Japanese Adolescents’ Self-Concept and Well-being in comparison with other countries

Saori Nishikawa

Department of Clinical Sciences
Divisions of Psychiatry and Child and Adolescent Psychiatry
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In memory of my grandfather Akira Noma
LIST OF PUBLICATIONS

This dissertation is based on the following papers.


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<td>Self Description Questionnaire-II</td>
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<td>SDQII-S</td>
<td>Self Description Questionnaire II- for Short</td>
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<tr>
<td>YSR</td>
<td>Youth Self-Report</td>
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<td>AQC</td>
<td>Attachment Questionnaire for Children</td>
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<td>EMBU-C</td>
<td>Egna Minnen Beträffande Uppfostran- for Children</td>
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<td>PLS</td>
<td>Partial Least Square regression</td>
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<td>SEM</td>
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Abstract


**Background:** In a rapidly changing and increasingly interconnected world, the issue of mental health and well-being among adolescents is one of the important research topics. However, there have been few studies amongst Japanese adolescents that have been published in international journals. **Objectives:** (I) to make a comparison in self-concept between healthy adolescents in Japan and Sweden, (II) to address the influence of perceived parental rearing on self-concept and mental health problems among Japanese adolescents, (III) to investigate contributions of attachment and self-concept to mental health problems reported by Japanese adolescents, (IV) to address a comparison of mental health problems and self reported competence in adolescents from Greece, Japan, Russia, and Sweden.

**Methods:** The following self-report instruments were used: Self-Description Questionnaire II (Marsh, 1992), Actual-Ideal Questionnaire (Nishikawa, 2003), Self-Description Questionnaire II-Short (Marsh, Ellis, Parada, Richards, & Heubeck, 2005), Youth Self-Report (Achenbach, 1991), Attachment Questionnaire- for Children (Sharpe et al., 1998), and Egna Minnen Beträffande Uppfostran (my memories of child upbringing) for Children (Muris, Meesters, & van Brakel, 2003). The participants for Paper I were adolescents aged 14 and 15 from Japan (n=144) and Sweden (n=96). One hundred ninety three Japanese students between the ages of 15-19 participated in Paper II and 228 students for Paper III. The participants for Paper IV were 812 healthy adolescents between 15 and 17 years of age from Greece (n=152), Japan (n=219), Russia (n=159), and Sweden (n=282).

**Results:** Paper I showed that Japanese students reported less positive self-concept compared to the Swedish counterparts. The results were discussed in terms of different response style and modesty in Japanese culture. Paper II showed that dysfunctional parental rearing and insecure peer attachment were associated with negative self-concept and more mental health problems. A unique influence on mental health
problems from parent-adolescent relationships depending on the
gender of parents and adolescents was also found. Paper III showed a
mediating role of self-concept in influencing the relationships between
attachment style and Internalizing Problems. Paper IV indicated rather
small differences across countries in the syndrome scales. Japanese
and Swedish adolescents tended to score lower than Russian and Greek
counterparts. Some cultural specific syndromes were found.

**Conclusion:** These results reported in this thesis present a general
view of Japanese adolescents’ self-concept and the influence of
interpersonal relationships in mental health problems assessed by
Western self-report instruments. When being compared with other
countries, cultural background and response style must be taken into
account.

**Key words:** Adolescence, Self-concept, Mental Health, Attachment
Style, Perceived Parental Rearing, Cross-cultural
INTRODUCTION

It can be said that my thesis project started when I visited Sweden in 1998. My impression of the people in Sweden was kind and helpful. Since I liked it here, I came back as a university student. It did not take a long time realize the things that I did not know when I was just a tourist—differences in culture and communication. That was a challenging period for me in discovering and developing myself in a different cultural context. As I continued my studies in psychology, I learned about the constructs as “independent and interdependent self” by Markus and Kitayama (1991) and the concept of “amae” by Doi (1973) which are described later in this thesis. I was impressed since these could explain the cultural differences I experienced. These differences contributed to my interest in self-concept in different cultures. In Japan, with a concept of amae, we can expect others to come by and offer help. However, it did not work when I had all Swedish classmates. I argued in my mind that Swedes were collectivistic and I was individualistic. Once I thought the difficulty in communication was because of the language. When I learned Swedish, however, I realized that it was not about the language. In order to communicate with people, I needed to push myself in front of them instead of expecting them to come to me. In recent years I learned of many interesting cultural differences through daily conversations with my supervisor, colleagues, and friends. I have felt strongly that I am “Japanese”, and this is deeply rooted in me even after a long time living abroad.

Adolescents in Japan

In a rapidly changing and increasingly interconnected world, acculturation and ethnic relations, individual behavior, experiences, and relatedness are important research topics. Japanese culture is a unique blend of tradition and modernism. Traditional norms, rules, and values are still powerful in regard to behaviors within families, businesses, and social life (Arnett, 2006). Many social changes, such as decreasing family size, increase of divorce and single-parent households, in the past two decades influenced Japanese adolescents’
family lives. In Japanese, the term “adolescence” is translated as *seinênki* (青年期), and it refers to adolescents aged between 14 and 25 years old. Currently there are approximately 6,947,531 adolescents between 12 and 18 years of age attending junior high schools and senior high schools in Japan (Ministry of Education, Culture, Sports, Science and Technology, 2009). In 2009, 98.2% of students started high school, and 53.9% (52.3% male and 55.5% female) of students went on to higher education (e.g., universities, colleges) directly after high school (Ministry of Education, Culture, Sports, Science and Technology, 2009). Japanese adolescents wear uniforms and follow school regulations, use mobile phones and communicate with friends online. They seem to be satisfied with their relationships with friends, family, and teachers, but dissatisfied with the present Japanese society, their own personality, and their school grade (Kurosawa & Makino, 2005). Their free-time is largely organized around the demands of schoolwork, *juku* (private classes after school known as “cram school”), and *bukatsu* (school-supported extra curricular activities and clubs). When they are asked what they would like to do in their free time, many of them answered “to take a nap, rest, or relax” (Nishino & Larson, 2003).

Figure 1. A class in second grade of Junior High School in Japan.
Recent years have seen increasing mental health problems such as delinquency, bullying, school refusal, and depression among Japanese adolescents (Ministry of Education, Culture, Sports, Science and Technology, 2009), as reflected in children’s and adolescents’ complete and busy lives. Japanese society has increasingly become aware of the importance of mental health care. However, it was only a few years ago that school psychologists were placed in schools in Japan. Triandis (1994) called Japan a “tight culture”, meaning that Japanese people have traditional behaviors or prescriptions they should use when confronted with emotional difficulties. Therefore, going to the psychologist is not as common as it is in the West, as the Japanese follow their traditional cultural prescriptions. However, we are now aware of the assistance psychologists can offer that traditional prescriptions cannot cure.

CONCEPTS, THEORIES, AND RESEARCH

Adolescent development

"Sublime power at the heart of the movement. Not everyone agreed with your smile. How strange that you should continue anyhow, strong hearted confidence and such repose. You talk like the tingling of ivory, a violin seems to alter the sound of the surrounding air, your voice rises on the crest" (The Unfolding, Sean Michael Wilson, 2008).

Adolescence is a period of challenges and opportunities for understanding oneself within the social context. A well-known note from more than 100 years ago describing adolescence as “storm and stress” (Hall, 1904), is still addressed by psychologists. Adolescence is typically divided into three periods: early (ages 13-14), middle (ages 15-18) and late (age 19, adoption of adult roles). During these periods, changes occur across multiple developmental systems—physiological,
cognitive, and psychosocial. Erikson (1968) called adolescence a “stage of identity”, the time when young people set the patterns for their future lives. Erikson believed that adolescents seek to find a definition of self (i.e., identity), and question their goals, attitudes, beliefs, and place in society. If the adolescents can resolve these questions of sense of self, they will develop an identity. However, if they fail to achieve this, they will develop a sense of identity confusion (Erikson, 1968).

Adolescence is a period of engaging in conflict with their parents (Branje, van Doorn, van der Valk, & Meeus, 2009). Yet parental support is important for their development of individuation and autonomy (Markiewics, Lawford, Doyle, & Haggart, 2006). Puberty starts in late childhood and early adolescence (e.g., Negriff, Fung, & Trickett, 2008; Stroud & Davila, 2008). The timing of pubertal changes seems to be important in socialization. For example, an early study found that early maturing girls report more psychosocial and behavior problems, while early maturing boys have good psychosocial adjustment (e.g., Graber, Seeley, Brooks-Gunn, & Lewinsohn, 2004; Stattin & Magnusson, 1990). However, more recent studies are less clear about these gender differences, as it was found that both early maturing girls and boys are at risk (e.g., Negriff, Fung, & Trickett, 2008; Stround & Davila, 2008). In this period of “storm” and “stress”, adolescence can be a time of risk for the onset of a wide range of emotional and behavioral problems, such as depression, delinquency and substance use (e.g., Pencer & Addington, 2008). Arnett (1999) proposed the concept of individual difference and cultural variation in the view of storm and stress. He noted that adolescents in more traditional cultures than in the West tend to experience less storm and stress. However, in our increasingly interconnected world, cultural differences may change. Adolescence can be not only a time of storm and stress but also a time of exuberant growth (Arnett, 1999), as Hall (1904) also noted adolescence as “the birthday of imagination” (Vol.1, p.313), and “the best decade of life” (Vol.1, p. xviii).

Above all, the development period of adolescence reflects an active interplay between him/her and his/her context such as the individual, family, friends, community, and culture.
Self-concept in adolescence

"Tell me about me, you don't even know you. Everything is within that closed left hand, slowly unfolding...He talks like just himself, but looks a little different; she says she loves herself, but don't let that stop you" (The Unfolding, Sean Michael Wilson, 2008).

The self broadly refers to the cognitive and affective representation of one’s identity. Current views of the self in psychology see the self as playing an integral part in human motivation, cognition, and affect. The self is emotionally invested in the cultural world through language and emotions. The word for self in Japanese, 自分 (jibun) implies that self is not apart from the social realm. Jibun literally means “self part”—a part of the larger whole that consists of groups and relationships. The Japanese divide the self into inner and outer world, such as outside and inside (uch to soto), or front and back (omote to ura).

William James (1890/2007), as a pioneer of the study of self and self-concept research, distinguished between the self as “I” (the subjective knower) and “Me” (object that is known). Mead (1934) viewed “Me” as the socialized aspect of the person, from interaction with others and with the environment, which includes both knowledge about that environment and about who he or she is: his or her “sense of self”, whereas “I” is the active aspect of the person, creatively, within the context of the “me”. Sullivan (1953) developed the concept of self-system as the individual’s collection of self-perceptions. In the process of the self system, it allows one to maintain congruence between one’s interpersonal world and one’s self-perceptions.

The early formulation of the self was dominated by a unidimensional construct regarded as a single score of the self-concept. One of the widely used instruments for one-dimensional assessment, the Rosenberg Self-Esteem Scale (Rosenberg, 1965), is concerned with how the individuals feel about themselves in general, but places little emphasis on social or specific situations.

The self-concept refers to the global understanding of being him or herself, and the answer to the question “Who am I?” The self-concept is distinguished from self-awareness, which is an awareness of one’s self. Shavelson, Hubner, and Stanton (1976) developed a multidimensional, hierarchical model of self-concept based on
relatively distinct components of self-concept (e.g., emotional, social, academic, physical, etc.). They defined self-concept as “a person’s perceptions of him/herself, formed through experience with the environment, interactions with significant others and attributions of his/her own behavior, p.411”. Shavelson et al. (1976) argued that self-esteem is the global, hierarchical component of a multidimensional hierarchy of specific components of self, and both self-esteem and specific components of self-concept (e.g., academic, social, and physical). Self-concept is both descriptive and evaluative (Shavelson et al., 1976). For example, “I am good at mathematics,” “I can run a long way without stopping,” and “I am good looking”. All have both evaluative and descriptive components and reflect specific components of self-concept. Based on the multifaceted and hierarchical self-concept model (Shavelson et al., 1976), Marsh (1992) developed the Self-Description Questionnaire for children (SDQI), adolescents (SDQII), and adults (SDQIII). These instruments include factors representing the specific physical (e.g., physical competence and attractiveness), social (e.g., relationships with friends, peers and parents), academic (e.g., math and verbal self-concept), and emotional domains and self-esteem. Currently, the SDQ instruments are translated and widely used in many countries, and the multidimensional construct is widely accepted in different psychology disciplines (e.g., social and educational psychology).

![Figure 2. A multidimensional and hierarchical model of the self-concept proposed by Shavelson, Hubner, and Stanton (1976).](image-url)
Our self-concept changes with time throughout our lifespan. Self-concept becomes more organized and hierarchical through adolescence, and the level of the self-concept decreased during preadolescence and increased during late adolescence and adulthood (Marsh, 1989). Adolescents are more capable of regulating their behavior to the demands of specific interpersonal contexts (Moretti, Marlene, & Wiebe, 1999). Along with this benefit, it increases the risk of highlighting congruence between one’s view of self and various self-standards. Discrepancy between Actual-self (actual view of self) and Ideal-self (one would like to be) were associated with emotional problems (Higgins, 1989).

There are some stereo typical gender differences found in specific self-concepts. For example, in SDQII boys had higher scores on Physical, Appearance and Self-esteem than girls while girls had higher scores on Verbal and Honesty self-concepts than boys. But gender differences were small for Parental Relations and School self-concepts. The age and gender interactions were typically small (Marsh, 1989).

Self-concept is important in its own right and also its close relationships with other psychological competence such as emotional and behavioral problems. Marsh, Parada, and Ayotte (2004) demonstrated the salience of a multidimensional self-concept for psychological well-being, and proposed taking the multidimensional self-concept rather than unidimensional self-esteem in mental health research. In a comparison between girls with anorexia and non-clinical girls, the non-clinical group scored significantly higher on Appearance, Emotional Self-concept, and Self-esteem, while the clinical group scored higher on two of three Academic self-concepts (i.e., Math and General School) (Ha, Marsh, & Halse, 2003).

So far, there have been few cross-cultural studies in multidimensional self-concept (e.g., Hägger, Lindwall, & Asci, 2004; Marsh & Hau, 2004; Wästlund, Archer, & Norlander, 2001). However, various studies have demonstrated that the average levels of self-esteem vary across cultures (e.g., Chan, 2000; Dekovic, Engels, Shirai, de Kort, & Anker, 2002; Farruggia, Chen, Greenberger, Dmittieva, & Macek, 2004), and that Japanese and other Asians generally reported lower levels of self-concept/self-esteem than their Western counterparts (i.e., American, British, and Australian). Despite the cross-cultural difference in the mean level of self-esteem, a recent study showed that the function of self-esteem in China and the USA are similar, indicating that self-esteem is of general psychological
importance (Brown, Cai, Oakes, & Deng, 2009). Heine and Lehman (1999) showed that Japanese college students reported higher congruence between the Actual and Ideal-self compared to the Canadian students, and self-discrepancy was less distressing for the Japanese than for the Canadians, as the Japanese seemed to regard themselves in a daily self-critical view and seeing oneself further away from one’s ideal is a motivation for self-enhancement. Cultural influence on self-esteem or self-concept is theoretically or empirically complex. In recent years there have been debates about the empirical evidence of the biases in judging the self as generally less pronounced in Asians than in the West (e.g., Brown, 2005), and the dimensions of independent-interdependent self or individualistic-collectivistic culture are not as pronounced as earlier (e.g., Matsumoto, 2002).

Attachment style in adolescence

Attachment theory was originated as an explanation for infant social and emotional development and adjustment (Bowlby, 1963, 1972, 1980). Bowlby (1963, 1972, 1980) conceptualized attachment as a life-span construct in which children maintain attachment bonds to their parents through childhood and adulthood. Infants’ attachment experiences are consolidated into internal “working models” of self, self in relation to others, and the world in general. Early researchers (1970-1985) investigated the validity of the three basic attachment patterns. Ainsworth, Blehar, Waters, and Wall (1978) developed a procedure to observe attachment relationships between infants and mothers called Strange Situation, in which children are classified in one of three categories: secure, anxious-avoidant, and anxious-ambivalent.

The next phase (1985 to present) focused on attachment adjustment in high-risk populations and development of methods for adult attachment. Hazan and Shaver (1987) extended the attachment theory to adult romantic relationships. Their assumption was that romantic relationships involve a combination of three innate behavioral systems described by Bowlby (1969) “attachment, care giving, and sex”, and identified four styles of attachment in adults: secure, anxious-preoccupied, dismissive-avoidant, and fearful-avoidant. Bartholomew and Horowitz (1991) differentiated two forms of avoidant attachment:
dismissing and fearful. Attachment research on adolescence seems to be relatively new. During the last decade, self-reports of the attachment style of late adolescents, family and peers were introduced.

A recent cross-cultural study of preschool children’s attachment experiences showed differences in the magnitude of gender differences. Girls from Hispanic countries (i.e., Spain and Chile) and European countries (i.e., Italy, Switzerland, and Belgium) scored higher in attachment security than boys from the same countries, but the difference was less common among European adolescents (Pierrehumbert et al., 2009).

Between ages 8 and 14, the attachment secure base transfers from parents to peers, when most children turn to friends for comfort and emotional support (Hazan & Zeifman, 1994). Yet secure base functions are still primarily with parents, especially mothers (e.g., Hazan & Zeifman, 1994; Markiewics et al., 2006). Many adolescents pose such questions as “How do I function with the others?” “How should I act for the others?” or “What is friendship?” Relationships with both peers and parents serve different complementary roles. Parental attachment and peer attachment appear unique to some adolescents. Some adolescents with insecure attachment from parents may seek friends to fulfill their needs (Nickerson & Nagle, 2005).

Some studies have shown associations between peer attachment and emotional/behavior problems. For example, secure attachment was negatively associated with depression and anxiety, while insecure attachment was positively associated with these problems (Irons & Gilbert, 2005); adolescents who were classified as securely attached reported fewer emotional behavioral problems compared to those who were classified as insecure attached (Muris, Meesters, & Van den Berg, 2003; Roelofs et al., 2006). Peer attachment and parental rearing behavior accounted for a unique proportion of the variance in the case of Internalizing Problems (Muris et al., 2003b), and in both Internalizing and Externalizing Problems (Roelofs et al., 2006). It was found that adolescents’ views of self were mediators between attachment and depression (Kenny, Moilanen, Lomax, & Brabeck, 1993). Tanaka et al., (2008) demonstrated that intrafamilial and extrafamilial variables from the early days, and those that are current, were potent determinates of attachment among University students in Japan.

Theoretical processes on the basis of longitudinal data obtained from meta-analysis indicated that attachment security is moderately stable
across the first 19 years of life (Fraley, 2002). However, change in the organization of attachment security was provided (Allen, McElhaney, Kuperminc, & Jodl, 2004). Adolescents with a risk factor showed declines over the course of adolescence, while adolescents with no risk at age 16 trend toward increasing security in the following two years. It was also found that attachment and depressive syndromes seem to influence each other longitudinally (Buist, Decovic, Meeus, & van Aken, 2004).

**Perceived parental rearing**

Interpersonal theory emphasizes that early interactions, primarily with parents, share children’s personalities (Sullivan, 1953). Closely related to attachment patterns, parent-child relationships frequently undergo transitions during adolescence (e.g., Wissink, Dekovic, & Meijer, 2006). One of the major aspects of parent-adolescent relationships is autonomy. Children’s autonomous self-regulation is associated with parental encouragement and support of participation in decision making and problem solving (Ryan & Lynch, 1989). Autonomy is challenging for both children and their parents, as Ryan and Lynch (1989) stated “individuation is not something that happens from parents but rather with them” (p. 341).

Baumrind (1966) developed dimensions of parenting styles: *authoritative* (high demandingness and responsiveness), *authoritarian* (high demandingness and low responsiveness), and *permissive* (low demandingness and high responsiveness). Children with authoritative parents had higher competence and psychosocial maturity compared to those with authoritarian and indifferent parents (Baumrind, 1991). Authoritarian parenting has been found to be more effective in collectivist cultures (e.g., Chao, 1994).

Alternatively, high “care” and low “overprotection” have been widely recognized as an optimal rearing combination (Parker, Tupling, & Brown, 1979). Emotional warmth from parents seemed to be the protective factor from development of a dysfunctional self, and overprotection and rejection from parents were related to dysfunctional perception of self and others (Andersson & Perris, 2001). Empirical studies showed that lower levels of perceived parental emotional warmth and higher levels of rejection and overprotection were linked
to increased mental health problems in adolescents (e.g., Bosco, Renk, Dinger, Epstein, & Phares, 2003; Muris et al., 2003b; Veenstra, Lindenberg, Oldehinkel, De Winter, & Ormel, 2006). Dysfunctional parenting styles were more strongly associated with Externalizing Problems than with Internalizing Problems (Muris et al., 2003b; Pereira, Canavaro, Cardoso, & Mendoça, 2008). It was shown that perceived parental rearing of both mother and father influenced adolescents’ interpersonal problems (Hakelind, Henningsson, & Armelius, 2008). Associations between parental rejection and problem behaviors were reported by both delinquent and healthy adolescents (Ruchkin, Eisemann, Hägglöf, & Cloninger, 1998).

Gender has a unique influence on parents and children (e.g., fathers vs. mothers, boys vs. girls) (Bosco et al., 2003; McKinney, Donnelly, & Renk, 2008; Roelofs, Meesters, ter Huurne, Bamelis, & Muris, 2006; Shek, 2005; Werner & Silbereisen, 2003). For example, boys reported more Externalizing Problems if they had negative perceptions of their mothers, while girls exhibited Internalizing Problems when they perceived both father and mother as negative (Bosco et al., 2003). Similarly, a study showed that memories of a rejecting father were of some importance to girls’ interpersonal problems, while memories of a rejecting mother were of some importance to boys’ interpersonal problems (Hakelind et al., 2008), and the concept of mothers as attachment behavior is important especially for girls regarding the development of Internalizing Problems (Östgård-Ybrandt & Ärmelius, 2004).

Lack of parental warmth is related to negative psychological outcomes (i.e., depression, aggression, school misconduct, and emotional unresponsiveness) and is found universally (Chen, Rubin, & Li, 1997; Greenberger & Chen, 1996). There were both cultural similarities and differences in the patterns of associations among family relationships and problem behaviors in adolescents from the United States, China, Korea and the Czech Republic (Dmitrieva, Chen, Greenberger, & Gill-rivas, 2004).

**Attachment and parenting in Japan**

Parenting varies with cultural norms and socialization. For example, Japanese mothers expect their young infants to be relatively
independent and to be socialized into interdependence with others, and typically spend more time with their infants compared to the Western mothers (Goldbergs, 2001/04). Japanese childrearing practices foster empathy (omoiyari) and receptivity (sunao) (Azuma, 1994). Harmony is symbiotic in Japan and a child could seek dependence (amae) on the mother (Doi, 1973). Amae means “to depend and presume upon another’s love or back in another’s indulgence” (p.8), and is “what an infant feels when seeking his or her mother” (p. 7). This amae-based symbiotic harmony continues in later childhood and adulthood in interpersonal relationships among the Japanese (Doi, 1973). Furthermore, scholars argue that such aspects as sensitivity, competence, and secure base of attachment, which emphasize the child’s autonomy, individuation and exploration, are viewed differently in Japan where interdependence in the form of accommodation is emphasized (Rothbaum, Weisz, Pott, Miyake, & Morelli, 2001). A more recent study showed both similarities and differences in mothers’ perceptions of attachment security and amae in mothers from Japan and the United States. It was shown that both Japanese and American children who were described as having designable characteristics were perceived to be secure and to have responsive mothers. However, Japanese mothers more often than American mothers link security with accommodative behaviors. Further, Japanese mothers more often attribute the child’s inappropriate behavior to the need for security and interdependence, while American mothers more often attributed these behaviors to egoism and self-maximization (Rothbaum, Kakinuma, Nagaoka, & Azuma, 2007).

Other studies of parent-child relationships showed that Japanese children and adolescents reported greater emotional ties to their mothers than fathers (Kurosawa & Makino, 2005). Since fathers are out of the house working all day (Matsumoto, 2002), Japanese children feel more emotionally close to their mothers than to their fathers. Despite the fathers’ absence, Japanese fathers take an important lead in family matters. Adolescents from Japan, Korea and Germany reported more fathers taking the lead in family matters, while more mothers took the lead in Sweden (Director General for Policy Planning and Coordination, 2004). One study identified a four-factor model of Parental Bonding Instrument (PBI) in a Japanese population (care, indifference, overprotection, and autonomy) (Uji, Tanaka, Shono, & Kitamura, 2006). This result was different from a Western study that
showed a two-factor model (Parker et al., 1979). Uji et al., (2006) explained it in terms of Japanese culture where the concept of individual independence and autonomy is not very deeply rooted. They also noted that behaviors perceived as allowance of “autonomy/independence” by Westerners may be perceived as “consideration or benevolent care” by the Japanese. This could be interpreted as an expression of the Japanese person’s psychological organization of “amae” (Doi, 1973).

**Mental health problems in adolescence**

Child and adolescent mental health is defined as “the capacity to achieve and maintain optimal psychological functioning and well-being. It is directly related to the level reached and competence achieved in psychological and social functioning” (WHO, 2005). Mental health can be conceptualized as a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community. There are empirically and diagnostically based approaches to identify the distinguishing features of individuals and patterns of problems. The empirically based (bottom-up) approach applies through reports of multiple informants to derive and assess syndromes, and the diagnostically based (top-down) approach conceptualizes children’s problems as syndromes of disorders (Achenbach & Rescorla, 2007).

Youth Self-Report (YSR) is one of the most widely used mental health assessments for children and adolescents (Achenbach, 1991a). Achenbach (1991a) identified Internalizing Problems (Withdrawn, Somatic Complaints, and Anxious/Depressed) and Externalizing Problems (Delinquent Behavior and Aggressive Behavior) by the second-order factor analysis of the syndrome scales. Since Social Problems, Thought Problems, and Attention Problems scales were related one another, they are not on either grouping.

There have been gender differences reported in various studies. For example, Internalizing Problems are more frequently reported by adolescent girls than boys while Externalizing Problems are more frequently reported by adolescent boys (e.g., Broberg et al., 2001; Lekkou, Åström, & Hägglöf, 2006).
The YSR is translated and widely used in different countries. A cross-cultural study of youth from seven countries (Australia, China, Israel, Jamaica, the Netherlands, Turkey and the United States) using the YSR indicated that youth from China and Jamaica had the highest and adolescents from Israel and Turkey had the lowest mean total score. Gender differences were similar across the cultures, i.e., girls scored higher than boys on Total Problems and Internalizing Problems, while the boys scored higher on Externalizing Problems than the girls. The age effects were less consistent, but generally adolescents in the majority of the cultures scored higher with increased age (Verhulst, Achenbach, van der Ende, Erol, Lambert, Leung, Silva, Zilber, & Zubrick, 2003).

Using YSR, it was shown that self-reported problems across countries were similar with small effects for differences in 23 countries (e.g., Sweden, USA, and Japan). Adolescents from Ethiopia, Hong Kong, Korea and Japan scored low in Positive Qualities (i.e., positive worded items that describe desirable characteristics for adolescents) compared to their counterparts (Rescorla et al., 2007). Ivanova et al.
(2007) showed generalizability of an eight-syndrome structure of YSR in 23 countries. It was shown that patterns of co-occurrence of problems reported by YSR items and scales in different countries were similar, and that Total Problems in 17 countries (e.g., Asia, the Middle East, Europe, and USA) were within one standard deviation of the grand mean.

Numbers of cross-cultural comparisons of mental health problems of youth were based on parent or teacher reports such as Child Behavior Check List (CBCL; Achenbach, 1991b). According to a study of 31 countries measured by CBCL (Rescorla et al., 2007), Greece and Russia had among the highest symptoms among the youths, while Sweden and Japan were among the lowest. However, parent or teacher reports cannot fully substitute for adolescents’ reports of their own problems, as adolescents have different perspectives on their problems. There were discrepancies between the youth and the parent/teacher reports (e.g., Tepper et al., 2008; Vassi, Veltsista, Lagona, Gika, Kavadias, & Bakoula, 2008). Another limitation mentioned by Achenbach et al., (2007) was that low problem scores in some countries might be seen as an expression of the parents’ reluctance to report problems as self-presentation (“self-serving”) more commonly in Asian countries than Euro-American societies (Yabuuchi, 2004).

Marsh et al. (2004) demonstrated the importance of taking into account multidimensional perspectives of both self-concept (SDQII) and mental health (YSR) for understanding the complexity of self in different contexts. They evaluated the construct validity of the SDQII factors in relation to multiple dimensions of differentiated patterns of mental health. For example, Physical, Appearance, Opposite-sex, Same-sex Relations self-concepts had almost no relationship to Externalizing Problems, while Emotional self-concept was substantially related to Anxious/Depressed and Attention Problems. These results provide support for predicting a variety of behaviors as well as outcome measures of diverse interventions.

**Gender**

Gender refers to the socially constructed roles, behavior, activities and attributes that a particular society considers appropriate for men and women (WHO, 2002). Sex is in focus on the biological characteristics,
while gender differences are social constructions that can be changed in ways that biological characteristics cannot (WHO, 2002). Chodorow (1978) argued that the different gender perspective may arise from the different developmental tasks in boys and girls, and differential emphases on self-definition and relatedness in the developments across genders.

Gender role varies with culture. In traditional cultures, gender roles tend to be divided (Arnett, 2006). Gender socialization leads to socializing boys and girls according to the different expectations about attitudes and appropriate gender behavior (Bussey & Bandura, 2004).

**ASPECTS OF CULTURE**

“After all, you open your eyes on a new morning and feel blessed, don’t you? All those words are from here, lingering and waiting. You look at it, the geography of desire, the search for meaning, holy sepulcher from invisible substance made; not found on this planet until you came along. Show to use the products of that unfolding” (The Unfolding, Sean Michael Wilson, 2008).

Culture is a term that has different meanings. One of the most commonly used definitions in cultural psychology is “a dynamic system of rules, explicated implicit, established by groups to ensure their survival, involving attitudes, values, beliefs, norms, and behaviors, shared by a group but harbored differently by each specific unit within the group, communicated across generations, relatively stable but with the potential to change across time” (Matsumoto & Juang, 2004, p10).

In the topic of self in the cultural context, scholars distinguished between individual and collectivistic self (Hofstede, 1983; Triandis, 1989), or independent and interdependent self (Markus & Kitayama, 1991). Western culture places relatively greater value on individuals being competent and self-sufficient while the Eastern culture focuses on fitting harmoniously with others and gaining a sense of belongingness and interdependence with others (e.g., Markus & Kitayama, 1991). More recently, it was found that the definition of the
individualism—collectivism dimension of cross-cultural differences in self-construal is complex (e.g., Kolstad & Horpestad, 2009; Takano & Sogon, 2008). A comparative Chilean and Norwegian study of individualism and collectivism was inconsistent with the previous characteristics of Chile as collectivistic and Norway as individualistic. Individuals in both countries had a unique blend of individualistic and collective elements (Kolstad & Horpestad, 2009).

In research of psychopathology, culture is also viewed as characteristics from shared social conventions, and refers to social conventions shared by people from a particular socio economic status. Not only the differences between cultural groups but also individual differences between members of each cultural group are important. The multicultural research on psychopathology can advance understanding of adaptive and maladaptive functioning and can assist help providers to meet children’s needs (Achenbach & Rescorla, 2007). The nature of the relationships of abnormal behavior and culture must be taken into account. A comparison of borderline and schizophrenic patients from Sweden and Nicaragua showed that cultural variability decreased as psychological disturbance becomes more severe (Sundbom, Jacobsson, Kullgren, & Penayo, 1998).

In this thesis, the term “culture” or “cross-cultural” are used for one group of shared social conventions related to characteristics such as nationality, ethnicity and language following the definition by Matsumoto and Juang (2004).

**Issues in cross-cultural assessment**

One of the problems in cross-cultural comparison is how to define the most appropriate combination of reliability and validity. There are typical sources of bias and strategies in cross-cultural studies such as: (1) construct bias (definitions of a construct do not completely coincide across cultures), (2) method bias (e.g., sample incomparability, different response styles, differential familiarity with response procedures), (3) item bias (poor item translation, and/or ambiguous items, with different meanings or interpretations across cultures) (Van de Vijver & Tanzer, 1997). Just as importantly, there are various ways to attempt to deal with such bias:
(1) Construct bias (using the convergence approach i.e., independent within culture development of instruments and cross-cultural administration of instruments).

(2) Construct bias and/or method bias (e.g., using bilingual subjects in samples, and use of local surveys, i.e., content analysis of free-response surveys).

(3) Method bias (e.g., training of administrators, detailed manual/protocol and instructions for administration, assessment of response style, and use of test/retest).

(4) Item bias (e.g., judgmental method of item bias detection as linguistic and psychological analysis, and psychometric methods of item bias detection such as differential item functioning analysis) (for more details see Van de Vijver & Tanzer, 1997).

To obtain a picture of similarities and differences across cultures, it is necessary to make a comparison in the relatively molecular level of specific items and at more molar level, i.e., syndromes and groups of items (Verhulst & Achenbach, 1995).

AIMS

General aims for this thesis

This thesis deals with the period of adolescence and how the healthy Japanese adolescents’ self-concept is related to the emotional/behavioral problems and interpersonal relationships during this period. Also, part of the thesis deals with how the view of self and mental health problems are described by adolescents from different countries.

Specific aims

I. The study aimed to (1) examine the psychometric properties of the SDQII, (2) examine the extent to which Japanese and
Swedish students differ in their self-concepts and actual-ideal self discrepancies and (3) explore gender differences.

II. The study aimed to (1) examine the associations between the perceived parental rearing, peer attachment style, self-concept, and mental health problems reported by healthy Japanese adolescents, (2) explore the influence of gender, and (3) investigate the predictive power of perceived parenting, attachment style and self-concept for mental health problems.

III. The study aimed to (1) investigate the hypothesized pathways underlying the relationships between peer attachment as determinants of self-concept and mental health problems defined as Internalizing and Externalizing Problems, (2) examine the influence of gender in the pathways in the model.

IV. The study aimed to (1) compare scores and scales of YSR reported by healthy adolescents 15-17 of age from Greece, Japan, Russia, and Sweden, (2) compare scores of competence scales and their associations to mental health problems, and (3) analyze gender and age effects between and within countries of the YSR syndrome scores.

The following main questions were addressed in studies:

- How is self-concept described by students in Japan and Sweden? Are there any gender differences? (Paper I)
- How are the self-concept and peer attachment styles associated with Internalizing and Externalizing Problems among Japanese adolescents? Are there gender differences? (Papers II, III)
- How are perceived parental behaviors of both mothers and fathers associated with adolescents’ well-being? (Paper II)
• Do self-concept and perceived parental rearing and peer attachment predict Internalizing and Externalizing Problems among Japanese adolescents? (Paper II)
• Is it possible to generate a structured model for the relationship among peer attachment, self-concept and mental health problems, and how does this model fit for boys and girls in Japan? (Paper III)
• How are mental health problems and competencies reported by adolescents from different countries? (Paper IV)
• Do self-reported competencies have associations to self-reported mental health problems? Do the associations differ in countries? (Paper IV)
• Are there gender and age differences in mental health problems, and are they similar/different across countries? (Paper IV)

METHODS

Participants

I. In Paper I, the participants were 144 Japanese (60 boys and 71 girls) and 96 Swedish (38 boys and 45 girls) adolescents attending public schools in middle-class neighborhoods in Japan and Sweden. The mean age of the Japanese students was 14.3 years (range: 14 to 15) and 14.5 years (range: 14 to 15) for the Swedish students. There were seven Japanese and 12 Swedish students who did not complete the questionnaire due to school absence or unwillingness to participate. Thirteen Japanese and 13 Swedish adolescents completed the questionnaires but did not mark their gender. These participants were not included in the gender analyses.
II. In Paper II, the study involved 193 adolescents (143 boys and 50 girls) attending public high school in middle-class neighborhoods (total inhabitants 255,765) in Japan. The mean age was 16.4 years (range = 15 to 19; SD = .96). Of the total sample of 268 students, 46 students (17.2%), who lived with only one parent, were excluded as well as 29 students (10.8%) due to absence. The response rate was 72%. Based on information provided by the school, a majority of the students were from middle class families.

III. In Paper III, the adolescents were the same as the group in Paper II, but included the students who don’t live with both fathers and mothers. The group of adolescents consisted of 228 high school students (186 boys and 82 girls) in middle-class neighborhoods in Japan. They were aged between 15 and 18 years with a mean age of 16.4 years. Based on information provided by the school director, a majority of the students were from middle-class families. Nineteen students (7.1%) did not complete the questionnaire due to absence from the school.

IV. Paper IV involved adolescents from different countries. Greece: 152 (61 boys, 91 girls) adolescents of 15-17 years old (mean age =15.99; SD=0.94) from a city in southern Greece. There was no drop out (Lekkou et al., 2006); Japan: 219 (146 boys, 73 girls) adolescents of 15-17 years old (mean age =16.21; SD=0.76 (Nishikawa et al., 2009) from a city in southern Japan. There were six students (2.7%) who did not participate due to absence or did not complete the questionnaire; Sweden: 282 (135 boys, 147 girls) adolescents aged between 15 and 17 (mean age =15.80; SD=0.86) from a small town in northern Sweden. There were two students who did not participate due to absence (Lekkou et al., 2006); Russia: 159 (73 boys, 86 girls) adolescents aged 15 to 16 (mean age= 15.40; SD=0.49) from a city in northern Russia. There was no drop out (Zashikhina & Hägglöf, 2007).
Design

All of the studies were cross-sectional, and each group was assessed on one occasion. Between and within group analyses were performed. This thesis is exclusively based on the adolescents’ self-ratings.

Ethical consideration

There are challenging issues when conducting research in different countries from an ethical point of view regarding the differences in values and world views, definitions, research design, informed consent, entry into the field, approaches to data collection and participant roles (Marshall & Batten, 2003). The studies (Papers I, II, III, and the Japanese sample in Paper IV) were designed and conducted following the World Medical Association Declaration of Helsinki (The World Medical Association, 2008) as ethical principles for the participants. All participants gave informed consent. In Papers I, II, and III, the studies were approved by the director of the school. Confidentiality was secured since data was analyzed in coded form and no individual could be identified in the publication. Students marked only gender and age. In Paper I, a letter for parental authorization was delivered before conducting the study.

In Paper IV, the Swedish study was approved by the Research Ethic Committee at Umeå University, Sweden (§53/99, dnr 99-014), and in Greece by the Pedagogic Institute of Greek Ministry of Education (21.01.98, Pr. No. T2/343). The Russian material was designed and conducted following the ethical principle in their country. The study was first approved by the director of the school, and the students marked only gender and age; participation was voluntary.

Instruments

Assessment of the self-concept

*The SDQII* (Self-Description Questionnaire II; Marsh, 1992) is a 102 item self-report inventory including 11 subscales that measured adolescent self-concept in the following areas: (1) an overall Total
Self-concept (total score of the SDQII), (2) Academic Self (Math, Verbal and School) and (3) Non-academic Self (Physical, Appearance, Same-sex relations, Opposite-sex Relations, Parent Relations, Emotional Stability and Honesty-trustworthiness) and Self-esteem. Each of the 11 SDQII scales is based on simple declarative sentences to which the participants respond on a six-point Likert response scale ranging from 1 = false to 6 = true; where the higher score means a more positive self-concept. The SDQII test manual based on an Australian normative sample showed good psychometric properties of the SDQII, as internal consistency of the Total Self scale was .94 and corrected item-scale correlations ranged from .35 to .80 (Marsh, 1992).

Assessment of the self-concept (short version)

The SDQII-S (Self-Description Questionnaire II for Short; Marsh, Ellis, Parada, Richards, & Heubeck, 2005) is a 51 item self-report inventory that has been modified from the original 102 item SDQII (Marsh, 1992) to measure junior and senior high school age self-concept in the following areas: Non-academic Self (Physical, Appearance, Same-sex Relations, Opposite-sex Relations, Parent Relations, Emotional Stability, and Honesty-trustworthiness), Academic-self (Math, Verbal, and School), and Self-esteem. The Total self-concept score is the sum of the different subscales. The participants respond on a six-point Likert response scale ranging from 1 = false to 6 = true. The psychometric properties of the original SDQII-S were sufficient with good reliability and higher order confirmatory factor models applied in Australia. Internal consistency of the Total Self concept scored .90, and the reliability coefficient for the SDQII-S factor ranged from .56 to .90 (median =.76; Marsh et al., 2005).

Assessment of actual-ideal self-discrepancy

The Actual-Ideal Questionnaire (Nishikawa, 2003) was designed for the present study to measure congruency between “Actual-self” and “Ideal-self”. The following eight comparison pairs of traits were included: (1) intelligent vs. less intelligent, (2) shy vs. not shy, (3)
relaxed vs. stressed, (4) popular vs. unpopular, (5) useful vs. useless, (6) satisfied vs. dissatisfied, (7) hopeful vs. hopeless, (8) independent vs. interdependent. To reduce the positive and negative response bias, the positive and negative traits were placed in parallel, i.e., (1) “intelligent vs. less intelligent (positive vs. negative)”, (2) “stressed vs. relaxed (negative vs. positive)”. Each pair is rated on a six-point semantic differential scale. At first the participants were asked to rate their actual-self traits and then their ideal-self. The scores ranged from 1 for negative traits to 6 for positive traits. The differences between the total score of Actual and Ideal scales were then combined to yield an overall measure of the discrepancy between the Actual and Ideal Self. As the pair “independent vs. interdependent” is difficult to value in terms of somewhat positive or negative traits, this comparison pair was not included in the total measure of self-discrepancy. First, the questionnaire was developed in English, and then translated to Swedish and Japanese by the author whose first language is Japanese. The Swedish translation was modified by a university teacher who has Swedish as the first language. A pilot study and back translation for both Swedish and Japanese version were conducted. This instrument was designed as short to save time and make it easy for students when answering other instruments (e.g., SDQII).

Assessment of emotional/behavioral problems

YSR (Youth Self-Report; Achenbach, 1991a) is a widely used self-report questionnaire designed for use with adolescents between the ages of 11 and 18. The first part contains seven competence items which include the scales Activity, Social Competence, and Total Competence. The second part contains 112 items that measure (a) eight narrowband sub-scales (Withdrawn, Somatic Complaints, Anxious/Depressed, Social Problems, Thought Problems, Attention Problems, Aggressive Behavior, Delinquent Behavior), and (b) two broadband scales: Internalizing Problems (Withdrawn, Somatic Complaints, and Anxious/Depressed) and Externalizing Problems (Aggressive Behavior and Delinquent Behavior). Items that are not included in any of the subscales are collected under the heading of Other Problems. The Total Problems scale measures the overall behavioral and emotional functioning of the adolescents. The youth is asked to rate each item on a three-point scale from 0 (not true) to 2
(very true or often true). A higher score means more emotional/behavioral problems. The reliability and validity of the YSR are documented by Achenbach (1991), with reliability coefficients ranging from .59 to .87.

**Assessment of peer attachment**

AQCC (Attachment Questionnaire for Children; Sharpe et al., 1998) is a simplified age-downward version of Hazan and Shaver’s (1987) single-item measure of attachment style developed by Sharpe et al. (1998). Children and adolescents are provided with three descriptions concerning their feelings about and perception of relationships with their friends and peers as follows: (1) “I find it easy to become close friends with other children. I trust them and I am comfortable depending on them. I do not worry about being abandoned or about another child getting too close friends with me” (secure attachment style), (2) “I am uncomfortable to become close friends with other children. I find it difficult to trust them completely and difficult to depend on them. I get nervous when another child wants to become close friends with me” (avoidant attachment style), and (3) “I often find that other children do not want to get as close as I would like them to be. I am often worried that my best friend doesn’t really like me and wants to end our friendship. I prefer to do everything together with my best friend. However, this desire sometimes scares other children away” (ambivalent attachment style). Various studies (e.g., Muris et al., 2003b; Sharpe et al., 1998) yielded good validity by showing theoretically meaningful relationships with other attachment indexes and psychopathology in youth. In the present studies, the word “children” in AQC was changed to “students” in order to make it more suitable for the adolescents.

**Assessment of perceived parental rearing**

EMBU-C (Egna Minnen Bätraffande Uppfostran: My memories of child upbringing—for Children; Muris, Meesters, & van Brakel, 2003) is a self-report instrument based on the original (Perris, Jacobsson, Lidström, VonKnorring, & Perris, 1980) that has been used for studies of adults and adolescents in different countries (e.g., Arrindell, Perris, Eisemann et al., 1992). The EMBU-C consists of 40 items assessing
adolescents’ current perceptions of parent behavior across four domains: Emotional Warmth, Rejection, Overprotection, and Anxious Rearing, and consists of 40 items (Muris et al., 2003a). In the present study of Japanese adolescents, a negatively worded item of overprotection (item number 24) “My parent(s) allow(s) me to do everything” was excluded due to negative item-scale correlation to the other items in the scale of Overprotection. Consequently, the EMBU-C in the present study contained 39 items that were to be answered on 4-point Likert-scales (1 = No, never, 2 = Yes, but seldom, 3 = Yes, often, 4 = Yes, most of the time). The EMBU-C has been found to be a reliable and valid questionnaire for assessing the main dimensions of parental rearing (Muris et al., 2003a). A higher score of Emotional Warmth means more functional parenting while a higher score in Rejection, Overprotection and Anxious Rearing is interpreted as more dysfunctional parenting. Two dimensions “control” (high loadings of Anxious Rearing and Overprotection and moderate loadings of Rejection), and “care” (high positive loadings of Emotional Warmth and high negative loadings of Rejection), were identified in the EMBU-C (Muris et al., 2003a). First, the participants rated the father’s rearing behavior and then the mother’s rearing behavior.

Statistical Analysis

Descriptive statistics

SPSS (The Statistical Package for Social Sciences) version 15 and 16.0 (2008) was used for computing descriptive statistics, correlations, t-test, analysis of variance (ANOVAs), and effect size, as well as SEM analysis. SIMCA (Soft Independent Modeling Class Analogy) version 8.0 was used for the PLS analysis.

Partial Least Squares regression (PLS)

Partial Least Squares (PLS) is a regression extension of Principal Component Analysis (PCA) (e.g., Henningsson, Sundbom, Armelius, & Erdberg, 2001; Wold et al., 1983). This predictive method represents an important development for clinical psychology and
personality assessment that often involves the data set that contain too many variables in relation to the number of subjects and/or variables that are not independent, implying risks with spurious results (Type I and II errors). PLS is an alternative to OLS regression. The advantage of the PLS regression is that it can cope with multicollinearity that OLS regression does not, and is useful when exceeding the numbers of the cases. It extracts a set of latent factors that explain as much of the covariance as possible between the independent and dependent variables. The statistical significance of each component is determined by cross-variation criteria to avoid overfitting of the model. The Q² value (the goodness of prediction) is a measure of how well the independent variables X can predict the Y variables, when new cases are added. A Q² value larger than 0.1 of a component indicates significance of the model. The relative contribution from each independent variable to the PLS model is expressed in a Variable Importance in Projection (VIP) value. A VIP value larger than 1.0 contributes more than average to the relationship, while VIP values below 0.8 make only a minor contribution to the model. A more comprehensive description can be found in Henningsson et al., (2001), where the method is illustrated by its application to data from a personality test.

**Structural Equation Modeling (SEM)**

Structural Equation Modeling (SEM) was analyzed using AMOS 16 (SPSS, 2008) to evaluate the mediating effects of the variables specified by models with path diagrams. This software performs analyses of moment structures through maximum likelihood estimation. To investigate whether a variable X (Self-Concept) is a mediator between independent variable A (Attachment) and dependent variable B (Mental Health) in the path analysis, a direct path from A to B is drawn in a first analysis. In the next analysis, two paths are added, one from A to X and the other from X to B. If X is a significant mediator, the weight of the path from A to B will decrease in the second analysis in comparison to the first one (Baron & Kenny, 1986).

The Goodness of Fit Index (GFI) is considered a reasonable statistical method for evaluating the model and assesses the fit between the hypothesized model and the date. AMOS calculates all measures that capture model evaluations that were selected based on the
different theoretical perspectives such as: CMIN/df (the minimum value of sample discrepancy divided by its degree of freedom, smaller values preferable, Holmers-Smith, 2000); GFI (The Goodness of Fit Index, the measure of the relative amount of variance and covariance, close to 1, over 0.9 is preferable, Jöreskog & Sörborn, 1993); AGFI (the adjusted Goodness of Fit Index larger value, over 0.9 preferable, Jöreskog & Sörborn, 1993); and RMSEA (the root mean square error of approximation based on population discrepancy, smaller values, below .08 preferable, Browne & Cudeck, 1993).

Procedure

In Paper I, all materials were originally produced in English and then translated into Japanese and Swedish. The Japanese versions were translated by the author, who has Japanese as the first language, and the Swedish versions were translated by Swedish university students who have Swedish as the first language. In Papers II and III, all materials were originally produced in English, except the Youth Self-Report (YSR) which was already produced in Japanese. All of the other instruments were translated by the author whose first language is Japanese. Back translation and pilot studies were carried out and translations were modified by school teachers for the materials in Papers I, II, and III.

In Papers I, II, and III, school classes were selected by the school director based on the students’ class schedules. The students filled in the questionnaire during regular class hours reserved for the study. It took approximately 30 minutes to complete. Only information about the gender and age were marked, and the participants had the opportunity to give or withhold consent. The questionnaires were conducted during the spring 2003 (Paper I) and summer 2005 (Papers II-IV) except for the data from Greece, Russia, and Sweden in Paper IV.

In Paper IV, the YSR was validated in all of the countries, and the data was collected by researchers for their original studies. Their studies were designed and conducted following ethical manner.
RESULTS

Paper I: Cross-cultural Validation of Adolescent Self-Concept in Two Cultures: Japan and Sweden.

The reliability coefficients for the eleven scales in both countries were acceptable (for Japan range = .71 to .94, Mdn = .83; for Sweden range = .74 to .92, Mdn = .86). Internal consistency for the Total Self scores was .93 for Japan and .91 for Sweden. In the confirmatory factor analysis (CFA) performed separately for Japan and Sweden, most of the factors loaded on the designed factor. However, some factors loaded at the same component. The Univariate F-test showed significant effects for Appearance, Same-sex, Opposite-sex, Parent, Emotional, Honesty, Verbal, School, Self-esteem, Total-self, Academic, and Non-academic Self, indicating that Japanese adolescents generally reported a lower self-concept in those scales compared to the Swedes. There were no significant differences in Physical and Math self-concepts between the countries. There were some stereotypical gender differences only among Swedish adolescents (e.g., boys scored more positive Appearance than girls, while girls scored more positive Honesty self-concept).

The independent sample t-test revealed significant differences in the total score of Actual-self and Ideal Self. Swedish adolescents reported a higher mean rate on Actual-self and Ideal-self than Japanese counterparts. Swedish youths also rated higher than Japanese on “independent” for Actual-self and Ideal-self. Japanese had significantly larger actual-ideal discrepancy than Swedish students. Girls from Japan and Sweden had larger Actual-Ideal discrepancies compared to the boys. There were negative associations between self-discrepancy and the self-concept scales across the country.

In conclusion, the fact of the sufficient psychometric properties of the SDQII in both Swedish and Japanese makes those instruments useful for further investigation. However, the favorability bias and different response style in self-concept in the cross-cultural comparison must be kept in mind. The gender differences were smaller compared to the influences from culture.

Correlational analysis indicated that dysfunctional parental rearing, particularly Rejection and Overprotection, and insecure peer attachment (i.e., Avoidant and Ambivalent) were associated with a negative self-concept and more mental health problems. The PLS (Partial Least Squares Regression) analysis showed that insecure attachment styles (i.e., Avoidant and Ambivalent) and perceived Rejection from both fathers and mothers were predictors of Internalizing and Externalizing Problems among boys, while all dysfunctional parenting (Rejection, Overprotection and Anxious Rearing) were determinants of these problems among girls. Non-Academic self-concept (social, emotional, and physical) was a predictor of Internalizing and Externalizing Problems. Power of the prediction of these problems was greater for girls than boys despite the small sample size of girls. The independent t-test showed that girls rated significantly higher Emotional Warmth from mother compared to the boys. All ratings of both positive and negative parenting of mothers were significantly higher than those of fathers.

In conclusion, there seem to be a unique influence on mental health problems from parent-adolescent relationships depending on the gender of the parents and adolescents. The results illustrated rather universal aspects of parental rearing (e.g., associations between peer attachment, self-concept, and mental health), yet there also seem to be cultural-specific aspects of parenting, which are important to consider.


The main results were that securely attached adolescents reported fewer mental health problems and a more positive self-concept than those who reported insecure peer attachment. Some patterns of associations among variables appeared to be different across gender. Associations between Academic Self and mental health problems (e.g.,
Externalizing Problems) among boys than girls. Mean scores of Total Problems (sum of the syndrome scales) were similar to the US norms. However, high standard deviation showed that there were individuals with high levels of mental health problems.

Based on the theoretical view, we evaluated two models regarding both direct and indirect relationships between Attachment and Mental Health via Self-Concept. In the first model, the path for the Academic Self did not reflect shared variance in Self-Concept. The path between Self-Concept and Mental Health was not significant. In addition, Internalizing and Externalizing Problems failed to explain the shared variance of Mental Health. The paths in the second model were all significant, and gave support to the mediating role of Self-concept in influencing the relationships between Attachment and Internalizing Problems, but not for Externalizing Problems. The paths for the model were significant across gender.

In conclusion, the results promote understanding of psychological processes that influence the relationships between peer attachment and psychological well-being among high school adolescents. Adolescents’ actual perceptions of their relationships play a role in how they feel about themselves and their emotional/behavioral problems. The model provided in the present study seems to be valuable for intervention and prevention in counseling practice.

Figure 2. Structural Equation Model
Note: All paths significant (** p<.001) unless indicated (ns). X² (df18)=33.16; CMIN/DF=1.84; GFI=0.96; AGFI=0.92; RMSEA=0.67.
Paper IV: Mental Health Problems Reported by Adolescents in Four Countries: Greece, Japan, Russia, and Sweden.

Comparison of problems reported by adolescents from Greece, Japan, Russia, and Sweden (n = 812) yield a small effect size (Cohen, 1988) of 4.8% for cross-cultural variations in YSR Total Problems scores. The deviations above the overall mean (42.16) for the Total Problems score were for Greece and Russia, while they were below the mean for Japan and Sweden. The effect sizes of country for narrowband and broadband scales were small or medium. There were tendencies of Greek reporting more on Internalizing Problems, Russian reporting more Externalizing Problems including Delinquent and Aggressive Behavior, and for Japanese scoring lower in those scales. Gender differences within countries (i.e., girls reporting more Internalizing Problems) were shown except for Japanese. In the Total Competence (sum of competencies), Greek scored significantly higher than the Japanese and Swedish adolescents. There were several negative associations between syndrome scales and competence scales across countries. Among the Japanese and Swedish, the Academic and Social Competence scales were negatively associated with the Total Problems. These results were not shown among Greek adolescents.

In conclusion, the present study provides a certain picture of adolescent mental health across different countries. Analysis within and between countries pointed out some particular problems that might be more or less common in some countries than others. By using the same instrument in distinctly different societies, the findings would help to improve the care methods for adolescents from different countries.

Qualitative notes from the Japanese adolescents from the YSR

In YSR, there are open questions such as “Please describe any concerns or problems you have about school” and “Please describe any other concerns you have” Even though not many students wrote something down, there were some interesting statements. There were students, especially boys who mentioned their worry about school and university entrance exam (n=20 for boys, n=4 for girls) such as;
• “I got a bad grade on exams.” (a boy, first grade)
• “I worry if I can follow my classes.” (a boy, first grade)
• “I worry about failing entrance exams for university.” (a boy, second grade)
• “I am worrying if I fail the certificate test for bookkeeping.” (a girl, second grade)

Apart from school and study, some students made statements about their worry about relationships with their friends and their future. Some of them complained about strict school regulations.

• “My relationships with friends don’t go well. I can’t make them understand how I think.” (a girl, third grade).
• “I don’t know what I want to do in the future.” (a girl, first grade).
• “School regulations are important, but it is too strict (hair style and school uniform, etc).” (a girl, second grade).
• “I have found what I want to do in the future, but it costs money. I worry if I cause a problem for my parents because of that.” (a boy, first grade).
• “I only have a little experience with love, so it does not often go well. Thinking about a boy seems to be heavy and it makes me very worried.” (a girl, second grade).
• I get easily angry and irritated (a girl, first grade).

In a question of YSR “Please describe the best thing about yourself”, descriptions by the students were similar and in terms of their relationships with others such as;

• やさしい (kind and gentle, 16 boys, 3 girls)
• 誰とも仲良くなれる (get along with anyone, 9 boys, 7 girls)
• 明るい (lively and amicable, 6 boys, 8 girls)
• 最後まであきらめないでやりとげる (finish doing the things without giving up, 6 boys, 5 girls)
• 人のことを考えられる (think about others, 4 boys, 1 girl)
• いつも笑顔 (always smiling, 4 girls)
DISCUSSION

The studies presented in this thesis explored the self-concept, and emotional/behavioral problems, and their associations to interpersonal relationships such as peer attachment style and perceived parental rearing in healthy adolescents in Japan. In the first and last papers, comparisons between Japan and others countries were conducted. The understanding of the context of adolescents’ inner world included theoretical, interpersonal and cultural factors.

Self-concept

The present thesis suggests that multidimensional self-concept is useful for adolescents in Japan and Sweden. The comparison between Japanese and Swedish adolescents using the SDQII showed not only differences but also similarities across countries. Swedish adolescents in general reported a more positive self-concept in most of the scales in SDQII, indicating a cross-cultural difference in the rating of actual perceptions of the domain specific self-concept. This corresponds to earlier studies of self-concept (e.g., Wästlund et al., 2001), and self-esteem (e.g., Farrugia et al., 2004). Similar levels of the Physical and Math self-concept across countries may reflect the notes that Japanese value physical competition in specific activities such as sports (Kanagawa et al., 2001), and a decrease of mathematic achievement in both countries (Mullis, Martin, Gonzales, & Chrostowski, 2004). The findings pointed out that when being focused on unidimensional self-esteem or multidimensional self-concept, Japanese adolescents’ response style appeared as a distinct difference in comparison to their Western counterparts such as the Swedes.

Gender differences in the mean score of self-concept from the SDQII were shown only among Swedish adolescents, i.e., boys reporting more positive Appearance and Opposite-sex self-concept, while girls reported more positive Honesty self-concept. This finding was in agreement with early studies (e.g., Marsh 1989, 1992). However, there were no gender differences among Japanese adolescents either on SDQII or SDQII-S (Papers I, II, and III). Gender differences in self-concept seem to be smaller when compared to the
influence of culture (Kashima et al., 1995), or there may be other explanations.

The studies (Papers I, II, and III) showed that Japanese adolescents had a similar self-concept across different ages. This result is supported by the other studies, which showed that self-concept generally decreases with an increase in children’s ages (e.g., Marsh, 1989). One possible explanation for this result is that the age range (14-15 and 15-18 years) was too small to perceive the age differences in the present studies. The results from groups 14-15 and 15-18 years old could not be compared due to the different form of the instruments.

In the Actual-Ideal Questionnaire, the Swedish adolescents rated significantly higher than Japanese on the total scores of Actual and Ideal Self. There was no difference in Japanese students on the trait “shy vs. not shy” (scale 2), which means that Japanese adolescents seemed to value the term rather positively. In the pair concerning “independent vs. interdependent”, Swedish adolescents rated higher on “independent” in contrast to the Japanese who rated more on the trait on “interdependent”. The Japanese also rated higher on “interdependent” regarding their “Ideal-self”, in contrast to the Swedish adolescents who rated more on “independent” for their “Ideal-self”. Consistent with an early study (Hankin, Roberts, & Gotlib, 1997), girls from Japan and Sweden had larger actual-ideal discrepancies than boys in their countries.

Supporting the early studies (Choi & Lee, 1999; Moretti & Wiebe, 1999), the domains of self-concept were associated with Actual-Ideal discrepancies among Japanese and Swedish adolescents. The larger Actual-Ideal discrepancy reported by the Japanese rather than the Swedes is in agreement with the study of Heine and Lehman (1999). The magnitude of these associations was smaller among the Japanese than the Swedes. One possible explanation for this result is that seeing further away from one’s ideal is a way of self-improvement; therefore, it is less distressing for Japanese people (Heine & Lehman, 1999). This different attitude can be also seen from daily conversations in Japan with a Japanese concept of “ganbatte (work hard)”, which is often translated as “good luck” in English or “lycka till” in Swedish.
Concerning which self-concept domain is related to interpersonal relationships among Japanese adolescents, the present thesis suggests that the adolescents’ actual perceptions of their relationships with their friends, peers, and parents play a role in how they feel about themselves. The results reported in the present studies are in line with the notions on attachment theory (Bowlby, 1969, 1973, 1980), and interpersonal theory (Sullivan, 1953). These associations seem to be universal. Non-academic Self is more related to attachment style than with Academic Self, which is the school and academic areas of self-concept. Sense of self-worth highlighted an impression of rejection by others. Such cognitions make adolescents reliant on gaining acceptance from others and more sensitive to social standards. Negative parenting styles were associated more with Externalizing Problems than with Internalizing Problems (Muris et al., 2003b; Pereira et al., 2008), showing the importance of parent-adolescent relationships in Externalizing Problems. When adolescents perceived their parents as controlling and restrictive, they tended to report a negative self-concept, insecure attachment style, or emotional/behavioral problems. These associations seem to be bi-directional.

Despite the fact that Japanese boys and girls viewed their parental behavior in a similar way, there were gender specific associations between perceived parenting and mental health problems. This result was in contrast to the Western study (Muris et al., 2003b) that found no gender differences. Especially for girls, negative parenting styles (i.e., Rejection, Overprotection and Anxious Rearing) were the predictors of Internalizing and Externalizing Problems, which indicated that parental influence on mental health was stronger among the girls than boys. These results agree with the interpersonal sensitivity of females (Kim, 2003; Rizzo, Daley, & Gunderson, 2006), and appear to suggest that adolescent girls seem more sensitive to their parents’ behaviors, or parents are more sensitive to their daughters’ behaviors.

In different gender socialization processes, girls are more likely to perceive their maternal emotional warmth than boys (Uji et al., 2006). Boys and girls reported both positive and negative parenting by mothers than those by fathers. It may reflect the absent father of the Japanese family, and that the mother has more interaction with the children (Matsumoto, 2002). However, the results showed that the
fathers’ behavior toward Japanese adolescents is as important as the mothers’ regarding the adolescent self-concept and development of mental health problems. This agrees with the previous studies in the USA (Rogers, Buchanan, & Winchell, 2003), the Netherlands (Roelofs et al., 2006), and China (Shek, 2007). Control and demand of obedience by parents are emphasized in a group-oriented society such as Japan (Rothbaum, Plott, Miyake, & Weisz, 2000). Therefore, children are accepting when their parents are controlling and discipline them as the responsibility of parents and as an expression of parental care and love. It can be said that Japanese parents are anxious in a Western sense, but responsible and caring in a Japanese sense. This would help to explain why the Anxious Rearing scale in EMBU-C in Japanese shared loading of “care” with “rejection”.

A note from the qualitative data, “I have found what I want to do in the future, but it costs money. I worry that it would cause a problem for my parents because of that” suggests a strong connection with parents in regard to adolescents’ future plans. In Japan, adolescents remain closer to their parents than Americans and do not feel as much need of autonomy from their parents (Rothbaum et al., 2000). Research showed that in the question “One should follow one’s parents’ opinions as much as possible”, more respondents from Japan and Korea agreed than disagreed, in contrast to the Swedish adolescents who disagreed more than they agreed (Director General for Policy Planning and Coordination, 2004). Most Japanese parents are responsible for their children’s higher education and it is common for children to live with their parents even after adolescence. Despite the fact from the West that autonomy is an important developmental goal in childrearing (Decoviv & Meeus, 1999), the value of emotional autonomy and the way it is related to adolescents’ relationships with their parents may be different in Japan.

Associations between perceived parenting and peer attachment were rather weak (Paper II), even if these associations are in support of attachment theory (Ainsworth et al., 1978; Bowlby, 1980). A study found that adolescent attachment to parents and peers differed across adolescent transition (Nikerson & Nagle, 2005). During adolescence, parental attachment changes as communication and trust for parents decrease. Secure attachment to parents may allow increasing security in other relationships, whereas insecure attachment to parents may foster the desire to feel security with friends (Nikerson & Nagle, 2005). These aspects seem to support why the magnitude of
associations between perceived parenting and peer attachment were small in the present study. So far, few studies have examined how adolescents describe their attachment to their parents, and peers, and the relationships exist between parent and peer attachment.

**Emotional and behavioral problems**

The mean scores of the YSR reported by the Japanese adolescents were similar with those of the US norm (Achenbach, 1991a). However, even among the healthy adolescents who normally go to school, there are individuals who reported mental health problems. Internalizing and Externalizing Problems were reported by adolescents with an insecure attachment style compared to the securely attached adolescents.

In contrast to the Western study (Marsh et al., 2004), there were gender specific associations between self-concept and mental health problems among Japanese adolescents. One possible explanation for this result is gender socialization in Japan where boys have higher parental expectations regarding higher education (Yamaoka et al., 2003). It also corresponds to the result that Academic self-concept is more associated with mental health problems among boys than girls (Paper II), and in the qualitative results in the Japanese boys saying they were worried about their school grades and university entrance exams.

In comparing mental health problems among Greek, Japanese, Russian, and Swedish adolescents, the Greeks and Russians were placed among those who had more problems, while Japanese and Swedish youths were placed among those who had fewer problems. This finding is consistent with the result measured by parental reports (Rescorla et al., 2007). Japanese adolescents reported significantly lower Externalizing Problems, including Aggressive and Delinquent Behavior compared to the adolescents from the other countries. In contrast, Russian adolescents scored the highest on Externalizing Problems, including Aggressive and Delinquent Behavior than their counterparts. This may be explained by the cultural sanction and cultural facilitation model (Weiz, Weiss, Suwanlert, & Chaiyasit, 2006). “Cultural facilitation” refers to a particular cluster of behaviors encouraged in one population group more than another and leading to the co-occurrence of these behaviors within the group’s behavioral
repertoire, while “cultural sanction” refers to a particular cluster of behavior that is verbally disapproved, negatively sanctioned or punished. Japanese culture emphasizes avoidance of physical aggression and rule-breaking behavior, and there is an obligation to their parents and social control regarding delinquency (Tanioka & Glaser, 1991). Some countries, like Japan, do not often discuss minds or mental status openly or explain their actions.

In Russian culture, on the other hand, delinquent behaviors are more valued as promotion status and popularity (Slobodskaya, 1999). Furthermore, it seems that aggressive rule-breaking behaviors are negatively sanctioned in Japan, while socially facilitated among Russians. Gender differences were similar across countries except for Japan. Consistent with various studies (e.g., Verhulst et al., 2003), girls from Greece, Russia and Sweden scored higher on Internalizing Problems than boys in their countries. There was no gender difference among the Japanese corresponding to the recent result from China (Tepper et al., 2008). An interesting tendency was that, in contrast to the traditional psychopathology, the present study showed that girls from Japan and Sweden reported slightly more Externalizing Problems than boys. A Norwegian study found that girls had more Delinquent Behavior than boys (Kvernmo & Heyerdahl, 2004). Scholars (Hurtig, Taanila, Ebeling, Miettunen, & Moilanen, 2005) explained this finding that girls in Nordic countries are allowed to express their emotions. The same result received among the Japanese was surprising since it is most evident that Sweden is one of the gender equal or feministic countries, in contrast to the Japanese culture that emphasizes a traditional gender role. One possible explanation is that both Japan and Sweden are countries with modern industries and high technology, and girls in those societies may be adopting male behaviors. It may also reflect a changing society in Japan. An interesting tendency, even though not significant, was that girls from Japan, Russia, and Sweden tended to report more Aggressive Behavior than boys. Of the items of Aggressive Behavior, Japanese girls reported verbal oriented aggression (e.g., “I talk too much”), while boys reported physical aggression (“I destroy my own things”) showing differences within scale. Age differences were less consistent, with a small range of age groups, although there were some significant age-by-country effects. Generally, most of countries scored higher on most scales with increasing age.
The present studies showed associations between the competence scales and the specific syndrome scales among adolescents especially Japanese and Swedish (Paper IV). This result supports the validity of the scales and corresponds well with early studies (e.g., Broberg et al., 2001; Sandval, Lemos, & Vallejo, 2006). Perception of competence, which is a sense of one’s personal skills and abilities as well as one’s success in relationships, is important throughout childhood and adolescence (Harter, 1999). The Academic Competence was associated with Total Problems among Swedish and Japanese youths. One of the explanations for this finding may be that Swedish and Japanese students feel stress or pressure connected to school work (Matsumoto, 2002; Ollfors & Andersson, 2007). Greek adolescents reported a higher rate of not only Total Problems but also of Total Competence than Swedish and Japanese students. However, no associations were found between the syndrome scales and competencies. It seems to be important to keep in mind positive biases in self-perception, and response style appears when comparing the mean score of Total Competence across countries. Low competence scored by the Japanese corresponds to the results in comparison to the self-concept (Paper I).

The present thesis can suggest that the poor self-concept is related to adolescent perceptions of dysfunctional parenting and insecure attachment, which in turn is related to Internalizing and Externalizing Problems. Dysfunctional parenting styles (e.g., Overprotection, Rejection) and Non Academic Self was a predictor of mental health problems, but not the Academic Self (Paper II). Self-concept played a mediating role through attachment style for Internalizing Problems, but not Externalizing Problem (Paper III). Internalizing and Externalizing Problems are theoretically different constructs (Achenbach, 1991a). This would help explain why the path between Self-concept and Mental Health was not significant when both Internalizing and Externalizing Problems were linked in shared variance for Mental Health. A non significant path between Self-concept and Externalizing Problems may be the case of different associations in gender. Only Self-esteem was associated with Externalizing among girls, while ambivalent attachment and the other self-concept scales were associated with Externalizing Problems among the boys. Antisocial behavior is maladaptive, but antisocial adolescents may be more likely to achieve success in enhancing relationships (PDM Task Force, 2006). The link between antisocial behavior and self-esteem is complicated. Some researchers suggest that aggression and antisocial
behavior in children and adolescents are an expression of their low-self-esteem (low self-esteem hypothesis; e.g., Donnellan, Trzesniewski, Robins, Moffitt, & Capsi, 2005), while others suggest that aggression stems from a high self-esteem disputed by others (disputed self-esteem hypothesis; e.g., Baumeister, Bushman, & Campbell, 2000). Another study showed that either low or exaggerated but disputed self-esteem is related to children’s aggression (Diamantopolou, Rydell, & Henricsson, 2008).

The results seem to suggest that Externalizing Problems may be associated more with parent-adolescent relationships than with peer attachment, as Externalizing Problems are disruptive for the family (Buist et al., 2004), and it was also shown in associations between parenting behavior and Externalizing Problems (Paper II). In the case of Internalizing Problems, peer attachment is connected to the self-concept, and when adolescents perceive their social world as untrustworthy and undependable, they are more likely to develop depression and anxiety, and withdraw from social interaction. The model provided in the present study (Paper III) seems to be valuable for choosing a focus in intervention and prevention in counseling practice.

Culture and well-being in adolescence

One of our studies showed that Japanese adolescents’ self-concept was lower than Swedish adolescents (Paper I); however their mental health problems were rather similar to the Swedish adolescents (Paper IV). These results may suggest that a more negative self-concept among Japanese compared to, e.g., Swedish adolescents, does not mean that Japanese youth are more psychologically unhealthy. When Japan is compared to its Western counter-parts in the positive aspects of self-esteem or self-concept, it appears as a tendency of the Japanese modest response style, which makes significant differences. When comparing mental health problems, the similarities and differences measured by the standardized assessment in different cultures illuminated the cultural-specific and universal aspects of psychopathology (Crijnenen, Achenbach, Frank, & Verhulst, 1999). By identifying the kinds of syndromes or problem behaviors that are common or uncommon in a specific country, it helps us to find out specific interventions for
adolescents with different cultural backgrounds. The results appeared as cultural or gender differences in expression or perception of the problem behaviors. Differences may be due to methodological factors related to assessment, methods and factors related to psychopathology, and biological or environmental factors (Verhulst & Achenbach, 1995). Absence of gender differences in self-concept and mental health among the Japanese contrasts common theoretical assumption in self-concept and mental health.

Despite the response style appearing in the self-concept assessments in the Japanese, there are adolescents who mentioned their positive features of themselves. Their descriptions were interpersonal oriented such as “kind and gentle”, “get along with anyone”, “lively and amicable”, as Shimizu (2000) noted that behaviors like being kind to others and empathetic to others are valued among the Japanese.

Even though Japanese adolescents rated their actual-self as less individualistic and more collectivistic than Swedish adolescents (Paper I), debates about the Japanese as more individualistic or independent (e.g., Brown, 2005; Matsumoto, 2002) cannot be ignored. Changing Japanese culture (Matsumoto, 2002) influences adolescents’ lives while Japan still keeps its traditions. Japanese adolescents can share the experience with people worldwide through a globalization of media. Globalization influences functioning among adolescents around the world, and identity confusion may be increasing in non-Western cultures (Arnett, 2002).

Limitations of the studies

It is important to acknowledge the limitations of the studies. There were some item biases associated with ambiguous item meanings in the instruments. In the trait “shy vs. not shy” (scale 2 in the Actual-Ideal Questionnaire, Paper I), the value judgment from a Swedish point of view was that adjective “shy” had a negative loading. However, Japanese adolescents seemed to value the term rather positively. This is a good example of the difficulty in identifying different meanings of the same words. The excluded item of EMBU-C “My parent allows me to do everything” may be perceived differently by Japanese adolescents (Paper II). Even though YSR is used for all of the four
countries in Paper IV, translations and sampling may be one of the variations.

The AQC (Papers II and III) may be sensitive to underreporting of attachment patterns (Muris et al., 2003b), and does not assess the four major attachment styles, i.e., secure, fearful avoidant, ambivalent, and dismissing avoidant (Bartholomew & Horowitz, 1991). On the other hand, the percentage of Japanese adolescents who rated themselves as neither avoidantly or ambivalently attached (32.9%) was comparable to the 32% reported by Sharpe et al. (1996).

All studies in the present thesis were designed to be cross-sectional and hence do not provide directions of causal effects. Buist et al. (2004) found that attachment and Internalizing Problems seem to influence each other longitudinally. There may also be bidirectional links with dysfunctional parenting styles resulting in emotional problems and a negative self-concept, which in turn further promotes negative parental relationships. Some longitudinal studies have indicated that parental rejection tends to precede the development of behavioral problems among adolescents (e.g., Chen, Rubin, & Li, 1997). The present studies were based on self-reports of non-clinical adolescents. There is a lack of additional information from parents or teachers about adolescents’ mental health problems and parenting behavior.

The sample sizes used in the present studies are relatively small and cannot be viewed as representative of the entire population. The result from the factor analysis in Paper I could have shown a better result if the sample size had been greater and using only two countries for comparison limits comprehensive investigation of the cross-cultural difference. There were more boys than girls in Papers II and III. There were only 15-16 year olds and no competence scales in the Russian sample (Paper IV). An early study reported that Russian children and adolescents reported lower Total Competence than Americans (Slobodoskaya, 1999).

The small range of age groups of the adolescents limits age effects. The overall deviations in different adolescent developmental stages across countries are a major question remaining to be further investigated.

Other factors (e.g., genetic, cognitive, life stress, and pubertal status) may be involved in emotional and behavioral problems among adolescents.
Main conclusions

If the role of self-concept is examined in different contexts, it can predict a wide variety of behaviors to provide outcome measures for interventions. The present thesis suggests that the aspects of the perceived parenting in relation to adolescent well-being seem to be universal. Adolescents in every culture need emotional support from their parents. Yet it is important to take the cultural difference in parenting into account. When adolescent’s psychological well-being such as self-concept and mental health problems are compared across countries, cultural background and response style must be taken into account. Adolescents’ perceptions of themselves, interpersonal relations, and mental health problems influence each other. It is important to consider gender differences to understand more about these associations. Perceptions of positive friends, peers and parents constitute positive working models of self. However, when adolescents perceive the relationships with them as negative those behaviors reinforce the self-concept in a negative way. Negative self-concept was expressed as such problem behaviors as anxiety, depression, aggression, delinquency and insecure peer attachment. It brings up a question that is important to keep considering; “How can these circumstances function in a better way in adolescents’ lives?” Matsumoto (2002) noted that currently Japanese youth lack socialization. Thus, many Japanese parents perceive difficulties in the upbringing of their children, especially for teaching their children the proper social behaviors. Many Japanese parents reported the reasons for that are because of overemphasis on education and academic pressure, as well as more affluent life styles and declining parental authority (Matsumoto, 2002). By seeing how the different domains of the self-concept are related to various aspects of mental health problems, it gives idea for the intervention and clinical practice for the adolescents who survive the period of storm and stress. Supporting and providing help to enhance a positive self-concept in various areas may be important for well-being among adolescents.
Implications for further studies

The present studies showed good psychometric properties of instruments. However, there have also been errors with wording in some items. Further development and validation of self-report (SDQII-S and EMBU-C) with a large sample size are an important task. It will also be interesting to investigate the Swedish version of these instruments. Birth order and gender of children influence parenting style in Japanese society (Someya, Uehara, Kadowaki, Tang, & Takahashi, 2000). Furthermore, it will be necessary to examine the influence of adolescents’ birth order and gender on their perceived parenting. Further investigation of Actual and Ideal self-discrepancy including different aspects of the self (e.g., false-self, fared-self, and possible-self) shown in different people in different situations, and relationships to the mental health problems may help to increase our knowledge about the link between adolescents’ descriptions of themselves and their well-being.
SUMMARIES IN JAPANESE

主要論文の概要

論文1「日本とスウェーデン2カ国の青年期のセルフ・コンセプト比較調査」では、英語版のリネス・スケールの日本語化版を用いて、スウェーデン語と日本語に翻訳し心理測定を調べ、日本とスウェーデンの中学生のセルフ・コンセプトの比較することを主な目的とした。日本 中名、スウェーデン 中名 の中学生が日本語とスウェーデン語のリネススケールとセルフ・コンセプトに回答した。主な結果は、日本の中学生がスウェーデンの中学生よりも高いセルフ・コンセプトの得点を有し、日本の中学生がスウェーデンの中学生よりも「自分の自分」と「理想的自分」の差異が大きかった。セルフ・コンセプトとセルフ・ディスクレバシーが相関が両国の間で見られた。セルフ・コンセプトの得点の男女差は文化の影響力に比べると比較的小さかった。

論文2「日本の青年期の親の養育態度が及ぼすセルフ・コンセプトとメンタルヘルスへの影響」では、日本の思春期の青年の親の養育態度がアダルチメントスタイルにどのように影響しているか研究した。計 名の高校生（男子 名、女子 名、平均年齢）が自己記述式質問紙に回答した。回帰分析では、不安定なアダルチメント（回避型と避難型）と親からの拒絶感の両方が高校生の内向的・外向的問題を予測するという結果が見られた。ノンアダルチメント・セルフ尺度は、内向的・外向的問題の両方を予測した。養育態度と親の間のメンタルヘルス問題との関連性は、親と子供それぞれの性別に応じて違った影響力があるようだ。

論文3「青年期のアダルチメントとセルフ・コンセプトによる内向的問題と外向的問題への貢献分析」では、高校生のアダルチメント・スタイルとセルフ・コンセプトがメンタルヘルス問題にどのように共に影響しているかを考察した。計 名の高校生（男子 名、女子 名、平均年齢）が自己記述式質問紙に回答した。主な結果は、安全型アダルチメントスタイルを有する学生は、不安定なアダルチメント（回避型と避難型）を有する生徒に比べメンタルヘルス問題が少なく、セルフ・コンセプトに高い傾向にあった。構造方程式モデルによって、アダルチメントとセルフ・コンセプトが仲介役となり
内向的問題に貢献していることがわかった。モデルの中の外向的問題には関連性がなかっ

論文４「青年期のメンタルヘルス問題国際比較研究 ギリシャ、日本、ロシア、スウェーデン」では、ユースセルフレポート させて「4か国 ギリシャ、日本、ロシア、スウェーデン の青年期のメンタルヘルス問題を比較することを目的とした。計 名 岁 の各国の中高生が標準化されたそれぞれの言語の 回答した。主な結果は、ギリシャとロシアがトータル・プロレーム 問題行動の全得点 の得点が高いグループに属し、スウェーデンと日本が低いグループに属した。外向的問題の得点はロシアが高く、日本は低かった。ギリシャはトータル・コンベんス 適応能力尺度の全得点 が日本とスウェーデンの若者に比べ高かった。メンタルヘルス尺度と社会 学力適応能力尺度の逆相関が日本とスウェーデンで見られた。言語や文化の違う国々を同じ質問紙を使用し比べることで各国のメンタルヘルスの傾向が映し出される。

まとめ

本研究では、セルフ・コンセプト尺度を取り入れることで様々な行動的・心理学的な問題が予測できることがわかった。また、セルフ・コンセプトやメンタルヘルスを言語や習慣の異なる国を比較調査する際は、レスポンス・スタイル 回答の仕方 の違いが平均得点の差に影響することも考えなければならない。親からの心理的サポートはどの国の若者にも必要である。しかし、養育態度は文化によって違うことも心にとどめておく必要がある。若者の自分自身の認識、対人関係、そしてメンタルヘルス問題はそれぞれ影響し合っている。友人や両親との関係が肯定的であると、セルフ・コンセプトも肯定的になる。一方、対人関係を否定的にとらえる若者は、セルフ・コンセプトも否定的になる。否定的なセルフ・コンセプトは、不安、気分の落ち込み、攻撃性、非行などの問題行動と関連している。「そのような青年期の実態をどのようにして改善できるか？ 」ということが今後の課題である。セルフ・コンセプトを高めるための支援することは青年期のウェル・ビーイングには重要であることがわかった。セルフ・コンセプト尺度それぞれがどのようにメンタルヘルスや対人関係と関連しているかを考察することにより青年期の問題行動の予防、また臨床研究でも役に立つことが望まれる。
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APPENDIX

A Summary Description of the Scales From the Self-concept Instruments (SDQII and SDQII-S)

1. **Physical**: Self-perceptions of skills and interest in sports and physical activities
2. **Appearance**: Self-perceptions of their physical attractiveness.
3. **Same-Sex Relations**: Self-perceptions of their popularity with peers of the same sex
4. **Opposite-Sex Relations**: Self-perceptions of their popularity with peers of the opposite sex
5. **Parent Relations**: Self-perceptions of interactions with parents.
6. **Honesty**: Self-perceptions of truthfulness and dependability
7. **Emotional**: Self-perceptions of emotional well-being and freedom from psychopathology
8. **Math**: Self-perceptions of ability, enjoyment, and interest in mathematics and reasoning
9. **Verbal**: Self-perceptions of ability, enjoyment, and interest in English (Japanese/Swedish) and reading
10. **School**: Self-perceptions of school ability, enjoyment, and interest in school subjects
11. **Self-esteem**: Self-perceptions of self-worth, self-confidence, self-satisfaction

Three derived scales: **Total Self** (sum of the 11 individual scales which reflect an adolescent’s self-ratings in various areas of self-concept; scale 1-11), **Academic Self** (particular school subject areas; scale 8-10), and **Non-academic Self** (social, emotional, and physical self-concepts into more specific areas; scale 1-7).