely used by clinicians. In the era when the values of

all medical treatments were judged by evidence, an objective evaluation of medical treatment had to be done either by survival rates, reduction of symptoms, or the quality of lives that patients would have after treatments. For diseases in which the effectiveness could not be evaluated solely by survival or by symptoms, the introduction of QOL, as an indicator of treatment benefit, was quite useful and hence welcomed by many clinicians. While researchers are working hard to make tailor-made scales of QOL for specific medical conditions, many clinicians are confident in using standardized QOL scales as a useful tool to judge the improvements in specific medical treatments.

Condition-Specific QOL and Generic QOL

Since the domains of impairments differ among diseases or disabilities, QOL scales specifically tailored for target diseases or disabilities have been extensively developed to date. Since impairments of physical conditions are different among each specific disease, these condition-specific QOL scales are naturally different from each other. So it is difficult to compare the results of QOL of patients with some specific disease with those of patients with other diseases by using condition-specific QOL scales. For example, it is difficult to compare the QOL of children with epilepsy with that of children with asthma by comparing the results of QOL scales specifically developed for epilepsy and asthma. On the other hand, generic QOL scales were developed for the assessment of well-being across various domains to capture more holistic well-being. Thus a generic QOL is only used for the assessment of well-being of children with specific disease or disability, but also for typically developing children. Although generic QOL scales cannot assess disease nor disability-specific well-being of children, they are still useful for the comparison of QOL across different diseases or disabilities. Moreover, they are also useful for cross-cultural comparison of children's well-being, although there are only a few such studies to date.

Quality of Life in Preschool Children

With the wide acceptance of generic QOL as an important indicator of children's self perception, numerous studies on the QOL among children have been carried out. Factors influencing children's QOL have extensively studied. For example, parental QOL is a strong indicator of children's QOL. Parenting styles have been associated with

QOL of children. A warm parenting style was shown to be associated with high QOL of children, and conversely a stern parenting was associated with low QOL (Maeshiro, Sakai, 2018).   When kindergarten/daycare center children entered elementary school, a significant decline in QOL was observed (Maeshiro, Sakai, 2018) indicating the importance of their life in kindergartens/daycare centers.

Measures to promote children's QOL in kindergartens/daycare centers have been seriously sought in Japanese kindergartens.

Self-Esteem as a Core Factor of Quality of Life

A positive sense of self has been regarded as an important component of psychological well-being.   The development of self-esteem is known to be associated with resilience, a dynamic, context and time-specific ability to adapt to adverse experience and maintain a steady mental status.

Children are known to develop their self-esteem through their experiences and interpersonal interactions.   Previous studies have shown that self-esteem of children is nourished both by praises and endorsements by others and their competence in domains of importance. It was demonstrated that positive parenting is effective in enhancing children's development in various domains. As children are growing up, competence in domains of importance plays more roles in developing self-esteem. In young children, abilities to run faster, to draw good pictures, and to dance better are among such domains of importance. It was shown that the presence of audience is an important factor in promoting the sense of pride and embarrassment (Seidner LB, *et al*. 1988).   It was also demonstrated that self-esteem is positively associated with academic achievement in a reciprocal manner (Trautwein, U. *et al*. 2006). Teachers in ECEC are well accustomed with the ways to promote children's sense of self-esteem.

Children with low esteem are often withdrawn, and have negative emotionality when confronted with various negative life events, and thus show low resilience. Maeshiro studied the relation between self-competence, an almost identical concept as self-esteem, among kindergarten/daycare center and elementary school children, and found that childhood behavior problems are significantly more common among children with low self-competence (Maeshiro, K., 2011). Hence promotion of self-esteem is among the most imminent issues, and researchers are advocating the importance of promoting self-esteem in kindergarten/daycare center children.

Promoting self-esteem during early childhood is of special importance, since it has been shown that both self-esteem and quality of life tend to decline as children grow older (Fujisaki, M, 2006, Wand, X., 2000, Fujisaki, M., 1995).

International Comparison of QOL and Self-Esteem

Previous studies have indicated the ethnic and international differences of QOL and Self-Esteem in children. Since the sense of value, culture, history and religions are different among ethnic groups and countries, these findings are not surprising.

As mentioned earlier, children's self-esteem is declining as children grow older (Wand, X., *et al*., 2000).   Self-esteem of young children is relatively easily elevated with the praises and encouragement by the presence of appropriate audience. Kindergarten/daycare center teachers have long been employing praises as a robust measure to enhance children's self esteem. It has been clearly shown that positive parenting attitudes are among the robust predictors of later child development by a large cohort study in the U.S. (NICHD).

However, as children grow older, children's self-perception has more effect on their self-esteem than praises and approvals by others. Even with warm encouragement and approvals by teachers, parents, and peers, it is difficult to overturn such evident achievement of themselves as test scores, athletic records, and their physical appearance, etc. With these respects, preschool period is an ideal time to promote children's self-esteem. While approvals and praises play some role to sustain children's declining self-esteem in later periods, their effects are expected to be limited.

International comparison of QOL has shown that there are differences among countries.   Berntsson *et al*. showed that in 5 Nordic countries, there were some differences in the subcategories of children's QOL, while age related decline was a common tendency (Berntsson, LT, 2001). In a similar study comparing the QOL of children between China and Japan revealed that children's QOL was higher in China than Japan. As indicated earlier, its implication is not clear considering the multifactorial determinants of QOL among different countries (Wand, X., *et al*., 2000).

Since self-esteem is a simpler than QOL as a concept, there have been numerous studies of international comparison of self-esteem. Using the well- known Rosenberg's rating scale of self-esteem for adults, Schmitt and Allik compared the self-esteem among 53 countries (Schmitt and Allik, 2005). The results of Schmitt and Allik were

received with a shock in Japan.   Among 53 countries, self-esteem measured by the Rosenberg scale was the lowest in Japan. It is interesting to note that out of the 5 countries whose self-esteems were the lowest, 4 of them were from Asia, namely Japan, Hong Kong, Bangladesh and Taiwan. The only exception was Czech Republic in Europe. Interestingly, these countries shared little in common. Their cultural, historical, religious and economic backgrounds are quite diverse, and it is difficult to attribute their low self-esteem to some specific factors.

Even more shocking pieces of information have been provided by reports from Furusho (Furusho, J., 2009).   In his popular book "*Why is the self-esteem of Japanese children so low*?", it was indicated that self-esteem of Japanese children was very low compared to that of children in the Netherlands and Germany. So not only adults but also children in Japan have been suffering from low esteem.   Considering the globally acknowledged negative effects of low self-esteem in childhood, teachers and researchers in Japan have been frantic to resolve this condition.

Factors Associated with Low Esteem and QOL

In order to improve children's low self-esteem by implementing effective measures, we must at first study factors that are attributable in lowering self-esteem and QOL.   Without knowing the factors contributing to lower self-esteem, we are not able to decipher the contexts in which children's self-esteem is reduced.   Previous studies have suggested several such factors.

In school age children, academic achievement has a negative impact on children's overall self-esteem (Trautwein, U., *et al*., 2006). Sonoda studied the relationship between mother's self-esteem, and children's self-esteem, and also between parenting styles and children's self-esteem (Sonoda, 2007).   It was found that mother's self-esteem was positively correlated with that of children. Over-protective parenting style had a negative association with children's self competence in exercise capability. On the other hand, supportive parenting style to facilitate children's independence had a positive effect on children's self competence in learning.

Among children with attention deficit hyperactivity disorder (ADHD), it has long been known that their self-esteem is low.   Although children with ADHD are different from typically developing children, its association with low self-esteem and QOL is of interest. It was believed that their low self-esteem is not innate, and is derived from

stern criticism and punishments to their disruptive behaviors such as hyperactivity and impulsivity at kindergartens/daycare centers or schools.   It was shown that children with ADHD were three-times more frequently bullied by their peers at school compared to the typically developing children (Twyman, KA., 2010). Since the prevalence of ADHD is known to be as high as 7 to 8 percent (Larson, K. *et al*., 2011), much attention has been paid to its relation with low QOL and self-esteem. Danckaerts studied the impact of ADHD on children's QOL by an extensive meta-analyses, and concluded that there is a robust negative relationship between ADHD and QOL (Danckaerts, M., 2010). The symptoms of ADHD are not discrete and many typically developing children often have less severe symptoms that do not cause any impairment.   If so, it is of interest to see the relation between hyperactive and inattentive behaviors and QOL and self-esteem of non-ADHD children.

(2) QOL and Self-Esteem of Children in Asian Countries and Factors Affecting Them

Although there have been many previous studies on QOL and self-esteem in children, there is a paucity in comparative studies among Asian countries. In addition, even with the presence of abundant studies on the association between QOL or self-esteem and ADHD, the relationship between hyperactive and inattentive behaviors of typically developing children and QOL or self-esteem has not been investigated.

I conducted a comparative survey on QOL and self-esteem among children in 3 Asian countries (Vietnam, Thailand, and Japan) with respect to the interrelation between QOL, self-esteem, and hyperactive and inattentive symptoms (Sakakihara, Y *et al*. 2018).

Subjects

We recruited 5-year-old children from Vietnam, Thailand, and Japan in the first wave survey. Because of the time and budget constraints, subjects were not randomly selected. These children were again invited to the second wave study when they were 7 years old. Not all the subject children in the first wave participated in the second survey, and numbers of children in the first and second wave surveys were as seen in Table 1.

Table 1:   Numbers of Subjects

Country	First Wave (age 5)	Second Wave (age 7)
Vietnam	177	30
Thailand	130	106
Japan	237	133

Although the subjects were not representing children in each country, we tried to recruit children from several geographically distinct regions in each country. In Japan, for example, we recruited children from Akita, Tokyo, Saitama and Kanagawa prefectures. Tokyo and Kanagawa represent the urban children, while Akita and Saitama represent the rural or suburban children.

Informed consents were obtained from the children's parents or main caregivers. We obtained permission from the ethical committee of Ochanomizu University.

Methods

We mailed questionnaires to the parents or caregivers, and asked them to answer questions described below. In addition to the demographic data such as children's age (in months), sex, birth order, body weight and length, confounding factors such as household income, parents' education, children's TV watching time, were asked in the face sheet.

QOL was measured by the Japanese version of KINDL scale originally developed by Raven-Sieberer, which was translated and standardized in Japan (Raven-Sieberer, U., 1998). Children's behavioral characteristics were evaluated by the Strengths and Difficulties Questionnaire (SDQs) (Goodman, R.., 2001). The scale for the evaluation of hyperactivity, impulsivity and inattention was developed by DuPaul (DuPaul, GJ, 1998). DuPaul's scale was originally developed to support the diagnosis of ADHD in children. Since its score is dimensional and non-categorical, it can be used to indicate the degree of these behavioral tendencies.

Parental QOL was measured by WHOQOL-BREF scale developed by WHO (World Health Organization, 1996), while parental self-esteem was measured by Rosenberg's scale (Rosenberg, M., 1979).

The second wave survey was conducted about 2 years later.   Since all subject children were second graders in elementary school, additional information regarding

their academic achievement was asked in the questionnaire that contained almost the same questions asked in the first wave survey.

Results

The results presented here were representative results obtained from Japanese subjects, but the results from Thailand and Vietnam were almost identical.

Factors predicting children's QOL were examined by a regression analysis. First I screened the association between children's QOL measured by KINDL scale and various factors assessed by several relevant scales. Then I put all the factors that were significantly associated with QOL as the independent variables in the multiple regression analysis. The significantly correlated independent variables in 5-year-old were inattention, hyperactivity (DuPaul), sleep time, household income, and parental QOL. Among these variables, only inattention and parental QOL remained significant as the effective coefficient of determination (Fig 1). In 7-year-old children, the number of significantly correlated independent variables greatly increased. Thus inattention, hyperactivity (DuPaul), parental QOL, conduct and emotional difficulties, pro-social behaviors, sleep time, BMI, school achievement, and household income were significantly correlated with children's QOL.　The regression analysis revealed that inattention, parental QOL, conduct and emotional difficulties and pro-social behaviors remained as the significant coefficient of determination (Fig 2) of children's QOL.
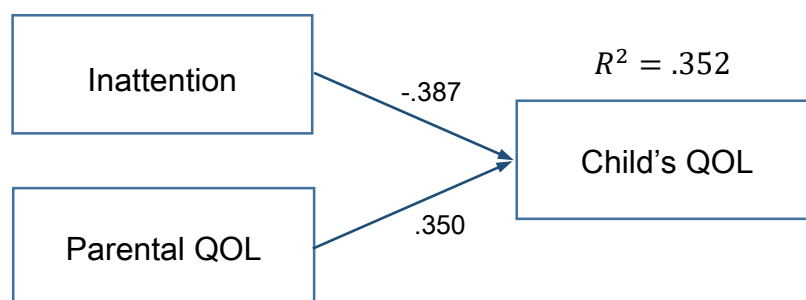

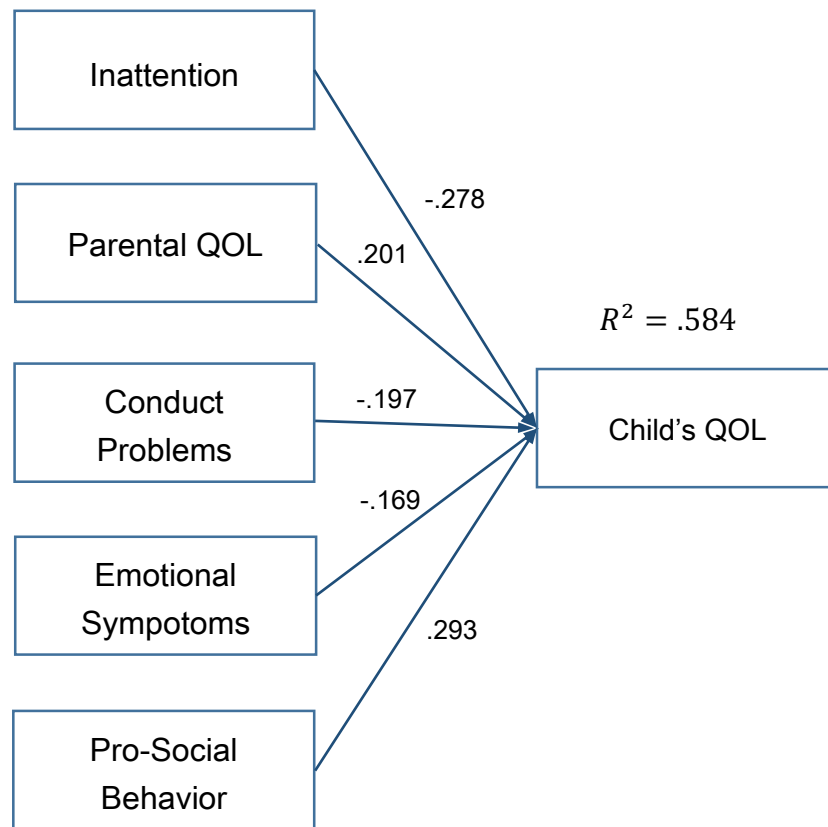Fig 1 Regression Analysis: Predicting Factors for Child's QOL at 5-Year-Old

Fig 2 Regression Analysis: Predicting Factors for Child's QOL at 7-Year-Old

Then factors predicting children's self-esteem were analyzed. As the indicator of children's self-esteem, sub-category "QOL of self" in the KINDL scale was used. The variables that were significantly correlated with "QOL of self" were put into the linear regression analysis. At 5-year-old, inattention and hyperactivity/impulsivity, social, physical, emotional and environmental QOL of parents (WHOQOL), and parental education were among these significant variables. As seen in Fig 3, only inattention was shown to be significant in predicting children's self-esteem.
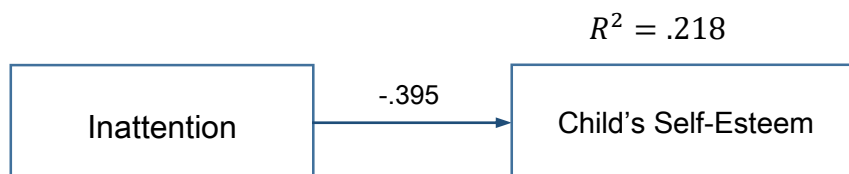

Fig 3 Regression Analysis: Predicting Factors for Child's Self-Esteem at 5-Year-Old

At 7-years-old, significantly correlated variables were inattention and hyperactivity/impulsivity, parental, social, physical, emotional and environmental QOL (WHOQOL), sleep time and academic achievement at school. The linear regression analysis revealed that pro-social behaviors and sleep time remained significant in predicting children's self-esteem (Fig 4).
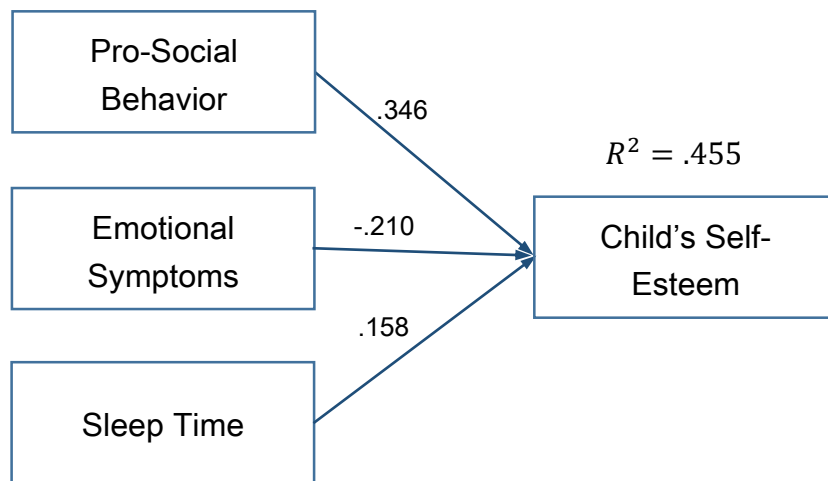

Fig 4 Regression Analysis: Predicting Factors for Child's Self-Esteem at 7-Year-Old

Finally inter-country comparisons were made on children's QOL (KINDL), inattentive and hyperactive behaviors (DuPaul), and parental self-esteem (Rosenberg). As shown in Fig 5a, 5b, 5c, significant differences were present between Vietnam, Thailand, and Japan.
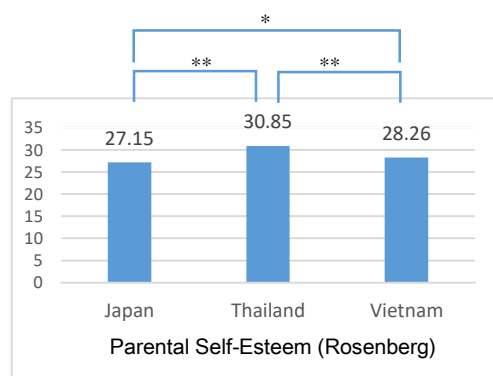

Fig 5a: There were small but significant differences of maternal self-esteem between countries. $* p < .05, ** p < .01$.
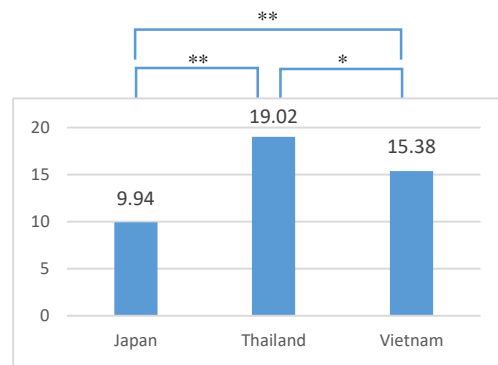
Fig 5b: Significant differences were noted in children's inattention/hyperactivity scores among 3 countries. $* p < .05, ** p < .01$
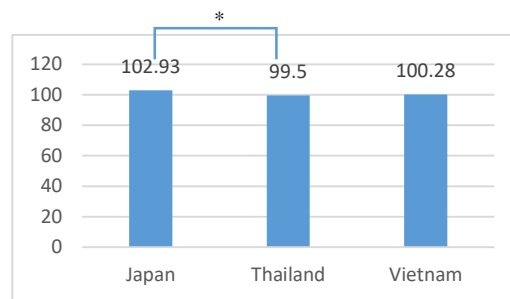

Fig 5c: Small difference of children's QOL was noted between Japan and Thailand. $* p < .05, ** p < .01$

Discussion

QOL and self-esteem of children were investigated in 3 Asian countries. Factors associated with, or predicting children's QOL and self-esteem were sought. Inter-country differences of children's QOL, inattention and hyperactivity as well as parental QOL were also investigated.

Children's QOL was shaped differently as children grow older. In 5-year-old children, their inattentive behaviors and parental QOL were significantly associated with their QOL. Inattentive children were more apt to be scolded, punished by parents and teachers, and bullied by their peers.

So this association was quite plausible. However, hyperactivity that was negatively correlated with children's QOL did not remain as a significant coefficient of determination in regression analysis. Since hyperactivity is more related to the disruptive behaviors at kindergartens/daycare centers and schools, there might be some

difference in children's perceptivity between inattention dominant children and hyperactivity dominant peers. Significant association between children's QOL and parental QOL was a robust finding through different ages. Parents with high QOL may interact with their child in a different fashion from parents with low QOL, for example with more permissive discipline. It was reported by Kato & Nakajima that mothers with high self-esteem cared more about their parenting, and were more receptive to children's opinions.   Maeshiro & Sakai reported that there was a significant correlation between warm parenting style and children's high self-esteem. It is of interest whether this association is applicable to the disciplines at kindergartens/daycare centers. Promoting the QOL of teachers might be a key factor to improve the quality of care in kindergartens/daycare centers. Considering the fact that many kindergarten and nursery teachers are suffering from low salary and inadequate working conditions, advocating the impact of better QOL of teachers on children's QOL would never be over emphasized

When the subject children grow older, in addition to the parental QOL and inattention, the pro-social behaviors (SDQ) emerged as a significant coefficient of determination. It is plausible that children with more pro-social behaviors would be praised more frequently. It is well studied that praises by others is among the major contributing factors to enhance children's self-esteem.

Similar association was found in the regression analyses where children's self-esteem was selected as the dependent variable.   In 5-year-old children, only inattention remained as the significant variable predicting children's self-esteem.   In 7-year-old children, again pro-social behaviors are among the significant variable predicting children's self-esteem.   Emotional problems affect negatively on children's self-esteem. Interestingly sleep time predicts children's self-esteem.   The importance of sufficient duration of sleep and steady sleep-wake rhythm was confirmed not only for the healthy body function, but also for the better self-esteem of children

Inter-country comparisons of children's QOL, self-esteem, and inattention/ hyperactivity demonstrated significant differences among them. Except for inattention/ hyperactivity that showed significantly large differences among countries, differences in parental self-esteem and children's QOL were small even though they were significant. It is difficult to clearly identify the attributing factors influencing children's QOL, parental self-esteem, further studies on this account is definitely needed.

(3) Conclusion

QOL and self-esteem are both important indicators of children's well-being. High QOL and self-esteem have a protective function when children experience negative life events and adversities.   Promoting these protective abilities is essential to ensure sustainable development of children. By understanding the factors promoting QOL and self-esteem, teachers in ECEC will be able to make children competent citizens of the future.

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