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Attachment and *Amae*:
A comparative study of mother-child
close relationships in Japan and Britain

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Declaration

This thesis has been composed by me and is entirely my own work. A publication arising from this thesis is included in the appendices. It has not been submitted for any other degree or professional qualification except as specified.

Kaori Komatsu

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Abstract

Attachment theory addresses the young child's biological and psychological need to elicit their mother's protection and care, and seeks to explain the emotional bond that forms between them in the early years of life. Several researchers have pointed out that the Western concept of attachment might be less relevant for Japanese parent-child dyads because Japanese child-rearing ideals are based on the concept of '*amae*' (emotional one-ness between mother and child), whereas attachment theory emphasises the link between attachment and independence/autonomy. Research to date, however, has not yet directly addressed the possible association between maternal *amae* attitudes and attachment patterns in Japanese mother-child dyads. This is, in part, due to the current lack of any assessment tool to measure mothers' responses to their child's *amae* behaviours. Japanese attachment patterns have also not yet been investigated using the Manchester Child Attachment Story Task (MCAST: Green et al., 2000), a doll-play attachment measurement for children aged between 4 and 8 years old which has been used in Western contexts.

This doctoral thesis consists of three cross-cultural empirical studies which address this gap in the current literature. In the first study, a 39-item prototype *amae* attitude scale (AAS) was constructed based on responses from Japanese focus groups and an earlier study of *amae* behaviours (Vereijken et al., 1997). The scale was subsequently completed by Japanese and British mothers. Japanese mothers were found to be more tolerant in general than British mothers of their child's *amae* behaviours, in all 4 sub-categories explored (pure, asking, frustrated, and anxious *amae*), with cultural differences most marked in maternal attitudes towards their children's anxious-*amae* behaviour.

The second study addressed two questions: whether attachment behaviours differ in Japanese and British 4-5 year olds (measured with the MCAST) and whether there is a relationship between children's MCAST attachment classifications and maternal attitudes towards children's *amae* behaviours (measured with the AAS) in Japanese and British dyads. Contrary to what has been found in some of the previous Japanese Strange Situation studies, the distribution of MCAST attachment classifications was similar in the two countries. As predicted from the results of study 1, the AAS scores of Japanese mothers also indicated that they were significantly more tolerant of their child's *amae* behaviours than their British counterparts. This was true for both mothers of securely and insecurely attached children. A tendency for mothers of

securely attached children to have less tolerant attitudes towards children's *amae* behaviours than those of insecurely attached children was found in both countries. A cultural difference also emerged in the way children expressed the maternal needs of the child doll during the mildly stressful scenarios in the MCAST.

The third study examined actual mother-child interaction in both countries, measuring the mother's emotional availability to the child (using the Emotional Availability Scale: Biringen, 2000) and relating this to both maternal AAS and child MCAST data. The results showed that emotional availability scores and attachment classification patterns did not differ across cultures. Analysis of the home observations also indicated that children from both cultures who were classified as insecurely attached (ambivalent and disorganised type) in the MCAST tended to show more *amae* behaviours towards their mothers than children classified as securely attached.

Together, these three studies suggest that children in both countries show similar attachment patterns and that it is not only Japanese children who express *amae* behaviours towards their mothers. In fact, *amae* relates to attachment security in both cultures, although the way it is expressed and maternal attitudes towards such behaviours differ across cultures.

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List of Abbreviations

AAS	<i>amae</i> attitude scale
BPVS	the British Picture Vocabulary Scale
EA	emotional availability
EAS	Emotional Availability Scale
MCAST	the Manchester Child Attachment Story Task
PVT	the Picture Vocabulary Test

CHAPTER 1

ATTACHMENT THEORY

1.1 Introduction

The human infant is not equipped to survive without the adult caregivers who provide food, warmth and protection from illness and injury. Yet our intuitive concepts of development go beyond the confines of physical care and include the notion that individual differences in later functioning are shaped by the early experiences we have with a relatively small number of caregivers. This thesis explores the cross-cultural differences and similarities in children's early experiences with their mothers within the framework of attachment theory. The emergence of attachment theory, as first articulated by John Bowlby (1958, 1969, 1973, 1980), and the discovery by Mary Ainsworth (1963, 1967) of a way to assess individual differences in attachment behaviour patterns, laid the groundwork for intense, ongoing, and fruitful attempts to examine the psychological effects of early relationships. During the last few decades, attachment theory has become one of the most widely researched theories in the field of child development (Posada & Jacobs, 2001; Vereijken, Hanta, & van Lieshout, 1997).

Attachment theory proposes that the quality of early caregiving is an important determinant of a child's ability to effectively use his¹ caregiver as a secure base from which to explore and learn about the environment and as a haven of safety to which to retreat (Ainsworth & Bowlby, 1991; Ainsworth, Bell, & Stayton, 1974; Ainsworth,

¹ Although the concept applies equally to girls and boys, male terms are used hereafter for ease of expression.

Blehar, Waters, & Wall, 1978; Bowlby, 1969, 1988). As Posada and Jacobs (2001) describe, attachment theory also focuses on this first relationship as a context for socialisation and for the development of expectations about close relationships in general. Bowlby hypothesised that secure base behaviour is regulated by a behavioural control system. He introduced this concept to highlight and account for the complex monitoring of internal states, relationship experience, and context that shapes proximity seeking and exploration away from attachment figures. Bowlby also argued that this behavioural control system is part of the human “evolutionary adaptedness” (Bowlby, 1969, p 76). Accordingly, it is central to attachment theory that all human infants have the potential to develop a secure base relationship with one or more primary caregivers.

Although Ainsworth’s original study of mother-child attachment behaviours was conducted in Uganda, most of the subsequent studies on the topic were conducted with caucasian North American and European samples (Posada et al., 2002). In recent years, though, this field of research has expanded to consider the development of attachment and emotional connection in other cultural contexts, in children beyond infancy, and in children being brought up under conditions of risk. Some of this research has raised questions about the meaning of attachment-related constructs and attachment classification categories. That is, what may appear within one cultural context to reflect attachment insecurity may, in fact, indicate behaviours that are appropriate and predictable within another cultural context (Mizuta, Zahn-Waxler, Cole, & Hiruma, 1996).

The questions that current research needs to address, therefore, include ones

concerning the appropriateness of the conceptualisation of caregiving offered by attachment theory to other cultures, the identification and description of the aspects of caregiving which differ from those proposed by the theory, and the possible association between attachment theory and other aspects of caregiving that may or may not be influential in shaping security of attachment in infants and young children. This thesis is designed to explore some of these issues. The goal was to explore whether a distinctive characteristic of Japanese mother-child relationships called *amae* might be better addressed than it has been to date methodologically and theoretically in studies of attachment. The aim was to provide a more in-depth understanding of the nature and origins of any cross-cultural differences in child attachment and/or child attachment behaviours which might exist.

Amae is a Japanese concept which refers to children's expectations of maternal indulgence and of interdependence, even when their requests to their mothers are immature and inappropriate (Doi, 1981; Yamaguchi, 2004). Although often equated with dependence, *amae* is more accurately thought of as a form of interdependence, an emotional one-ness between mother and child. The latter term captures the reciprocal nature of *amae*: children need to be indulged and parents need to accept children's bids for indulgence (Yamaguchi, 2004). Research to date, however, has not yet directly addressed the possible association between maternal *amae* attitudes and attachment patterns in Japanese mother-child dyads.

In the doctoral research to be reported here, a total of 139 Japanese and 112 British preschool children and their mothers took part in one of three studies. Based on responses from four Japanese focus groups, the first study identified 39 items of

typical *amae* behaviours in young children. An *amae* attitude scale was then constructed and administered to examine if attitudes towards these behaviours differ between Japanese and British mothers. The second study explored possible associations between maternal attitudes towards their children's *amae* behaviours and the children's attachment classifications, using the Manchester Child Attachment Story Task (MCAST, Green, Stanley, Smith, & Goldwyn, 2000), a semi-structured doll-play task for children aged 4-8 years. In the third study, mother-child interactions were observed in the home environment to see if the actual interactions of the dyads are reflective of the children's MCAST attachment classifications and the maternal attitudes towards child behaviours expressed in the *amae* attitude scale.

These three interlinking studies will be presented in later chapters of this thesis. This introductory chapter aims first to set these studies in the broad context of what is already known about child attachment by reviewing the origins of ideas that later became central to attachment theory. The methodological innovations that expanded the theory will also be introduced. Chapters 2 will look at the cross-cultural literature in this field, seeking to understand how cultural norms and parental expectations are involved in shaping the similarities and variations in the development of attachment in different countries. Relating to the findings from attachment studies conducted in Japan, a concept of *amae* will be introduced at the end of this chapter. Chapter 3 will then describe the childrearing and children's socialisation in Japan in seeking to provide the texture to our understanding of the contexts in which the concept of *amae* developed. The empirical studies carried out as part of this thesis will subsequently be presented in Chapters 4 - 7, with the relevance of the findings from these chapters to the existing literature and theory in this field then explored in the

concluding chapter.

1.2 Empirical roots of attachment theory

Attachment theory is the joint work of John Bowlby and Mary Ainsworth (Ainsworth & Bowlby, 1991). Drawing on concepts from ethology, cybernetics, information processing, developmental psychology, and psychoanalysis, Bowlby formulated the basic tenets of the theory (Ainsworth & Bowlby, 1991; Bretherton, 1992). It was Ainsworth's innovative methodology, however, which not only made it possible to test Bowlby's ideas empirically but also helped to expand the theory itself, underpinning some of the new directions now being taken in this field (Bretherton, 1992). In this section, the roots of this theory will be described.

After graduating from the University of Cambridge in 1928, Bowlby carried out volunteer work in a residential school for maladjusted children (Ainsworth & Bowlby, 1991). His experience with two of the children he encountered at this school set his professional life on course. One was an isolated, affectionless adolescent who had never experienced a stable relationship with a mother figure, and the other was an anxious child who followed Bowlby around like a shadow. Persuaded by this experience of the effects of early family relationships on personality development, Bowlby resolved to continue his medical studies toward a speciality in child psychiatry and psychotherapy (Ainsworth & Bowlby, 1991; Senn, 1977 as cited in Bretherton, 1992).

His first systematic research began at the London Child Guidance Clinic, where he

compared 44 juvenile thieves with a matched control group and found that prolonged experiences of mother-child separation or deprivation of maternal care were much more common among the thieves than in the control group, and that such experiences were especially linked to children diagnosed as affectionless (Bowlby, 1944).

Similar research on the effects of early care and relationships was also being carried out by other psychologists during this period. Some of the first attempts to study the psychological effects of early care focused on the development of children reared in orphanages and without the benefit of a consistent caregiver (Cassidy, 2008). In the 1940s, when orphanages were common in North America, there were many such studies and their findings indicated not only that these children were developmentally delayed, but also that their social and emotional behaviour was unusual. They did not seem to form close relationships, and were instead described as inappropriately friendly towards everyone, including strangers (e.g. Bender & Yarnell, 1941; Spitz, 1945). When they were later adopted or reared in foster homes, improvement was noted in many domains, but some cognitive and affective impairments persisted (Goldfarb, 1945).

These data were generally interpreted as the effect of “maternal deprivation” (Bowlby, 1951; Goldfarb, 1945), and this view was buttressed by the experiment of Slodak and Skeels (Skeels, 1966). They found that children from orphanages who were moved to an institution for mentally retarded adults were usually ‘adopted’ by a particular older resident who lavished individual attention and affection on them. Compared to the children who remained in the orphanage, these children were more likely to develop normally, leave the institution and become fully contributing

members of society.

Now we are more aware that the privations of institutional care cannot be attributed to maternal deprivation alone. Child outcomes were also influenced by the relatively deprived living conditions during the post second World War period, and the absence of fathers, siblings, and a family context. Nevertheless, at that time, these data played a major role in Bowlby's theoretical formulations concerning the mother-child relationship (Goldberg, 2000). Bowlby's major conclusion, grounded in the consistency across empirical evidence, was that to grow up mentally healthy,

"...the infant and young child should experience a warm, intimate, and continuous relationship with his mother (or permanent mother substitute) in which both find satisfaction and enjoyment." (Bowlby, 1951, p.13).

At the time, the two widely accepted theories that offered explanations for the child's tie to the mother were both secondary-drive theories: the psychoanalytic theory of object relations and the social learning theory of dependency (Ainsworth, 1969; Cassidy, 2008). In 1905, the psychoanalyst Freud had specified that the child's first love object is the mother's breast, and he referred to the early sucking relationship as the prototype of all later love relations (Freud, 1952). His first stage, the oral stage, presupposed that infants develop relationships with their mothers, because mothers satisfy their hunger. Social learning theories followed the psychoanalytic lead in conceiving the origin of interpersonal relations to lie in the infant's dependence on his mother (Ainsworth, 1969). Beller (1955), for instance, described the infant as experiencing physical contact with the mother while also experiencing reduction of his hunger drive through food intake. Dependency, then, was defined as a learned

drive, acquired through its association with the reduction of the primary drive - hunger. Thus, psychoanalytic and social learning theorists' overlapping proposition is that an infant's relationship with the mother is 'secondary': it emerges because she feeds the infant, and that pleasure experienced upon having the hunger drive satisfied comes to be associated with mother's presence (e.g. Beller, 1955; Freud, 1957).

Bowlby, meanwhile, had begun a search for an adequate explanation of the empirical findings, having found neither of the secondary drive theories described above sufficient to account for young children's responses to separation and reunion, or to explain adequately how the tie to the mother develops. In relation to social learning theory, he recalled later that:

"This theory did not seem to me to fit the facts. For example, were it true, an infant of a year or two should take readily to whomever feeds him, and this clearly is not the case. But, if the secondary drive dependency theory was inadequate what was the alternative?" (Bowlby, 1980, p.650)

At this point, other attempts to understand the role of early care in development were being made through naturalistic observations of animal behaviours, as well as by experimentally manipulating rearing conditions in laboratory studies. For instance, ethologists documented the phenomenon of 'imprinting' in precocial birds, a term first introduced by Lorenz (1935, as cited in Bretherton, 1992) in his studies of behaviours in geese. The common finding was that during a 'critical' or 'sensitive' period shortly after birth, exposure to a specific figure sets in motion a series of behavioural processes that results in later preferential behaviour, such as following toward that figure. Under normal rearing conditions, the figure is a biologically appropriate one (the mother or another member of the species), but experimental

manipulations can lead to striking examples of imprinting on an anomalous figure, for example, as in the famous photograph of Konrad Lorenz being followed by a line of goslings.

Another very widely known study was conducted by Harry Harlow and his colleagues (Harlow & Harlow, 1962). They began their studies of rhesus monkeys raised with various types of ‘mother surrogates’ in order to examine how baby monkeys reacted to these surrogates under laboratory conditions. Wire frames covered with terry cloth to which the monkey could cling for comfort, with attached bottles containing food, allowed the monkeys to grow and develop in a fashion that initially appeared normal, particularly when some exposure to peers was provided. Later studies (Harlow & Harlow, 1965), however, showed that this type of rearing resulted in abnormal social behaviours, namely an inability to interact with peers and to have normal sexual relations, with females, if impregnated, grossly neglecting and/or showing abusive behaviour towards their infants.

In one further experiment (Harlow & Zimmermann, 1959), eight infant monkeys were raised with either a cloth model or a wire model. Four infants were fed (on demand) from the cloth model and four from the wire model and the time infants spent on each model was measured. The results showed that, irrespective of which model provided the food, the infants came rapidly to spend most of their time on the cloth model. Whereas infants of both groups spent an average of fifteen hours a day clinging to their cloth model, no infants of either group spent more than an hour or two out of the twenty-four with the wire model. Some infants whose food came from the wire model managed to lean over and suck the teat bottle while still maintaining a

grip of the cloth model. From these findings, Harlow and Zimmermann concluded that contact comfort is a variable of critical importance in the development of affectional responsiveness to the surrogate mother (i.e. the model) and that nursing appears to play a negligible role. They also reported that with increasing age and opportunity to learn, an infant fed from a wire 'mother' does not become more responsive to her, but instead becomes increasingly more responsive to its non-lactating cloth 'mother'.

On becoming familiarised with the ethological literature, Bowlby was struck by the evidence that, in contrast to the secondary drive theories, a strong social bond can be formed even when it is not based on oral gratification (Ainsworth & Bowlby, 1991). He was furthermore impressed by the fact that ethological research began with field observations of the infant animal in its natural environment, the same starting point as a clinician.

During the early 1950s, Bowlby was also deeply influenced by his membership of an international and interdisciplinary study group on the psychobiology of the child convened by the World Health Organization, which met annually. Among the members were Jean Piaget, Konrad Lorenz, and Margaret Mead, and among guest speakers were Julian Huxley, Ludwig von Bertalanffy, and Erik Erikson (Ainsworth & Bowlby, 1991). These were colleagues from such diverse fields as evolutionary biology, ethology, developmental psychology, cognitive science, and control system theory.

1.3 Emergence of attachment theory

Another member of Bowlby's research team during this period of initial formulation of attachment theory was a developmental psychologist, Mary Salter Ainsworth. Her connection with Bowlby - a friend had shown her a newspaper advertisement for a developmental research position - proved fortunate for the development of attachment theory (Cassidy, 2008). Following work with Bowlby in London, Ainsworth conducted systematic observations of human infants in Uganda, which Bowlby called one of "the two pioneer studies" (Bowlby, 1969, p.366) in the development of attachment theory. The other was conducted by Schaffer & Emerson (1964), and will be discussed later.

Ainsworth (1963, 1967) recruited 28 families and conducted a short-term longitudinal study with unweaned Ganda infants aged between 1 and 24 months. She visited the families and observed every 2 weeks for 2 hours per visit over a period of up to 9 months. Visits (with an interpreter) took place in the family living room, where Ganda women generally entertain visitors in the afternoon. Researchers interviewed the mother about her infant care practices and about the infant's development, and observed their behaviour in interaction, as well as the interactions of the rest of the household with the young infant.

What she saw did not support the Freudian notion of a passive, recipient, narcissistic infant in the oral phase. Rather, she was impressed by the infants' active search for contact with the mother when they were alarmed or hurt, when the mother moved away or left even briefly, and when they were hungry - and even then she was struck

by their initiative in seeking the breast and managing the feeding. There was impressive evidence of the use of the mother as a secure base from which to explore the world and as a haven of safety. She observed the very beginnings of the infant's formation of attachment to the mother in differential smiling and vocalisation and in differential termination of crying.

Ainsworth was especially interested in determining the onset of proximity-maintaining behaviours, noting carefully when these signals and behaviours became preferentially directed towards the mother or other caretakers. Because a number of adults were always present, it was possible to observe differences in the responses and behaviours directed towards the mother and those directed towards other adults. By the end of the study the two youngest infants were only six months of age, but most had reached ten to fifteen months. All but four were showing proximity-seeking behaviours, such as attempting to follow a departing mother as soon as they could crawl.

Ainsworth's findings made it clear that in all but a very small minority of Ganda infants, attachment behaviour was clearly present by six months of age, and was evidenced not only by the child's crying when the mother left the room but also by his greeting her on her return with smiles, lifting of the arms, and crows of delight. Crying was more likely to occur when the child was left alone or with strangers, but at this age it did not occur on every such occasion. During the next three months, however, as the infant progressed from six to nine months of age, all of these behaviours were exhibited more regularly and with more vigour "as though the attachment to the mother was becoming stronger and more consolidated" (Ainsworth,

1963, p.82). Infants of this age followed their mother when she left the room; when she returned to the room, they first greeted her and then crawled as quickly as possible to her. All these patterns of behaviour continued during the final quarter of the first year and throughout the second year of life. Clinging to the mother also became especially evident after the age of nine months, particularly when a child was alarmed, e.g. by a stranger's presence.

A similar study was conducted by Schaffer and Emerson (1964). They conducted a study in Scotland with 60 typically developing infants, of whom 31 were male and 29 females. Their parents were all Scottish-born, and lived in a part of Glasgow which was a largely working-class area. Information was obtained from interviews with the parents at intervals of four weeks from their child's birth until 12 months and then again when infants were 18 months of age. Schaffer and Emerson stated that "the core of the attachment function is represented by one of the simplest yet most fundamental elements in social behaviour, namely the tendency of the young to seek the proximity of certain member of the species" (Schaffer & Emerson, 1964, p.6), and focused mainly on the infant's responses to being left by the mother in seven possible situations, e.g., when left alone in a room, left in their cot at night, or when put down after being held in the adult's arms or lap. First-hand observations were limited in this study, and greeting responses were not taken into account.

In the Scottish investigation, one-third of the infants were showing attachment behaviours by six months of age and three-quarters by nine months. Taken at face value, as Bowlby (1969) discusses, Schaffer and Emerson's findings suggest that Scottish children are a little slower to develop attachment behaviour than are Ganda

children. This may well be so and would be in keeping with the notably advanced motor development of the Ganda infants. An alternative explanation, as Bowlby (1969) further argued, is that such differences are a result of the different criteria of attachment and methods of observation that were employed in the two studies. In the study of Schaffer and Emerson, for example, the sole criterion of attachment behaviour was a child's protest on being left by someone. In Ainsworth's study in Uganda, by contrast, the criteria were more broadly based: in addition to protest at separation, an infant's greeting of a caregiver and the use of this person as a base from which to explore were included as criteria of attachment. In addition, as Ainsworth conducted an observational study, she may have been able to document more subtle and earlier attachment behaviours than Schaffer and Emerson were able to access using their interview approach.

Likewise, different criteria for attachment behaviour may have been the source of other disagreements in findings in relation to the development of attachment in these two samples of mother-infant dyads. Of the 58 Scottish infants studied by Schaffer and Emerson (1964), 17 (29%) were reported to have been directing attachment behaviour towards more than one figure almost from the time at which such behaviour was evident. After another four months, not only had half the children more than one attachment figure, but a number of them had as many as five or more different attachment figures. By the time these children had reached eighteen months of age, only 13 % restricted their attachment behaviour to only one figure which meant that for a child of eighteen months, having only one attachment figure was quite exceptional. Ainsworth's (1963) findings for the Ganda infants showed a slightly different picture from this: all but a tiny minority had formed multiple

attachments by nine or ten months of age. In her study, although attachment behaviour was also shown by infants towards other family adults, behaviours towards the mother were nearly always shown earlier, more strongly, and more consistently. Between the ages of six and nine months, any child whose father came home regularly would greet him joyfully when he appeared, although actual following of a family adult (other than the mother) when they left the room was not observed until after the age of nine months.

As Bowlby (1969) discusses, while a plurality of attachment figures is probably the rule by twelve months, these attachment figures are not treated equivalently. In each of the two cultures considered, the infants showed clear discrimination. In the case of the Scottish sample, a scale was devised for measuring the intensity of protest that a child exhibited on being left by each figure. Results showed that, for most children, there was regularly more protest when left by one figure than by another, and that a child's attachment figures could be arranged in hierarchical order. Using a broader range of criteria, as described earlier, Ainsworth also found that Ganda children tended to focus most of their attachment behaviour on one special person. Up until about nine months of age, however, she observed that a child with more than one attachment figure nevertheless tended to confine actual following to a single figure.

Interestingly, both studies reported that when a child was hungry, tired, or ill he usually turned specifically to one figure. Schaffer and Emerson (1964, p. 24) wrote,

“sometimes the infant was also reported as crying for attention from anyone under normal circumstances but as insisting on the company of a particular

person when tired or ill”.

Ainsworth also stated that:

“It seems likely that, to some extent, different figures elicit different patterns of attachment behaviour. Thus, it may be that the father or favourite older sibling, with whom the infant interacts chiefly in play, may elicit strong greeting responses. On the other hand, it is the mother, who is more responsible both for basic need satisfactions and for protection against threat, who is more likely to elicit protest patterns when she departs and more obviously serves as a secure base for exploration or haven of safety in time of flight.” (Ainsworth, 1963, p. 103)

These findings suggested that, from an early age, different figures may elicit different patterns of social behaviour and that it is important, therefore, to pay more attention to distinguishing infants’ behaviours towards playmates from those towards their core attachment figures.

Despite the differences highlighted above, the two reports are in agreement on many key findings. One of these is the three different phases in attachment development. Both studies reported that the infant passes through a phase of indiscriminate social responsiveness, to a phase of attachment to the mother, and then to an expansion of the capacity for attachment from just one figure to other figures. As his attachment to his mother grows in depth and strength, the infant’s general capacity for attachment also grows in breadth. Schaffer and Emerson (1964) in fact found no evidence that attachment to the mother became less intense when attachment behaviour was also directed to other figures; on the contrary, in the early months of attachment, the greater the number of figures to whom a child was attached, the more intense his attachment to his mother was likely to be. They found that the infant with an intense

attachment to his principal caregiver was more likely to have formed attachments to other caregivers as well, whereas the weakly attached infant tended mainly to focus on only the one individual.

Another finding reported in both studies relates to the large individual differences in the ways in which the infant manifests attachment, and in the figures with whom attachments are formed. Ainsworth (1963) argues that these individual differences are related, at least in part, to differences in the patterns of infant care, to the constellation of figures in the household, and to the relationships amongst these figures. In order to search for associations between quality of attachment and these variables, she grouped her dyads into 3 major groups - securely-attached, insecurely-attached, and non-attached. Insecurely-attached infants cried a lot even when the mother was present, whereas securely-attached infants cried little except when their mothers were absent or seemed about to leave. Non-attached babies manifested no differential behaviour to the mother, although Ainsworth later recalled that these infants were often left alone for long periods by mothers because they were the youngest in the sample, and she believes that they may merely have been delayed in developing attachment (Ainsworth & Bowlby, 1991). Ainsworth found that secure attachment was significantly correlated with maternal sensitivity. Infants of sensitive mothers tended to be securely attached, whereas infants of less sensitive mothers were more likely to be classified as insecure.

Similarly, Schaffer and Emerson (1964) found that the degree of maternal responsiveness and amount of maternal interaction showed a significant association with the intensity of attachment to the mother. They also found that maternal

availability was not related to the intensity of attachment and that the mother's constant presence per se appeared to be no guarantee that the infant would develop a close attachment to the mother. According to Schaffer and Emerson, when a relatively unresponsive mother is found in conjunction with, say, an extremely attentive father, the latter is more likely to become the focus of an intensive attachment relationship, despite the mother's greater presence. Interestingly moreover, infants sometimes formed secure/intense attachment with figures who took no part in their routine care, suggesting that something other than the mere satisfaction of bodily needs determined the quality and direction of attachment (Ainsworth, 1963; Schaffer & Emerson, 1964).

Another core finding common to these studies was that not only does the kind of care an infant receives from his mother play a part in determining the quality or intensity of attachment, but also that the extent to which an infant himself initiates interaction is an important factor. Ainsworth (1963) states that from at least two months of age onwards, and increasingly through the first year of life, the infants she studied were not so much passive and recipient as active in seeking interaction. Schaffer and Emerson also described their Scottish infants in the same vein as follows:

"...from the early weeks on the infant appears to take an active part in seeking interaction with his social environment, and it is he rather than the adults around him who is so often found to take the initiative in establishing and maintaining contact. Not only is there striving for the satisfaction of physical wants, but a considerable portion of an infant's motivational effort is also devoted to attention seeking - apparently for its own sake. The fact that, for the greater part of the first year, the infant's comparative lack of locomotor abilities precludes the use of many of the later-appearing devices employed for this end should not blind one to the power of those means with

which he can signal his requirements even in the early months (crying being the most obvious and effective in this respect).” (Schaffer & Emerson, 1964 p. 63)

These findings, along with Harlow’s intriguing work on the infant-mother relationship in the monkey, cast doubt on the role previously attributed to the infant’s feeding experience in the establishment of affectional bonds. They also allowed attachment theory to be further developed by Bowlby (1958, 1969) and Ainsworth (1964, 1967, 1969) to account for the nature and formation of the child’s tie to the mother and other caregivers. Ainsworth and Bell (1970) defined attachment as “an affectional tie that a person or animal forms between himself and another of his kind - a tie that binds them together in space and endures over time.” (p.50). As seen in the study conducted by Ainsworth (1963) in Uganda, the behavioural hallmark of attachment is seeking to gain and to maintain a certain degree of proximity to the figure of attachment, ranging from close physical contact under some circumstances to interaction or communication across some distance under other circumstances. As Ainsworth (1964, 1967, 1969) and Bowlby (1958, 1969) state, attachment behaviours are behaviours which promote proximity or contact. In the human infant these include active proximity- and contact-seeking behaviours such as approaching, following, and clinging, and signalling behaviours such as smiling, crying, and calling.

As Bowlby (1958, 1969) states, the most fundamental aspect of attachment theory is its focus on the biological bases of attachment behaviours. Attachment behaviour, as seen in the studies conducted both in Uganda and in Scotland, has the predictable outcome of increasing the proximity of the child to the attachment figure (usually the

mother). Some attachment behaviours (smiling, vocalising) are signalling behaviours that alert the mother to the child's interest in interaction, and thus serve to bring her to the child. Other behaviours (crying) are aversive, and bring the mother to the child to comfort him. Some active behaviours (approaching and following) move the child to the mother (Cassidy, 2008).

Bowlby proposed that during the time in which humans were evolving, when they lived in what he called "the environment of evolutionary adaptedness", genetic selection favoured attachment behaviours because they increased the likelihood of child-mother proximity, which in turn increased the likelihood of protection and provided survival advantage. In keeping with the evolutionary thinking of his time, Bowlby emphasised survival of the species in his earliest theoretical formulations. He noted that advances in evolutionary theory necessitated a framework within which, for all behavioural systems, including attachment, "the ultimate outcome to be attained is always the survival of the genes an individual is carrying" (Bowlby, 1969, p. 56).

Many predictable outcomes beneficial to the child are thought to result from the child's desire for proximity to the parent (Bowlby, 1969). These include feeding, learning about the environment, and social interaction. In the environment of evolutionary adaptedness, infants who were biologically predisposed to stay close to their mothers were less likely to be killed by predators, and it was for this reason that Bowlby referred to protection from predators as the "biological function" of attachment behaviour. Because of this biological function of protection, Bowlby considered infants to be predisposed particularly to seek their parents in times of

distress. Thus, attachment is considered a normal and healthy characteristic of humans throughout the lifespan, rather than a sign of immaturity that needs to be outgrown (Cassidy, 2008)

1.4 Individual differences in patterns of attachment and the Strange Situation paradigm

In 1963, while still working on the data from the Ganda study, Ainsworth embarked on a second observational project, this time in the United States. Again, she opted for naturalistic observations, but with interviews playing a somewhat lesser role compared to her previous study in Uganda. The 26 participating Baltimore families were recruited prenatally, with 18 home visits beginning in the first month and ending at 54 weeks. Each visit lasted 4 hours to make sure that mothers would feel comfortable enough to follow their normal routine, resulting in approximately 72 hours of data collection per family. Raw data took the form of narrative reports. Typed narratives from all visits for each quarter of the first year of life were grouped together for the purposes of analysis. As Bretherton (1992) has argued, a unique (at the time) aspect of Ainsworth's methodology was the emphasis on meaningful behavioural patterns in context, rather than on frequency counts of specific behaviours.

Close examination of the narratives revealed the emergence of characteristic mother-infant interaction patterns during the first 3 months (for overview, see Ainsworth et al., 1978). Separate analyses were conducted on feeding situations (Ainsworth & Bell, 1969), mother-infant face-to-face interactions (Blehar,

Liebermann, & Ainsworth, 1977), crying (Bell & Ainsworth, 1972), infant greeting and following (Stayton & Ainsworth, 1973), the attachment-exploration balance (Ainsworth, Bell, & Stayton, 1971), obedience (Stayton, Hogan, & Ainsworth, 1973), close bodily contact (Ainsworth, Bell, Blehar, & Main, 1971, as cited in Bretherton, 1992), approach behaviours (Tracy, Lamb, & Ainsworth, 1976), and affectionate contact (Tracy & Ainsworth, 1981).

As in her Ganda study, striking individual differences were observed in how sensitively, appropriately, and promptly the Baltimore mothers responded to their infants' signals. Distinctive patterns were observed in face-to-face interactions between mothers and their infants during the period from 6 to 15 weeks (Blehar et al., 1977). When mothers were sensitive to infant's behavioral cues and were conspicuous for their respect for the baby's current state and activity in progress, infants responded with joyful bouncing, smiling, and vocalising. In contrast, mothers who tended to be impassive and matter-of-fact in their face-to-face encounters with their infants were less likely to evoke a positive response from the babies. Consequently, their interactions tended to be brief. Findings relating to close bodily contact resembled those on feeding and face-to-face interaction, as did those on crying. There were enormous variations in how many crying episodes a mother ignored and how long she let the baby cry. In countering those who argued that maternal responsiveness might lead to "spoiling," Bell and Ainsworth (1972) concluded that: "an infant whose mother's responsiveness helps him to achieve his ends develops confidence in his own ability to control what happens to him" (p. 1188).

Maternal sensitivity in the first quarter was associated with more harmonious mother-infant relationships in the fourth quarter. Babies whose mothers had been highly responsive to crying during the early months now tended to cry less, relying for communication on facial expressions, gestures, and vocalisations (Bell & Ainsworth, 1972). Similarly, infants whose mother had provided high levels of tender holding during the first quarter sought contact less often during the fourth quarter, but when contact occurred it was rated by researchers as more satisfying and affectionate (Ainsworth et al., 1971, as cited in Bretherton, 1992). Ainsworth et al. (1978) explained these findings by recourse to infants' expectations, based on prior satisfying or rejecting experiences with their mothers.

About the middle of the first year the Baltimore babies had clearly become attached, and one of the signs of this was that they began to show distress when mother left the room. However, infants whose attachment was secure seemed to build up a working model of their mother as being available even though out of sight, and thus came to protest at little everyday departures at home less often than did infants who were insecurely attached. They were also more likely than insecure infants to greet the mother positively upon reunion, and less likely to greet her grumpily or with a cry (Stayton, Ainsworth, & Main, 1973).

These findings contributed to the development of a standardised procedure for assessing the infant-parent attachment relationship. Based on the findings Ainsworth obtained through naturalistic observation in Uganda and Baltimore, the laboratory procedure known as the Strange Situation was developed (Ainsworth & Wittig, 1969). The Strange Situation is a 20-minute miniature drama paradigm with eight

episodes in which a wide range of behaviours pertinent to attachment and to its balance with exploratory behaviour may be elicited. The mother and infant are introduced to a laboratory playroom where they are later joined by an unfamiliar woman. While the stranger plays with the baby, the mother leaves briefly and then returns. A second separation ensues during which the baby is completely alone. Finally, the stranger and then the mother return. As Ainsworth and Bell (1970) describe, the situation is designed to be novel enough to elicit exploratory behaviour, and yet not so strange as to evoke fear and heighten attachment behaviour from the beginning. The approach of the stranger is gradual, so that any fear of her could be attributed to unfamiliarity rather than to any abrupt, alarming behaviour.

The theoretical background of this procedure, according to Ainsworth et al. (1978), is that an unfamiliar or strange situation might be expected to activate three behavioural systems in varying degree of strengths: exploratory behaviour, wary/fearful behaviour, and attachment behaviour. Exploratory behaviour is antithetical to attachment behaviour in that it leads the infant towards interesting features of his environment and thus usually away from the attachment figure. If, however, the infant is alarmed, attachment behaviour as well as wary/fearful behaviour tends to be activated (Bowlby, 1969, 1973), with these two systems commonly working in concert. Behaviour that promotes proximity to the attachment figure therefore also tends to lead the baby away from the alarming stimulus or at least to reduce its impact. To the extent that exploratory behaviour is activated more strongly than the other two systems in combination, a child can be expected to explore the new environment.

As anticipated, Ainsworth found that infants explored the playroom and toys more vigorously in the presence of their mothers than after a stranger entered or while the mother was absent (Ainsworth & Bell, 1970), with the mother's departure and brief absence in the Strange Situation providing strong enough activation of attachment behaviour to override even the strongly activated exploratory system. This is an aspect of the phenomenon that Ainsworth (1963, 1967) referred to as "using the mother as a secure base from which to explore".

Ainsworth also became intrigued with individual differences in patterns of infant reunion behaviours (Ainsworth et al., 1978). The infants whom Ainsworth termed 'secure' used the mother as a secure base for exploration, as expected. That is, when the mother was present, they freely explored the environment, with only occasional visual, verbal, or physical contact with the mother. When she departed, their exploration was diminished. They might or might not cry, but when she returned, they greeted her positively, and if they were visibly upset, they went to her, were soon comforted and returned to exploring. The infants Ainsworth termed 'avoidant', on the contrary, explored with little reference to the mother, showed little distress at her departures, and visibly ignored or snubbed her when she returned. The infants Ainsworth termed 'resistant' or 'ambivalent' seemed to be preoccupied with the mother. They were reluctant to explore even in her presence, and were extremely distressed by the departures. They were surprisingly angry when the mother returned after a 3-minute (or shorter) separation. They cried and wanted contact but would not simply cuddle or "sink in" when picked up by the returning mother. Instead, they showed their ambivalence by kicking or swiping at her.

Within each of these major patterns, Ainsworth et al. (1971) furthermore noted subgroups - four in the secure group B, two in the avoidant group A, and two in the ambivalent group C. Secure group B1 and B2 infants were somewhat like avoidant infants in that they showed minimal upset and displayed less contact-seeking during reunions than B3 and B4 infants. However, they were distinguished from the avoidant group of infants by their positive responses to the mother. B3 and B4 babies were somewhat like resistant infants in that they were readily upset by separation and engaged in strong contact-seeking at reunions. B4 infants were also relatively slow to settle. However, these babies differed from the resistant group in not being ambivalent about their desire for contact, and in being less angry. Thus, securely attached infants may show one of four different secure patterns, differing in the amount of distress they exhibit, but are nonetheless similar in showing a positive response to the mother at reunions and an ability to return to exploration in her presence.

In the avoidant group, A1 infants were consistently avoidant whereas A2 infants showed mixed behaviour, namely some tendency to greet or approach the mother but mixed with a marked tendency to move away or look away at reunions. Thus the A2 baby might start to approach the mother on her return, but then continue past her to the door or veer off towards the toys. The common feature in both avoidant groups, however, was the inability to approach the mother directly after separations or to express overt pleasure at her return.

In the resistant group, C1 infants were overtly angry, while C2 infants were more passive and helpless, signalling to be picked up at reunion rather than actively

approaching. The C2 infants were also thought to be angry, but showed their anger through panting and inappropriate helplessness rather than overt protests. Infants in both resistant groups shared an inability to engage in exploration and play after separations.

Each of the three main patterns of behaviour within the Strange Situation reflects a strategy for enlisting the caregiver in the service of alleviating stress. The secure infant explores freely and seeks contact with the attachment figure as necessary. The avoidant infant focuses on exploration, monitors and maintains proximity to the attachment figure, but does not express attachment needs in order to avoid risking rejection. The resistant infant is preoccupied with the availability of an inconsistent caregiver, making repeated high-intensity demands to ensure that at least some of these elicit attention.

Soon after Ainsworth and her colleagues developed the Strange Situation Procedure, it was being widely used by others (Goldberg, 2000). In the course of these studies, however, investigators found a small number of infants whose behaviour could not be classified under Ainsworth's three-category scheme. Furthermore, as studies expanded to include larger and more diverse populations, such as parents with a history of maltreatment (Crittenden, 1985) or depression (e.g. Radke-Yarrow, Cummings, Kuczynski, & Chapman, 1985), not only were there children who could not be classified within the categories available, but there were some for whom classifications seemed to be anomalous with respect to known family information (Main & Solomon, 1986).

Main and Solomon (1986) undertook the review of 55 videotapes of infants from community samples whose responses to separation and reunion in the Strange Situation failed to meet the criteria for any of the three typical attachment patterns. As Main and Solomon (1990) describe, the central discovery was the absence of clear new patterns of infant Strange Situation behaviour. Surprisingly, infants who could not be classified within the typical A, B, C system did not appear to resemble one another in any coherent, organised way. What these infants shared in common was instead bouts or sequences of behaviour which seemed to lack a readily observable goal, intention, or explanation. The term ‘disorganised’ or ‘disoriented’ was therefore selected to describe these behaviour patterns (Main & Solomon, 1990).

In some infants, as Main and Solomon (1990) describe, behaviour could be seen as disorganised only when it was considered at an abstract level, as for example with respect to the observer’s expectations regarding the usual temporal patterning of infant behaviour. In others, they found more obviously disorganised or disoriented behaviour (e.g. approaching with head averted, stilling or freezing of movement for thirty seconds accompanied by a dazed expression).

Because disorganisation is not a pattern in and of itself (Goldberg, 2000), there is no clear description of this pattern. However, Main and Solomon (1990) found that infants who could be classified as disorganised D in the Strange Situation tended to have one or more of the following features: “disordering of expected temporal sequences; simultaneous display of contradictory behaviour patterns; incomplete or undirected movements and expressions; direct indices of confusion and apprehension; and behavioural stilling” (p.122).

In the coding of data from the Strange Situation, if an infant is thought to fit the disorganised category best, effort is also made to determine the underlying category (secure, avoidant, or resistant). Thus, an infant may be classified as disorganised-secure, disorganised-avoidant, or disorganised-resistant. If there does not appear to be an underlying pattern, the infant may alternatively be classified as 'unclassifiable'. This unclassifiable U category may also be used for infants who show no sign of disorganisation but who do not fit the description for any of the other behavioural categories (Goldberg, 2000).

1.5 The association between children's Strange Situation behaviour and maternal behaviour

As was hypothesised, Ainsworth et al. (1978) found an association between the attachment pattern assessed in the Strange Situation and the quality of infant-mother interaction observed at home throughout the first year of life. They found that mothers of securely attached infants were the most sensitive in their responses to infant signals, including cries. They were described as emotionally expressive and flexible in dealing with their infants. In the last quarter of the first year, their sensitivity to signals was specifically shown in their behaviour during feeding, in their contingent responsiveness in face-to-face situations, and in their tender and careful holding when in close bodily contact with the infant. They were found to be relatively mobile in emotional expression and tended to lack rigidity and compulsiveness in dealing with the infant throughout the first year. Moreover, they were also psychologically accessible to their infants, accepting rather than rejecting,

and cooperative rather than interfering. Mothers of avoidant infants were described as “rejecting” (Ainsworth et al., 1978, p300) slow to respond to distress, and expressing their rejection in terms of aversion to close bodily contact with their infants. Their positive feelings about the baby were often overcome by anger and irritation. They were minimally expressive, relatively rigid in dealing with their infants, and often interfered unnecessarily with their infants’ activities. Mothers of resistant infants were inconsistently responsive. Like the mothers of avoidant infants, they were relatively insensitive to infant signals, but were less rejecting. Although they showed no aversion of bodily contact, they were more likely to be inept in physical contact with their infants, showing little spontaneous affection.

On the basis of these associations, Ainsworth et al. (1978) concluded that different patterns of infant behaviour during the Strange Situation are associated with different constellations of maternal behaviour both before the Strange Situation and subsequent to it. During the Strange Situation, because maternal behaviour was controlled both through instructions and through the structure of the episodes themselves, infant behaviour was largely freed from its usual contingencies with maternal behaviour. Thus, the individual differences in infant behaviour which emerged under these circumstances cannot be attributed to individual differences in the contingencies provided by maternal behaviour during the Strange Situation itself. As they argue, the continuity in patterns of infant behaviour, despite the experimental control of maternal behaviour, suggests that “the determinants of infant behaviour toward an attachment figure include an inner organisational component, as well as situational determinants” (Ainsworth et al., 1978, 301).

This finding, and their argument, is in line with Bowlby's (1969, 1973) view that from the early attachment relationship onwards, the child begins to represent what to expect from the world and from other people, as well as how he can expect to be treated by others. By about the middle of the first year of life, the infant's attachment behaviour begins to become goal directed and to be organised in accordance with this plan, albeit in a rather primitive way. Bowlby called this mental representation an "internal working model" of the social world and suggested that the infant creates this model based on his experiences and expectations of the accessibility and responsiveness of his caregiver. As Thomson (2008) describes, these mental representations not only enable immediate forecasts of the caregiver's responsiveness, but develop into an interpretive filter through which children (or adults) reconstruct their understanding of new relationships and experiences in ways that are consistent with past experiences and expectations arising from secure and insecure attachments.

Although some have criticised Ainsworth for overgeneralising from the findings of her small sample (e.g. Lamb, Thompson, Gardner, & Charnov, 1985), these findings have since been replicated and the Strange Situation procedure (Ainsworth & Wittig, 1969; Ainsworth et al., 1978) has become a standard infant-mother attachment measurement, allowing us to operationalise Bowlby's theory. This procedure has provided extensive data about the balance between attachment and exploratory behaviour in young infants, and about the eliciting and terminating conditions for attachment behaviours (Miyake, Chen, & Compos, 1985; Takahashi, 1986; van den Boom, 2001). As van den Boom (2001) notes, the development of this attachment measurement was a major step forward in understanding the attachment relationship between mothers and infants.

Ironically, however, given the roots of Ainsworth's work in Uganda, the development of this attachment measurement has also raised questions about the universality of some of the key assumptions of the attachment theory which generated it. This was because the theory was largely based on a Western concept of "independent construal of self" (Markus & Kitayama, 1991, p.226). Attachment theorists view exploration as an early form of autonomy, and the link between the attachment security and autonomy tends to be highlighted. However, as Cole and Tan (2007) argue, cultures vary not only in their ideas for how to achieve the balance between emotional independence and dependence but in terms of the number of caregivers an infant has, amount of experience infants have being separated from primary caregivers, and physical risks associated with being away from them. In the next chapter, attachment research conducted in various countries - including Western Africa, China, Israel, and Japan - will be reviewed in order to gain insights into attachment relationships in a wider range of cultural contexts.

CHAPTER 2

CROSS-CULTURAL PATTERNS OF ATTACHMENT AND THE JAPANESE CONCEPT OF *AMAE*

2.1 Introduction

The previous chapter described the origins and the development of attachment theory. A central tenet of the theory proposed by Bowlby (1969, 1973, 1980) is that the mother's early sensitivity or responsiveness influences the quality of attachment the child forms with the mother. As outlined in Chapter 1, Ainsworth's seminal studies in Uganda (Ainsworth, 1967) and Baltimore (Ainsworth et al., 1978) provided initial empirical evidence in support of the role of sensitive caregiving in attachment security. Using the laboratory-based Strange Situation protocol to observe behavioural response to reunion with the mother following two separations, it became possible for the first time to assess individual differences in the nature of the child's attachment to his mother. Ainsworth identified three central attachment patterns in her original Baltimore sample: avoidant (A), secure (B), and resistant or ambivalent (C).

Within a decade, 2,000 Strange Situations had been conducted in eight countries (van Ijzendoorn & Kroonenberg, 1988), with the global proportions of avoidant, secure, and resistant/ambivalent attachment patterns found to be almost identical to those reported in Ainsworth's original studies. Notably however, Ijzendoorn & Kroonenberg's meta-analysis also found two studies that diverged from this global distribution: a study conducted in Northern Germany (Grossmann, Grossmann, Spangler, Suess, & Unzner, 1985) and a study conducted in Sapporo, a city on the

island of Hokkaido in the far north of Japan (Takahashi, 1986). These two studies have received continuous worldwide attention and have triggered numerous cross-cultural investigations of attachment. This notwithstanding, the question of whether the individual differences in attachment behaviours identified by Ainsworth have the same implications with respect to attachment security in all cultures remains unanswered. The many cross-cultural studies conducted over the past three decades have nevertheless significantly enriched our understanding of similarities and differences in mother-child interactions, parental beliefs, and child-rearing practices across cultures. The present chapter therefore reviews the most important of these, as they have played an important role in the development of the attachment research to be reported and built on within this thesis. In particular, the attachment studies conducted to date within Japan will be reviewed, and the Japanese concept of *amae* will be introduced later in the chapter.

2.2 Mother-child attachment in Northern Germany

Inspired by Ainsworth's Baltimore study, Grossman and her colleagues conducted a longitudinal study in Bielefeld, Northern Germany with 54 mothers and their newborns (Grossmann et al., 1985). They carried out three, two hour home visits throughout the first year (when the infants were 2, 6, and 10 months) and then observed the infants and their mothers in the Strange Situation at 12 months. In their home observations, they focused on infant crying and maternal responsiveness, on behaviours involving close bodily contact, and on infant responses to brief everyday separations and reunions, all behaviours found by Ainsworth and her colleagues to be closely linked to the development of different patterns of infant-mother attachment.

They also used Ainsworth's maternal sensitivity scale to make overall ratings of maternal behaviour during the infant's first year and correlated these ratings with infant attachment patterns derived from their responses in the Strange Situation. These data were then compared with those from Ainsworth et al.'s Baltimore study.

The Strange Situation procedure yielded broadly the same types of reunion behaviour in the North German mother-child dyads as in the 23 dyads in the Baltimore sample. However, the distribution of the attachment behavioural patterns was different. Forty-nine percent of the North German infants showed the avoidant pattern (A) of reunion behaviour toward their mothers compared to 26% of the Baltimore infants. Only 33% showed the secure pattern (B), seeking close bodily proximity or contact with the mother on her return compared to 57% in the Baltimore sample. Finally, 12% of the Bielefeld infants, compared to 17% of the Baltimore infants, responded ambivalently (C) to their mothers' return.

In line with Ainsworth et al.'s findings, Grossmann and her colleagues also found in the Bielefeld sample that mothers of infants classified as securely attached in the Strange Situation at 12 months were more sensitive to their infants' signals during the first year of life. In the Bielefeld sample, maternal sensitivity assessed at 2 and 6 months predicted the infants' attachment classification at 12 months. However, maternal sensitivity as rated during the 10-month visit was not significantly related to the infants' attachment classifications at 12 months. This was due to the fact that the mean sensitivity ratings of the group B mothers in Bielefeld at the 10-month home visit were markedly lower than the previous visits, possibly because of the change in mothers' response towards their children as they grew older.

Relating to this point, qualitative and quantitative differences in maternal behaviours between the Baltimore and Bielefeld mothers were also found during the 10-month home observations. Although both samples of mother showed almost the same amount of close bodily contact with their 10-month-old infants, the quality of holding differed: the Bielefeld mothers were generally less tender and affectionate, their holding episodes were shorter, and their pickups were more frequently interfering when compared to those of the Baltimore mothers. Furthermore, Grossmann et al. found that the Bielefeld mothers offered a toy in response to their infants' distress signals about three times as often as the Baltimore mothers (Bell & Ainsworth, 1972), thereby effectively diverting their infants from seeking close bodily proximity. They also often tried to relieve the infants' distress by means other than picking them up, a response which was quite successful in many instances. The Bielefeld infants, in turn, seemed to communicate less with their mothers than the Baltimore infants did.

Grossmann et al. (1985) interpreted these findings with respect to the cultural values that they believed to be dominant in North Germany, where people tend to keep a greater interpersonal distance. As soon as infants become mobile, most mothers feel that they should now be weaned from close bodily contact. To carry an infant who can move on his own or to respond to his every cry by picking him up would be considered as spoiling. The ideal childrearing is to foster an independent, non-clinging infant who does not make demands on the parents but rather is unquestioningly obedient. In the eyes of Northern German mothers, the behaviours of infants classified as avoidant may not therefore seem insecure. Grossmann et al.

(1985), indeed, argue that the B pattern responding within the Strange Situation would be judged by many German parents as that of a spoiled or immature toddler.

The Northern Germany study was the first attempt to replicate Ainsworth et al.'s 1978 study and showed the importance of the role of cultural expectation in assessing mother-child interaction. From this study, it appears that the Strange Situation, in using a specific, laboratory-based observational procedure to assess a 1-year-old's responses and then making this the basis for classifying the quality of overall maternal attachment, may not do sufficient justice to the significance and meaning of similar behaviour patterns across differing cultures.

2.3 Mother-child attachment in Mali

The influence on attachment patterns of cultural differences in childrearing practices and of family living contexts was further documented in a study conducted amongst the Dogon ethnic group of Mali in 1990 (True, Pisani, & Oumar, 2001). Nearly 20 years after Ainsworth conducted her observational study in Africa, True and her colleagues conducted a new study with 26 Mali mothers and their 1-year-old infants. Traditionally, as the authors described, the Dogon economy is based on rural subsistence farming of a single crop, which makes the members of the Dogon society vulnerable to malnutrition. The sample included in their study was derived from a more acculturated and economically diverse town population. With a few exceptions, these infants were living in compounds with their extended families. The father usually had children with several wives. Researchers were therefore investigating attachment in a very different environment from the Baltimore and Uganda study.

During the first year of their lives, the infants were nursed by their biological mothers. Maternal care was supplemented with care from siblings and other family members. In particular, with a first-born male infant, the primary caregiver during the day was the paternal grandmother; however, the mother was available when the child was hungry, and the mother slept at night with the infant. For other infants, the mothers were mainly responsible during the day and night, but they readily shared the child care with female relatives or older children. Infant mortality was high during the first years of life: 25 % of the children did not survive the first 5 years. This threatening ecology may have influenced the attachment-related caregiving behaviours. True et al. found that three central features of Dogon infant care - frequent breastfeeding, quick response to infant distress, and contact proximity to the mother or caregiver - served to maintain infant wellbeing. Dogon mothers breast-fed their infants on demand and very frequently, and kept them in close proximity almost all the time. Physical interaction was favoured above vocal or visual interaction, and infant distress signals were met with immediate responses.

Dogon mother-infant dyads were filmed in the traditional Strange Situation procedure. In addition to the classic tripartite A-B-C system, an additional coding system for the disorganised/disoriented classification (Main & Solomon, 1986) was also applied for the first time with an African sample. Potential individual differences in mother-infant communication were also observed twice in the mildly stressful setting of a standardised Weigh-In procedure. In this procedure mothers were asked to place their child on a set of scales and stand to one side, and then pick their child up for a short reunion period. The Weigh-In was coded using four rating scales of

infant communication and four rating scales of maternal communication. The infant rating scales were directness of signaling, avoidance, resistance, and disorganisation. The maternal rating scales were co-operation, withdrawal, overriding of infant negativity, and frightened or frightening behaviours. As with the Ainsworth interactive scales, the Weigh-In scales evaluated communication behaviours in terms of how well they fitted the interactive context and the attachment goals of the infant.

True and her colleagues found that two thirds of the Dogon infants were classified as secure in the Strange Situation, providing some cross-cultural evidence for the normativity hypothesis of attachment theory (Ijzendoorn & Sagi-Schwartz, 2008) and consistent both with earlier studies conducted in Africa (Ainsworth, 1967; Kermoian & Leidermann, 1986) and with an aggregate global distribution (van IJzendoorn & Kronenberg, 1988). Consistent with previous research conducted in Western countries (e.g. Main 1990), True et al. also found that infant attachment security was significantly related to the quality of mother-infant communication as observed in the Weigh-In procedure. More specifically, mothers of disorganised infants were rated significantly higher than other mothers for frightened or frightening behaviours as suggested by Main and Hesse (1990) and supported by Schuengel, Bakermans–Kranenburg, and Van Ijzendoorn, (1999) in studies with mostly Caucasian participants. These findings indicate that there are basic aspects of attachment theory that are relevant across cultures.

On the other hand, True and her colleagues also found important variations in some aspects of mother-infant attachment in their Dogon study. In a meta-analysis of 306 Strange Situations in which the ABCD system had been used, van IJzendoorn et al.

(van IJzendoorn, Schuengel, & Bakermans-Kranenburgh, 1999) reported the distribution of classifications to be 62% secure, 15% avoidant, 9% resistant, and 15% disorganized (because of the relatively recent use of the four-category system, the vast majority of the Strange Situations in this meta-analysis had been conducted with U.S. samples). In True et al.'s Dogon sample, however, 25% of the infants were classified as disorganised, a much higher percentage than in typical Western samples, although a rate matching reports from low-income U.S. samples (van IJzendoorn, et al., 1999).

A second variation was the lack of avoidant classifications among the Dogon. One interpretation for the lack of avoidant infants (0%) in this sample, according to True et al. (2001), is that Dogon caregiving practices are contrary to the maternal caregiving practices associated with infant avoidance in Western samples, namely, rejection of attachment bids, lack of close physical contact, lack of tender holding, and intrusion (Ainsworth et al., 1978). Indeed, this seemed to be the case. Their observations indicated that Dogon maternal care practices involved constant proximity to their infants, nursing in response to hunger and distress signals, and prompt responsiveness. Maternal intrusion was rarely observed in their sample.

True and her colleagues observed that although some Dogon infants did experience rough handling, inconsistent responsiveness, or both (Lyon, 1992, as cited in True, Pisani, & Oumar, 2001), it would be virtually impossible for a Dogon infant to develop an avoidant strategy because the infant's attachment and feeding systems are inextricably intertwined, similar to those of the Ugandan infants studied by Ainsworth (1967). It is possible that, in cultures where physical dangers are common

and infant mortality rate is high, a mother cannot consistently maintain those behaviours usually associated with the development of an infant's avoidant attachment organisation, such as aversion to contact or rejection of attachment bids (Rothbaum & Morelli, 2005), as to do so would put the infant at risk of malnutrition and disease. From the infant's perspective, it would be nearly impossible to develop an avoidant strategy with a mother who “often enough” nurses in response to hunger and distress bids. This is because ‘often enough’ the infant's distress signals would be met with the comfort of close bodily contact and warm milk. In essence, nursing would operate as an intermittent reinforcer of the infant's attachment bids.

In all, the lack of avoidant classifications among the Dogon highlights two key issues. The first is that avoidance may be a difficult-to-impossible strategy for infants to develop when mothers do not reject attachment bids and when they nurse on demand in response to signals of distress and hunger. Second, the lack of avoidant classifications suggests that in a truly global distribution, avoidance may be a relatively rare attachment strategy rather than a relatively common one.

A third variation in attachment behaviour reported by True et al. was in relation to differences in the behaviours of the Dogon infants and those of infants from the United States during the Strange Situation procedure. The coders observed that the Dogon infants were more passive than infants in other samples. They did not crawl towards their mothers on reunion as frequently or as readily as did infants observed in other cultures. True et al. interpreted these behaviours as reflecting the infants' experience. Dogon infants usually do not need to move toward the mother because they are within arm's reach of her most of the time. In addition, Dogon infants do not

generally roam freely in the family compound because of the risks, for example, from the open cooking fire, snakes, and contact with animal droppings. These findings are reminiscent of Ainsworth's (1967) comment that "one must evaluate an infant care practice in its context" (p.457).

2.4 Mother-child attachment in Israel

Other fascinating cultural differences in childrearing practices are illustrated in findings from Israeli kibbutz studies of attachment behaviours. Collective sleeping arrangements for children away from their parents constitute probably the most distinctive characteristic of kibbutz living. The major reasons for instituting collective sleeping for children in the early years came out of a concern for both children's safety and for women's equality and were in alignment with the need to train children for communal life (Aviezer, van Ijzendoorn, Sagi, & Schuengel, 1994). Whereas most institutionalised childrearing in Western cultures involves clinical and multiproblem populations, the collective sleeping arrangements in the kibbutzim were designed for healthy, middle-class, well-functioning, intact families (van Ijzendoorn & Sagi-Schwartz, 2008).

According to Aviezer et al. (1994), only a few kibbutzim still maintain communal sleeping arrangements for children. In those where the custom continues, this facility serves as the place in which children spend most of their time, eat their meals, are bathed, and sleep at night. Family time is in the afternoon and evening, when both parents try to be available. Children are returned to the children's house for the night by their parents, who put them to bed; a caregiver or a parent then remains with them

until the night watchwomen take over.

Sagi and colleagues conducted the first Israeli attachment research with 86 infants and their mothers using the Strange Situation procedure to examine the attachment relationships of communally sleeping kibbutz infants to their parents and caregivers (Sagi, Lamb, Lewkowicz, Shoham, Dvir, & Estes, 1985). A notable finding was the proportion of insecure attachments falling into the ambivalent C category. Compared with samples studied in the United States (14%), they found a much greater number of infants assigned to the C classification (33%). In a later study, Sagi, Koren-Karie, Gini, Ziv, and Joels (2002) also examined infant-mother attachment in 758 Israeli infants representing various types of early child care in the city. They found that only 59% of kibbutz infants were securely attached to their mothers, in comparison to the 72% of Israeli city infants and the 65-70% of Western infants found in most studies using the ABC classification system. Communal sleeping in a children's house – a unique characteristic of collective upbringing - was suggested by Sagi and his colleagues to be a possible antecedent for the development of insecure attachment.

Among children with insecure attachment in both Israeli samples, ambivalent relationships were overrepresented in comparison to Western samples. According to Sagi et al. (2002), the most distinctive features of the ambivalent infants were their search for contact with their caregivers immediately after brief separations, along with expressions of high resistance directed toward the same caregivers. Some of these infants were unable to settle upon reunion with their caregivers. This may also be related to the Israeli societal climate, which is characterised by continued safety threats plus social and economic stress, all of which have important implications for

daily life (Bar-Tal & Antebi, 1992). Parental preoccupation with these daily stresses may lead to exaggerated overprotectiveness and ‘impaired’ sensitivity to children’s attachment signals (van Ijzendoorn, & Sagi-Schwartz, 2008). In a similar vein, a recent evolutionary analysis offered by Belsky (1999) proposed that societies under survival threat might develop in-group orientation, thereby promoting close proximity between parents and children, as well as helpless dependency.

Another reason for the differences noted above, recently suggested by van Ijzendoorn and Sagi-Schwartz (2008), is the temperament of Israeli infants. There is growing evidence that emotional reactivity may be more closely associated with ambivalent attachment than with avoidant attachment (Belsky & Rovin, 1987, as cited in van Ijzendoorn & Sagi-Schwartz, 2008). The over representation of ambivalent attachment and the near-absence of avoidant attachment may therefore also be attributed to a predominance of a high degree of emotional reactivity in Israeli society, although as yet there is no evidence that Israeli infants have higher emotional reactivity than infants from other cultures. This possible interpretation does, however, highlight the important point that cross-cultural differences in patterns of attachment may relate not only to differences in parental beliefs and child-rearing practices, but also to differences in child temperament and behaviour. Ultimately these different factors may be difficult to disentangle.

A rather intriguing finding from the Israeli sample is that even in the communal sleeping context, all children appeared to be attached to their mothers. Furthermore, although the percentage was lower than in global distributions, the majority of infants living in the collective sleeping arrangement were still securely attached to

their mothers. These findings tell us that even in very different culture and socioeconomic context, infants exhibit secure-base behaviour and that infants become attached to their primary caregivers. They also support Bowlby's proposal that attachment behaviours are rooted in evolution, providing a survival advantage by increasing mother-child proximity. These Israeli studies again illustrate cross-cultural differences in the development of attachment, linked to differences in child-rearing practices and cultural context. They emphasise the need to identify what is universal and what is culturally variable in the development of attachment.

2.5 Mother-child attachment in China

In relation to this thesis, cultural similarities and variations in attachment patterns in Eastern countries are a central concern. Unique patterns of child-rearing, variations in the ideas of maternal sensitivity and social competence may all contribute to differences in the development, meaning and consequences of attachment behaviour. To date a number of attachment studies have been conducted in Asian countries. A pioneering study of attachment in China using the Strange Situation was conducted by Hu and Meng (1996, as cited in van Ijzendoorn & Sagi-Schwartz, 2008). The aim was to describe patterns of attachment in Chinese infants, as well as associations between the involvement of mothers in the care of their infants and the quality of the mother-infant attachment relationship. The sample consisted of 31 mother-infant dyads (16 of the infants were boys) from intact families with "middle class" backgrounds. Typically for China, each infant was an only child, and all but one family lived with the grandparents.

The distribution of attachment classifications in this Chinese sample was found to be similar to the global distribution: the percentage of secure infant-mother dyads was 68%; 16% were avoidant and 16% were ambivalent (compared to the global pattern: A 21%, B 65%, and C 14%; van Ijzendoorn & Kroonenberg, 1988). As in Western samples, the distribution of attachment classification for male and female infants was virtually the same (Hu & Men, 1996, as cited in van Ijzendoorn & Sagi-Schwartz, 2008). However, Hu and Men expressed doubts about the validity of the avoidant category. They noted that the avoidant infants did not show stranger anxiety, and they commented on the indifference the avoidant infants expressed toward their mothers at reunion. The researchers expressed their uncertainty over whether these infants had developed avoidant strategies to assuage their distress or merely because the mothers were not their primary attachment figure. It was suggested that the emphasis placed by Chinese mothers on early independence, as well as their reliance on nonparental caregivers may have been responsible for this 'indifferent attachment' among infants classified as avoidant. In some cases, grandparents may have served as the primary attachment figures.

In fact, in this Chinese sample, attachment appeared to be associated with the involvement of the mothers in the care of their infants. Mothers of both avoidant and secure infants worked outside the home every day, whereas mothers of ambivalent babies stayed at home. Hu and Men also found that mothers of avoidant infants were less involved in child care than mothers of secure infants, and that grandparents played an even larger role as substitute caregivers. What this study tells us is that even though the distribution of the attachment classification may be similar to the normative one, the attachment relationships or the experiences of mother-infant

dyads may nonetheless be different across cultures. In other words, simply comparing the distribution per se does not necessarily provide the full picture as we do not know whether attachment classifications have the same meaning in different cultures.

Another study was conducted with Chinese mothers living in Beijing within an international collaborative study carried out by Posada and his colleagues (Posada et al., 1995). They investigated whether children's behaviour with their mothers – as seen at home in everyday life circumstances – was organised in a way that indicated that the child used the mother as a secure base and if so, whether they did so in a culturally specific way. The other countries sampled were Colombia, Germany, Israel, Japan, Norway, and the United States. The study used the Attachment Q-Sort (AQS: Waters & Deane, 1985). This consists of 90 small cards that describe infants' and young children's behaviour in the home setting. The researchers used this to investigate three perspectives on secure-base behaviour across the seven countries: mothers' characterisations of the behaviour of their own child, mothers' characterisations of their notion of the 'ideal' child, and childcare experts' descriptions of the hypothetically most securely attached child. Mothers from all the countries involved provided Q-sort descriptions of 'own child' and 'ideal child' (although only in Israel and Japan did the same sample provide information for each of these two categories. There were also different sets of childcare experts in each country, who provided the Q-sort descriptions for the third category).

In each country, including China, the mothers who described their own child via the AQS shared the same sample characteristics as those who provided Q sorts of their 'ideal' child; hence, the two subsamples were characterized jointly (Posada et al.,

1995).

The Chinese sample consisted of 41 mothers living in the city of Beijing; all but one mother had only one child; the age of their children ranged from 13 to 44 months, with a mean age of 30.7 months. Mothers averaged 13.9 years of education and along with the Norwegian, German, and U.S. samples, this group included some of the most extensively educated of the mothers sampled. In the Chinese families both parents worked full-time outside of the home, with the care of the child being entrusted to grandparents and child-care centres.

The patterning of the attachment behaviours in the range of AQS descriptors showed that Chinese parents, as well as Chinese childcare experts found the concept of a secure base applicable in their cultural context. Furthermore, the Chinese mothers' descriptions of their own children were no more highly correlated with one another than with descriptions from various Western (Germany, Norway, United State) and non-Western (Colombia, Japan) societies. The implication is that Chinese mothers do not systematically deviate from mothers living in a variety of other cultures in terms of their description of the relevance of the secure-base phenomenon to their own children. In fact, the authors found that parental beliefs about the secure base phenomenon were similar across all seven countries.

Although mothers' preferences regarding secure-base behaviour as expressed in their descriptions of the 'ideal' child were similar across cultures, some significant cross-cultural differences among countries were found at the level of the more specific behavioural components of the secure-base phenomenon (Posada et al.,

1995). These included the finding that on the 'physical contact with mother' scale, the Chinese sample yielded significantly lower scores than the German sample and near-significant lower scores than the Israeli sample. Furthermore, on the 'interactions with other adults' scale, Chinese mothers tended to emphasise the child's enjoyment of physical contact less than German, Colombian, and Israeli mothers and also tended to place less emphasis on the comfort derived from it.

The finding that Chinese mothers placed less importance on children's physical contact appears to contradict the notion that Chinese parents tend to emphasise emotional harmony and control in social relations in comparison to Western parents, with the latter more inclined to stress individuality and spontaneity (Ho, 1986). Rather, it supports the outcome of a study of childrearing attitudes in Chinese, Chinese American, and European American parents of kindergarten-age and elementary school-age children carried out by Lin and Fu in 1990. In their study, Chinese and Chinese American parents rated the importance of the child's independence more highly than their European American counterparts. Lin and Fu suggested that valuing interdependence and filial piety within the family is not necessarily incompatible with valuing individual independence in the wider social context, such as at school or work. Furthermore, children's age may be an important factor. Whereas Chinese parents are considered to be indulgent and overprotective of younger children (van Ijzendoorn & Sagi-Schwartz, 2008), this parental attitude changes dramatically when the children are deemed to be of an age at which they can be responsible for their own actions. From that point in time (which may be located anywhere between 2 and 6 years), as Lin and Fu (1990) suggest, Chinese parents may start to promote independence. This notion provides complicated yet rich

insights into the development of Chinese children.

This finding also implies that the concept of the 'ideal child' is multidimensional, in that mothers' notions of the ideal child might be different depending on the context, as well as on the child's age and gender. For example, the ideal attachment behaviour for a three-year-old at home when mothers are busy doing house work might be different from that expressed when mothers have free time to enjoy quality time with them. Moreover, it might be that there is a slight gap between the concept of the 'ideal' child that is constructed socially, culturally, or educationally and the idea of the 'ideal' child that parents have instinctively formed. It is therefore important to specify the context when carrying out research in this area.

It is worth noting here a final finding of Posada et al.'s (1995) AQS study: that in all countries, mothers' AQS sorts of their own child were only moderately correlated with their sorts of the child they would ideally have liked to have. Moreover, mothers who described their child's actual behaviour achieved far lower security scores than those who described their notion of an 'ideal' child; this was found in all countries, with the most significant difference being observed among the Japanese sample. These findings support the proposition that mothers' AQS descriptions of their own child cannot be construed merely as reports of how they would like their children to behave and hence dismissed as non-interpretable owing to social desirability biases operating within the sample (Pasoda et al., 1995). However, they also suggest that mothers' preferences do not necessarily translate directly into child behaviour. In other words, children's actual behaviour does not simply reflect mothers' preferences regarding the secure-base phenomena.

2.6 Mother-child attachment in Japan

While findings from the Chinese studies described above add an important dimension to the picture of attachment development in Asian countries, not all Eastern cultures are equivalent. In relation to this thesis it is therefore important to explore the findings from previous Japanese attachment studies in depth. Findings from research carried out with Japanese mother-infant dyads presents a real challenge to the attachment paradigm (van IJzendoorn & Sagi-Schwartz, 2008). Two studies using the Strange Situation procedure and two studies using the AQS have been conducted in Japan with mothers of infants. The first study using the Strange Situation was conducted with 34 infants and their mothers in Tokyo when the infants were 12 months old (Durrett, Otaki, & Richard, 1984). This showed the pattern of avoidant, secure, and ambivalent infant-mother attachment to be consistent with the global distribution: 13% A, 61% B, and 18% C, with 8% unclassifiable in terms of the traditional 3 way classification. However, when these categories were broken down into subgroups, among the participants classified as secure(B) infants, almost half of them were classified as B4 which is much higher than has been found in most Western middle class samples (e.g. 4% in Ainsworth et al., 1978).

Van IJzendoorn and his colleagues (van IJzendoorn, Goossens, Kroonenberg, & Tavecchio, 1985) describe the B4 category in terms of a quick and intensive activation of the attachment behavioral system in the stressful part of the Strange Situation. B4-children show relatively intensive proximity seeking and contact maintenance behaviour towards the mother but they can at the same time exhibit

some resistant behavior. They also show a high level of anxiety in the presence of a stranger: their attachment-exploration balance seems to be disturbed after a short time and is not restored much by the return of the mother. With respect to exploration, B4-children behave similarly to those in the C-category, with whom they differ on extent of resistance to the mother. B4-children behave dependently towards their mothers (i.e., cling to her, protest against her leaving, show intensive 'search behavior' after she has left) and assuagement depends on continuing contact with the mother, with the infants showing similar kinds of contact maintenance behaviours to category C children. The difference from C-category infants is that B4 infants clearly use their mother as a secure base when placed under mild distress.

Durrett et al's finding that nearly 50% of Japanese infants were classified as either B4 or C-category is relatively consistent with the outcome of a later study conducted in Sapporo, a large city in the northern part of Japan (Takahashi, 1986). In this study, the Strange Situation procedure was used with 60 Japanese mothers and their 12-month-infants. Takahashi found that 68% of the infants were classified as B-secure, but that the Japanese insecure group consisted of only C-type (32%), and that there were no A-type infants. In addition, about half of the C-type infants behaved inconsistently: they behaved like both B-type and C-type infants. The results of this Sapporo study were reported in several separate publications (Miyake, Chen, Ujiie, Satoh, & Takahashi, 1982; Miyake Chen, Campos, 1985; Takahashi & Miyake, 1984).

Takahashi (1990) followed the Sapporo sample for a further 2 and half years after this initial assessment, focusing on the children's compliance with their mother's

requests, their curiosity, their social competence, and their cognitive development. During the second year of life, findings showed that, compared to the ambivalently attached infants, the secure infants complied more with their mothers' directions and demands. They also showed more curiosity about a new object and were more competent in relation to unfamiliar peers. This is in line with attachment theory's competence hypothesis that children who are secure become more socially and emotionally competent children than children who are insecure. Studies conducted in the West have similarly indicated that secure children tend to be more autonomous, less dependent, better able to regulate negative affect, less likely to have behaviour problems, and are more likely to form close, stable peer relationships than those who are insecure, and that this attachment pattern is stable over time (Cassidy & Shaver, 1999).

During the third year of life, however, the ambivalently attached children in Takahashi's sample no longer differed from the securely attached children in terms of social competence and cognitive development. On the basis of this, Takahashi concluded that, despite being predictive of competence in later years in Western samples (e.g. Matas, Arend, & Sroufe, 1978), attachment patterns in infancy did not predict post-infancy competence among his Japanese sample. This leaves the competence hypothesis within attachment theory appearing to lack cross-cultural validity. As van Ijzendoorn and Sagi-Schwartz (2008) argue, however, during the first 5 years of life, changes in attachment security must take into account the interaction between the developing child and the changing environment. Without the inclusion of any assessment of potential changes in the childrearing context therefore, Takahashi's interpretation of her findings may not necessarily therefore have been

the only possible valid interpretation for these data.

There are a number of contextual factors that might result in these differences between Japanese and Western samples. Firstly, the degree of ‘strangeness’ of the Strange Situation might have been influenced by the frequency with which an infant is placed in novel situations in daily life (Miyake et al., 1985), with the level of stress induced by the procedure almost certainly exceeding the appropriate level for Japanese infants (Takahashi, 1982). As some scholars point out, it is very rare in Japanese culture for mothers of young children to go out leaving the children with even the father and/or grandparents. Even when at home, a Japanese mother tends to carry her young child on her back and will seldom leave him alone in the room. It is also rare to hire a baby sitter who is a stranger in Japan, and the use of day-care or similar facilities during early infancy is uncommon (Johnson, 1993; Miyake et al., 1985; Takahashi, 1982). This is still the case today. Japanese ideas of child-rearing have traditionally insisted on the importance of deep emotional relations between mother and child in the early years for healthy development in future life (Wagatsuma & Hara, 1974).

As suggested above, the strangeness in the Strange Situation procedure – especially that of the ‘infant alone’ segment – would almost certainly have aroused much more stress in Japanese infants than among their American counterparts. When the stress of the experimental procedure is extremely potent, the infant may direct attachment behaviours even towards a person to whom they ordinarily would not attach (Takahashi, 1986). In addition, this procedure might also have been unusually stressful for Japanese mothers. Takahashi (1990) found that most Japanese mothers

rushed to pick up their infants as soon as they re-entered the room and before their infants exhibited any cue that they wanted to be picked up. Hence, she suggests that infants simply cannot avoid the mother in the Japanese style of mother-infant interaction.

Some researchers suggest that the Strange Situation procedure should simply be shortened for highly distressed infants (Main, 1990) or that a separation episode should be curtailed as soon as a particular level of distress is reached (Hinde & Stevenson-Hinde, 1990). Takahashi and Miyake (1984) assessed Japanese infants and mothers using such a modified version of the procedure to examine whether it yielded results for Japanese infants that were more similar to those for American 'normative' infants. However, there were still no infants classified as type-A, although the proportion of avoidant behaviours increased and fewer infants were classified as resistant. This does seem to lend some support to the notion that, for Japanese infants, the standard Strange Situation procedure might not induce the 'mild stress' (Ainsworth et al. 1978) required to measure the infant-caregiver attachment relationship properly.

A second possible reason for the lack of avoidant relationships found in Japanese mother-infant dyads, Takahashi (1990) argues, is that it is simply contrary to Japanese culture to exhibit avoidant behaviours in interpersonal interactions. The Japanese emphasis on the development of harmonious modes of interpersonal interactions, reinforced by a highly homogeneous society, inhibits avoidant behaviours toward others, as impolite modes of interaction (Dennis, Cole, Zahn-Waxler, & Mizuta, 2002; Johnson, 1993; Rohlen, 1989; Takahashi, 1990). This

different way of interacting might have discouraged Japanese infants from showing avoidant behaviours in the Strange Situation paradigm, as in everyday interchanges (Takahashi 1990).

Interestingly, comparative observations of Japanese and U.S. mother-infant interactions have found that Japanese mothers emphasise interpersonal intimacy and harmony, whereas U.S. mothers emphasise stimulation and individual achievement (e.g. Miyake, Compas, Kagan, & Bradshaw, 1986; Ujiie, 1997). More specifically, compared to American mothers who typically direct their infant's attention out to the environment, fostering exploration, Japanese mothers were more likely to direct their infant's attention towards themselves, fostering accommodation to the mother and her activities. Furthermore, American mothers, more than their Japanese counterparts, encouraged their infants to attend to objects or events in their environment (Bornstein, Azuma, Temis-LeMonda, Ogino, 1990; Bornstein, Toda, Azuma, Yamis-Lemonda, & Ogino, 1990, Bornstein, Temis-Lemonda, et al., 1992), and to explore (Bornstein, Toda, et al., 1990; Caudill & Weinstein, 1969). American mothers were also more likely to orient their children to novel aspects of their social environment, particularly to strangers (Miyake, et al., 1985). Japanese mothers, by contrast, encouraged infants to attend to the mothers (Bornstein, Azuma, et al., 1990; Bornstein, Toda, et al., 1990), with their infants directing more cries to them than U.S. infants did towards their mothers (Ujiie, 1997).

A study with preschool children (48 – 70 months) and mothers conducted by Dennis, Cole, Zahn-Waxler, & Mizuta (2002) likewise found marked cultural differences in mother-child interactions between the Japanese and U.S. dyads. The Japanese

mothers and their children were citizens of Japan, but temporarily residing in the U.S. In this study, 60 mothers and their children (30 Japanese dyads/30 U.S. dyads) took part in a free play task and a waiting task. During these two sessions, the actions, speech, emotion, and attention patterns of each mother-child dyad were coded.

Dennis et al. found that although autonomy and relatedness were expressed by mothers and children in both cultures through behaviour, emotion and attention, the two cultures varied in the degree to which they expressed each. As predicted, the social behaviour of the U.S. mothers and their children was characteristic of an emphasis on the autonomy and separateness of self and other. Compared to Japanese mothers, U.S. mothers made positive responses more often to their children, such as praising and encouragement of accomplishment, and showed positive emotion. They communicated more about individual experiences, and were at times physically distant. During the free play task, they engaged more with their children as playmates and shared attention jointly. Compared to the Japanese preschoolers, the U.S. preschoolers more often made positive responses and showed more positive emotion towards the mother. During the free play task, they engaged mothers as playmates while showing joint attention and during the waiting task they communicated more about their own experiences. Both the U.S. maternal and child behaviours were thus consistent with autonomy: a focus on individual experience and bolstering uniqueness and pride in self (Dennis et al., 2002).

In contrast, Japanese mothers and children demonstrated more behaviour that was characteristic of an emphasis on the relatedness of self and other. Mothers more often maintained role distinctions by engaging in parallel activities. During the free play

task, they communicated about shared experiences and used divided attention rather than joint attention. Compared with U.S. children, Japanese children also showed more parallel activity and divided attention during the free play task. Counter to prediction, the children were more distant from the mother during the waiting task, possibly because they were complying by occupying themselves independently. Overall, these behaviours appear to reflect relatedness: a focus on togetherness and hierarchical role distinctions as a socialisation strategy, but also a certain degree of autonomy and independence.

Most recently, Rothbaum and his colleagues (Rothbaum, Kakinuma, Nagaoka, & Azuma, 2007) conducted semi-structured interviews with 39 U.S. mothers and 32 Japanese mothers of children aged between 3 and 5 years to assess their beliefs about attachment and *amae* behaviours. The concept of *amae* will be discussed more fully below and in Chapter 3 but in essence, although there is no equivalent word in English, *amae* refers to an emotional one-ness between parent and child, and the *amae* behaviours of preschoolers can be defined as seeking close emotional and physical contact with caregivers.

In Rothbaum et al.'s study, this age range of children was chosen because it was considered optimal for assessing *amae* related concepts. Rothbaum et al. examined maternal notions of what constitutes a desirable versus an undesirable child, mothers' perceptions of children's 'Strange Situation' behaviours, and whether their ideas about child security and insecurity were associated with desirable and undesirable characteristics, respectively. Mothers were shown a picture of the Strange Situation procedure, and the interviewer asked mothers to describe how the child would

behave during the pre-separation, separation, and reunion episodes.

Some of their findings were consistent with attachment theory. A clear majority of mothers in both cultures perceived children with desirable characteristics as secure and children with undesirable characteristics as insecure. Moreover, in both cultures, socially desirable characteristics were linked with social referencing and exploration under the Strange Situation protocol.

However, Rothbaum et al. also found cultural differences in the meaning and manifestation of attachment, as well as in its consequences and antecedents on three broad fronts. Firstly, Japanese mothers were more likely to mention accommodative behaviour when describing the 'desirable' child, both in early childhood and in the later years, whereas the focus of mothers in the United States was on the maximisation of individual potential rather than on active efforts to modify the self to fit in with others and the environment. Secondly, mothers' perceptions of Strange Situation exploratory behaviours were more closely linked with their notion of desirable characteristics and security in the United States than in Japan, suggesting that exploration is seen as a more central component of secure attachment in the United States. Thirdly, Japanese mothers were more likely to attribute children's demanding and difficult behaviours in mildly stressful situations to needs for security and interdependence whereas U.S. mothers were more likely to attribute this kind of behaviour to their children's self-maximising desires. On the basis of these differences, Rothbaum et al. concluded that Japanese mothers' greater tendency to attribute their children's behaviour to social/relational rather than egotistic/self-maximising motives may underlie children's ambivalent behaviours in

the Strange Situation procedure.

Such studies show that the interactions between mothers and their young children and mothers' ideas of what are 'desirable' characteristics in their children can provide very valuable insights into how children may acquire the skills necessary for becoming competent members of society (Denham & Groot, 1993). Although the studies outlined above showed mixed results of attachment patterns in Japan, they have also provided a window into cultural variation in the origins and meaning of 'self'. While attachment theory reflects a Western concept of the 'independent construal of self' (Markus & Kitayama, 1991, p. 226), based on the belief that people are intrinsically separate, the prevailing belief in Japanese culture is that human beings are fundamentally connected to each other and, hence, there is an 'interdependent construal of self' (Markus & Kitayama 1991, p. 227; see also Mizuta, Zahn-Waxler, Cole, & Hiruma, 1996; Rothbaum, Weisz, Pott, Miyake, & Morelli, 2000). This different concept of self in Japanese culture might also be reflected in the Japanese-specific attachment patterns described here.

2.7 The Japanese concept of *amae*

As Mizuta et al. (1996) and Emde (1992) argue, one manifestation of this emphasis on connectedness or on the interdependent construal of self can be found in the Japanese construct of *amae*. This is an everyday Japanese word for which there is no literal English translation. It has been variously defined as either a motivational status within the individual, or a certain patterning within interpersonal relationships (Behrens, 2004). As Behrens synthesises, it includes one's desire to be intimately

close to another person (e.g. Doi, 1973); to act playfully, like a baby (e.g. Taketomo, 1986); to depend upon and presume upon another's love (Doi, 1981); and to act helplessly and importune somebody (e.g. Okonogi, 1992). As Mizuta et al. (1996) state, *amae* behaviours of preschoolers include seeking close physical contact, such as climbing up and sitting on their mother's lap, and burying their face against her chest. These behaviours and their underlying motivational structure, when taken in conjunction with the caregiver's attitude toward their children's *amae* behaviours, might well affect classification in the Strange Situation paradigm.

Despite some similarity between *amae* and selective attachment - such as the age at which both are first manifested, the motivation underpinning them, and the most salient behaviours and emotions characterising them - there are also basic differences between them. According to Rothbaum and Kakinuma (2004), the essential distinctions centre on the fact that *amae* is closely linked with interdependence, a forerunner of harmony, and that attachment is linked with exploration, a forerunner of autonomy. While both *amae* and selective attachment first emerge at around 9 months, *amae* behaviour is most evident in later childhood – 3 to 5 years old - (Azuma, 1996; Kumagai, 1981; Rothbaum et al. 2007) whereas attachment is most evident at 12-18 months. Furthermore, as Rothbaum and Kakinuma (2004) explain, *amae* is associated with loneliness and sadness and attachment with fears.

The view that *amae* typifies early child-mother relationships in Japan is supported by research that used a modified Strange Situation paradigm for preschool children (Mizuta et al. 1996). Thirty Japanese and 30 U.S. children and their mothers were studied in situations designed to examine attachment-related behaviours, feelings

expressed by mother-child dyads, and children's *amae* behaviours. Child age ranged from 48 to 70 months. Separation and reunion behaviours, conversations about separation, and child-rearing patterns were also examined in relation to culture. In this study, *amae* behaviour was operationalised as immature, dependent behaviour, such as clambering up on the mother's lap, burying of the face against the mother's chest, sustaining close physical contact, and persistent requests to or demands of the mother.

Mizuta and his colleagues found that Japanese children showed more *amae* behaviour than same-aged U.S. children. For instance, following separation then reunion, in comparison to U.S. mothers and children, the Japanese children showed greater levels of *amae* behaviours by, for example, leaving their play activity and reaching for their mothers when reunited. Japanese mothers in turn engaged in more proximal reassurance of their children, for instance, by patting the child on the head and back or straightening and smoothing clothes and hair when he pulled close and/or climbed on her lap. In contrast, there was more distance between mothers and their children in the U.S. dyads as these preschoolers were more likely to remain seated and proudly show mothers what they had done in her absence.

However, it is also important to point out that in Mizuta et al.'s study, Japanese and U.S. dyads did not differ in overall levels of security and sensitivity in separation and reunion behaviours, and that this study did not support the notion of greater insecurity in Japanese children. This means that the greater level of *amae* behaviours among Japanese children and Japanese mothers' more responsive attitudes towards these behaviours did not affect the level of attachment security. This suggests that

amae behaviours can be reliably distinguished from other dimensions of attachment-related behaviours. In other words, as pointed out in the section on Chinese mother-child behaviours, autonomy and relatedness are not mutually exclusive attributes but dimensions that coexist within individuals and cultures, and can vary with situational context (Kagitcibasi, 1994; Rothbaum et al., 2000). Thus, the concept of *amae* might not serve as a ‘real challenge’ to attachment theory’s universality (van Ijzendoorn & Sagi-Schwartz, 2008). Rather, it might provide rich texture to our understanding of human development if we are able to examine how these parallel behavioural systems coexist within mother-infant relationships. If this is the case, cross-cultural study on attachment needs to move forward from research that lies primarily in its ability to confirm or deny the universality of attachment theory claims to research that contribute to our understanding of how cultural processes are involved in the similarities and variations in human attachment (Rothbaum & Morelli, 2005).

One significant limitation of Mizuta et al.’s (1996) study, however, is that they treat *amae* as a unitary construct. As mentioned above, they defined *amae* simply as the child’s desire for bodily closeness to the mother and the child’s immature reactions toward the mother. However, it may not be appropriate to treat *amae* as a global construct with a single meaning because it has many functions and characteristics depending on the contexts in which the *amae* is expressed (Behrens, 2004). Thus, it is questionable if Mizuta et al.’s study drew a full picture of *amae* relationships of mother-child dyads in both countries. This multifaceted nature of *amae* will be explored more fully in Chapter 4.

Another study, carried out in two parts, explored the similarities and differences between *amae* and attachment using the AQS (Vereijken, Riksen-Walraven, & Van Lieshout, 1997). Conducted by non-Japanese researchers, this work aimed to illuminate the interrelations between *amae* and attachment and the role each plays in what is deemed desirable children's behaviour. In the first part of the study, Vereijken et al. first asked U.S. experts in the field to hypothetically describe the behaviours of a secure and a dependent child, to construct an attachment security criterion sort and to construct a dependency criterion sort, all using the Attachment Q-Sort (AQS). As described in the section above, the AQS consists of 90 small cards that describe children's behaviours in the home setting. Eight Japanese experts in the field were then asked to describe the concept of *amae*, also using the AQS. From this, they found, for example, that the "*amae* child" typically enjoys physical contact with mother (item 44, 64, 11, 28) and keeps close to her (item 35, 25). This child wants to be in the centre of mother's attention (item 31, 23) and is demanding and impatient with her (item 3, 8, 81, 6, 2). The Japanese experts were strongly in agreement on the description of *amae* derived from the AQS.

This newly constructed expert definition of *amae* was compared with the expert definitions of dependency and attachment security as produced by Waters and Deane (1985). Vereijken and his colleagues found that *amae* as described by Japanese experts showed similarity with dependency, but there were also differences. Both *amae* and dependency were unrelated to attachment security. Vereijken et al. also examined to what extent Japanese parents consider dependency, attachment security, and *amae* as desirable characteristics for their children. To this end, they compared the Japanese and U.S. AQS expert definitions of dependency, attachment, and *amae*

with an AQS definition of the ideal child, as provided by Japanese parents by Kondo-Ikemura (1990). They found that the concepts of *amae* and dependency were not considered desirable by Japanese mothers, whereas the concept of security was considered highly desirable.

In the second part of the study, 49 Japanese children were observed at 14 and 24 months and rated on the AQS. Vereijken et al. found that the children's *amae* behaviours correlated with their dependency behaviours, although neither *amae* nor dependency were related to security. Furthermore, they found that Japanese mothers viewed the behavioural construct of a securely attached child as desirable, whereas neither the behavioural construct of dependency nor of *amae* was considered desirable, as found in their first part of their study. This is in stark contrast to Rothbaum et al.'s (2000) claim that Japanese mothers indulge children's dependency and perceive this indulgence as a key ingredient of sensitive caregiving.

In another study, already touched on in the earlier section on Chinese research, Posada et al. (1995) also included 42 Japanese mothers and 18 Japanese experts in their seven-country AQS study. Mothers described the 'ideal' child when their own children were 4 months of age, and later, when their children were 12 months old. In this study, the Japanese mothers' description of the 'ideal' child matched well with the experts' profile of the most secure child. These findings imply that even from a Japanese perspective, attachment security seems to be desirable to mothers. However, it is worth highlighting that in Posada's study, these 42 Japanese mothers also provided descriptions of their 'real' child and that these security scores were significantly lower than their scores for their 'ideal' child, suggesting that mothers'

notions of the ideal child do not necessarily translate directly into child behaviours. As such, as touched upon earlier, these studies cannot eliminate the possibility that Japanese mothers accept or tolerate children's *amae* behaviours, even though they think this is not an ideal situation.

These two studies are often cited in cross-cultural attachment literature as strong evidence to support the universality of attachment theory, but as studies of *amae* behaviours the methods they employed were problematic in a number of respects (Rothbaum & Morelli, 2005). The first issue is the age of children. In both studies, informants were mothers whose own children were less than 2 years old, an age which may not be appropriate for the study of *amae* because *amae* is thought to be more salient in later childhood (3-5 years old; Rothbaum et al. 2007). It is possible that Japanese mothers of older children who express a wide range of *amae* behaviours might have a different view of *amae*, the desirability of *amae* behaviours, and of the notion of the 'ideal' child.

The second problem is that, as Van IJzendoorn and Sagi (1999) and Behrens (2004) point out, the domain of 90 behavioural descriptions within the AQS may have restricted the range of potential definitions and evaluation of *amae* behaviours, since the AQS was not originally constructed for *amae* behaviours. For instance, parent-child co-sleeping and co-bathing is common in Japan for an extended period, often until the child is five or six (Arbiter, Sato-Tanaka, Kolvin, & Leitch, 1999; Johnson, 1993). These behaviours could be related to *amae* behaviours but are not included in the 90 AQS behavioural descriptions. Because the AQS was originally designed by Western investigators with Western participants, some potential

amae-related contexts might well have been excluded. In conducting research on mother-infant behaviours and on attachment, it would seem essential to use measures that reflect indigenous concepts, as Ainsworth herself pointed out:

“Let us not blind ourselves to the unusual feature of the unfamiliar society by limiting ourselves to variables or procedures based on the familiar society- our own” (Ainsworth, 1976, p.145).

In relation to the research to be presented later in this thesis, firstly, it clearly seems important to find a valid way of measuring *amae* and maternal attitudes to this behaviour, one which makes use of specifically designed measures that reflect indigenous cultural values. Secondly, as suggested earlier, it might not be appropriate to treat *amae* as a unitary construct as previous *amae* researchers have typically done so far. Such a unitary approach to *amae* leaves it unclear whether/how/to what extent any specific type of *amae* might have influenced the quality of attachment demonstrated in the contexts under study. The first aim of this thesis is to address these two concerns. In the absence of a metric of mothers’ attitudes towards *amae* behaviours, an *amae* attitude scale was constructed. Its development and administration will be described, and the implication of *amae* in relation to attachment will be discussed in the following chapters. Prior to these empirical chapters, however, the next chapter will describe some of the core Japanese cultural values surrounding childrearing in order to provide a more in-depth insight into the culturally specific concept of *amae*.

CHAPTER 3

CHILDREARING AND CHILDREN'S SOCIALIZATION IN JAPAN

3.1 Introduction

The previous chapter reviewed some of the cross-cultural attachment studies conducted over the last 3 decades. As Rothbaum and Morelli (2005) argue, these studies are valuable because they provide additional texture to our understanding of key phenomena presumed to be precursors and consequences of secure attachment, such as sensitive caregiving and social competence. Attachment theorists acknowledge that there are differences amongst cultures in the ways that these phenomena are manifested, but they seldom focus on or describe the variation. As a result, we are left with overly abstract descriptions of key attachment phenomena or with descriptions that have a specifically Western slant. For example, sensitivity is defined in terms of vague modifiers such as “timely” and “appropriate” responsiveness, but we know little about what constitutes “timely” or “appropriate” responsiveness, except in Western countries (Rothbaum & Morelli, 2005).

Cultures provide their members with implicit or explicit models for childrearing. It influences parenting patterns and practice (and, in turn, child development), including which parenting practices are accepted or expected, when and how parents care for children, what parents expect of children, which child characteristics and behaviours parents consider desirable and emphasise (e.g. Bornstein & Cheah, 2006). Childrearing norms are also reflected in cultural orientations toward family versus work, maternal employment, and child care. As described in the previous chapter,

what constitutes sensitive, responsive caregiving is also likely to reflect indigenous values and goals, which are likely to differ from one society to another.

The aim of this chapter is to review evidence of similarities and differences between mother-child close relationships in Japan and those in the Western countries and to attempt to provide a framework for understanding these variations.

3.2 Antecedents of Japanese relatedness

Attachment theory postulates that infants become securely or insecurely attached on the basis of several factors, the most important of which is the mother's ability to respond sensitively to the child's signals (Ainsworth, Blehar, Waters, & Wall, 1978). Ainsworth et al (1978) define a sensitive mother as one who “is alert to perceive her baby’s signals, interprets them...[S]he makes her responses temporally contingent upon the baby’s signals (p.142)”. Western investigators have demonstrated that insecurely attached children are more likely to have parents who respond negatively to their child’s explicit signals or who are inconsistently responsive or consistently unresponsive to such signals, especially in mildly stressful situations (van IJzendoorn & Sagi, 1999). For example, if the infant perceives danger and signals for help, security stems from the mother's accurately perceiving and appropriately responding to the child's need for help in a timely manner. As described in the first chapter, this association between maternal sensitivity and security of attachment, referred to as the sensitivity hypothesis, has been widely supported by studies in the United States and other Western countries (Rothbaum et al., 2000).

On the other hand, cross-cultural studies suggest that the timing of caregivers' responses to infants' signals may not be the same across cultures. In fact, most of what is known about early maternal responsiveness is limited to only a few cultures (Dennis, Cole, Zahn-Waxler & Mizuta, 2002). Western investigators tend to evaluate caregiver's behaviour in terms of its *responsiveness* - how soon and how appropriately after the child's overt signal the caregiver's response occurs. However, sensitivity in other cultures, Japan in particular, may have more to do with *anticipation* of children's needs and being receptive to subtle and nonverbal cues of these needs (Rothbaum & Morelli, 2005; Rothbaum, Nagaoka, & Ponte, 2006).

Anticipatory responsiveness has been reported in a number of studies of Japanese childrearing practices. For example, Japanese parents prefer to anticipate their infant's needs by relying on situational cues, rather than wait for their infants to express their needs. (Clancy, 1986; Doi, 1973). Sometimes this means identifying situations that may stress their infants and taking anticipatory measures to minimise the stress (Vogel, 1991). There is also a much higher incidence of co-sleeping and physical contact between mother and child than that typically seen in most Western countries, with the Japanese mother carrying her child on her back for a large part of the first two years of life (Marcus & Kitayama, 1991). These childrearing practices would again seem to reflect the cultural value of anticipatory responsiveness in Japan.

In a similar vein, Clancy (1986) observed how Japanese mothers used empathy to obtain a state of symbolic union during communicative exchanges with their children. She described how, in Japanese culture, the ideal interaction is not one in which

speakers express their wishes and needs adequately and listeners understand and comply, but rather one in which each party understands and anticipates the needs of the other, even before anything is said. In terms of child development, it has been suggested that the Japanese mother's empathy and anticipation may reduce the child's motivation and opportunities to vocalise, as well as her own opportunities to respond to her child's overt behaviours (Rothbaum et al., 2006).

Parents in the United States, by comparison, typically prefer to wait for their infants to communicate their needs before taking steps to meet those needs (Clancy, 1986; Rothbaum, Weisz, et al., 2000). These different expressions of sensitivity and responsiveness suggest that for Japanese caregivers, responsiveness has more to do with emotional closeness and with the parent's role in helping infants regulate their emotional states, whereas for caregivers in the United States, responsiveness has more to do with meeting children's need to assert their personal desires and, wherever possible, respecting children's autonomous efforts to satisfy their own needs (Keller, Voelker, & Zach, 1997; Vogel, 1991).

Although there has been no previous study that directly examined cultural differences in anticipation versus responsiveness in parenting style, Rothbaum and his colleagues explored teachers' beliefs about these different styles of interactions (Rothbaum et al., 2006). They interviewed 20 preschool teachers, 9 from the U.S. and 11 from Japan. The U.S. teachers were from two preschools in Boston, and the Japanese teachers were from three preschools in Ibaraki-prefecture. The U.S. and Japanese samples were similar with respect to socioeconomic status of the teachers and families, average age of teachers (30 years), average number of years of teaching

experience (7 years), and average age of the children they taught (4 years). There were, however, differences in the teachers' educational background: while most of the U.S. teachers held at least a four-year undergraduate degree in early childhood education or a related field, the majority of Japanese teachers held an associate degree (an academic degree awarded after two years in higher education) in early childhood education. In addition, no male teachers were interviewed in Japan whereas two were interviewed in the United States.

During the interviews, teachers were presented with a range of scenarios, asked whether it was better to anticipate or respond to children's needs in each, and then asked to explain their choice of action. These scenarios/questions included "Q 9: Children are playing outside. A child hurts him/herself, but not seriously. The child probably stumbled over a stone but he/she is not crying. (a) Would you come and comfort this child? (b) Would you wait and see what happens and if the child starts crying, would you come and comfort this child?" "Q10: If a child is in a bad mood, would you think: (a) it is better to go to this child and offer comfort by sitting close to him/her and talking to him/her or (b) it is better to let this child know that he/she can approach you if he/she feels he/she needs comfort?" As predicted, Rothbaum et al. found cultural differences in the preschool teachers' responses. In Japan, teachers emphasised anticipation of children's needs, and saw the primary role of the child as waiting for the teacher to meet their needs. In the United States, by contrast, teachers emphasised responsiveness to children's explicit expression of needs. The researchers also found that Japanese teachers believed that they had primary responsibility for clarifying children's needs partly because of the child's inability to do so. They emphasised the children's immaturity and inability to express

themselves, and their own obligation to make decisions on their behalf. U.S. teachers, on the other hand, believed that the children had primary responsibility for clarifying their own needs, in part because children have the requisite verbal skills and self-understanding. U.S. teachers, unlike Japanese teachers, viewed the children as the expert in relation to their own needs.

As Rothbaum et al. (2006) state, it is also important to note the similarities they found between U.S. and Japanese preschool teachers. Teachers in both cultures maintained that it was important for children to express their desires for assistance. Teachers in both cultures also reported that, after they offered help, it was important to wait for the child to indicate he needed help. Most teachers in both countries believed that it was better to carefully observe the child and to offer help when they believed help was needed than to always respond immediately to the child's requests. In addition, as Rothbaum et al. mention, it is important to note that Japanese and U.S. teachers' differing forms of sensitivity were compatible rather than mutually exclusive. Although the balance of their responses differed, each saw both proactive and responsive styles of interaction as alternate forms of everyday practices and were able to switch their style as necessary in ways that made the child feel more comfortable.

A possible difficulty in interpreting Rothbaum et al.'s findings is that they did not provide any description of teacher-child ratio in the preschools they visited. Instead, they simply stated that there was generally a much lower teacher-child ratio in Japan than in the U.S. As Lewis (1995) and Tobin, Wu, and Davidson (1989) state, this is commonly the case. However, the Japanese preschools the Rothbaum et al.

study took place in were located in a relatively rural area of Japan. As a result, it remains unknown if Japanese teachers' preference for anticipatory interaction with the preschool children stems from such a situational factor rather than a more broadly-based cultural factor as they suggest. This emphasises the need to consider a broad range of factors when interpreting the findings from cross-cultural studies of Japan.

Nevertheless, cultural differences in proactive versus reactive responding to young children's signals may indeed reflect different cultural priorities regarding the development of independent/individualistic or interdependent forms of competence (Keller et al., 2003; Rothbaum et al., 2006). As Markus and Kitayama (1991) state, in cultures where interdependence is valued, the requirement is to 'read' the other's mind and thus to know what the other is thinking or feeling. It involves the willingness and ability to feel and think what others are feeling and thinking, to absorb this information without being told, and then to help others to satisfy their wishes and realise their goals. Thus, in Japanese culture, nonverbal communication is often as important as, or even more important than, verbal communication. Expressing oneself too clearly is often considered to be impolite or inadequate (Nagashima, 1973).

In contrast, leading Western attachment theorists regard emotional openness as important to children's well-being. Bowlby (1979), for instance, maintains that "nothing helps a child more, I believe, than being able to express hostile feeling candidly, directly, and spontaneously" (p.12), and Bretherton (1995) argues that children's feelings of security are particularly associated with their sensitive, open

communication with parents. Interestingly, research has found that American mothers, when compared to Japanese mothers, place greater value on their children's social initiative and verbal assertiveness as hallmarks of individualisation (Azuma, Kashiwagi, & Hess, 1981). They also encourage emotional expressiveness more than Japanese mothers, even when expressivity was associated with anger and aggression.

Although verbal expressivity is seen as central to close relationships in the United States (Rothbaum et al., 2000) and has been used as part of the concept of children's attachment security (Bowlby, 1979; Bretherton, 1995; Oppenheim & Waters, 1995), this might not hold true in the case of Japan. A number of studies have shown that the Japanese are more sensitive toward, and make conscious use of, many forms of nonverbal communication in human relations through the medium of gestures and physical proximity (Caudill & Weinstein, 1969; Clancy, 1986; Miyake, Chen, & Campos, 1985; Bornstein et al., 1992). Caudill and Weinstein (1969) conducted a cross-cultural study with 30 Japanese and 30 American first-born, middle-class infants who were between 3 and 4 months of age and their mothers. In the Japanese sample, 20 dyads were obtained from Tokyo and 10 from Kyoto. In the American sample, all participants were selected from the metropolitan area of Washington, D.C. In both countries, data were obtained through naturalistic observations made on two consecutive days, covering one morning and one afternoon and totalling 4.8 hours. The data on the Japanese cases were gathered by a Japanese female psychologist, and the American cases were gathered by an American female anthropologist.

Caudill and Weinstein found a basic similarity in the biologically-rooted behaviour of the infants in the two countries with respect to the total time spent in intake of

food (sucking on the breast or bottle and eating semi-solid food) and in sleep, and also a basic similarity in the behaviour of the mothers in the two countries in the time spent in the feeding, changing, and dressing of their infants. Beyond these similarities, however, American infants showed greater amounts of gross bodily activity, of play (with toys, hands, and other objects) and of happy vocalisation; in contrast, the Japanese infants seemed passive, and showed greater amounts of unhappy vocalisation. The American mothers did more looking at, and positioning of their babies, and more chatting to them; the Japanese mothers did more carrying, rocking, and lulling of their infants. They also found that the Japanese mothers talked to their children significantly less often than American mothers. On the other hand, the Japanese mothers were together in the same room with their children significantly more often than American mothers, even while the infants were sleeping, and responded quickly to soothe and care for their needs upon any negative vocalisation. Based on these findings, Caudill and Weinstein suggested that a great deal of cultural learning opportunities have already been provided to infants by 3-4 months of age, in line with the differing expectations for later behaviours in the two cultures as the child grows to be an adult.

Caudill and Weinstein's study is significant in that it was the first empirical cross-cultural study that showed how early in the lives of infants, and in what ways, cultural differences become manifested in the behaviours of mothers and infants. However, there are two methodological concerns we need to take into account before drawing any conclusions. Firstly, there is a possibility that the very presence of an observer in a mother-infant interaction context could have created significant behavioural differences between the two nationalities (Chen & Miyake, 1986).

Although this possibility is not considered in any of Caudill's papers, a number of researchers have discussed differences in adult interactive styles between Japan and the U.S. They all discern a tendency for the Japanese to be very sensitive to others, to adapt to others and to conceal their own opinions and desires (Barnlund, 1975; Doi, 1973, 1986; Markus & Kitayama, 1991; Weisz, Rothbaum, & Blackburn, 1984). Thus, it might be that Japanese infants' unhappy vocalisation and the Japanese mothers' lower level of verbal communication with their infants stem from the latter's more sensitive reaction towards stranger in their home (Chen & Miyake, 1986).

Secondly, as Chen and Miyake (1986) point out, the physical setting – the size and the layout of the typical Japanese house is very different from that of an American house – is also closely connected to the issue. To explain why American infants showed more vocalisation, Caudill and Weinstein (1969) argued that, in the American mothers' relationship with her baby, her pace of interaction was "livelier". They tended to move in and out of the room and provided more naturally-occurring opportunities both to speak to the infant and for the infant to respond vocally when approached. Caudill and Weinstein focused on a cultural difference in maternal attitudes towards infants when explaining the differences observed but the American mothers' behaviours could also be interpreted as a result of the physical setting of the American home, where more rooms are usually available and the infant is more likely to have his own room. Under such condition, it may be natural for the mother to leave her infant alone in his room and only to check on his condition from time to time, thus creating what Caudill and Weinstein described as the "liveliness" that resulted in interaction.

Taking these factors into consideration, Bornstein and his colleagues conducted observational studies to compare and contrast activities and interactions of Japanese and American mothers and their 5-month-old infants (Bornstein, Azuma, Tamis-LeMond, & Ogino, 1990). Forty-eight dyads were recruited in total: 24 dyads were Japanese mothers and infants living in Tokyo and 24 were American mothers and infants living in New York City. Home observations were conducted identically in the two cultures. A female observer, always a native of the country, visited the home. Mothers were asked to behave in their usual manner and to disregard the observer's presence insofar as was possible. After a period of acclimatisation, mothers and infants were videotaped for 45 minutes.

Bornstein et al. clearly state their awareness of possible factors external to child-rearing style that might play a part in determining the activities of mothers with their infants. In an effort to minimise these, the Tokyo-New York comparison was specifically selected. As with the Japanese who are unaccustomed to entertaining strangers at home, New Yorkers are normally also wary of inviting strangers into their home (Bornstein et al., 1990). Moreover, families in both cities lived in small one-floor apartments in multi-storey buildings. One significant similarity between Japanese and American dyads found by Bornstein et al. was the kinds of maternal activity they showed towards their infants. Although some stylistic distinctions emerged, mothers in both cultures generally synchronised their activities with their infant's in ways appropriate to their infant's development.

Prominent differences in the activities of mothers and infants in the two countries

were also found in the Bornstein et al. study, however. American infants explored and vocalised more than Japanese infants, and Japanese infants tended to vocalise negatively more than their American counterparts. As Bornstein et al. state, these findings confirm earlier reports that American infants tend to be more active than Japanese infants in terms of motor behaviour, exploratory play, and positive vocalisation.

American and Japanese infants differed from one another more than their mothers did in this New York/Tokyo study. Rather surprisingly, as mentioned above, mothers in the two countries did not systematically differ in expected ways in terms of their engaging in social activities with their infants. Indeed, Bornstein et al. found that during the observation period, American mothers and infants actually engaged in more mutual regard than the Japanese mothers and infants. Besides, there were no cultural differences in mothers' behaviours that stimulated their infants to explore the environment. This finding contradicts findings from a previous study conducted in Sapporo city, Japan (Bornstein, Miyake, Tamis-LeMond, 1985-1986, as cited in Bornstein et al., 1990). In their Sapporo study, the Japanese mothers stimulated their infants to explore the environment significantly less than did New York City mothers. As Bornstein et al. (1990) point out, it is possible that cultural differences are waning with the modernisation, urbanisation, and Westernisation of Japan. Within-culture differences arising from geographical location within a country may also partly explain the differences found.

Another possibility is that, although broad cross-cultural similarities are observed, residual cultural differences may still be found at the micro level of analysis

(Bornstein, Toda, Azuma, & Tomis-LeMond, 1990). The observational data gathered in Tokyo and New York City (Bornstein, Azuma, et al., 1990) was submitted to microanalysis (Bornstein, Toda, et al., 1990). Relations among selected mother and infant activities, notably maternal control of and responsiveness to attentional focus in infants, were evaluated using co-occurrence and lag-sequential analyses. Bornstein's team found that American and Japanese mothers and babies engaged in most activities at similar rates. However, American mothers appeared to respond to environmental (i.e. non-social) interest in their infants more than Japanese mothers did, by further encouraging them to attend to properties, objects, or events in the environment, whereas it was during periods of decreased environmental interest and increased social interest that Japanese mothers deployed didactic encouragement to a greater degree than American mothers.

A further cross-cultural study was conducted to compare the functional content of Argentine, French, Japanese, and American mothers' speech to their 5- and 13-month-old infants in the natural setting of the home (Bornstein, et al., 1992). It was found that maternal language to infants contains affect-salient as well as information-salient topics. It is likely that mothers share feelings and contribute to emotional exchanges via their affect-salient speech to their infants, just as they wish to impart or confirm cognitive information which relates to their infants' perceptual experiences via information-salient speech (Bornstein, et al., 1992). Western-Eastern similarities were again found, in that mothers in all four countries studied typically favoured affect over information in speaking to their 5-month-old infants and information over affect in speaking to their 13-month-old infants. Apparently, over the second half of the first year of life, mothers tend to expect that their infants need

to be directed more, expect that their infants know more or will perhaps better comprehend their questions, and believe that they can and should give their infants more information about the infants themselves, their mothers, and the environment which surrounds them (Bornstein, et al., 1992).

Interesting variations in the speech of mothers in these four cultures were nevertheless identified and these appeared to reflect more general cultural beliefs and values (Bornstein, et al., 1992). Japanese mothers were highest in the use of affect-salient speech both when their infants were 5- and 13- month-old, meaning that they used the most grammatically incomplete utterances and that they played with sound more than the mothers in the other three cultures when speaking to their infants, using nonsense, onomatopoeia, song, and the like. This result replicated the laboratory-based findings of Toda, Fogel, and Kawai (1990) showing that Japanese mothers used nonsense, onomatopoeic utterances, and calling by name to their 3-month-olds more than American mothers. Variations in categories of information-oriented speech also emerged across cultures (Bornstein, et al., 1992). Japanese mothers displayed lower frequencies of direct statements than mothers in the three other cultures. They also questioned their infants the least among the four countries.

As described in this section, it has been documented in a range of studies that Japanese caregivers (preschool teachers and mothers) emphasise the importance of anticipating children's needs based on subtle and indirect cues more than responding to the child's overt, verbalised needs. It has been also reported that Japanese mother-infant communication is more nonverbal, affect-salient, intuitive, and indirect

compared to that of mothers in countries in the West. Mother-infant interactions and maternal speech begin the process of informing infants about themselves, about their mothers, and about the environment. These aspects of the mother-child relationship reflect the communication code of the culture in which the child will grow up, and they play central roles in the socialisation process and in developing a culturally appropriate communication style (Clancy, 1986; Bornstein, et al., 1992). It seems that the Japanese mother's goal in early child rearing is to empathise with her child's needs – to meet her child at the child's level – rather than to show authority as a mother (Bornstein, Azuma, et al., 1990; Bornstein, et al., 1992; Clancy, 1986; Doi, 1973). Interestingly, however, important similarity in the activities of Japanese mothers and American mothers of infants were also found, and these mixed findings suggest that cultural variations and universal phenomena interact in children's development.

3.3 Interdependency and *amae*

Although the Japanese concept of *amae* was discussed specifically in relation to attachment in the previous chapter, it is an everyday word and regarded as basic to both individual and social psychology in Japan (Doi, 1973; Markus & Kitayama, 1991). In fact, the broad Japanese view of communication and interaction arises from, and contributes to *amae*. The typical Japanese mother seems to attempt to foster her young child's emotional dependence on her through co-bathing and co-sleeping and through avoidance of denying the child's wishes, while she herself experiences emotional satisfaction from such practice (Kobayashi, 2001). Doi defined *amae* as the ability “to depend and presume upon another's love or bask in another's

indulgence” (1992, p. 8) and called *amae* “a key concept for the understanding not only of the psychological makeup of the individual Japanese but of the structure of Japanese society as a whole” (1973, p. 28). Although *amae* is a common word in the Japanese language, it has no exact equivalent in English (Niiya, Ellsworth, & Yamaguchi, 2006). Some translations are “whining,” “sulking,” “coaxing,” “pouting,” “wheedling,” “being spoiled or pampered” (Johnson, 1993), “cherishment” (Young-Bruehl & Bethelard, 2000), and an English Midlands dialect word, “mardy”, meaning soft or spoilt (Lewis & Ozaki, 2009) - but none of these translations fully conveys the meaning of the complex feelings inherent to *amae* (Niiya et al., 2006). For one thing, almost all of these terms have negative connotations in English, whereas *amae* is considered fundamentally human and does not ordinarily elicit disapproval in Japan.

Doi took the lack of an English translation of the word *amae* and the complexity of the concept as evidence that *amae* is unique and central to Japanese culture, but he provided no empirical data to support this claim. The lack of any English translation and the difficulty in defining the concept may be an indication that *amae* is more salient and more frequently experienced in Japan, but neither of these rules out the possibility that it may also exist in non-Japanese cultures.

Amae is best understood by Westerners in the context of the mother-child relationship but is also expressed in many other interpersonal interactions in Japanese culture. As Niiya et al. (2006) describe, a 6-year-old child climbing on the knees of her mother while the mother is working on the computer and asking her to read a storybook would be a typical example of *amae*. The child experiences a sweet

sensation of being taken care of, while the mother feels needed and trusted. When this kind of *amae* is expressed, the mother accepts and indulges the child's needs to be indulged, loved or looked after. The actual request per se, reading a story for him, does not necessarily matter, because unlike attachment, *amae* refers to the feeling experienced rather than to the specific behaviour (Niiya, et al., 2006). From the mother's point of view, sensitivity to *amae* makes it easier to detect what the child really needs, as opposed to what they may be requesting (Doi, 1989). As described here, because *amae* relates to feelings more than behaviour (Rothbaum et al., 2000), and can be fully understood only when viewed in context (Behrens, 2010), it makes it somewhat difficult to research.

Taketomo (1986) claims that *amae* entails a playful interaction with the parental figure in which social pressures on the child to behave age-appropriately are relaxed. The child is allowed to regress happily to the "sweetness" of being an infant enveloped in the total security and acceptance of the mother's attachment. This license for a relaxation of the ordinary constraints on the child's behaviour is based on the adult's agreement to respond playfully to the child in the way he or she would have responded when the child was an infant. The adult, then, recaptures that once-so-gratifying intimacy. Both of the participants here must agree to deviate from the "proper" mode of interaction. If the adult takes a critical stance and disapproves of the child's age-inappropriate behaviours, *amae* is aborted.

3.4 The consequences of Japanese mother-child relatedness for broader cultural interactions

In all cultures, it is a continuing task of parents and other caregivers to enculturate children, that is, to prepare them for socially accepted physical, economic, and psychological situations that are characteristic of the culture in which they are to survive (LeVine, 2003). “Actively or passively, to a greater or lesser degree, intentionally or unwillingly, parents pass their ‘culture’ on to their offspring” (Bornstein & Cheah, 2006, p.15)’. In Japanese culture, as in other cultures, the same child behaviour can be viewed as either desirable or undesirable depending on the social context. *Amae* is associated with a pivotal Japanese form of social intelligence called *kejime* - the ability to shift easily between private (*uchi*) and public (*soto*) contexts and to understand how to act in each (Hendry, 1995; Tobin, 1992). Western children, too, are taught this difference, but it is much more salient for the Japanese child (Azuma 1994; Mann, Mitsui, Beswick, & Harmoni, 1994; Miyanaga, 1991).

As Rothbaum et al., (2000) describe, the extreme indulgence (*amae*) the Japanese child enjoys with parents inside the home is in contrast to the polite and etiquette-led considerate behaviour and language that the Japanese child is expected to observe with persons outside the home. Throughout childhood, Japanese mothers place great value on their children’s social control and courtesy in public (Johnson, 1993).

Although it has become more relaxed in recent years, Japanese parents impose elaborate rules of manners and conduct, insisting on compliance to others, self-restraint, suppression of inner feelings, observance of formal greetings and

speech, appropriate gestures (e.g. bowing) and polite etiquette (Rothbaum et al., 2000). Japanese parents are more demanding than American parents of good behaviour toward others and less demanding of good behaviour toward themselves (Hendry, 1995). By relaxing these requirements inside the home, parents help children learn about the critical distinction between *uchi* and *soto* relationships.

For children, the typical outside world would be school. As described earlier, in Japanese culture there is a profoundly important difference between the way that children should feel and behave at home with their mother and the way they should behave in preschool or elementary school. As Peak (1989) stated, the reason for this difference in behavioural expression is simply: the school is *shuudan seikatsu* (group/collective life). As a participant in *shuudan seikatsu*, Japanese children are expected to learn that their own desires and goals are secondary to those of the group. A certain degree of *enryo* (hesitation) or restraint in expressing one's own feelings and a diffident self-presentation are appropriate. Children must develop a willingness to participate enthusiastically in group activities and must interact smoothly and harmoniously with others. Selfishness, or excessive assertion of independent desires and wanting to have things one's own way, is termed *wagamama*. Although it is an understandable aspect of human nature, it must not be allowed to influence individual behaviour in a group setting. Individuals are expected to assume these appropriate attitudes and behaviour, almost as one would put on a suit of clothes, for the duration of their active participation in the group.

Once alone or at home again, children can relax and let their real feelings and preferences show. Indeed, the conspicuous display of *amae* behaviour in the home is

an important method of affirming intimacy and trust and providing family members with the chance to indulge such desires and thus demonstrate love and affection. Learning to participate in the *shuudan* implies learning to switch between two codes of behaviour - one appropriate to participation in the family and one appropriate to the outside group. Although the indulgent aspect of Japanese socialisation tends to attract attention in research, it is only a part of the whole picture of social development in Japanese children.

Doi (1971, 2001) argues that having opportunities to exhibit *amae* behaviour and to receive indulgence from mothers in early childhood does not automatically mean that opportunities to be independent are absent for Japanese children. Kagitchibasi (1994) states that autonomy and relatedness are not mutually exclusive attributes but dimensions that coexist within individuals and cultures and vary with situational context. In fact, empirical studies on maternal expectation concerning child development have shown that Japanese mothers expect preschool-aged children to be instrumentally independent at an earlier age (Miura, Nakazawa, Magara, & Kaneko, 1992) than both American mothers (Hess, Kashiwagi, Azuma, Price, & Dickson, 1980) and English mothers (Joshi & MacLean, 1997). As Yamada (2004) claims, these findings indicate that individualistic and collective values do coexist in the context of Japanese socialisation.

Markus and Kitayama (1991) similarly state that an interdependent view of self does not result in a merging of self and other, nor does it imply that one must always be in the company of others to function effectively, or that people do not have a sense of themselves as agents and originators of their own actions. On the contrary, they

argue, it takes a high degree of self-control and agency to effectively adjust oneself to various interpersonal contingencies. Active exercise of control, as seen in Japanese culture, however, is directed primarily to those inner attributes, such as desires, personal goals, and private emotions that can disturb the harmonious mode of interaction. These inner attributes can be contrasted with the Western notion of control, which primarily implies an assertion of the inner attributes and a consequent attempt to change the outer aspects, such as one's public behaviour and the social situation (Markus & Kitayama, 1991).

As Markus and Kitayama (1991) point out, given the Japanese notion of control, one that is inwardly directed, the ability to adjust effectively in the interpersonal domain may form an important basis of self-esteem, and the individualised style of such adjustment to social contingencies may contribute to the sense of self-uniqueness. For the Japanese, "the straightforward claim of the naked ego" (Hamaguchi, 1985, p. 303) is experienced as childish. Self-assertion is not viewed as being authentic, but instead as being immature.

White and Levine (1986) discuss the Japanese term *sunao*, used by Japanese parents to characterise what they value in their children. This term, *sunao*, is frequently translated as 'obedient', but it would be more appropriate to approach its usage through a cluster of meanings – 'open minded', 'non-resistant', 'truthful' (White & Levin, 1986), 'receptivity' (Rothbaum et al., 2000) or 'authentic in intent and cooperative in spirit' (Kumagai, 1981, p. 261). Although it is almost impossible to translate into any one English word, it contains the implication of naturalness, naiveté, straightforwardness, simplicity, frankness, open mindedness, mildness or

gentleness and compliance (White & Levin, 1986). Importantly, a *sunao-na* (adjective of *sunao*) child has not yielded his personal autonomy for the sake of cooperation; cooperation does not suggest giving up the self. Instead, it implies that working with others is the appropriate way of expressing and enhancing the self. Engagement and harmony with others is, then, a positively valued goal and the bridge to open-hearted cooperation - as in *sunao* - is through sensitivity, reiterated by the mother's example and encouragement (White & Levin, 1986). In Japan, being *sunao* is not a sign of weakness; rather, it reflects tolerance, self-control, flexibility, and maturity (Markus & Kitayama, 1991).

Kobayashi (2001) conducted an observational study with Japanese preschool children and their mothers and reported that the mothers' goal was to bring up a *sunao-na* child who internalises the mother's expectations and straightforwardly tries to fulfil such expectations. In his study, mothers used the word *sunao* to describe an ideal child. The mothers seemed to believe that in order for the child to develop his *sunao-na* mind, they should help to make the child feel spontaneously like doing what they expected from him. In other words, anything that makes the child do a task reluctantly should be avoided. Thus, the mothers, by suggesting or hinting, provide the child with the chance to perform an expected task as if it were his own decision. The suggestion and hint also serve to sensitise the child to others' needs. Because the *sunao-na* child is expected to mind-read what others expect him to do (Kobayashi, 2001), the mother's frequent use of suggestion and hint helps the child to know what is expected from him before he is told directly.

In order for the child to mind-read the mother's expectation and behave according to

the mother's suggestion, there must be a strong emotional bond between child and mother (Kobayashi, 2001). The mothers' emphasis on their emotional bond with the child during the skill-teaching episodes was symbolised in some mothers' use of words, such as '*ittaikan*' (togetherness) and '*ninin sankyaku*' (three-legged race) in his study. Japanese mothers think that for successful teaching, a relaxed atmosphere in which both the mother and her preschool-aged child share the sense of 'togetherness' is essential. This is where the *amae*- based relationship comes in.

'Togetherness' may be interpreted as an emotionally interdependent relationship in which the child's *amae* is encouraged for the emotional satisfaction of both the mother and the child. With an emotionally close relationship, it does not seem difficult for the child to accept the mother's expectation as the child's own. Kobayashi (2001) further states that in the *amae* relationship in which the child and mother are emotionally united, the child's goal and the mother's goal become one. In this way, children are exposed to a fundamental aspect of society and learn the social and intellectual skills needed to become successful members of Japanese society (Yamada, 2004).

3.5 Maternal responses to *amae* and *wagamama* behaviour in the Japanese context

As described earlier, Japanese children learn the concept of *uchi* versus *soto* or *kejime* and also learn early on to discriminate to whom they can express *amae* or to what extent they can show their feelings of *amae*. Even in Japanese culture, where the mother and child are emotionally united, excessive *amae* in the child is not

accepted positively by the mother (e.g. Behrens, 2004, 2010; Kobayashi, 2001). At the same time, the mother blames herself if she allows her child to show too much *amae*, presuming on the mother's limitless tolerance toward his demand. As already indicated, when *amae* becomes excessive, it is called *wagamama* (self-centeredness). One mother in Kobayashi's study (2001) explained that she disapproved of her son's *amae* when he was preparing at home for kindergarten life because at kindergarten, the teacher, having many children under her charge, cannot accept his *amae* and that in *shuudan seikatsu* it is important for the child to know when not to be *wagamama*. It appears that mothers are sensitive to the distinction between *amae* and *wagamama* especially when the children start to prepare for kindergarten life.

Thus, what is crucial to the mothers in the child's skill training is how much indulgence should be tolerated and when discipline should be given (Kobayashi, 2001). The mature adult knows when it is acceptable to exercise *amae* (namely in private situations). Because of the Japanese emphasis on tightly knit groups, it is extremely important to adhere to social norms. Positive *amae* hinges on the ability to read social contexts and thereby determine when, where, and with whom one is released from norms and obligations. Without *kejime*, this form of social intelligence, there is no assurance; it is the individual's ability to adhere to the rigorous system of norms, as well as knowledge of when s/he is released from the latter, that guarantees acceptance by others and the granting of *amae*.

Because, as was previously mentioned, the mother herself seems to enjoy the child's *amae* and the interdependent relationship with the child, it is not an easy task for her to control it. The distinction between *amae* and *wagamama* depends on the specific

situation and the child's reaction to the mother's controlling effort. For instance, acting helpless or immature when a child is tired or sleepy might be regarded as *amae* and accepted by the mother. If, however, they throw a tantrum because the *amae* request was not accepted due to the mother's circumstances, the mother might see this as *wagamama* and deny the request. Hence, it is not only the mother's controlling intent alone but also the child's reaction to it which determines the strategy the mother actually uses. In order to keep the child in a cooperative mood, the mother responds to the child's reaction quickly and flexibly. Thus, maternal sensitivity for the Japanese mother might be the ability to distinguish *amae* and *wagamama* appropriately without sacrificing the bond with her child. Indeed, the degree to which *amae* is accepted appears to be a source of great anxiety among many Japanese mothers (Kumagai, 1981).

As all of the above suggests, the importance of having a way to evaluate maternal sensitivity that makes sense to the community studied is paramount. The concept of 'appropriateness' should never be divorced from local context and meaning (Rothbaum & Morelli, 2005). As described in the previous chapters, much of what Ainsworth considered sensitive caregiving reflects the value placed on children's autonomy, with this reflected in the maternal sensitivity scale she developed to evaluate caregiving (Ainsworth, 1976, as cited in Rothbaum et al., 2000). For *acceptance*, she stated that the mother "values the fact that the baby has a will of its own, even when it opposes hers...[she] finds his anger worthy of respect... [she] respect[s] the baby as a separate , autonomous person" (Ainsworth 1976, p.4). For *cooperation*, Ainsworth states that the "mother views her baby as a separate, active, autonomous person, whose wishes and activities have a validity of their own.... She

avoids situations in which she might have to impose her will on him” (Ainsworth 1976, p. 4, as cited in Rothbaum et al., 2000). For *sensitivity*, she stated that “it is a good thing for a baby to gain some feeling of efficacy. She nearly always gives the baby what he indicates he wants” (Ainsworth 1976, pp. 3-4). This conceptualisation of sensitive, responsive caregiving served as the prototype for subsequent measures and is still regarded as the standard in the field (Sroufe & Waters, 1997), but it does not necessarily fit with Japanese notions of sensitivity.

3.6 The maternal role in Japan and the UK

Before moving on to the empirical chapter, it is important first to provide a brief description of the maternal role in Japanese families. More than three decades ago, Vogel (1978) noted that for the Japanese housewife, it is mothering that provides her purpose in life, her *ikigai*. Since her whole identification is with her role as mother of a family, she puts herself into her tasks and her family relationships with a professionalism that calls forth not only total devotion but also continued efforts to learn and improve. Her feelings of satisfaction, even her feelings of success as a person, are directly tied to her feeling of success as a mother. Although this is not so much the case in modern Japanese society, the role of mother is still the primary role for many Japanese women who have children (Rice, 2001). It is in the context of this cultural value of role commitment, that *amae* can be observed to be significant in the manifestation of the role of the mother in Japan. Because fostering *amae* interdependence is seen as enhancing the child’s educability at all ages (Rice, 2001), mothers are perhaps likely to create and sustain a more intense relationship with their children than in Western society.

As with other countries, female roles have changed over time in Japan. However, according to a recent survey (Morota, Kimura, Shou, & Nishimura, 2009), a relatively high percentage of mothers of preschool children who live in the metropolitan Tokyo area are still housewives (52.8%) or part-time workers (25.9%), and only 13.7 percent work fulltime. According to a similar survey conducted in Scotland, by contrast, 34.4 % of the mothers with young children are housewives, and about a half of the mothers work either full-time (37.0%) or part-time (18.2%), with 5.1 % of the mothers were classified as something else (Anderson et al., 2007). However, the cultural values described above do not fully explain the higher percentage of mothers who stay at home with their preschool children in Japan. In another survey carried out by Rice (1992) with 195 mothers of preschool children in Nagoya, the fourth biggest city in Japan, the great majority of families lived within nuclear families, suggesting that most families did not have live-in childcare (e.g. from grandparents). Although almost all the mothers (182) thought both parents should participate in childcare, 70% (137) admitted that it was they who actually took primary care of the children.

This pattern of childcare may stem from the excessive working hours of fathers which is common in Japan. In his survey, Rice reported that on a workday, 50% of the fathers spent less than 60 minutes with their children. Twenty-five percent of the fathers spend only thirty minutes each workday with their children. Another quarter spent less than that, including 11.5% who were spending no time with their children. This report is in line with the findings of Morota et al. (2009). According to their report, in the metropolitan Tokyo area, 66% of the fathers came home after 8 pm and

28% came back after 10 pm. Thus, it is not necessarily the case that every mother is willing to become a full-time housewife, having internalised the cultural values; rather, it might be for more practical reasons that these demographical data arise.

Rice (2001) describes how, in light of the work life led by most men, for women, marriage or starting a family means complementing the men's role by taking care of the home and children full-time. Collectively, the women in her study seemed to have chosen to become full-time housewife mothers. Morota et al. (2009), however, report that the mothers in the sample who worked full time, when compared to mothers that were housewives, had more positive attitudes and feelings towards their childrearing practices and were satisfied with their time with their children. As is the case in other cultures, it would appear that Japan is not one homogeneous culture, and research into children's close maternal relationships in different regions of Japan might yield diverging results (van Ijzendoorn, Bakermans-Kranenburg, & Sagi-Schwartz, 2006). Also, it is important to remember that mother-child relationships exhibit substantial variation (Pasoda et al. 1995) and are tied to historical, economic, and lifestyle conditions that change over time and context, as well as being shaped by cultural differences in child-rearing practices.

3.7 The present studies

Following the 1986 study reporting a predominance of ambivalent attachment among insecure Sapporo infants (Takahashi, 1986), the generalisability of attachment theory and methodologies to Japanese samples has been questioned. Since then, only a few attachment studies have been conducted in Japan (Behrens, 2007) possibly because

attachment research is considered inappropriate for Japanese samples. Emde (1992) claims that the concept of attachment that values autonomy may not be relevant to the Japanese culture, in which *amae* seems to play a more prominent and more adequate role in describing family relationships and their social implications. I disagree. Firstly, as Dennis et al. (2002) argue, autonomy and relatedness are not mutually exclusive attributes but dimensions that could coexist within individuals and cultures and vary with situational context. In this sense, attachment research may be very relevant within Japan, despite the possibility of some culture-specific characteristics. Furthermore it could be possible to observe *amae* behaviours among children in the Western countries, such as UK. What we do not know is how/to what extent the two concepts of attachment and *amae* coexist and interact not only in Japan but also in the West.

In this light, as Behrens (2010) argues, it would be logical to study *amae* in relation to attachment research due to the availability of several established attachment measures. Behrens goes on to suggest that the development of an *amae* Q-sort would be an ideal step forward, a direction which the work reported in this thesis had already taken. In the absence of any metric of mothers' attitudes towards preschool children's *amae* behaviours, the first study of this thesis constructed a prototype *amae* attitude scale (AAS). The aim was to examine whether Japanese mothers' attitudes toward their children's *amae* behaviours differ from those of British mothers and, if so, in what ways. It was also hoped that this study might illustrate what sorts of *amae* behaviours are accepted by Japanese mothers and what sorts of behaviours are regarded as *wagamama* and denied.

Secondly, as mentioned above, culture is heterogeneous, and every culture changes over time (e.g. LeVine, 1982; Weisz, Rothbaum, & Blackburn, 1984). More than two decades has passed since Takahashi (1986) conducted the attachment study in Sapporo, and we do not have a clear picture of mother-child relationships in Japan today. Thirdly, most of the previous research conducted in Japan has focused on infants' attachment relationships, and so we have not obtained comprehensive picture of preschool children's attachment relationships in Japan. This is particularly important because *amae* is considered to be most evident in this period of life.

In seeking to fill these gaps in the research, the Manchester Child Attachment Story Task (MCAST: Green, Stanley, Smith, & Goldwyn, 2000) was administered to Japanese and British 4-5 year olds in the second study of this thesis in order to see whether attachment behaviours and attachment patterns differ in two cultural groups. Furthermore, this second study also examined a possible association between children's attachment classifications and maternal attitudes towards children's *amae* behaviours (measured with the AAS) in Japanese and British dyads. The third and final study addressed actual mother-child interaction in both countries, measuring the mother's emotional availability to the child (using the Emotional Availability Scale: Biringen, 2000) and relating this to both maternal *amae* attitudes and to children's attachment patterns. In the next chapter, Study 1, which involved the construction and use of the *amae* attitude scale, will be described.

CHAPTER 4²

STUDY 1A CONSTRUCTION OF THE *AMAE* ATTITUDE SCALE

4.1 Introduction

The previous chapter described some interesting features of Japanese mothers' sensitivity towards their children's *amae* behaviours as well as the kinds of *amae* behaviours that they may accept and expect from their young children. However, as yet no metric for quantifying cultural differences in child-rearing attitudes exists. In addition, *amae* behaviours may well be seen in children from non-Japanese cultures (e.g. in the UK), even although these cultures have no specific word for this behaviour. However, it is not fully clear whether there are differences in the way in which Japanese and British mothers respond to this type of behaviour. In order to fill this gap in the research, as the first part of three interlinked, consecutive doctoral studies, a 39-item prototype *amae* attitude scale was constructed based on responses from three Japanese focus groups. The scale was subsequently completed by 79 mothers from Japan and 52 mothers from Scotland. In this chapter, the construction of the scale will be reported, and in the next chapter, the results obtained from this first, cross-cultural comparison will be discussed. In this chapter the background to the chosen format for the measurement instrument will first be described, and the contents of the attitude scale which was constructed will then be discussed.

² The data for this first study were collected in part fulfilment of the dissertation element of a taught masters degree at the University of Edinburgh (MSc in Childhood Studies - awarded 2005). The data have been extensively re-analysed and re-interpreted for this PhD research, and set within an updated and broader review of the relevant literature.

4.2 Selection of a type of scale

There are three kinds of scale that have been commonly used in the construction of attitude scales: Guttman scales, Thurstone scales, and Likert scales.

As DeVellis (2003) describes, a Guttman scale is a series of items tapping progressively higher levels of an attribute. Thus, a respondent should endorse a block of adjacent items until the level of the attribute that the items tap exceeds that possessed by the respondent. None of the remaining items should be endorsed. A Guttman scale is therefore most appropriate where a clear ordering along the attribute is possible. For example, a series of interview questions might ask, “Do you smoke?”, “Do you smoke more than 10 cigarettes a day?”, “Do you smoke more than a pack a day?” and so on. As with this example, endorsing any specific item on a Guttman scale implies affirmation of all preceding items. A respondent’s level of the attribute is indicated by the highest item yielding an affirmative response.

This scale can work well for objective information or in situations where it is a logical necessity that responding positively to one level of a hierarchy implies satisfying the criteria of all lower levels of that hierarchy. In such instances, a Guttman scale has a considerable inherent advantage. If we know how many items a respondent endorsed we know his performance on the whole test. The reproducibility of the score patterns is, indeed, an index of the efficacy of this scale. As Kline (2000) notes, this reproducibility is more than knowing the score a person would have obtained. It also indicates the actual items that the subject endorsed and did not

endorse.

However, an objection to this model stems from the fact that scales can be constructed by choosing items widely spaced out in terms of level of difficulty or, in the case of attitude scales, endorsement rate. As Kline (2000) states, the use of such a wide dispersion of items underpins this model but as a consequence, any scale is not necessarily short. Thus, as some researchers argue (Anastasi, 1988; Kline, 2000; Nunnally, 1978), the very conditions of Guttman scaling make it less useful in practice in research.

A Thurstone scale is also based on dichotomous responding to statements concerning, for example, attitudes. According to Kline (2000), the development of this kind of scale involves three steps: (1) a large number of statements relevant to the attitude is collected together; (2) these are rated by a large number of judges on an 11-point scale from 'strongly favourable' to 'strongly unfavourable'; (3) 10 to 20 items are selected where there is good agreement among judges (as measured by a small standard deviation of ratings). In addition to this, care must be taken that the statements selected embrace the whole range of possible attitudes, i.e. that some items obtain ratings at the extremes of the scale.

One of the practical difficulties with this approach stems from the fact that in a typical study, approximately 100 judges would rate the attitude implied by each of around 100 statements. As Edwards (1957) argues, 100 judges are required to ensure that the whole range of opinions is sampled. To obtain such a large number is clearly onerous. Furthermore, these judges must be representative of the population for

whom the test is intended or the scaling will not be accurate (Edwards, 1957; Nunnally, 1978). Given that, for the present study, the researcher was based for most of her time in the UK, this approach was likely to have limited applicability.

Likert (1932) developed a type of scale that is more practical to construct whilst potentially yielding equally satisfactory reliability. When a Likert scale is used, the item is presented as a declarative sentence, followed by response options that indicate varying degrees of agreement with, or endorsement of, the statement. Depending on the phenomenon being investigated and the goals of the investigator, either an odd or an even number of response options might accompany each statement. The most common choice is to have five fixed-alternative expressions, labelled 'strongly agree', 'agree', 'neither agree nor disagree', 'disagree', and 'strongly disagree' (Robson, 2002). Weights of 1, 2, 3, 4, and 5 are assigned to these alternatives, with the direction of weighting depending on whether the statement is positive or negative.

Although a Likert scale has the disadvantage that participants, if they feel that their responses fall between categories, may be undecided about which category to choose (Brunier & Graydon, 1996), there are nonetheless several advantages to this method. It can be designed to be easy for participants to respond, in that it provides a limited number of distinct categories from which to select (Scott and Huskisson, 1977). This type of scale can also look interesting to respondents, and people often enjoy completing a scale of this kind (Robson, 2002). This is important not only because if respondents are interested they are likely to give considered rather than perfunctory answers, but also because this may result in an increased number of participants

completing the full measure. Furthermore, this type of scale is straightforward to construct, is usually highly reliable, can be adapted to the measurement of many different kinds of attitude, and has produced meaningful results in many studies to date (Nunnally, 1978; Anastasi, 1988; Kline, 2000). Hence, Likert scales were chosen as the basis for attitude measurement in this study.

4.3 Selection of number and display of response options (scale steps)

According to some researchers (Kline, 2000; Nunnally, 1978), it is advantageous to use more rather than fewer response options (steps) in a Likert scale. In fact, this has been demonstrated by numerous studies showing that the reliability of individual rating scales is greater the wider the range of response options used (Guilford, 1954). On the other hand, a large number of steps might confuse subjects, or irritate them to the point where they become careless. In fact, as Nunnally (1978) notes, as the number of scale steps is increased from 2 up to 20, the increase in reliability is very rapid at first. It tends to level off at 7, and after about 11 steps there is little gain in reliability from increasing the number of steps.

An interesting and cross-cultural study with findings pertinent to this study was conducted by Lee and his colleagues (Lee, Jones, Mineyama, & Zhang, 2002). In their study, cultural differences in responses to a Likert scale were examined using the 13-question Sense of Coherence Scale with a choice of either 4, 5, or 7 steps. Participants were 136 Chinese, 323 Japanese, and 160 Americans who lived in Southern California. They found that the construct validity of the scale tended to be better for the Chinese and Americans when there were 4 steps and for Japanese when

there were 7 - although a possible reason behind this difference was not offered by the authors of this study.

Another issue regarding the number of steps on rating scales relates to whether an even or an odd number of steps generally is preferable. Nunnally (1978) and Kline (2000) point out that an odd number permits the use of a middle step meaning 'neither agree nor disagree'. Because there is no study on differences in responses to a Likert scale among British subjects and because this was thought to make at least Japanese subjects more comfortable in making a choice, an odd number of 7 steps was adopted in the study to be reported in this and the next chapter, even though there was a risk that participants might use the neutral step too often regardless of the content of the attitude questions.

4.4 Number of items required

It was important to consider the number of *amae* attitude items to be included in the scale. For Likert scales, reliability tends to increase with the number of items (Jackson 1996; Lowenthal, 2001). Specifically, Anastasi (1988) states that reliability may be unacceptably low with fewer than 20 items. However, as the number of items increases so the time taken to complete the questionnaire will also increase and this may reduce participants' motivation to complete the form. Specifically, Anastasi (1988) states that more than 30 items may demotivate participants from responding. Moreover, Lowenthal (2001) argues that if there are several subscales represented within a questionnaire, while it might require a greater number of items, investigators should keep each subscale as short as possible so as not to exceed 50 items in total.

4.5 Identification of items for inclusion in the *amae* attitude scale

With these factors in mind, 40 attitude items were gathered for the present study, in order to allow for the inclusion of several subscales and for a balance between a satisfactory level of reliability and a length of scale which would not be demotivating for participants. There were two main sources of items for the *amae* attitude scale: feedback from focus groups of mothers and teachers and information gathered from an earlier study in which a group of Japanese child development experts were asked to describe the concept of *amae* using the attachment Q-sort (Vereijken, Riksen-Walraven & Van Lieshout, 1997).

4.5.1 Items derived from focus groups

In order to construct a valid attitude scale reflecting the Japanese concept of *amae*, two focus groups were conducted: one with five native Japanese mothers in Tokyo who had children under six years and the other with four Japanese classroom teachers of Japanese pupils aged between six and ten years. These four teachers were from different public elementary schools in Tokyo.

Focus groups were considered to be the most appropriate method to gain a wide range of opinions, experiences, and feelings toward children's *amae* behaviours as they take advantage of a group dynamic in which people interact and spark ideas from one another as they do in real life (Morgan & Richard, 1993). Both focus groups were opportunity samples and the participants were chosen based on the fact

that they were all from Tokyo and had experience with children in the age group of interest. Written consent was obtained from every participant prior to the focus group sessions. They were fully informed about the purpose of the study, were told that all the information provided by individual participants would be used only for the purpose of research, would be kept confidential and would remain anonymous. The focus groups took place in quiet, private settings, and the conversation was tape-recorded with the permission of each participant.

Mothers were asked a number of questions about children's *amae* behaviours. These included (1) What sort of children's behaviour is *amae*? (2) Are *amae* behaviours of girls and boys different? (3) What sort of *amae* behaviour is acceptable or desirable and what sort is not? The mothers were asked to focus on the *amae* behaviours of preschool age children, which is between 3 and 6 in Japan.

Participants responded that children tend to exhibit *amae* most when they are tired or sleepy. This is in line with Behrens' (2004) report of interviews conducted with Japanese mothers in Sapporo, Japan. The majority of mothers in the current study stated that whether they felt happy about their children's *amae* behaviours or not partly depended on the birth order and gender of the child. For example, one of the mothers said:

“When I was bringing up my eldest son, I wanted him to be more autonomous and did not accept his amae behaviours, but now, I feel happy when my daughter expresses amae, and I actually enjoy when she behaves like a baby” (mother of 7-year-old boy and 4-year-old girl).

Although some of the mothers in the focus group reported that they responded

differently to the *amae* behaviours of their sons and daughters, difference of actual behaviours expressed by boys and girls were not mentioned by the mothers, and none of the literature to date discusses this issue.

The focus group with teachers identified a number of *amae* behaviours that young pupils generally expressed in the classroom, including clinging to the teacher, asking her to feed them, and asking for help in getting down from a place from which they could easily get down themselves. One of the teachers said:

“Some of my students express amae in a classroom, in front of other pupils. When one student asked me to feed him at lunch time, I said “no”, of course, but I was very surprised he asked me that, you know. I don’t know if he often amaeru (expresses amae behaviours) because he cannot amaeru to his mother or because it is usually accepted to amaeru to his mother...” (A class-room teacher of 5 to 6-year-olds).

From these focus group conversations, it seemed that not all *amae* behaviours are accepted by Japanese adults, and that acceptance largely depends on the situation and sometimes the mood of the person who receives *amae* expressions. As Behrens (2004) notes, children’s *amae* behaviours seem to be diverse and contextual. Also, it seemed that the majority of participants in these focus groups believed that the focus of children’s *amae* behaviours is usually the mother. It is important to note, however, that the mothers and the elementary school teachers who participated in these focus group studies were all live in Tokyo, and slightly different responses might have been obtained from mothers and teachers from more rural and less Westernised area of Japan where many families live with extended members of the family.

4.5.2 Items drawn from the Attachment-Q-Sort

As was described in Chapter 2, the Attachment-Q-Sort (AQS) consists of 90 small cards describing infants' and children's behaviours in the home setting. In tandem with the information provided by the focus groups, behavioural descriptors from a study of *amae* using the AQS were also consulted to inform the construction of the *amae* attitude scale to be used in this thesis.

Using the AQS cards, Vereijken, Riksen-Walraven and Van Lieshout (1997) asked eight Japanese behavioural scientists (acquainted with the concept of *amae*) to describe the concept. The behavioural experts were instructed to describe what they considered to be a child showing prototypical *amae* behaviours. These descriptions were then averaged into an *amae* criterion sort, and the AQS items that gained the highest scores from the experts were considered to be prototypical *amae* behaviours. As the AQS was designed to describe attachment behaviour it was not likely to cover the full range of *amae* behaviours (Behrens, 2004), but as there has been little systematic *amae* research that has specified what kind of children's behaviours *amae* are, this source seemed likely to be a useful reference base.

For the purpose of the present study, the highest scoring items (above 7.5 out of a possible 9) from Vereijken et al.'s (1997) study were selected, 17 items in total. These included, for example, AQS item 81: 'Cries as a way of getting mother to do what he wants' (which received a mean score of 8.63 out of a possible 9), item 64: 'Enjoys climbing all over mother when they play' (which received 8.50), and item 75 'At home, child gets upset or cries when mother walks out of the room' (which

scored 7.88), scores showing that the most of the Japanese experts considered these behaviours as *amae* behaviours. Likewise, AQS item 31: ‘Want to be centre of mother’s attention. If mother is busy or talking to someone, he interrupts’ (which scored 8.38) was included although for clarity this item was slightly modified in the construction of the *amae* attitude scale being reported here, and was recast as ‘I would say “no” to my child if she interrupts and tried to get my attention when I am talking to someone’. In addition, the 10 items deemed most atypical of *amae* according to the experts were also utilised because if these were reverse worded, the sentences may well describe *amae* behaviours. These included, for instance, AQS item 35 (score 1.50): ‘Is independent with mother. Prefers to play alone; leaves mother easily when he wants to play’, item 57 (score 1.63): ‘Is fearless’, and item 69 (score 1.63): ‘Rarely asks mother for help’. (see Appendix A for the full set of items included in the initial prototype *amae* attitude scale).

4.6 *Amae* categories

As Behrens (2004) states, *amae* represents a cluster of behaviours, an emotional or internal state, and a philosophical construct for Japanese people that can be viewed either positively or negatively. She divides development into three phrases - infancy, childhood, and adulthood - and she categorises *amae* behaviours toward mothers in childhood into two groups: affective and manipulative. Affective *amae*, according to Behrens, is motivated by children’s desire for physical and emotional closeness to their mothers. She states that typically developing young children still enjoy closeness to their mothers, sometimes by even mimicking infants’ behaviours, and such behaviours fit into this affective category. With respect to her second

classification, manipulative *amae*, she states that as children get older, they become more capable of taking the perspectives of others, and they may engage in *amae* behaviours such as pretending to be helpless, and demanding extra care and attention from adults, particularly from their mothers, for example, by being clingy and displaying temper tantrums. As Yamaguchi states, children may show these behaviours to gain self-confidence in terms of controlling the environment to their liking and also in terms of the approval of the adults.

The accomplishment of Behrens' conceptualisation is in her differentiation of these two kinds of *amae*. She pointed out that these are not mutually exclusive and that they may appear in different contexts, but within the same relationship. However, there are some difficulties in this manner of categorising *amae* behaviours. Firstly, it might not be appropriate to divide the human lifespan into only three phases. In Behrens' classification, childhood starts at age 2 years and extends to 19 years of age, a time frame which would include Piaget's preoperational, concrete operational, and formal operational stages, Vygotsky's play, learning, and peer stages, and Freud's oedipal, latency, and general activity stages (Cole & Cole, 2001).

Secondly, it is questionable whether a child as young as 2 years of age is able to 'manipulate' another's mind. Some researchers (e.g. Chandler, Fritz, & Hala, 1989; Fodor, 1992) claim that 3-year-olds, and even younger children, acquire the basic principles of folk psychology (understanding other people) and can distinguish between true and false beliefs. However, a meta-analysis of research to date (Wellman, Cross, & Watson, 2001) suggests that such an important conceptual change in children's understanding of others does not take place until around age 4

years. Moreover, Cole, Cole, and Lightfoot (2005) argue that due to the immaturity of the frontal cortex, and/or connections between the frontal cortex and association areas, children of this age are incapable of considering someone else's point of view, or thinking through the consequences of one's actions. Thus, although very young children sometimes appear to be trying to manipulate other people's emotional responses (Flavell, 1999), or to understand what behaviours may get the attention of others (Behrens, 2004), these behaviours must be viewed differently from those produced at older ages.

The picture is further complicated by the fact that there are some situations in Behrens'-classification which fit both affective *amae* and manipulative *amae*. For instance, if a child becomes affectionate and acts helpless whenever his mother sits with him or is affectionate towards other family members (e.g. another sibling), this behaviour can be interpreted as the child using *amae* behaviours instrumentally to direct the mother's attention towards himself, and it could therefore be categorised as manipulative *amae*. However, the origin of this behaviour may come from the child's desire to be close to his mother, and might not fall outside the category of affective *amae*. In this sense, the nature of this behaviour is qualitatively different from that of, say, a high school student who demonstrates *amae* behaviour in order to obtain pocket money, as in Yamaguchi's (1999) example described below.

Yamaguchi (1999) also categorised Japanese *amae* into two categories: manipulative *amae* and emotional *amae*. He illustrates manipulative *amae* through the example of a high-school student who approaches his parents in a helpless and desperate manner when he wants some pocket money from them. According to Yamaguchi,

manipulative *amae* incorporates the intention to control the other person, and this is clearly not the same as the *amae* behaviour when seen in preschoolers. In fact, all the *amae* behaviours of preschoolers can be categorised as emotional *amae*, according to Yamaguchi's definition.

Almost all the items proposed in the present study, derived from the focus groups and the child expert AQS study, and identified as *amae* behaviours of children aged between three and five-years-old, could be considered as falling within the category of affective *amae* (Behrens, 2004) or emotional *amae* (Yamaguchi, 1999). However, *amae* can show itself in many different forms and functions, depending on the context in which it is exhibited. It is also possible to gain a deeper understanding of *amae* and to work with this concept if we treat *amae* separately according to context (Behrens, 2004). For this purpose, a multidimensional approach was taken in the current study, and emotional or affective *amae* was further classified into four *amae* types: Pure-*amae* (Doi, 1971), Asking-*amae*, Frustrated-*amae* (Doi, 1962), and Anxious-*amae* (Okonogi, 1992).

Because many researchers (e.g. Tezuka, 1999) agree with Doi's claim that *amae* originally stems from children's desire to be intimately close to their mother, children's straightforward (*sunaona*) expression of behaviours evidencing their desire to be close to their mothers both physically and emotionally were named Pure-*amae*. Thirteen items were categorised as Pure-*amae*. These included, for example, Q7. If my child starts a baby talk, I would instruct the child to speak age-appropriately and Q12. It is inappropriate for a child who no longer breast feeds to try to drink or pretend to drink from her mother's breast (see Appendix A for

further examples of AAS items).

In Behrens's 2004 study, Japanese mothers described how their children would demand maternal help in getting dressed in the morning when they ordinarily could dress themselves or when the mother was busy, attending to the younger sibling, they would claim they could not get up until they got a hug from her. Asking the mother to do something even though able to do it on his own was classified as *Asking-amae* (Behrens, 2004, Vereijken, et al., 1997) and comprised four items; Q 3, for example, 'if my child asked for help with getting down from a place that she can get down by herself, I would tell her to try it by herself, even if it was easy to help' was one of such items.

Doi (1962) introduced the Japanese words, *suneru* and *higamu*, as words that are related to the psychology of *amae* and gave this a generic term, frustration of *amae*. *Suneru* describes the behaviour of a child who pouts and sulks because he feels he is not allowed to *amaeru* [show *amae* behaviour] as much as he wants to, and *higamu* describes the behaviour of a child who feels himself unfairly treated compared to others. For example, in addition to acting helpless or in an immature manner, as described above, a child may throw a tantrum in a public place when wanting a toy in a store and the request is denied. Such behaviour can be also regarded as *amae* and viewed rather negatively by mothers (Behrens, 2004). These behaviours in the item set were therefore categorised as *Frustrated-amae*, and comprised 8 items (e.g. Q 28: 'When my child is cranky, I try to treat her strictly.').

Finally, a child's behaviour when separated from the mother was classified under

Anxious-*amae* (Okonogi, 1992). Fourteen items comprised this group; Q 33 ‘If my child gets into my bed at night, I would welcome her’ and Q 37 ‘Children cannot help clinging to mothers in an unfamiliar situation.’ are typical of this classification.

Out of the four types of *amae* behaviours, mothers’ attitudes towards those behaviours classified into Anxious-*amae* were expected to be the key to challenging the universality of the Strange Situation Paradigm. This is because the Strange Situation procedure is the observational study of dyads when they face separation, making Anxious-*amae* behaviours the most likely to be triggered in an unfamiliar situation, especially when children are unexpectedly separated from their mothers. The relationship between Anxious-*amae* and attachment will be discussed further in chapters 5 and 6. The other categories appear, at face value, to be related somewhat less closely to attachment, suggesting that although there are some overlaps between attachment and *amae*, they are distinct concepts.

4.7 Initial check of the items

After the 40 items had been gathered, a Japanese attachment researcher (Dr Kazuko Behrens, based at the University of California, Berkley), who had published widely on the topic of *amae*, was consulted regarding the content validity of the proposed scales. As a result, four items were picked up as potentially being insufficiently relevant as they did not truly reflect children’s *amae* behaviours (Behrens, personal communication, 24th May, 2005). These items were ones which asked about children’s attitudes towards disliking food and about shyness with strangers.

In terms of the item focusing on children's attitudes towards food, 'Children cannot help liking and disliking certain foods', some mothers in the focus group had also pointed out that this might not be an *amae*, but be more reflective of children's *wagamama* [head-strong, self-willed, selfishness - as translated by Kumagai and Kumagai, 1986]. This item was therefore removed from the item pool. In terms of the three items related to children's shyness, however, Doi (2001, p.106) states:

"The first hitomishiri [shyness or bashfulness with stranger].....happens when the infant recognizes its mother and distinguishes her from others. This development, which occurs because of the child's realization of the necessity of the mother, can also be described as the beginning of the child's amae."

Moreover, two mothers who had participated in the focus group were subsequently interviewed on the phone and both of them indicated that this aspect of children's shyness did reflect the Japanese concept of *amae* in their view. Therefore, these items were retained in the working item pool.

By combining and synthesising the descriptions of childhood *amae* behaviours from the focus groups and the findings from Vereijken et al.'s (1997) study, the *amae* attitude scale (AAS) was thus created: 39 items, in 7-step Likert-scales (ranging from 1, "strongly disagree", to 7, "strongly agree" with natural point of "neither agree nor disagree"), presented as a graphic scale, and requiring tick-box completion. In order to avoid response bias, 15 items were changed to be negative statements, and the responses to these items were re-coded in the later statistical analysis (see Appendix A).

4.8 Translation of the *amae* attitude scale

One of the challenges of this study was to construct two equivalent questionnaires: one in Japanese and one in English. In order to compare results from both questionnaires, therefore, it was important to make sure both versions described exactly the same behaviours. Hence, special consideration was given to choosing the wording. To this end, after initial translation was completed by the researcher, three Japanese postgraduate students and one British doctoral student who were familiar with both cultures and languages checked the content of the questionnaires to see if each item, written in either English or Japanese, had exactly the same meaning. Two of the items in which it seemed to be difficult to match the meaning were checked intensively by the bilingual speakers by translating the Japanese version into English and subsequently translating it back into Japanese. Points that translated back differently from the original sentence were modified to ensure better equivalence.

4.9 The initial pilot testing of the *Amae* Attitude Scale

In parallel with the consultation with Dr. Behrens, the first pilot test was conducted with 13 native English speakers (including 4 mothers) using the English version of the scale and 10 native Japanese speakers (including 6 mothers) using the Japanese version of it. The sample method used in this pilot testing was opportunity sampling. The purpose was to ascertain if any items were either leading questions or ambiguous sentences, and also to modify/clarify the English and Japanese to make both versions of the scale as equivalent as possible. Additionally, the face validity of the items, which were all believed to reflect children's *amae* behaviour, was evaluated through

this pilot test by the Japanese participants.

Two of the items which had been identified in initial exploratory work as too extreme were modified as less extreme statements. Six of the items were pointed out to be either leading questions or ambiguous. In addition, some of the participants noted that the response would depend on the situation. Therefore, the wording of these six items was modified to be situation-specific, more clearly-stated and non-leading. For instance, “If my child asks to lie on my lap, I would happily let him/her” was modified to be “If my child sits on my lap while I watch TV, I would happily accept it.” An important point to be taken into account, however, is that in establishing context-specific and clear, unambiguous items which can be easily coded, the range of possible answers may have been restricted, leaving fewer dimensions for response (Lemon, 1973). Moreover, too specific a sentence can easily influence or lead the answers. Achieving some balance was therefore important in formulating all of the items.

Interestingly, Japanese participants reported that they were not accustomed to “tick the box” questionnaires. In fact, some of the respondents were unsure how they were supposed to answer. Hence, the instruction was changed to be “Please circle the most appropriate answers...” for both the Japanese and English versions.

Due to the small sample size, the answers from the Japanese and the English native speaking participants were not analysed statistically at this pilot stage. However, there seemed to be relatively small differences in their responses, but in the predicted direction, with the Japanese participants showing greater acceptance of *amae*

behaviours. One of the reasons for the differences being relatively small might be because the Japanese participants were recruited from around Edinburgh; some of them grew up in Western countries, some of them had Scottish partners, and all were raising their children in Scotland. Thus, their attitudes toward children's *amae* behaviours might have been influenced by Western sensibilities.

A second and final pilot test using the Japanese and English versions of the AAS was conducted with 7 Japanese mothers and 6 Scottish mothers (all of whom lived in Scotland and had children aged between 3- and 5-years-old), again recruited by an opportunity sampling method. Japanese mothers were recruited from a Japanese School in Scotland with permission from the Head of School, and the Scottish mothers were recruited from the University day nursery with the permission of the Nursery Head. The classification of items was explained to the Japanese mothers, and they were asked for their views on the validity of this method of categorising items. All of these Japanese mothers agreed with the classification. Clarity of the instructions and categorical questions and the straightforwardness of the answering methods were also checked during this final pilot test, and these were found to be adequate. Both Japanese and Scottish participants spent approximately 10-15 minutes filling out the questionnaire. Because the number of participants was once again small, the results obtained from these Scottish mothers and Japanese mothers were not analysed statistically. However, the answers from these two sets of mothers appeared to be moderately different, again in the direction predicted. On the basis of the step-wise methodology described above, a final 39-item version of the AAS and of the instructions for its completion was prepared for use with larger samples of Japanese and Scottish mothers. This next stage in the study is described in the

following chapter.

CHAPTER 5

STUDY 1B: EXPLORING DIFFERENCES IN THE ATTITUDES OF SCOTTISH AND JAPANESE MOTHER-ATTITUDES TOWARDS THEIR CHILDREN'S *AMAE* BEHAVIOURS

5.1 Introduction

In the absence of a metric of mothers' attitudes towards preschool children's *amae* behaviours, the last chapter described how an *amae* attitude scale (AAS) was constructed by combining and synthesising the descriptions of preschoolers' *amae* behaviours from preliminary focus groups conducted with Japanese mothers and primary school teachers and by drawing on the Attachment Q-sort responses of a group of Japanese child experts in an earlier study by Vereijken, Riksen-Walraven, and Kondo-Ikemura (1997). Using this new scale, the first study in this thesis examines whether Japanese mothers' attitudes toward their children's *amae* behaviours differ from those of Scottish mothers and, if so, in what ways.

5.1.1 Maternal attitudes towards children's *amae* behaviours

Many international scholars misunderstand the concept of *amae* and believe that it is unique to Japan, implying that the Japanese (as compared to Westerners) are uniquely dependent in their interpersonal relationships in childhood. However, the uniqueness of the indigenous concept does not necessarily imply that the Japanese behavioural pattern associated with the concept is also unique (Yamaguchi & Arizumi, 2006). Nevertheless, it can be speculated that Japanese mothers' degree of tolerance for accepting children's prolonged desire for connectedness may exceed

that of their Western counterparts. The purpose of the present study is to examine empirically if this is the case.

Rothbaum and his colleagues (Rothbaum, Kakinuma, Nagaoka, & Azuma, 2007) conducted semi-structured interviews both in Japan and the United States with mothers of children aged between 3 and 5 years to assess their beliefs about their children's interpersonal behaviours. Along with many cross-cultural similarities, they found cultural differences in both the attributed meaning and in the manifestation of children's behaviours. Firstly, the Japanese mothers were more likely to mention accommodative behaviour when describing the desirable child, both in early childhood and in the future, and they were more likely to mention the absence of such behaviour when describing the undesirable child in the future. Although U.S. mothers want their children to be well behaved and well mannered, the focus was more on traits that promise the maximisation of one's full potential rather than on self-malleability and active effort to modify the self to fit in with others and the environment. According to Rothbaum and his colleagues, Japanese mothers used concepts such as *sunao* (willing receptive, as introduced in Chapter 3), *sassi* (receptivity; guessing the true intentions of others; mind reading), and *kyouchou* (cooperative with others despite differences in personality or opinion) - reflecting the Japanese emphasis on seeking harmony with others and the environment. Although their study did not focus on *amae* per se, it showed that there are potentially different maternal attitudes towards children's behaviours expressed during the mother-child interaction.

Thus, it is assumed that *amae* behaviours occur universally (Doi, 1996; Vogel, 1996),

as described earlier, but that the degree of acceptance from mothers may differ across cultures – with context and culturally- shared beliefs possibly adding a different nuance to the children’s behaviours. As Rubin (1998) argues, if a given behaviour is viewed as acceptable within the culturally-based belief system, then mothers will attempt to tolerate or encourage its expression, whereas if the behaviour is perceived as maladaptive or abnormal, then they will attempt to discourage it. In other words, cultural values guide maternal beliefs and attitudes, and these beliefs in turn shape the mother’s response to the child (Vinden, 2001), which then impacts on the child’s behaviour.

Cross-cultural differences in early maternal behaviours have been documented in research carried out by Rothbaum, Pott, Azuma, Miyake and Weisz (2000). They found during observation that the Japanese mothers encouraged their infants to orientate to them more than they encouraged their exploration of the environment, which suggests that, in comparison to the U.S., dependent behaviour in Japan is exercised more and exploratory behaviour is exercised less within the infant-caregiver relationship. Similarly, American mothers have been reported to encourage more autonomy and to maintain physical distance, whereas Japanese mothers express more relatedness toward their children in their behaviours (Dennis, Cole, Zahn-Waxler, & Mizuta, 2002).

5.2. The present study

Although there has been some research focusing on the *amae* behaviour of young children and on maternal responses to this behaviour (e.g. Vereijken et al., 1997), no

studies to date have involved any measure specifically developed to assess maternal attitudes towards young children's *amae* behaviours. Additionally, although Japanese mothers' greater tendency in comparison to Western mothers to indulge or accept their children's *amae* behaviours is documented (e.g. Rothbaum et al., 2000), studies have typically treated *amae* as a unitary construct and consequently it remains unknown whether any specific forms of *amae* behaviours are tolerated more or less than others by mothers in different cultures.

In order to address this question, an *amae* attitude scale (the AAS) was constructed, as described in Chapter 4. This chapter reports on how this scale was used to evaluate whether Japanese mothers' attitudes toward their preschool children's *amae* behaviours differ from those of Western mothers and, if so, in what ways. Mothers from a suburban area of Tokyo, Japan and from Edinburgh, Scotland were chosen to participate because these cities are similar in terms of modernity, level of industrialisation, per capita income, and standard of living. In both cities, nuclear family organisation predominates, with the mother normally the primary caregiver in the family setting. Locales and participants were therefore considered comparable in terms of broad socio-demographics.

However, substantial differences do exist between Japan and Scotland in terms of their histories, beliefs, and educational systems. In terms of education, an important difference of relevance to this study given its focus on mothers of pre-school children, is that in Japan the academic year begins in April, and elementary school children enter first grade at age six years. Children in Scotland, in comparison, generally start primary school in August, aged between 4½ and 5½ depending on when the child's

birthday falls. The Scottish system is the most flexible in the UK, however, and parents of children born between September and February can opt to hold their child back a year and let them start school the following August. This usually allows those not ready for formal education to have an extra year at nursery school. Nonetheless, children in Scotland usually begin primary school at a younger age than children in Japan. As it was assumed that mothers might have different expectations and beliefs towards the *amae* behaviours of preschool-age children and school-age children, in both countries only mothers of preschool children, aged 3 to 5 years, were asked to participate in this study.

Given the previous research in this field, described above, it was hypothesised that the Japanese mothers would show more tolerant attitudes overall towards children's *amae* behaviours than the Scottish mothers. Behrens (2004) also reported that Japanese mothers seemed to have more positive attitudes towards children's *amae* behaviours that were mostly affective in nature (*Pure-amae*), while they did not always welcome children's helpless *amae* behaviours (*Frustrated-amae*) or *amae* behaviours that demanded extra care and attention from them when they were busy (*Asking-amae*). Thus, it was further predicted that the Japanese mothers in this study would show more positive attitudes towards those *amae* behaviours that are predominantly affect-driven, such as seeking to be held, and less tolerance towards attention-demanding *amae*, such as asking for something to be done that could easily be done by the child himself.

5.3 Methods

5.3.1 Participants

Mothers of children aged between three to five years were invited to participate in this study as the development of *amae* is most evident in early childhood years (Azuma, 1996), making this stage optimal for assessing any cross-cultural differences in *amae* behaviours (Rothbaum, et al., 2007). A total of 104 Japanese participants were contacted via two private nurseries and one private kindergarten in Tokyo, with permission from their directors. As a result, completed questionnaires were obtained from 79 Japanese mothers with children aged between three- and five-years-old, a response rate of 76%. Among Japanese participants, 37 mothers (47%) answered the questionnaire regarding their male child, and 42 mothers (53%) answered it regarding their female child. The average age of the mothers was 34.3 years ($SD= 3.38$) and the range was from 27 to 40 years.

A total of 145 mothers in Scotland were similarly contacted via two private nurseries in Edinburgh and 52 mothers completed the questionnaires. This response rate was relatively low: 36%. However, as only Scottish mothers were sought for recruitment from the Edinburgh nurseries, this difference in response rate may have reflected the different ethnic compositions of the two cities (with Edinburgh probably having a greater ethnic diversity than suburban Tokyo), rather than simply a poorer rate of response in Edinburgh. Among Scottish participants, 20 mothers (38%) answered the questionnaire regarding their male child, and 32 mothers (62%) answered it regarding their female child. Average maternal age was 32.7 years ($SD= 5.60$) and age range was from 22 to 40 years.

An independent samples *t*-test showed no significant difference in age between the Japanese and Scottish mothers who returned completed questionnaires, $t(129) = 1.78$, *ns*. There was also no significant difference between the age of the Japanese and the Scottish children of the mothers recruited to the study ($M = 4.0$, $SD = 0.9$ and $M = 3.9$, $SD = 0.7$ respectively; $t(129) = 1.14$, *ns*). Table 1 provides information on the employment status of mothers, and Table 2 provides information on birth order of the children in the two cultural groups.

Table 5.1 Breakdown of mothers' occupations

	Japanese ($n=79$)		Scottish ($n=52$)	
	Frequency	Percent	Frequency	Percent
Full time worker	19	24.1	25	48.1
Part time worker	16	20.3	25	48.1
House wife	42	53.2	1	1.9
Full time student	1	1.3	1	1.9
On maternity leave	1	1.3	0	0

Table 5.2 Breakdown of children's birth order

	Japanese ($n=79$)		British ($n=52$)	
	Frequency	Percent	Frequency	Percent
Only child	21	26.6	30	57.7
Oldest among 2 children	16	20.3	9	17.3
Oldest among 3 children	1	1.3	0	0
Middle among 3 children	4	5.1	0	0
Youngest among 2 children	28	35.4	11	21.2
Youngest among 3 children	7	8.9	2	3.8
Youngest among 4 children	1	1.3	0	0
Twin	1	1.3	0	0

5.3.2 Measures and procedure

The study adhered to The British Psychological Society (BPS) Ethics Guidelines and to the University of Edinburgh Research Ethics Policy and Procedures. The approval

of the University of Edinburgh School of Social and Political Studies Ethics Committee was obtained prior to the study commencing. Disclosure Scotland clearance was also sought and gained as the researcher would be visiting the nurseries in person. Additionally, for the Japanese arm of the study, as it was considered to be equally important to follow Japanese ethical guidelines and Japanese law, the Japanese Personal Information Protection Law (enacted on 1st of April, 2005) and the Ethical Guidelines of Tokyo University were referred to when determining all relevant aspects of procedure.

The 39-item *amae* attitude scale (AAS), described in the preceding chapter, was the central instrument used in this study. In addition to the 39 *amae* items, a number of demographic questions on age-group, occupation and nationality of the mother, and age, birth order and gender of her child were also included in the questionnaires distributed to the two participant groups of mothers. It was also clarified at the beginning of the questionnaire that if mothers had more than one child in the required age group, they were asked to answer to the questions in relation to a specific child.

The questionnaires and consent forms were distributed to mothers via their child's nursery, and mothers were asked to complete the questionnaires in private and then return them, along with their signed consent form, in a sealed envelope to the nursery.

Mothers were assured that their questionnaire responses would be treated confidentially and anonymously, and that research data would be stored securely.

The purpose of the study was fully explained to the directors of the nursery/kindergarten. To the mothers, however, the fact that the present study was a cross-cultural comparison between Scotland and Japan was not revealed before collecting the data in order to minimise stereo-typed responses. Furthermore, the word '*amae*' was not used in the consent form for the Japanese mothers as there is no equivalent word in English. All other pertinent information was described at the beginning of the questionnaire. It was especially made clear to participants that they could withdraw from the study at any time without giving a reason (Loewenthal, 2001; The British Psychological Society, 1995) and that they were free to omit any question if they preferred not to answer it.

5.4 Results

In this section, the reliability of the *amae* attitude scale (AAS) is first analysed and based on these results, maternal *amae* scores from Japanese mothers and Scottish mothers are then compared. Scores on each of the 4 subcategories of *amae* behaviours are then also compared across the two cultures in order to identify where any differences in maternal attitudes towards their children's *amae* behaviours might be more, or less, marked.

5.4.1 Reliability of the *Amae* attitude scale (AAS)

In order to assess the internal reliability of the AAS, Cronbach's alpha was calculated separately for each cultural group for each *amae* category. As the resultant alpha values were relatively low, 10 items were subsequently removed for the purpose of analysis, in order to increase within-category intra-reliability: 1 item (Q5)

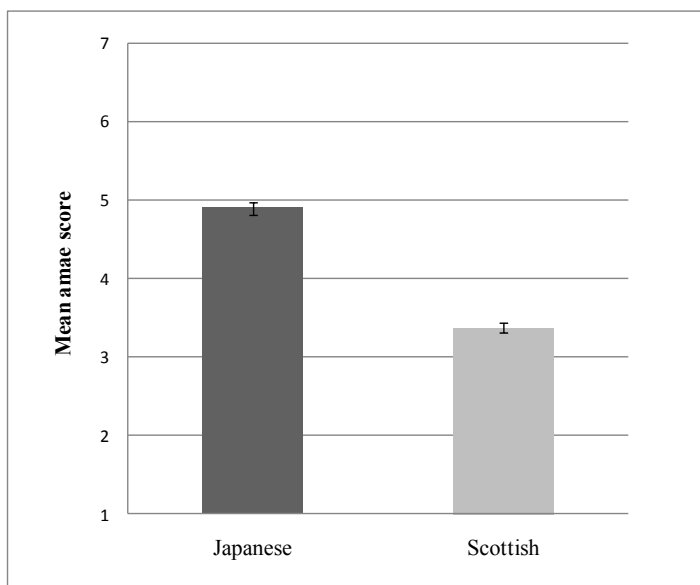
from Pure-, 2 from Asking- (Qs 14 & 35), 5 from Anxious- (Qs 10, 11, 15, 16, & 22), and 2 from Frustrated-*amae* (Qs 30 & 34). This left a total of 29 items for inclusion in all subsequent analyses. In this abbreviated version, Cronbach's alpha for the Pure-*amae* was 0.84 in the Japanese sample and 0.67 in the Scottish sample, and 0.76 and 0.65 for Anxious-*amae*, 0.60 and 0.50 for Asking-*amae*, and 0.65 and 0.56 for Frustrated-*amae* respectively. *F*-tests showed that these alpha values were not significantly different across cultures for any of the 4 *amae* categories under study.

5.4.2 Mothers' attitudes towards children's *amae* behaviours

In the first-stage analysis carried out, mean maternal scores³ across all 29 items were compared across the two groups (see Figure 5.1). An independent *t*-test showed that the Japanese mothers showed more positive attitudes towards their children's *amae* behaviours than the Scottish mothers ($M = 4.89$, $SD = 0.78$, range 3.17 - 6.41 and $M = 3.37$, $SD = 0.43$, range 2.66 - 4.66 respectively); $t(129) = 12.90$, $p < .01$, Cohen's $d = 2.41$).

³ Not every mother completed the AAS in its entirety. Three mothers missed out two items, and four mothers missed out one item. These were replaced with the mean value of that item across the two maternal samples. Analyses were conducted with and without the missing data and results were essentially identical. The analysis with the replacement mean values is therefore reported.

Figure 5.1 Mean total *amae* score



In order to investigate whether national differences in maternal employment status might more parsimoniously explain the cross-cultural differences found in mothers' attitudes towards their children's *amae* behaviours, additional tests were carried out. Because there was only one housewife in the Scottish sample (see Table 5.1), it was not possible to directly compare the two groups across all categories of employment status. However, a one-way ANOVA on the Japanese sample confirmed that there was no significant effect of Japanese mothers' occupation on mean scores ($F(2,74) = 2.64, ns$). An independent *t*-test was also carried out excluding the 42 Japanese housewives and comparing only mean *amae* scores for Japanese and Scottish working mothers. As with the original analysis run, this again revealed significant cross-cultural differences in attitudes towards children's *amae* behaviours ($t(83) = 11.43, p < .01, \text{Cohen's } d = 2.42$).

In a similar vein, in order to investigate whether differences between the groups in child gender might more parsimoniously explain differences in mothers' attitudes

towards their children's *amae* behaviours, additional tests were carried out. It was found that Japanese mothers of boys had more tolerant attitudes towards their overall *amae* behaviours compared to their Scottish counterparts ($t(55) = 8.83, p < .01$). A similar pattern was found among mothers of girls when the two cultures were compared ($t(72) = 9.32, p < .01$).

Additionally, several analyses were carried out to eliminate the possibility that differences in child birth order might explain national differences in mothers' attitudes towards their children's *amae* behaviours. However, it was found that Japanese mothers of an only child had more tolerant attitudes compared to Scottish mothers of only one child ($t(49) = 11.04, p < .01$), as did mothers who answered regarding their oldest child ($t(23) = 4.25, p < .01$) and youngest child ($t(48) = 7.49, p < .01$).

Having thus established that the differences between Japanese and Scottish mothers were unlikely to be attributable to the subgroup of Japanese housewives, to differences across samples in child gender or to birth order, the full sample of Scottish and Japanese mothers was included in all subsequent analyses.

5.4.3 Mothers' attitudes towards specific child *amae* behaviours

In the second stage of analysis, mean scores for each of the 4 *amae* categories were again used to compare responding patterns in the Scottish and Japanese mothers (see Table 5.3 and Figure 5.2). A MANOVA revealed that maternal attitudes towards these 4 distinctive types of children's *amae* behaviours differed significantly in the

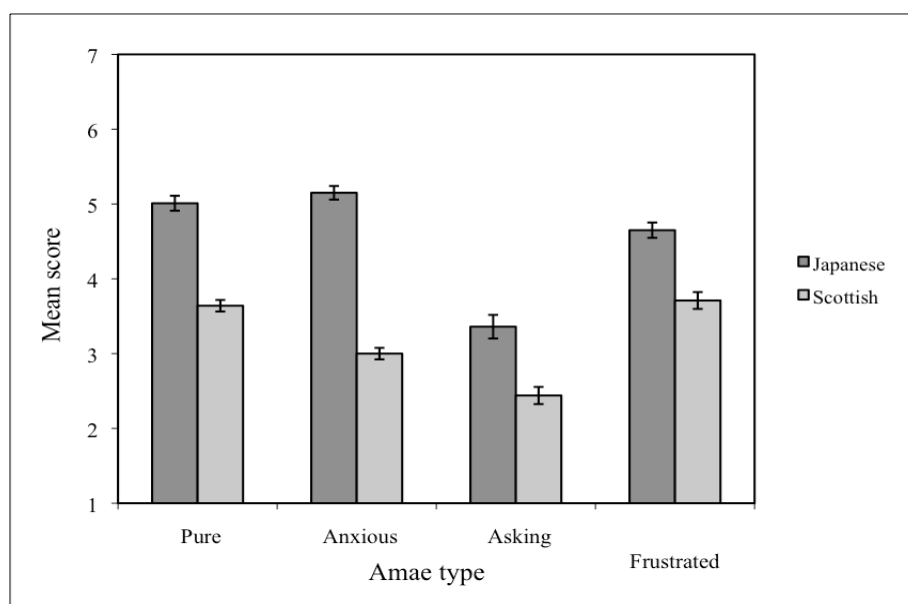
Japanese and Scottish mothers [$F(1,126) = 73.54, p < .01$], with Japanese mothers showing significantly more tolerant attitudes towards all 4 categories of children's *amae* behaviours: Pure- [$F(1, 129) = 109.15, p < .01$], Anxious- [$F(1, 129) = 281.63, p < .01$], Asking- [$F(1, 129) = 18.17, p < .01$], and Frustrated- [$F(1, 129) = 36.34, p < .01$]. However, it is clear from Figure 5.2 that differences in attitudes were most pronounced for the Anxious-*amae* items.

In Japanese mothers, attitudes towards Pure--and Anxious-*amae* did not differ significantly. However, mothers showed more tolerant attitudes towards Pure-*amae* than towards their children's Asking- ($t(78) = 12.55, p < .01$) and Frustrated-*amae* [$t(78) = 4.88, p < .01$]. Furthermore, there was also a significant difference between Asking- and Frustrated-*amae* scores ($t(78) = 10.24, p < .01$). Differences between other *amae* categories were not significant. In Scotland, on the other hand, maternal attitude scores to Pure-*amae* and Frustrated-*amae* items did not differ significantly. Among Scottish mothers, significant differences were found between Pure- and Anxious-*amae* ($t(51) = 7.52, p < .01$), Pure- and Asking-*amae* ($t(51) = 7.95, p < .01$), Anxious- and Asking-*amae* ($t(51) = 3.58, p < .01$), Anxious- and Frustrated *amae* ($t(51) = 6.22, p < .01$), and Asking- and Frustrated-*amae* ($t(51) = 6.75, p < .01$).

Table 5.3 Mean (SD) AAS score for the 4 *amae* categories in the Japanese and British samples

	Japanese (<i>n</i> =79)		Scottish (<i>n</i> =52)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Pure- <i>amae</i>	5.01	0.88	3.64	0.56
Anxious- <i>amae</i>	5.15	0.81	3.00	0.55
Asking- <i>amae</i>	3.36	1.40	2.44	0.83
Frustrated- <i>amae</i>	4.65	0.91	3.71	0.81

Figure 5.2 Mothers' attitudes towards specific child *amae* behaviours



To establish which *amae* category contributed most to these group differences, scores for all 4 *amae* categories were entered into a stepwise logistic regression. This analysis revealed that the inclusion of Anxious-*amae* improved prediction accuracy over the null model from 60.31% (AIC = 178.00) to 93.13% (AIC = 44.85), with no other variables making significant contributions, indicating that only maternal responses to Anxious-*amae* items usefully distinguished the participant groups (Odds Ratio = 61.79, $p = .01$).

5.5 Discussion

The present study examined empirically whether Japanese mothers were more accepting of children's *amae* behaviours than Scottish mothers. It was considered meaningful to compare maternal attitudes toward *amae* because *amae* can only be expressed in the presence of someone who actively allows the person to express *amae* (Taketomo, 1986; Vereijken, Risken-Walraven, & van Lieshout, 1997). This study arguably provides the first cross-cultural quantitative exploration of mothers' attitudes towards different types of *amae* behaviours.

In reviewing the results from the study, three findings seem worthy of some further attention here. Firstly, the main finding, that the Japanese mothers showed more positive attitudes towards their children's *amae* behaviours than the Scottish mothers, seems worthy of note. This is in line with previous literature, suggesting that although close relatedness can clearly be expressed by mothers and children within both cultures, the kinds of behaviours that mothers accept and expect from their young children are not universally the same across these two cultures. Indeed, the data support the argument of Mizuta et al. (1996) that what may appear as problematic or inappropriate in one cultural context may be construed as more acceptable in another. This finding is also in line with the proposition that Japanese mothers tend to enjoy emotional oneness (*ittaikan*) with their children (Rothbaum, Rosen, Ujiie, & Uchida, 2002). In fact, both boys and girls in Japan are often allowed to continue enjoying a close relationship with their mothers in the form of *amae* (e.g. co-sleeping and co-bathing) well beyond infancy, without worrying about their closeness being labelled as 'sexual' (Mizuta et al., 1996).

The second main finding from this study was that, when the four individual *amae* categories were compared, it was found that Japanese mothers had a significantly more accepting attitude towards all four of these *amae* categories than the Scottish mothers. However, it was found that differences attitudes were most pronounced for the Anxious-*amae* behaviours. Along with the fact that Anxious-*amae* items were the only significant predictor of cultural difference, this supports the notion that *amae* is a non-unitary construct (Okonogi, 1992; Behrens, 2004). The possible implications of this cultural difference in attitude towards anxious-*amae* for studies of attachment are considered in greater detail later in this discussion.

Thirdly, the data analysed here have shown that, even within each of the two countries studied, mothers responded with significantly higher levels of acceptance towards some categories of *amae* behaviour than others. The pattern of variation did differ between countries, however. In Japan, mothers showed more tolerant attitudes towards their children's Pure- and Anxious-*amae* behaviours than to their Asking- and Frustrated-*amae*, and no significant difference was found in their attitudes between Pure- and Anxious-*amae*. However, in Scotland, mothers showed significantly more tolerant attitudes towards their children's Frustrated- and Pure-*amae* behaviours than to the other two categories of *amae* behaviours; no significant difference was found in their attitudes to Frustrated-and Pure- *amae*. In both countries, children's Pure- and Anxious-*amae* behaviours were accepted more positively than their Asking-*amae* behaviours. Again, these findings support the notion that *amae* is a non-unitary construct, conveys multiple meanings, and represents intricate functions within a diverse range of interpersonal interactions

(Okonogi, 1992; Behrens, 2004).

Mean Japanese scores for all but one *amae* category (Asking-*amae*) were positive/accepting (i.e. higher than a neutral score of 4: ‘neither agree nor disagree’), whereas mean Scottish scores for all 4 *amae* categories were negative/non-accepting (i.e. lower than a neutral score of 4). The overall mean *amae* attitude score was 4.89 for the Japanese sample and 3.37 for the UK sample. This suggests that, in general, Japanese mothers do find *amae* behaviour acceptable. This finding is in contrast to previous research by Vereijken et al. (1997 - described more fully in chapter 2), which concluded that the concept of *amae* was not considered desirable by Japanese mothers. In that study, eight native Japanese behavioural scientists were asked to describe a child whom they considered prototypical for *amae* by sorting the Attachment Q-sort (AQS) cards, and these data then compared with the AQS description of the ideal child provided by Japanese mothers to Kondo-Ikemura (1990 - as cited in Vereijken et al., 1997). Based on this comparison, Vereijken et al. concluded that *amae* was not associated with the ideal Japanese child in the eyes of mothers.

However, as outlined in Chapter 2, there are several difficulties with the Vereijken et al. study. Firstly, mothers’ notions of the ideal child do not necessarily translate directly into child behaviours. In fact, in a similar study using the AQS, Posada et al. (1995) found a poor match between mothers’ preferred behaviours and children’s actual behaviours. This suggests that although children’s *amae* behaviours may not be associated with the ideal child in the eyes of Japanese mothers, there is a possibility that children nevertheless do express *amae* and that mothers accept it,

thinking that children cannot help *amaeru*ing.

Secondly, whereas both the descriptions of *amae* from experts and the descriptions of the ideal child from Japanese mothers were based on the AQS, this may not be an appropriate measure for *amae* research. As Van IJzendoorn and Sagi (1999) and Behrens (2004) point out, the AQS was not originally constructed for research into *amae* behaviours. In fact, the ten items (items 2, 6, 11, 23, 28, 31, 38, 44, 64, and 81) in the Q-Sort that were picked up by experts in the Vereijken et al. study as the most typical *amae* behaviours did not contain Anxious-*amae*; four of them can be classified as Pure-*amae*, two can be categorised as Asking-*amae*, and four of them can be classified as Frustrated-*amae*. Thus, the type of *amae* behaviours that emerged as being the most acceptable in the present study, Anxious-*amae*, was not included in the Vereijken et al. analysis at all.

A further difficulty arises from the fact that because the AQS was originally designed by Western investigators with Western participants, some typical *amae* behaviours seen among Japanese children are not represented in the item set. For instance, co-sleeping of infants and parents is common in Japan for an extended period - often until the child become five or six (Arbiter, Sato-Tanaka, Kolvin, & Leitch, 1999; Johnson, 1993). In a recent study of school-aged children in Japan, for example, Owens (2004) found that 59% of 6-year-old children slept with parents. This co-sleeping is mentioned as an example of *amae* relationship by several scholars (e.g. Rothbaum et al., 2002), and was the reason for items related to co-sleeping, classified as Anxious-*amae*, being included in the *amae* attitude scale used in the present study (e.g. Item 33: If my child gets into my bed at night, I would welcome her).

Similarly, behaviours relating to the mother's breasts are not included in the AQS. As Johnson (1993) and Rothbaum et al (2002) note, touching the mother's breast or suckling while falling asleep may be allowed even long after nutritional weaning in Japan, although such behaviours are more likely to be viewed as sexual or inappropriate by Western parents. Interestingly, one Japanese mother (and one Japanese primary school teacher) in the focus group of Study 1A mentioned this:

“My son sometimes asks if he can drink from my breasts, though he knows it is not possible. Because he asks so when he is upset or tired I sometime let him bury his face against my chest.” (Japanese mother of 5-year-old boy)

From this, it is clear that children's behaviours relating to breast feeding are not always considered to be acceptable, even in Japan, and acceptance depends on their age or the situation. However, it suggests that the Japanese tend to regard this behaviour as *amae* on the part of the child. Again, for this reason, behavioural items relating to the mother's breasts were included in the *amae* attitude scale which was used in the study reported here and were classified as Pure-*amae*.

In the AQS, these two types of *amae* behaviours that could be classified as Anxious- or Pure-*amae* respectively were not included. Importantly, Anxious- and Pure-*amae* behaviours were responded to more positively in comparison to the other two *amae* types by the Japanese mothers in the current study, and had these types of items been included in the analysis conducted by Vereijken et al (1997), they might have found somewhat different results. Additionally, by including multiple examples of each category of *amae*, the present study obtained a more comprehensive picture of

mothers' attitudes towards differing *amae* behaviours, suggesting that children's *amae* behaviours can be viewed either positively or negatively depending on the type of behaviour and the context. *Amae* is a word that pulls together a number of different types of behaviours and as such, it is clearly essential to analyse each type of *amae* behaviour individually.

Another reason why the standard AQS is inappropriate for the study of *amae* is that the items for it were obtained through home-based observations of children under the age of 3 years (Waters & Deane, 1985). While this is appropriate for research on attachment behaviour, which is most evident at 12-18 months (Rothbaum & Kakinuma, 2004), *amae*, in contrast, is most evident later in childhood (Azuma, 1996, as cited in Rothbaum & Kakinuma, 2004; Rothbaum et al., 2007). Some *amae* behaviours shown by pre-school children in wider social settings are not therefore represented in the AQS. In particular, Anxious-*amae* is a set of behaviours shown by a child when they are separated from their mother, and just as likely to be shown outside the home-setting, and in a variety of different forms. In the AQS, however, behaviours that can be categorised as this type are not covered (although they were the very type of *amae* behaviour perceived as the most acceptable in the present study). In sum, then, Vereijken et al. (1997) might well have obtained different results if they had used a set of items that was specifically prepared for *amae* research. The present study does this in providing 29 items of *amae* behaviours, within four sub-categories, and is thus potentially more useful in that it may provide a more accurate picture of mothers' attitudes towards *amae*, and not merely to their children's attachment-related behaviours.

In the present study, even within individual *amae* categories, differences in maternal attitudes towards different behaviours were found. For instance, within the category of Pure-*amae*, item 1 (“I would happily accept if my child sits on my lap while I watch TV.”) scored significantly higher than item 24 (“If my child asks me to hold them but I am busy doing some work, I would say "I cannot do it right now" and would not hold her.”), suggesting that in both countries, Pure-*amae* seems to be perceived differently when it is expressed in the context of mothers being busy doing housework.

Excessive behaviours of the child that demand care and attention when mothers are busy, or that convey the child’s helplessness, seemed to share a common underlying dimension with items of Frustrated-*amae*. This study empirically supports Behrens’ (2004) assertion that the context of the child’s *amae* behaviour influences Japanese mothers’ attitudes towards it. Japanese mothers (indeed those from Scotland too) seemed to have more positive attitudes towards those of their children’s *amae* behaviours that were mostly affective in nature, while they did not always welcome children’s helpless *amae* behaviours or *amae* behaviours that demanded extra care and attention when they were busy. These findings suggest that mothers differentiate amongst their attitudes towards their children’s *amae* depending on how these behaviours are expressed and in which contexts.

In this study, the main finding, that attitudes towards *amae* behaviours were more positive in the Japanese mothers, did seem to indicate a true cultural difference. Although there were differences between the participant groups in the mothers’ employment status, in child birth order and in child gender, this finding did not

appear to stem from these: the cross-cultural difference in attitudes remained even when analyses took these sample differences into account. Although it is possible that the results reflected other demographic (as opposed to more fundamentally cultural) differences between the participants, the groups were closely matched on maternal and child age to avoid this possibility. Other demographic differences, such as household income and time spent in nursery each week may conceivably have contributed to the differences in attitudes across samples, but it was not possible to investigate this within this study.

The finding that cultural differences were most pronounced in relation to the Anxious-*amae* category links this study to the wider literature on cross-cultural differences in attachment. Anxious-*amae* behaviours are those expressed when the child is separated from the mother, or which indicate unwillingness to be away from her. It might be that mothers whose culture (as in Japan) emphasises the fundamental connectedness of human beings to each other (Markus & Kitayama, 1991) tend to be more positive towards children's *amae* behaviours expressed when they are separated from their mothers, or when they are not willing to be away from their mothers - for instance, clinging to the mother in an unfamiliar situation or throwing a temper tantrum when facing separation from her. The results from the present study, along with the previous literature indicating an association between Anxious-*amae* and attachment behaviours (discussed in chapter 2), together raise the possibility that as well as culturally-dependent responses toward children's overall *amae* behaviours, mothers' attitudes toward Anxious-*amae* behaviours may be the key to understanding the non-normative classification of Japanese mother-infant dyads in the Strange Situation paradigm (Behrens et al., 2006; Takahashi, 1990).

The types of behaviours that were classified as Anxious-*amae* in the present study are regarded as being likely to contribute to a classification of insecure (C) attachment-type in the standard Strange Situation procedure (Rothbaum, Rosen, Ujiie, & Uchida, 2002). However, these behaviours, as the present study shows, are culturally comprehensible and seen as acceptable in Japan (see also Behrens, 2004; Johnson, 1993; Mizuta et al., 1996). The important point is that when mothers accept children's *amae* behaviours, their children are more likely to express those behaviours, as *amae* can only be expressed in the presence of someone who actively allows the person to express *amae* (Maruta, 1992; Vereijken et al., 1997). Because these behaviours are considered to contribute towards an attachment classification of insecure (C)-type in the Strange Situation procedure, children showing these behaviours are more likely to be classified as (C)-type, providing a possible explanation for why Japanese infants have been disproportionately classified as (C)-type in the Strange Situation procedure in some previous research (e.g. Takahashi, 1986).

Notably, in the Strange Situation paradigm, attachment classification is based - to some extent - on the presence or absence of these Anxious-*amae* behaviours on separation and reunion. In this circumstance, children's Anxious-*amae* behaviours are obviously the most likely of the *amae* behaviour categories to be triggered. Therefore, the finding here that Japanese mothers showed the most accepting attitudes toward this type of *amae* among the four types of *amae* behaviours, and that attitudes towards this *amae* type contribute the most to cross-cultural differences, supports the notion that the *amae* relationship within Japanese dyads might have

underpinned the disproportionate classification into insecure (C)-type within the Strange Situation procedure (Takahashi, 1986), and also that children's Anxious-*amae* plays a key role in understanding Japanese patterns of attachment classification. These ideas will be explored more fully in study 2, to be reported in the next chapter of this thesis.

In summary, the *amae* attitude scale, created for this study, arguably provides the first quantitative measure of maternal attitudes towards child *amae* behaviours, assessing attitudes to four interlinking but distinctive categories of *amae* behaviours. The scale was successfully used to differentiate attitudes towards *amae* behaviours across two cultural groups. Findings emphasise the importance of taking social and cultural context into account when exploring mother-child relationships. The discussion of findings from the present study has also raised a query over whether cross-cultural differences in how mothers view their child's *amae* behaviours may have been a contributory factor in previous research findings of cross-cultural differences in attachment classification, rather than these differences stemming from differences in the quality of attachment per se. across cultures.

5.6 Study 1 summary and the next study in this thesis

The present study provides an important first step in understanding different attitudes toward preschoolers' *amae* behaviours in Japanese mothers and Scottish mothers. Leading on from these findings, several other issues should now be explored. Firstly, knowledge of attitude does not directly lead to improved prediction of mother-child behaviours, because interactions are also based on other factors, such as personal

characteristics, influences of other attitudes and motives, or situational factors (Lemon, 1973). Therefore, although the present study is useful in understanding differences between Japanese mothers and Scottish mothers in attitudes toward preschoolers' *amae* behaviours, whether they actually behave in the manner expressed in the attitude scale is unknown. Thus, further studies are required to examine if/how mothers' attitudes relate to their and their children's actual behaviours in a naturalistic environment. The link between expressed maternal attitude and maternal behaviour is explored more fully in Study 3, reported in Chapter 7.

Additionally, in order to further explore the link between maternal attitudes towards pre-school children's *amae* behaviours and their attachment classification, it will be necessary to compare attitudes toward *amae* behaviours in Japanese and Scottish mothers whose children fall within the same attachment group, for example, by comparing *amae* attitudes in Japanese and Scottish mothers whose children are classified as securely attached. In the study reported here, we can only assume that there was a similar distribution of attachment types within both the Japanese and Scottish samples. It may be, however, that a disproportionately large number of Japanese children were insecurely-attached (type-C) and a large number of Scottish children were securely-attached. Hence, the different attitudes toward *amae* behaviours found here might not stem from cultural differences, but from differential proportions of attachment types in these particular samples. It is thus important to explore the association between attachment classification and maternal *amae* attitude.

In order to explore these results further, Study 2 of this thesis, to be reported in the following chapter, will examine the relationship between mothers' attitudes towards children's *amae* behaviours, as measured by the *amae* attitude scale, and children's attachment behaviours, as expressed in an attachment doll-play interview, the aim being to identify any cross-cultural differences in mother-child attachment classification, in maternal attitudes towards their child's *amae* behaviour, and in the association between the two. Attitudes toward *amae* behaviours in Japanese and British mothers whose children fall within the same attachment group will also be directly compared to see if any significant difference across countries remains after controlling for child attachment classification.

CHAPTER 6

STUDY 2: EXPLORING THE ASSOCIATION BETWEEN THE MATERNAL ATTITUDES TOWARDS CHILDREN'S *AMAE* BEHAVIOURS AND MOTHER-CHILD ATTACHMENT SECURITY IN JAPAN AND BRITAIN

6.1 Introduction

Although findings from the first study are potentially useful in understanding different attitudes toward preschoolers' *amae* behaviours in Japanese and Scottish mothers, if or how these attitudes relate to children's early attachment behaviour remains unknown. Since Takahashi (1986) found high percentage of insecure/ambivalent attachment classification among Sapporo infants, Japanese childrearing has been extensively discussed by, for instance, Rothbaum et al. (2000), who claimed that "attachment theory is laden with Western values and meaning" (p. 1093). It was also argued that the exploratory "secure base" patterns considered optimal in Western studies might well be considered insecure in Japan, with Rothbaum et al. further claiming that "Many . . . features of ambivalent behaviour characterize the normal *amae* relationship in Japan" (p. 1100). In other words, they argue that child behaviours called insecure/ambivalent in attachment studies in the West would likely be viewed as *amae* behaviours in Japan and would therefore be considered appropriate and welcomed. Although the first study of this thesis partially supported their claim, it is not appropriate and accurate to synonymise insecure/ambivalent and *amae* without assessing the possible association between these two concepts. The aim of the next study in this thesis study was therefore to examine the relationship, if any, between mothers' attitudes towards children's *amae* behaviours as measured by the AAS and their children's attachment behaviours as

expressed in a doll-play interview.

In order to put this next study into context, some currently-available measures of attachment in early childhood will first be reviewed and recent attachment research with preschool age children conducted in Japan then outlined.

6.1.1 Overview of selected current measures of early childhood attachment

As with measures of most constructs, measures of child attachment come in several different shapes, including observations, projective/story-stem scenarios, semi-structured interviews, Q-sorts, and questionnaires. The form of the assessment is often dependent on the age of the participants. For preschool-aged children measurement of the child's representation or working model of attachment is measurable through cognitive- and language-based assessments, in addition to behavioural assessments (O'Connor & Byrne, 2009; Solomon & George, 1999).

Two types of approach to developing comprehensive attachment coding for preschool-aged children have been reported. The behaviourally-based coding system of Cassidy, Marvin, and the MacArthur Network (1992) uses the separation-reunion procedure designed for infants but modifies the coding of the child-adult behaviour to reflect, for example, the increased use of language and developmental changes in what represents developmentally appropriate secure base behaviour in children of this age group. The second kind of approach makes use of the internal working model hypothesis and assesses attachment behaviour by prompting the child with the beginning of a story with an attachment theme (e.g., a child is hurt) and then asking

the child to complete the story – this is known as the ‘story stem’ or narrative approach (Bretherton, 1990). This procedure resembles projective measures, but has several methodological advantages, including the fact that this approach uses a theoretically and empirically grounded coding system that has proved to be reliable and to have construct validity in several studies (for overview, see O’Connor & Byrne, 2007). Yet another strand of development is represented by Waters’s (1995) Attachment Q-Sort (AQS) method, which is designed to permit observers (either trained observers or caregivers) to describe child attachment behaviour in the home. In contrast to the other two systems of classifying mother-child attachment behaviour and children’s attachment representations more broadly, the AQS only assesses the quality of a child’s secure-base behaviour. While secure and insecure attachment can be measured using the AQS, the individual insecure attachment categories cannot.

Selected attachment measures for the preschool age-group that are relevant to the second study in this doctoral research will now be discussed.

Separation-reunion procedures

One of the primary methods of measurement of attachment in preschool age children, as well as in infants, is via the observation of various behavioural interactions between the child and their attachment figure(s). Based on the attachment theory framework, and building upon Ainsworth’s Strange Situation attachment classifications (Ainsworth et al., 1978), researchers such as Cassidy and Marvin (1987), Main and Cassidy (1988), Crittenden (1992, 1999), and Howes and Ritchie (1999) have expanded attachment classifications beyond 18 months through

modification of the assessment criteria to include developmental changes in early childhood (Fairchild, 2006; Solomon & George, 1999).

Although this method of measuring attachment utilises the Strange Situation procedure of separation and reunion between the child and his attachment figure, when developing the coding system for attachment security, the researchers did not focus on the proximity seeking and the maintenance of continued contact emphasised in Ainsworth's earlier classification system (Fairchild, 2006). Rather, the emphasis was on parent-child attachment in terms of the "quality of distance interaction (i.e., talking) and negotiations around departures and reunions" (Solomon & George, 1999, p. 296). Both the Cassidy and Marvin system (1978, as cited in Fairchild, 2006) and the Preschool Assessment of Attachment system of Crittenden (1992) include an expanded set of subgroups for measuring attachment.

The Cassidy and Marvin system is a categorical classification system for children aged 2.5 to 4.5 years that includes coding specifications for a secure group (B) and for four insecure groups: avoidant (A), ambivalent (C), controlling/disorganised (D), and insecure/other (IO). As synthesised in reviews by Fairchild (2006) and Solomon and George (1999), a number of studies using the Cassidy-Marvin attachment classifications have found some evidence of the validity of its core theoretical predictions regarding maternal sensitivity and interactions in secure versus insecurely attached children (Achermann, Dinneen, & Stevenson-Hinde, 1991; Moss, Rousseau, Parent, St. Laurent, & Saintonge, 1998; Stevenson-Hinde & Shouldice, 1995). In studies involving children with various types of childhood problems, for example, maltreatment, children were identified more often as controlling/disorganized (D), or

insecure/ other (IO) than were typically developing children (Cicchetti & Barnett, 1991).

The Preschool Assessment of Attachment system of Crittenden (1992, 1994, as cited in Solomon & George, 1999) is an attachment classification for children aged 21 months to 5.5 years, with specifications for six primary classification categories. Children's reunion behaviour is classified according to: secure (B), defended (A), coercive (C), defended/coercive (A/C), anxious depressed (AD), and insecure/other (IO). Despite the apparent overlap in group designations with the previous Cassidy and Marvin system, the Preschool Assessment of Attachment system is based on an expanded set of criteria, including "inferred regulations of internal feeling states, parent-child negotiation, the responsiveness of the attachment figure, and the observer's affective response to interaction" (Solomon & George, 1999, p.299). This system has been used in studies of both normative and high-risk mother-child samples in the U.S., but no studies involving other types of caregiver relationships have been published (Fairchild, 2006; Solomon & George, 1999).

A key conceptual difference between these two systems concerns what constitutes a disorganised attachment strategy (Solomon & George, 1999), with the Preschool Assessment of Attachment system placing greater emphasis on the parent's behaviour and a child's response in the moment, and requiring a more abstract level of inference. Nevertheless, both systems appear to capture some of the variance of preschool child-mother relationships. Secure classifications in both systems are related to global measures of positive/smooth interaction between a mother and child (Cassidy, Berlin, & Belsky, 1990, as cited in Solomon & George, 1999; Crittenden &

Claussen, 1994 as cited in Solomon & George, 1999; Fagot and Pears, 1996; Stevenson-Hinde & Shouldice, 1995). Besides, particular categories (D and IO in the Cassidy-Marvin system; A/C, AD, IO in the Preschool Assessment of Attachment system) seem to be closely associated with a clinical antecedent (i.e. maltreatment, maternal depression, conduct disorder). Beyond these broad distinctions, however, the relative value, utility, or validity of one system over another cannot be determined at present (Solomon & George, 1999).

As Solomon and George (1999) point out, a possible limitation to both measures is their reliance on the brief separation and reunion episodes of the Strange Situation. Theoretically, the quality of attachment behaviour depends on the degree to which the attachment system is activated, and it is not clear that 2-, 3-, 4- year-old children will find a 3-minute separation sufficiently arousing, nor that children from different cultures would experience the separation in similar ways.

Attachment Q-sort

In contrast to systems which classify child attachment behaviour and representation, the Attachment Q sort (AQS) assesses the “broad picture of the child’s secure base behaviour and personality attributes as ascertained in the context of caregiver-child interaction” (Waters, 1995, p. 235) for ages 10 months to 6 years. It thus focuses on a much narrower range of behaviour than the other systems, and does not consider behaviours representative of individual categories of insecure attachment. Within the AQS system, secure base behaviour is defined as the smooth organisation of and appropriate balance between proximity seeking and exploration, based on the theoretical framework of Bowlby and Ainsworth’s secure base concept (Posada et al.,

1995). Validated sorts for A, C, or D insecure attachment groups are not yet available.

As briefly described in Chapter 4, the current version of the AQS includes 90 items that are sorted into nine categories according to their applicability to the child being described. On each card a specific behavioral characteristic of children is described. The cards describe the behaviour of a child in the natural home setting, with a special emphasis on secure base behaviour (Vaughn & Waters, 1990). After several hours of observation the observer ranks the cards from "most descriptive of the child" to "least descriptive of the child." By comparing the resulting description with the behavioral profile of a "prototypically secure" child provided by attachment experts, one can compute a score for attachment security. Scores can vary from -1.0 to 1.0, with a higher score indicating greater security. Waters (1995) recommends that the sort by observers should be based on two to three visits for a total of 2-6 hours observation in the home, with additional observations carried out if observers failed to agree on the sorting scores.

AQS security scores have been found to differentiate 12- to 18-month-old infants classified as secure or insecure in the Strange Situation in several, but not all, published studies (e.g. Belsky & Rovine, 1990; Bretherton, Ridgeway, & Cassidy, 1990; Sagi et al. 1995). The strength of the relationship tends to be moderate, with average security scores for the secure group of about .50, and average security scores for the insecure groups of about 0.25 (Solomon & George, 1999). In the preschool period, the relation between the AQS and other attachment measure is less extensively researched (Solomon & George, 1999).

As mentioned in Chapter 2, a major study on the cross-cultural validity of the AQS was conducted by Posada et al. (1995). Researchers examined if there were differences in ideas of attachment security, ideas of a desirable child, and constructs of dependency, of mothers and experts in a range of 7 countries (China, Japan, Israel, Colombia, Norway, and U.S.). Although the structure of the data was broadly similar cross-culturally, the correlation of the maternal AQS sorts across countries was low (range = .15-.32). This suggests that ecological factors may have a powerful effect on maternal perceptions of young children's secure-base behaviours in the home.

The strength of the AQS lies in its emphasis on naturalistic observation in ecologically valid and realistic contexts. However, as Solomon and George (1999) argue, the lack of correlation with other attachment assessments is rooted in the different research contexts of a naturalistic home environment and the laboratory environment of the separation and reunion Strange Situation procedure. In the placid and relatively safe environment of the middle-class home, there is little to activate the attachment system. As O'Connor and Byrne (2007) discuss, it is important to emphasise that in order for the child's attachment to be assessed, the child's attachment system must be activated. This is done in the Strange Situation procedure in a standardised manner by introducing mild stress, either behaviourally or cognitively. The reason that mild stress is introduced is that an important function of attachment relationships is that they provide safety and security from threat. Drawing on evolutionary and ethological ideas, Bowlby (1982) pointed out that, in the face of threat, the immature offspring's seeking out and maintaining proximity to an attachment figure is a matter of survival.

Although most of the attachment behaviour observed by parents and researchers is no longer a matter of survival, when the child does perceive threat in the environment, the normative response is to cease play and exploration and seek out the attachment figure in order to re-gain a sense of security and safety. Once that is accomplished, the child is then free to explore (again). Bowlby (1982) adopted a behavioural systems model because exploratory, fearful, and attachment behaviours are intimately linked. His phrase 'secure base for exploration' ties these ideas together, and makes clear that assessing an attachment relationship requires a level of observation that is more than the single attachment part. Assessments of child-parent interactions in non/low-stress contexts do not directly index attachment because they do not reveal this behavioural dynamic (O'Connor & Byrne, 2007).

Story-stem/narrative approaches: attachment doll play

Early in the preschool years, children begin to use symbolic forms of mental representations and to organise knowledge conceptually (Bretherton, 1985). This developmental achievement enables researchers to assess the child's internal working model of attachment, which is one of the major concepts of attachment theory. Through interactions with caregivers, the child develops specific internal working models about the self and others. Included in the internalised working model or mental representations of attachment are expectations and beliefs about the caring and responsiveness of the caregiver, as well as beliefs regarding whether the self is worthy of care and attention (Ainsworth, et al., 1978; Bowlby, 1973). Internal representational models of relationships are believed to arise from actual experiences in relationships. Because of their link to experience, individual differences in these

models can be expected to parallel individual differences in a child's actual behaviours with an attachment figure; that is, they should be systematically related to measures of attachment security based on reunion and secure base behaviour in early childhood and thereafter (Solomon and George, 1999).

For preschool-aged children, attachment measures based on their representation or working model of attachment have often involved observation of their doll play centring on attachment-relevant themes. Bretherton and her colleagues (Bretherton, Prentiss, & Ridgeway, 1990) first developed a doll-play procedure, the Attachment Story Completion Task, to assess attachment security in 3-year-olds. George and Solomon extended this to enable assessment of 6-year-olds in their Attachment Doll Play measure (1990, 1996, 2000, as cited in Katsurada, 2007). Their procedure involves a set of five stories (child spills juice, child hurts his knee, child discovers a monster in his bedroom, parents depart and return). A researcher introduces each story with a story stem that describes what has happened, and the child is asked to describe and enact what happens next using child and parent dolls. Bretherton et al. developed a classification system that identifies the four main attachment groups (A, B, C, D). Secure B children show confidence in dealing with the attachment issues introduced in the doll play. Avoidant A children swiftly deal with, and minimise attachment issues using stereotypes and rationalization. Ambivalent C children cognitively disconnect the attachment issue, and this defensive strategy is manifested by such characteristics as confusion, uncertainty, delay and incompleteness in doll play stories. Disorganised D children do not have any defensive strategies to deal with the attachment issue and become either chaotic (D1) or constricted (D2). In doll play, the D1 child's story is characterised by chaotic, destructive and violent themes,

whereas the D2 child characteristically refuses to make up any story (George & Solomon, 1990, 1996, 2000, as cited in Katsurada, 2007). One of the encouraging signs from work with the Attachment Doll Play measure is the concordance between its attachment classifications and those based on reunion behaviours assessed by Main and Cassidy (1988) classification system (e.g. 79%, Kappa=.74, Solomon & George, 1999).

More recently, the Manchester Child Attachment Story Task (MCAST) was developed (Green, Goldwyn, & Stanley, 2000). Green and colleagues made several modifications to the 'story stem' assessment in order to make it more developmentally appropriate for preschool children's attachment assessment. Firstly, the MCAST includes vignettes that are thought to be more likely to activate the child's attachment system and attachment cognitions (the child awakes following a nightmare, the child injures himself, the child becomes ill, and the child gets lost in a shopping centre) and that focus exclusively on the child and a particular attachment figure (e.g. a mother) rather than other family members (e.g. a father or siblings) or an unspecified attachment figure(s) (e.g. a babysitter). Because attachment relationships are dyad-specific, the procedure purposely generates the representation of interactions between child and one caregiver, rather than a group (e.g. parents) or whole family (Green, Stanley, & Peters, 2007; Green, Stanley, Smith, & Goldwyn, 2000).

Secondly, because attachment theory postulates that internal working models of attachment can be dormant in everyday functioning until mobilised by specific triggers (especially distress or anxiety involving threat to self), the MCAST includes

a specific ‘mood induction procedure’ during the presentation of each vignette scenario (Green et al., 2007). According to Green and his colleagues (2007), this aims to produce a level of felt distress in the child, appropriate to the vignette scenario, to trigger the representation of attachment. This is seen as analogous to the function of the brief separation in the Strange Situation procedure. It is also expected that setting this emotional arousal context will increase the reliability in assessing the attachment representation of the child by minimising the tendency toward providing ‘normative’ or interviewer pleasing responses from the child. In responding to any ethical concern, it is important to note that the MCAST vignette includes content that is familiar to any child of this age, and the arousal does not go beyond that which is “ typical of the range of normal experience for any child of this age” (Green, Stanley, & Peters, 2007, p. 209). The protocol, moreover, dictates stopping the administration if any unwarranted adverse reaction is seen (Green, Stanley, & Peters, 2007; Green, Stanley, Smith, & Goldwyn, 2000).

As with other systems for coding children’s attachment representations or narratives, the MCAST requires the coder to evaluate the content of the child’s story for instances of secure, avoidant, dependent, aggressive, chaotic, or other behavioural themes. The coder seeks evidence of the child’s mental representation (expectation) of the attachment figure as being able to manage or regulate the child’s distress in an effective and sensitive manner. Especially for older children, the quality of the story narrative is also coded with respect to whether it tells a coherent story with a clear beginning, middle, and end (resolution) or an incoherent story in which the narrative is difficult to follow. (Green, et al., 2000; O’Connor & Byrne, 2007).

Evidence for the construct validity of attachment doll play story stem procedures is modest but growing, and assessment of its validity depends on which of several existing scenarios and scoring systems are used. Even the more evaluated procedures continue to be revised (Green et al., 2000; Oppenheim, Emde, & Warren, 1997). Several features of these measures are worth noting further, however. One is that the MCAST procedure is adapted well to the clinic setting (Futh, Thomas, O'Connor, Matias, Green, & Scott, 2008) and another is that the MCAST has further stimulated considerable work into social cognitions in the attachment literature and links with other models of social, emotional, and cognitive development (Kirsh & Cassidy, 1997; Laible & Thompson, 1998).

6.1.2 Attachment research with preschool-age children in Japan

Japan's challenge to attachment theory and research (Rothbaum et al., 2000; van IJzendoorn & Sagi, 1999) emerged when a Strange Situation study conducted in Sapporo in 1986 reported more than twice as many insecure-ambivalent infants than had been seen in other studies worldwide (Takahashi, 1986). As previously described in Chapter 2, some researchers attributed this discordant outcome to Japanese infants' lack of familiarity with separations, coupled with the (for them) unusually long separations that occurred in this particular study (e.g., Grossmann et al., 1990; Grossmann & Grossmann, 1989; van IJzendoorn et al., 2006). Others (see e.g. Takahashi, 1990; Rothbaum et al., 2000) have suggested, however, that Japanese childrearing ideals based on the concept of *amae* may be of relevance here.

From this viewpoint, the preoccupation with the mother observed in an unusually

high proportion of Sapporo infants during the Strange Situation procedure could be understood as representing the ideals of *amae* (Behrens, 2007; Takahashi, 1990). Categorising an infant's preoccupation with the mother, accompanied by a failure to explore, as insecure-ambivalent could be seen as attributable to a bias found within the ideals of Western cultures that encourages an infant's exploratory behaviour in the mother's presence (an aspect of secure base behaviour associated with the Strange Situation 'secure' category; Ainsworth et al., 1978). Some attachment researchers therefore considered it a mistake to interpret the behaviour of Japanese infants as indicative of an insecure/ambivalent attachment to their mothers, when in fact these dyads were acting in keeping with the cultural ideals of their care-giving environment (e.g. Rothbaum et al., 2000).

As a consequence, findings from Western attachment research have largely been considered to be inapplicable to Japanese mother-child dyads until fairly recently (Behrens, 2007). However, it is important to note that another, earlier, infant study conducted in Tokyo showed the global patterns of attachment (Durrett, Otaki, & Richads, 1984). Furthermore, several interesting findings have emerged in recent years from attachment research with Japanese preschool-age children which sought to examine whether the culture-specific patterns of attachment found in Takahashi's study (1986) also emerged at older ages.

Recently, for example, Japanese preschool-age children's attachment representations were assessed by Yamakawa (2006) using the Attachment Doll Play measure (Solomon, et al., 1995) and the separation-reunion procedures (Main & Cassidy, 1988). Her study was conducted in Yokohama area (the second biggest city in Japan)

with 56 Japanese children aged 5 and 6 years old. Yamakawa found that attachment classifications derived from behaviour in the Doll Play paradigm corresponded significantly with those found using the Separation-Reunion procedures (Main & Cassidy, 1988), providing evidence for the convergent validity of the Attachment Doll Play method, and suggesting that this was a useful paradigm for use in Japan (Yamakawa, 2006). However, she also found in this Doll Play paradigm a larger proportion of ambivalent C type (17.9 % of children avoidant A, 33.9%, secure B, 37.5 % ambivalent C, and 10.7% disorganised D) than would be expected on the basis of global patterns. This was also the case in the separation-reunion procedures. She suggests several reasons for the lower percentage of B type and higher percentage of C type among her participants compared to typical Western patterns of attachment. Firstly, she suggests that it might not be appropriate to see her sample as 'standard' middle class Japanese dyads because of the low response rate when recruiting to her study. Secondly, she considers it possible that some scenarios in the Attachment Doll Play interview might have slightly different connotations for Japanese, as opposed to Western, preschool children.

In Yamakawa's study, 36 of the 56 children (64.3%) were classified as ambivalent C in the second of the three scenarios, 'a monster in the bedroom', partly due to the children's reaction towards a monster. While the Attachment Doll Play protocol (George & Solomon, 1990, 1996, 2000, as cited in Yamakawa, 2006) states that children with secure attachment would respond to this story by moving the child doll into the proximity of the parent doll and indicating that the parent doll kills the monster, Japanese children generally showed a slightly different reaction to this scenario. Only 16 children responded that the parents would attack the monster and

only half of those ended the story by actually ‘killing’ the monster. The rest of the children ended the story, for example, by ‘the parent doll releasing the monster from the window’ or ‘the parent doll turning on the light and getting rid of the monster’. Although Japanese children indicated in their story that the child doll felt secure and went back to sleep, according to the Attachment Doll Play manual, parents’ reactions like these are considered to be ‘not enough’ reaction towards child distress caused by the monster and the ambivalent C type is given to children recounting this type of story – possibly inappropriately in this context of a culture which emphasizes harmonious relations with others. Interestingly, three children responded to the ‘monster in bedroom’ scenario by making up a story, such as ‘becoming a friend with the monster’ or ‘going out with the monster’. This indicates that the monster might not necessarily be a scary object for some of the children. As Yamakawa (2006) states, this is understandable considering that there are several popular Japanese animations with friendly monsters.

The third scenario of the Attachment Doll Play measure might also need some consideration in a cross-cultural context. In Yamakawa’s (2006) study, the ‘departure story: the parents go away for the night and the child is left with a babysitter’ and the ‘reunion story: the parents return the next day’ were combined and introduced to the children. Because Japanese children are not familiar with the concept of babysitting (Miyake, Campos, Bradshaw, & Kagan, 1986), Yamakawa slightly modified the scenario by calling the babysitter ‘a lady who takes care of children while parents are away’. As Yamakawa mentioned, however, some children confused this ‘lady’ with their grandparent, and none of the children made a story involving the negative attitude towards the ‘lady’ (babysitter) as had some American children during this

scenario (Solomon, et al., 1995). Thus, although the Attachment Doll Play protocol states that it is important to include as a character a babysitter who is not a member of the family, it is doubtful that the Japanese children understood this in the same way as Western children would. It might also be the case that the parents being away for one night and being left with a stranger was too stressful a scenario for some of the children because mothers of young children in Japan, as mentioned earlier, seldom go out leaving the children even with the father or grandparents (Miyake et al., 1985; Takahashi, 1982, 1985). It is also rare to hire a babysitter who is a stranger in Japan (Johnson, 1993).

Thus, two out of the three scenarios used in the Attachment Doll Play procedure might have induced slightly different distress levels (either too low or too high) for the Japanese children from those originally intended by George and Solomon. This suggests that patterns of attachment found in Yamakawa's study might be an artifact of measure used rather than true reflection of attachment among preschool children and their parents in Japan. Thus, in the present study careful consideration needs to be taken in choosing a measure of attachment so that the scenarios convey the intended meaning to the child and produce a level of felt distress in the child which is ethically sound and also appropriate for triggering the representation of attachment.

Another study with Japanese preschool-age children was conducted in Sapporo by Behrens and her colleagues (Behrens, Main, & Hesse, 2007). In this study, 43 mothers and their 6-year-olds took part and attachment distributions were assessed using Main and Cassidy's separation-reunion procedure for 6 year olds. Mothers' representations of attachment to their own parents was also assessed using the Adult

Attachment Interview (AAI). In contrast to the previous Sapporo study with infants (Takahashi, 1986), children's three-way attachment distribution in this study did not differ from the global distribution for infants (i.e., 22% avoidant A, 68% secure B, and 10% ambivalent C versus 21% A, 65% B, and 14 % C respectively), with 2 children remaining unclassified. The proportion of ambivalent C children in their study was, in fact, slightly lower than the international average, whereas the proportion of avoidant A children was slightly higher.

Notably, though, a very high proportion of controlling D children (44%) was found when D and/or CC (cannot classify) categories were also included. According to Main and Cassidy's classification system, two characteristic behaviours of controlling D children are (a) *controlling-caregiving*, in which the child seemingly tries to help organise, cheer up, and/or take care of the mother and (b) *controlling-punitive*, as seen in ordering the mother about in a demanding or even humiliating manner. Also, a few children received a classification of 'cannot classify', CC, when they showed two or more contradictory strategies or globally anomalous features in their behavioural responses, and therefore did not fit into any single classification. Thus, this D classification is not equivalent to Main and Solomon's (1986) disorganised D classification, and it is not clear from Behrens et al.'s study if/how many children who were classified as secure B in the three way classification moved into these other categories when D and/or CC categories were included. Besides, a global distribution for infant D/CC is yet to be reported. Nevertheless, the proportion of 6-year-olds categorised as D/CC in Sapporo in their study still markedly exceeds the percentage of Western preschoolers in this category reported by George and Solomon (1996), which was 37%.

It is possible that this large proportion of controlling D children is simply the result of variation unique to this relatively small sample. As Behrens et al. (2007) argue, another reason for the high proportion of D and CC classifications could be the fact that the non-Japanese coders could not understand the children's speech on the tapes of the procedure. Instead, they relied of necessity on the transcripts with English translations for the verbal part of the reunion, thereby perhaps missing the tone or nuances in remarks being made. It could have been, then, that taking the children's words literally as spoken made some transcripts seem controlling–caregiving when merely polite, while others that seemed controlling–punitive were possibly simply bossy, teasing, or high-spirited. Behrens et al. concluded that a new study is necessary, using native Japanese coders trained in the use of this paradigm who can more accurately decipher apparently D–controlling statements to better estimate the real rate of D-type behaviour among Japanese 6-year-olds.

In finding a proportion of ambivalent C infants similar to that found globally in studies using the standard Strange Situation procedure, it has also to be noted that Behrens et al's (2007) results conflicted with those of the earlier Sapporo infant study (Takahashi, 1986). As Behrens et al. suggest, one of the possible explanations might be that some of the 6-year-olds in their sample might have shown ambivalent behaviours during the Strange Situation procedure when they were infants, as in the previous Sapporo study, but that such behaviours may simply have disappeared in the course of development as their lives gradually included more normative separation experiences. It is also possible that Japanese infants today might in fact show less ambivalent behaviours during the Strange Situation procedure than did

infants in the 1980s as a result of families being influenced by the more Western culture in modern-day Japan. These possibilities should both be considered when comparing the Behrens et al. findings to the earlier Sapporo study. At the same time, it should be kept in mind that these distributions found in 2007 are in keeping with the findings of the 1984 Tokyo study with infants by Durrett et al.

6.2 The present study

As we have seen above, a review of the available investigations on attachment in Japanese preschool children showed rather mixed results and suggests a need for more research using a culturally-appropriate attachment measure. In addition, there has been no research which has examined a possible association between *amae* and attachment. It thus remains an empirical question, for instance, as to whether maternal attitudes towards children's *amae* behaviours predict children's attachment security/insecurity.

In the first study of this doctoral research a prototype *amae* attitude scale (AAS) was constructed based on responses from four Japanese focus groups. The scale was subsequently completed by 79 mothers from Japan and 52 mothers from Scotland. Japanese mothers were found to be more tolerant in general than Scottish mothers in all 4 sub-categories of *amae* behaviours explored (pure, asking, frustrated, and anxious), with cultural differences most marked in maternal attitudes towards their children's anxious-*amae* behaviour.

The aim of the next study within this thesis was to examine the relationship, if any,

between mothers' attitudes towards preschool children's *amae* behaviours as measured by the AAS and the children's mental representation of attachment. The child age group of 4.5 - 5 years was selected because it is thought to be optimum for assessing children's *amae* behaviours (Rothbaum et al., 2007) and also fitted within the administration range of the Manchester Child Attachment Story Task, the attachment measure which was selected for use in this next study.

As a method of assessing children's attachment type, the MCAST was chosen for four main reasons. Firstly, the MCAST is gaining in use in European research and clinic settings, and the evidence base regarding the construct validity for story stem procedures is modest but growing (Green, et al., 2000). Secondly, compared to the Attachment Doll Play measure (Solomon, et al., 1995), the MCAST includes vignettes that were thought to be more appropriate and likely to be more familiar to Japanese children (the child awakes following a nightmare, the child injures himself, the child becomes ill, the child gets lost in a shopping centre). Thirdly, given that the present study focuses on the child's relationship with the mother, the MCAST was thought to be appropriate, because its scenarios focus specifically on the child and a single attachment figure (the mother in this study) rather than including parents, siblings, and/or a babysitter. Finally, in contrast to AQS and several other 'story-stem' assessments, the MCAST emphasises the importance of assessing children's attachment security with respect to mildly stressful situations. This is important because attachment behaviour is thought to be elicited by, and best observed in, situations that are mildly stressful, mildly threatening, or mildly fear-inducing for the child (Solomon & George, 1999). Although separation-reunion procedures include this mildly stressful situations, whether children in two different

cultures would similarly experience being separated from their mother in real life is uncertain and this procedure was therefore not used in this study.

Although not all types of *amae* are likely to be triggered during mildly stressful situations, Anxious-*amae*, in particular, may play some role during the attachment related scenarios. As mentioned earlier, Anxious-*amae* behaviours are those expressed when the child is separated from the mother, or which indicate unwillingness to be away from her. The findings from the Study 1, along with the previous literature indicating an association between Anxious-*amae* and attachment behaviours (discussed in chapter 2), together raise the possibility that mothers' tolerant attitudes toward Anxious-*amae* behaviours may restrict children's exploratory play, and that children's assuagement may depend on the contact maintaining behaviours of the children. This may lead to associations between maternal tolerant attitudes towards anxious *amae* behaviour and insecure/ambivalent attachment, at least among Japanese mother-child dyads.

In conducting this study, it was hypothesised:

- i) that *amae* behaviours, especially Anxious-*amae*, will be tolerated more by Japanese mothers than British mothers
- ii) that the children of mothers with more tolerant attitudes towards anxious *amae* behaviours will tend to be categorised into insecure/ambivalent, at least in the Japanese sample

6.3 Methods

6.3.1 Participants

Research packs were distributed to parents at one private kindergarten in a suburban area of Tokyo and in three state and three private nurseries in Edinburgh, with permission from the Edinburgh City Council in the case of the state nurseries and from the head teachers of each nursery school in all the cases. Packs contained a detailed description of the study and a copy of the *amae* attitude scale (AAS). They contained consent forms for the parent and child's participation in the study and for parent's consent to videotape their children's doll play interview, the Manchester Child Attachment Story Task (MCAST; Green, Stanley, Smith, & Goldwyn, 2000). Parents were asked to return the consent forms to the nursery, along with completed AAS, if they agreed to participate. The information in the Japanese and British research packs requested only the participation of Japanese and British mothers respectively. As a result, 80 mother-child dyads were recruited (40 Japanese, 40 British).

The response rate in Japan was 27%. The Japanese sample included 19 boys and 21 girls, and mean age was 61.5 months, with a range of 51-69 months (*SD* 4.4). The birth order of the children is as shown in Table 6.1 below. Mothers (all married) ranged in age from 20 to 44 years (*M* 34.6, *SD* 4.7), most Japanese mothers being housewives and very few working full-time (as shown in Table 2 below).

The response rate in each of the 6 British nurseries ranged from 5%-57% depending on how the research packs were distributed and how the research was introduced by

the head teacher to the mothers. The response rate was much higher when the head teacher mentioned the study during a parent meeting or when the researcher had the opportunity to speak directly to the mothers herself prior to the recruitment process. The UK sample included 20 boys and 20 girls, and mean age was 59.6 months, with a range of 54-70 months (*SD* 4.0). Their birth order is as shown in Table 1 below. Mothers (including 2 single parents) ranged in age from 20 to 45 years ((*SD* 4.4); more than a half of the British mothers worked part-time and about a third were housewives (See Table 6. 2 below).

Table 6.1 Breakdown of children's birth order

	Japanese (<i>n</i> =40) <i>n</i> (%)	British (<i>n</i> =40) <i>n</i> (%)
Only child	7 (17.5)	4 (10)
Oldest among 2 children	9 (22.5)	10 (25)
Oldest among 3 children	3 (7.5)	3 (7.5)
Middle among 3 children	3 (7.5)	5 (12.5)
Youngest among 2 children	11 (27.5)	13 (32.5)
Youngest among 3 children	7 (17.5)	5 (12.5)

Table 6. 2 Breakdown of mothers' occupations

	Japanese (<i>n</i> =40) <i>n</i> (%)	British (<i>n</i> =40) <i>n</i> (%)
Full-time worker	3 (7.5)	3 (7.5)
Part-time worker	8 (20)	23 (57.5)
Work at home	1 (2.5)	0 (0)
Part-time student	0 (0)	1 (2.5)
House wives	28 (70)	13 (33.5)

Independent samples t-tests showed no significant difference between the Japanese and British participants in children's age, ($t(78) = 1.91, ns$), in mothers' age ($t(78) = 0.28, ns$), and in children's verbal mental age (see below for details, $M = 53.58$ months,

$SD=13.61$ and $M=58.28$ months, $SD=8.82$ respectively; $t(66.87) = 1.83, ns$). There was also no significant difference between the Japanese sample ($M=2.12, SD=0.69$) and the British sample in total number of children the mothers had ($M=2.30, SD=0.78$); $t(75) = -1.03, ns$). However, there was a significant difference in mothers' occupations between two samples, ($\chi^2 = 1.46, p=.01$), with UK mothers significantly more likely to work (see Table 2).

6.3.2 Materials and procedure

The *amae* attitude scale (AAS) was completed by the mother privately at home (for full description, see Chapters 4 and 5 and Appendix B). After the completed AAS and consent forms were obtained from the mother, the language assessment (see further details below) and the MCAST doll play interview were administered to the children at the children's nursery, either in a separate room or in a quiet corner of the room. Before starting with the session, the procedure was explained in age-appropriate terms to each child who was then asked whether s/he was happy to stay with the researcher and the test materials and to be videotaped. A book token worth £5 was sent to each mother as a thank you gift on completion of their and their child's participation in the study.

Verbal mental age

Children's language development clearly influences the quality of their responses to the representational stimuli (Solomon & George, 1999). In order to control for this variable across the two groups, the British Picture Vocabulary Scale (BPVS) was administered to the British children and the Picture Vocabulary Test (Ueno, Utsuno, & Iinaga, 1991), the Japanese equivalent to the BPVS, to the Japanese children. This

test was carried out before the child had completed the MCAST and took approximately 10 to 20 minutes to administer. After the test, a small thank you sticker was given to each child. Because these language assessments start with an easy level of words, they were also useful as an icebreaking tool. After this assessment, almost all children seemed more relaxed than when they first entered the room.

Children's attachment representation

Attachment patterns were rated using the Manchester Child Attachment Story Task (MCAST; Green, Stanley, Smith, & Goldwyn, 2000). The MCAST is a semi-structured doll play attachment measure for children aged between 4-8 years. It provides a measure of children's mental representations of attachment to the parents. As indicated above, the child is introduced to the play materials, and 4-roomed doll's house with basic furniture, and is asked to choose dolls to represent himself and his mother from a selection of 3 child dolls and 3 mother dolls. This selection included Asian and Caucasian dolls for each sample. For Japanese children, the interview protocol was translated into Japanese by the researcher. Another bilingual researcher then provided a back-translation, which was then checked by the researcher for nuances and accuracy. A few sentences were modified based on the discussion.

A few further adjustments were made to the nightmare vignette so that it more accurately reflected Japanese custom and was therefore more meaningful to the children being studied. First, a futon, instead of a bed, was used in the study conducted in Japan. Second, based on the suggestion from Professor Green (personal communication, April, 2007), the mother's futon and the child's futon were placed in

the same bedroom if the child said that he slept in the same bedroom as his mother. Thirty-two out of forty Japanese children said that they slept in the same bedroom as their mothers. When a few Japanese children said that they usually slept in the same futon as their mother, however, they were suggested that in this story, the child-doll is in his own bed. None of the children showed a negative response to this suggestion.

The task starts with a breakfast vignette that represents a warm-up trial, to provide the child with an introduction to the procedure. It also serves as a non-attachment-eliciting comparison for the later attachment-eliciting vignettes. The breakfast vignette is followed by four attachment-related 'distress' vignettes. The content of the four vignettes' is as follows: (1) in the night, the child doll has a nightmare; (2) the child doll hurts his/her knee while playing in the yard; (3) the child doll has a tummy ache; and (4) the child doll loses himself in a big mall while shopping with the mother. In this last shopping mall scenario, the doll house is put aside, and the furniture is used as pretend-shops in the mall. At the beginning of each vignette, the researcher places the mother doll at the appropriate place (e.g. in the kitchen near the cooker in the breakfast vignette) and holds the child doll to act out the beginning of the story.

At the beginning of each MCAST scenario, the interviewer amplifies the intensity of the distress represented in the child doll figure to a point where the child is clearly involved and sympathetically aroused by the predicament shown in the scene. In order to do this, the interviewer 'acts out' the pain/distress of the child doll rather dramatically. A typical reaction of the child to this would be showing an embarrassed

laugh or an inappropriate ‘forced’ smiling expression.

The second phase of the vignette begins when the researcher passes the child doll to the child and the child plays out a story completion with the materials available. After the child has completed the story, the interviewer takes the lead once more with structured probes. The probes are; ‘Can you tell me how the (child’s name)-doll is feeling now?’ ‘Can you tell me what the (child’s name)-doll is thinking about?’, ‘Can you tell me what the mother-doll is thinking about?’, ‘Can you tell me how is the mother doll feeling now?’ ‘How is the (child’s name)-doll’s tummy/knee now?’ (vignettes 2 and 3 only) After all five vignettes have been completed, the task ends with a period of free play in which the child is asked to use the dolls to act out something the family like doing together. The aim of this final vignette is not to gain further information about family dynamics but to allow the child to reconstruct their ordinary experience before the end of the session.

The task takes about 15–45 minutes to administer; administration is videotaped and the taped session is used for scoring. Scores are attributed to the following four dimensions: represented mother- and child-doll behaviour, child participant behaviour, expressed and described emotions, and narrative coherence. As described in the MCAST coding manual (Green, Goldwyn, & Stanley, 2000), an overall attachment category is then assigned to the child based on the predominant strategy represented in the four vignettes, as follows:

Avoidant attachment (A): According to the MCAST coding manual, avoidant stories show non-interpersonal ways of resolving distress, either by self-care (e.g. going to

the hospital alone) or by displacement activity (e.g. watching TV, cleaning the house, denying the distressing event). Lack of representation of interpersonal behaviour is expressed by a lack of proximity seeking or only a transient ineffectual interpersonal bid. The mother is not represented, or is represented as cold and rejecting. Interaction can be minimal and is ineffective in resolving distress. This category has the sub-category of 'highly avoidant' (A1) where there is a complete and sometimes highly organised form of the avoidant strategy and 'weakly avoidant' (A2) where the avoidant strategy is less complete and organised and often involves a 'top-up' of interpersonal contact with the mother outside the theme of attachment (e.g. making a meal together)

Secure attachment (B): Secure stories show an effective interpersonal transaction between child and caregiver (mother in this case). The child enacts the child doll asking for help and comfort, and the mother doll responding quickly and appropriately to the child doll's needs. The result is a prompt resolution of distress, with the child doll returning to exploratory activities (e.g. relaxed play). The caregiver is represented as warm and sensitive, but not overly controlling. The story is coherent, with appropriate emotions and a clear ending. The 'secure' MCAST category has four sub-classifications. 'Optimally secure' (B3) children are those who closely match the prototype, displaying optimal parental behaviour and quick resolution of distress. 'Secure/avoidant' (B1) and 'secure/ambivalent' (B4) children represent a basically secure strategy, with minor elements of insecurity. There is also a 'secure/other' sub-classification for ambiguous cases (B2).

Ambivalent attachment (C): Ambivalent stories represent interpersonal transactions

with the mother that are not effective in resolving distress, and actually increase or maintain it. The stories also typically involve high levels of anger from the child-doll and/or mother doll or reciprocal control. The child often introduces new elements of distress (e.g. after medication for the hurt knee, the child returns to playing but then hurts his/her head, and so on), and the story may never reach a clear ending. This category also consists of 2 sub-categories. One is 'interpersonal promotes distress' (C1) where initial distress and interpersonal contact with the mother evolves into conflict between the mother and child around non-relevant issues. Another is 'passive' (C2) where there is weak signalling of distress and weak assuagement.

Disorganised attachment (D): In disorganised stories, the attachment strategy is incoherent and ineffective in calming distress. There may be complete lack of a recognisable strategy or rapid alternation of incompatible strategies. Most of the time, stories are characterised by narrative/behavioural 'lapses' (e.g. freezing, trance-like states, interrupted sequences) and intrusion of bizarre, frightening, or overly aggressive content. Two sub-categories included in this type are 'complete chaos' (D1) where there is a lack of structure and complete lack of any overarching strategy or an apparent absence of the capacity to produce a strategy at all, and 'use of multiple strategies' (D2) where the child uses a number of different and incomplete strategies for assuagement during the course of the narrative, none of which are effective in assuaging distress.

All videotaped sessions were scored by the researcher. Prior to conducting the study, she completed a 3-day training course in the administration and coding of MCAST at the University of Manchester, Department of Psychiatry. Reliability of

administration and subsequent coding techniques were assessed after the training by the MCAST team and she was deemed to be a reliable coder of MCAST data. Because there is as yet no other trained Japanese coder for the MCAST, the Japanese tapes were transcribed, the scripts translated into English by the researcher and other bilingual researcher, and the two translations were compared and discussed. An agreed translation was then added as a subtitle to each Japanese video clip. Eight Japanese sessions (20% of all Japanese data) and 8 British sessions (20% of all British data) were randomly selected and cross-rated by another English-speaking MCAST-reliable coder who was blind to the hypothesis of the present study. Inter-coder agreement rates (Cohen's Kappa) on the four MCAST attachment categories were 0.66 for the Japanese data and 0.82 for the British data. Inter-coder agreement rates (Cohen's Kappa) on the ten subcategories were 0.63 for the Japanese data and 0.63 for the British data.

6.3.3 Ethical considerations

As with the first study, this study followed The University of Edinburgh Research Ethics Policy and Procedures. Furthermore, renewed Disclosure Scotland clearance was sought and gained as the researcher was visiting public and private nurseries. Additionally, for the Japanese study, as it was considered to be important to follow Japanese ethical guidelines and Japanese law as well as Scottish law, the Personal Information Protection Law (enacted on 1st April, 2005) and the Ethical Guidelines of Tokyo University were also taken into account.

The purpose of the study was fully explained in the information letter in the research pack. It was especially made clear to the dyad that participation in this research was

entirely voluntary, and if they would like to take part, but at any time changed their mind about this, they would be free to withdraw from the research without having to give any explanation to the researcher or anyone else. (Loewenthal, 2001; The British Psychological Society, 1995). It was also explained that the names of the participants will be kept anonymous in any publication, report, paper or presentation on the findings. Participants were assured that all identifying information would be kept confidential with the exception of the unlikely event of the researcher being given reasons to suspect that the child was at risk (see Appendix C for a sample of the leaflet). At the beginning of the session, each child was asked if it was okay to video record the session and it was explained that if s/he wished to finish s/he could say so any time. The researcher was also careful in observing the reactions of each child so as not to miss any sign that the child was experiencing discomfort which exceeded the mild degree expected in the procedure.

6.4 Results

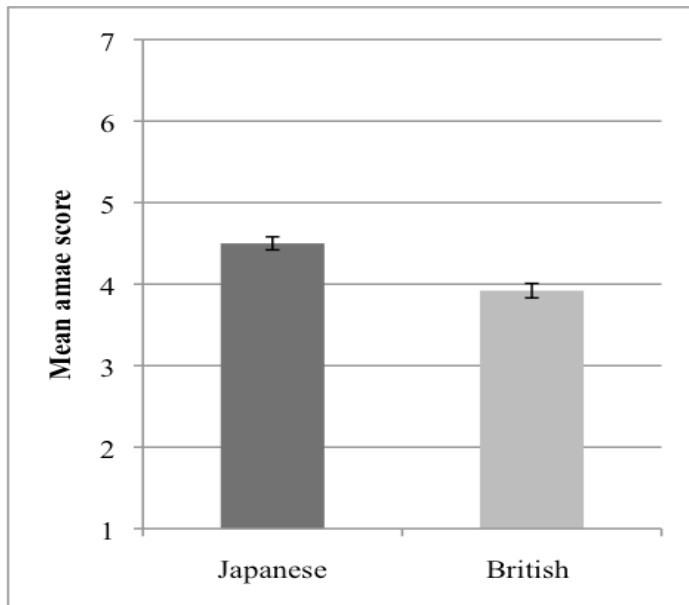
6.4.1 Reliability of the *Amae* attitude scale (AAS)

Cronbach's alpha was calculated for each cultural group for each of the 4 *amae* categories represented in the 29-item AAS. The Cronbach's alpha for the Pure-*amae* category was .69 in the Japanese sample and .66 in the British sample, for Anxious-*amae* it was .62 and .59, for Asking-*amae* it was .43 and .50, and for Frustrated-*amae* it was .43 and .47 respectively. *F*-tests showed that these alpha values were not significantly different across cultures for any of the 4 *amae* categories under study.

6.4.2 Cross-cultural comparison of AAS scores

In the initial analysis, the averaged maternal scores across all 29 AAS items were compared across the two groups. As shown in Figure 6.1 below, an independent *t*-test indicated that the Japanese mothers showed more tolerant attitudes overall towards their children's *amae* behaviours than the British mothers ($M=4.50$, $SD=.51$, and $M=3.92$, $SD=.56$, respectively; $t(78) = 4.82$, $p<0.01$, Cohen's $d = 1.08$).

Figure 6.1 Mean total *amae* score

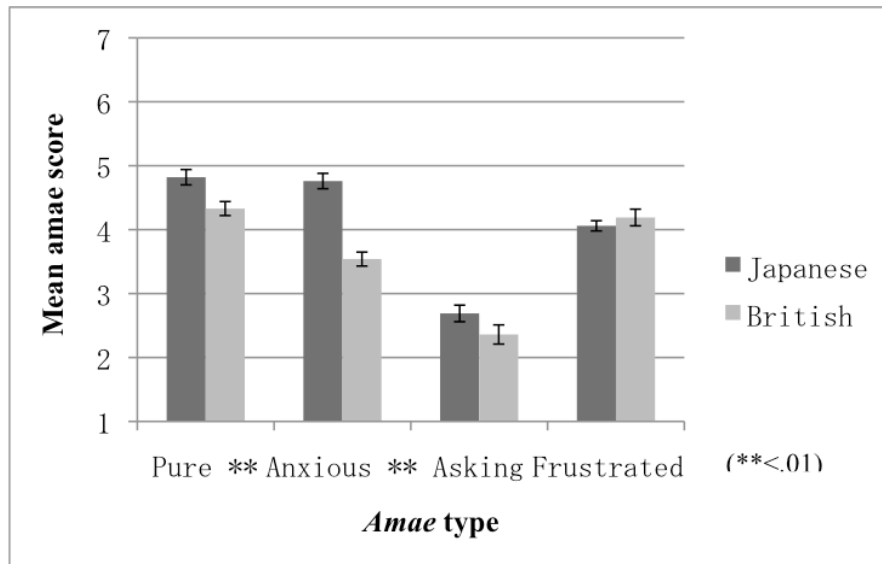


The next part of the analysis looks, firstly, at the difference in scores between Japan and British mothers for each *amae* category, and then it examines whether there were differences in attitude to each type of *amae* within each cultural group.

A MANOVA (nationality (2) x *amae* types (4)) revealed that maternal attitudes towards the four distinctive types of children's *amae* behaviours differed significantly in the Japanese and British mothers ($F(1, 75) = 17.48$, $p<.01$), with Japanese mothers showing more positive attitudes towards 2 categories of children's

amae behaviours: Pure ($F(1, 78) = 9.62, p < 0.01$) and Anxious ($F(1, 78) = 57.48, p < 0.01$). There were no significant differences in the Japanese and British mothers' attitudes towards Asking ($F(1, 78) = 2.66, ns$) or Frustrated ($F(1, 78) = .68, ns$), as shown in Figure 6.2 below.

Figure 6.2 Mothers' attitudes towards specific child *amae* behaviours



A one-way repeated measures ANOVA was then carried out in each cultural group in order to examine if maternal attitudes were different depending on the specific type of child *amae* behaviours being rated. The mean *amae* attitude scores for each *amae* category in both samples are shown in Figure 6.2 and Table 6.3.

Table 6.3 Mean (SD) AAS score for the 4 *amae* categories in the Japanese and British samples

<i>Amae</i> type	Japanese (n=40)		British (n=40)	
	Mean	SD	Mean	SD
Pure	4.82	.74	4.33	.68
Anxious	4.76	.73	3.54	.7
Asking	2.69	.84	2.36	.97
Frustrated	4.06	.5	4.19	.85

For the Japanese sample, Mauchly's test indicated that the assumption of sphericity had been violated ($\chi^2 (5) = 16.03, p < .05$); degrees of freedom were therefore corrected using Greenhouse-Geisser estimates of sphericity ($\epsilon = .78$). The results showed that Japanese mothers' *amae* attitude scores were significantly different depending on the type of *amae* ($F (2.34, 91.40) = 93.74, p < .01, r = .84$). Bonferroni post-hoc tests revealed significant differences between maternal attitudes towards Pure- and Asking ($p < .01$) and Pure and Frustrated ($p < .01$), but not between any other pairs ($p = ns.$). As shown in Table 6.3, mothers were significantly more tolerant of Pure-*amae* than Asking or Frustrated.

A significant effect of different types of *amae* behaviours was also found in the British sample ($F (3, 117) = 74.76, p < .01, r = .81$). Bonferroni post-hoc tests revealed significant differences between Pure and Anxious ($p < .01$) and between Pure and Asking ($p < .01$), but not between any other pairs ($p = ns.$). As shown in Table 6.3, mothers were significantly more tolerant of Pure-*amae* than Anxious or Asking.

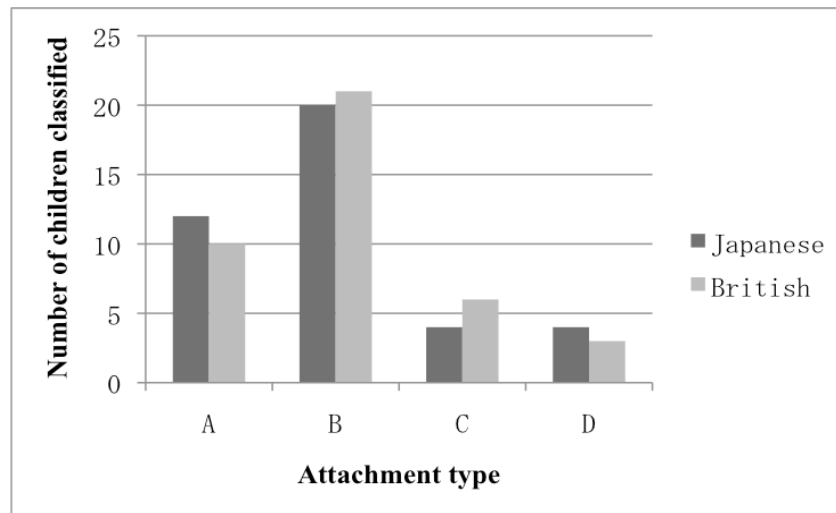
6.4.3 The MCAST

Children's attachment classifications based on their MCAST responses are presented in Table 6.4 and Figure 6.3 below. As shown in the table, around half of the children were scored as being secure B in both countries, with avoidant A being the next most common attachment classification in both countries. Due to the small number of children in C and D classifications, statistical analysis was conducted on secure B versus insecure (A, C, & D) attachment. This showed non-significant difference between the two cultural groups ($\chi^2 = .05, p = ns.$).

Table 6.4 Attachment distributions in the Japanese and British samples

	Japanese			British		
	boys (%)	girls (%)	total (%)	boys	girls	total (%)
Avoidant (A)	6	6	12 (30)	6	4	10 (25)
Secure (B)	9	11	20 (50)	9	12	21 (52.5)
Ambivalent (C)	2	2	4 (10)	2	4	6 (15)
Disorganised (D)	2	2	4 (10)	3	0	3 (7.5)
Total	19	20	40 (100)	20	20	40 (100)

Figure 6.3 Attachment classifications in Japanese and British samples



The distribution of children's attachment classifications broken down into sub-categories is shown in Table 6.5 below. Although the number of cases was too small in each subcategory to allow statistical comparison, the figures in the table shows that the pattern of sub-categorical classification of A type and D type children was fairly similar across cultures. However, among B type children, although the majority of securely attached children in both countries were classified as B3, a relatively high proportion of Japanese children were classified as B4 (secure/ambivalent) and a relatively high proportion of British children were classified as B2 (secure/other). Among C type, all of the Japanese children were classified as B2 (secure/other). Among C type, all of the Japanese children were classified as C2 whereas all of the British children were classified as C1.

Table 6.5 Attachment distribution including sub-categories in each country

		Japanese	British
		n (%)	n (%)
Avoidant	(A1)	8 (20)	8 (20)
Avoidant	(A2)	4 (10)	2 (5)
Secure	(B1)	2 (5)	3 (7.5)
Secure	(B2)	1 (2.5)	6 (15)
Secure	(B3)	10 (25)	8 (20)
Secure	(B4)	7 (17.5)	4 (10)
Ambivalent	(C1)	0 (0)	6 (15)
Ambivalent	(C2)	4 (10)	0 (0)
Disorganised	(D1)	4 (10)	3 (7.5)
Disorganised	(D2)	0 (0)	0 (0)
Total		40	40

6.4.4 The association between maternal attitudes towards *amae* behaviours and children's attachment classification

The mean and standard deviation of mothers' *amae* scores for each *amae* category, along with the MCAST classifications of their children, are shown in Tables 6.6 & 6.7 and Figures 6.4 & 6.5 below.

Table 6.6 Mean *amae* scores of Japanese mothers in each child attachment group

	Pure		Anxious		Asking		Frustrated		Total	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
A (12)	5.02	0.66	4.98	0.69	2.46	0.58	4.11	0.52	4.64	0.53
B (20)	4.66	0.78	4.41	0.64	2.78	0.98	3.90	0.47	4.30	0.49
C (4)	5.17	0.58	5.21	0.81	2.38	1.03	4.46	0.55	4.84	0.17
D (4)	4.69	0.96	5.36	0.48	3.25	0.29	4.29	0.34	4.72	0.47

Figure 6.4 Mean *amae* scores of Japanese mothers in each child attachment group

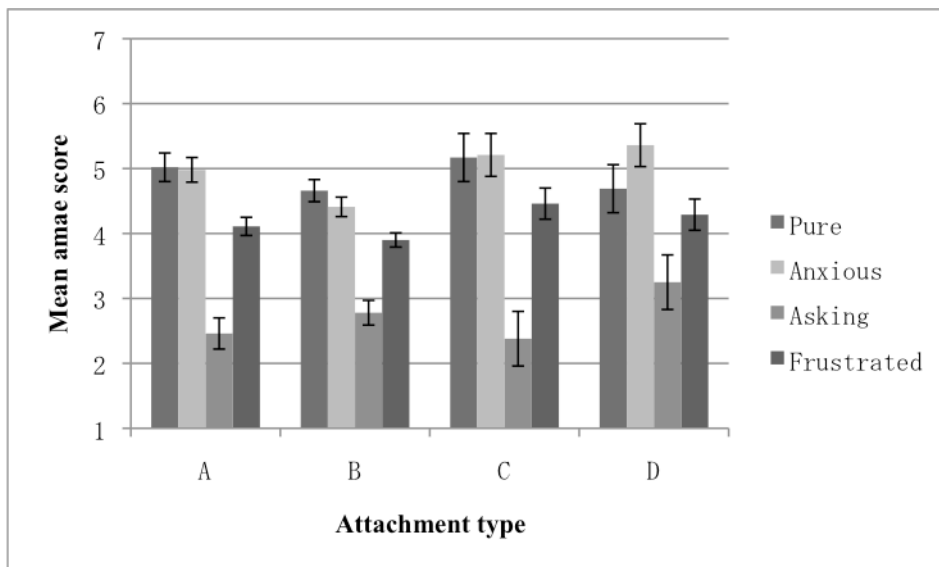
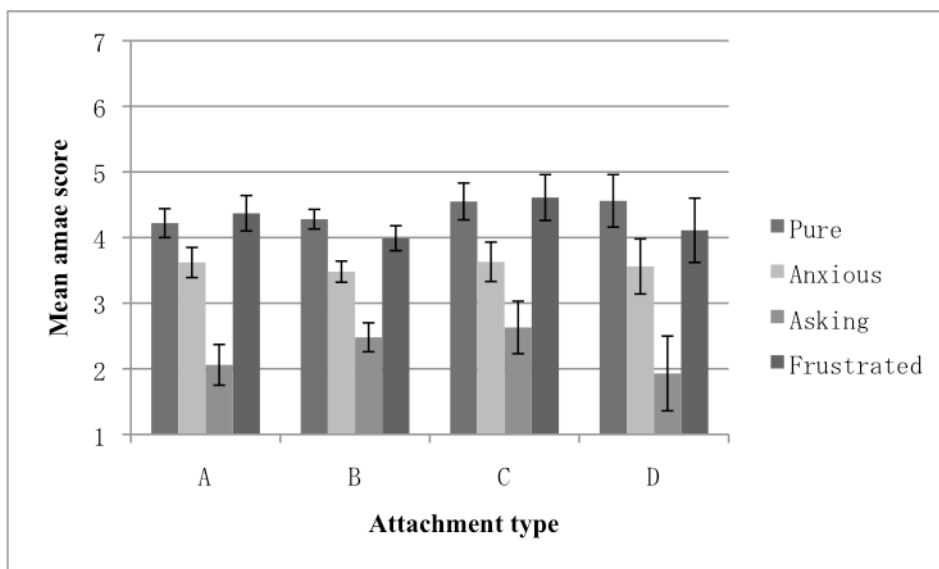


Table 6.7 Mean *amae* scores of British mothers in each child attachment group

	Pure		Anxious		Asking		Frustrated		Total	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
A (10)	4.22	0.52	3.62	0.77	2.06	0.65	4.37	0.78	3.92	0.50
B (21)	4.28	0.81	3.48	0.79	2.48	1.07	3.99	0.88	3.85	0.65
C (6)	4.55	0.59	3.63	0.17	2.63	1.18	4.61	0.95	4.15	0.45
D (3)	4.56	0.18	3.56	0.65	1.93	0.81	4.11	0.42	3.97	0.29

Figure 6.5 Mean *amae* scores of British mothers in each child attachment group



Because the numbers of children who were classified as ambivalent C type and disorganised/disoriented D type were small, the 3 groups of insecure attachment (A, C, and D) were combined in the following analysis. In order to examine the effect of nationality and attachment classification (secure/insecure) on total *amae* score, a two-way independent ANOVA (nationality (2) x attachment security (2)) was carried out. A main effect of nationality and a main effect of attachment classification were found, but there was no significant interaction between nationality x attachment classification. As previously reported, nationality significantly affected the average total *amae* score ($F(1, 76) = 24.33, p < .01, r = .73$), with Japanese total *amae* scores significantly higher for both the securely attached and insecurely attached group ($M = 4.30$ and $M = 4.70$ respectively) when compared to their British counterparts ($M = 3.85$ and $M = 4.00$ respectively) (both $ps < .01$). The significant main effect found for attachment classification (secure/insecure) on total *amae* score ($F(1, 76) = 5.60, p < .05, r = .44$) was due to the fact that mothers of securely attached children scored significantly lower than did mothers of insecurely attached children. Although no significant interaction was found between nationality x attachment classification ($F(1, 76) = 1.16, ns$), the trend for mothers of securely attached children to score lower on the AAS than mothers of insecurely attached children was found in both countries.

In order to look at the associations among nationality, attachment security, and maternal attitudes towards the 4 specific kinds of *amae* behaviours, a MANOVA (nationality (2) x attachment security (2) x *amae* types (4)) was conducted. This showed that there were significant main effects of nationality on maternal attitudes towards children's Pure *amae* ($F(1, 76) = 9.54, p < .01$) and Anxious *amae* ($F(1, 76)$

= 63.46, $p < .01$) but not towards Asking *amae* ($F(1, 76) = 2.73$, *ns*) and Frustrated *amae* ($F(1, 76) = .83$, *ns*). Significant main effects of attachment security (secure/insecure) were also found on maternal attitudes towards children's Anxious *amae* ($F(1, 76) = 7.34$, $p < .01$) but not towards Pure ($F(1, 76) = 1.75$, *ns*), Frustrated ($F(1, 76) = 5.68$, *ns*), or Asking *amae* ($F(1, 76) = 1.01$, *ns*). There was no interaction effect of nationality and attachment security on maternal attitudes towards the 4 types of *amae* behaviours. These findings suggest that across both cultural groups, mothers of securely attached children showed less tolerant attitudes specifically towards children's Anxious-*amae* behaviours than did mothers of insecurely attached children.

Although the small numbers of children classified as ambivalent C type and disorganised/disoriented D type meant that it was not possible to conduct any statistical analysis on these individual categories, there were sufficient numbers of children classified as either avoidant A type or secure B type in each country to allow for statistical comparison of these groups. A MANOVA (nationality (2) x attachment type (2) x *amae* types (4)) showed that there was no significant difference between mothers of attachment A type and B type children in terms of their attitudes towards their children's Pure *amae* ($F(1, 59) = 0.60$, *ns*), Anxious *amae*, ($F(1, 59) = 3.38$, *ns*). Asking *amae* ($F(1, 59) = 2.31$, *ns*), and Frustrated *amae* ($F(1, 59) = 2.55$, *ns*). It showed, however, that there was a significant effect of the nationality of the mothers in their attitudes towards their children's Pure *amae* ($F(1, 59) = 9.14$, $p < .01$) and Anxious *amae* ($F(1, 59) = 35.74$, $p < .01$), but not towards Asking *amae* ($F(1, 59) = 2.09$, *ns*) and Frustrated *amae* ($F(1, 59) = .90$, *ns*), as shown previously. Attachment classification of the child x mothers' nationality did not show a significant effect on

differentiating mothers' attitudes towards all 4 *amae* categories.

6.4.5 Children's verbal expression of needs during the MCAST

Although it was not necessarily reflected in the attachment classification and although the study was not originally designed to analyse this, some qualitative and quantitative differences in mother-child relationships were shown during the MCAST. After the mildly stressful situations were introduced, 12 Japanese children, compared to 2 British children, moved the child doll towards the mother doll without verbally expressing the child-doll's needs in more than 2 of the vignettes. Instead, some of the Japanese children placed the mother-doll and the child-doll face to face and moved two dolls as if they were communicating in silence. These two British children created the story line that mother-doll suspected the child-doll's problem and treated it (e.g. by saying "Oh dear, you fall down? Let me get a plaster."). Some of the children said that the mother-doll knew the problem because she heard the child-doll crying.

In order to investigate these findings quantitatively, the child's verbal expression of the child-doll's needs was coded on a 9 point scale ranging from 0: no verbal expression at all, 1: call the mother-doll but not express the child-doll's distress, 2: the child-doll's distress is expressed in a single word (e.g. tummy), 6: describe the child-doll's distress in a sentence 7: full verbal description of their distress to 9: full and detailed verbal description of their distress situation. This coding system was taken from the MCAST coding system in which there were no descriptions for some of the numbers. The mean score for the Japanese children was 2.35 ($SD = 2.65$) and

for the British children it was 3.75 ($SD = 3.46$). In other words, it was found that Japanese children expressed their needs verbally less often with fewer details than British children did ($p < .05$), although the mother-doll's verbal response towards the child's doll did not differ across cultures ($p = ns.$). This coding was conducted by the researcher, and inter-rater reliability coding was outwith the scope of the thesis..

6.5 Discussion

This study addressed mainly two hypotheses with 40 Japanese mother-child dyads and 40 British dyads. One is whether this study replicates the findings of the first study showing that Japanese mothers have more tolerant attitudes towards children's *amae* behaviours than the British mothers. The other is whether there is a relationship between children's MCAST attachment classifications and maternal attitudes towards children's *amae* behaviours (measured with the AAS) in Japanese and British dyads. Children's Anxious-*amae* was particularly focused on because this type of *amae* is most likely to be triggered when the children face separation from the mothers.

As predicted from the results of study 1, the AAS scores of Japanese mothers indicated that they were significantly more tolerant of their child's *amae* behaviours than their British counterparts. This was true for both mothers of securely and insecurely attached children. A significant tendency for mothers of securely attached children to have significantly less tolerant attitudes towards children's Anxious-*amae* behaviours than those of insecurely attached children was found in both countries. A cultural difference also emerged in the way children expressed the maternal needs of the child doll during the mildly stressful scenarios in the MCAST. However, contrary

to what has been found in some of the previous attachment studies conducted in Japan (e.g. Takahashi, 1986; Yamakawa, 2006), the distribution of MCAST attachment classifications was similar in the two cultural groups. This finding was in line with that of Behren et al. (2007), in which attachment security of Japanese 6-year-olds was assessed in Main and Cassidy's separation-reunion procedure. These results will be discussed in turn in more detail in the following section.

The Strange Situation study conducted in Sapporo in 1986 reported more than twice as many infants classified as insecure-ambivalent in attachment, compared to reports from other studies worldwide. Some researchers attributed this discordant outcome to Japanese infants' lack of familiarity with the separation that occurred in this particular study (e.g., Grossmann et al., 1990; Grossmann & Grossmann, 1989; Takahashi, 1990). Others suggested, however, that Japanese childrearing ideals, based on the concept of *amae*, might explain this marked difference in findings (e.g. Takahashi, 1990).

In line with this argument, a comparative study of Japanese and American preschoolers' separation and reunion behaviours with their mothers showed that Japanese children demonstrated more *amae* behaviours - such as clambering up on the mother's lap, maintaining physical contact, etc. - than the US children, although the study indicated no clear cross-cultural differences in attachment security and insecurity (Mizuta et al., 1996). Any possible association between children's *amae* behaviours expressed during the separation and reunion situation and the children's attachment security was not addressed in Mizuta et al.'s study.

Recent investigation into natural language usages of the term *amae* by Japanese native speakers have, however, revealed that the concept is more complex than was previously believed (Behrens, 2004). It has also been suggested that *amae* is not a unitary construct, and that Japanese mothers do not necessarily always welcome *amae* depending on the context and situation.

In the first study reported in this thesis (Chapters 5 & 6) a prototype *amae* attitude scale (AAS) was constructed based on responses from Japanese focus groups. This conceptualised *amae* as a multidimensional concept. The scale was subsequently completed by Japanese mothers and Scottish mothers. The main findings from this first study were that Japanese mothers showed more tolerant attitudes towards their children's *amae* behaviours than Scottish mothers in all 4 sub-categories of *amae* behaviours explored (pure, asking, frustrated, and anxious). This suggests that the kinds of behaviours that mothers accept and expect from their young children are not universal. It was also found that among the four types of *amae*, Japanese mothers showed the most positive attitude toward Anxious-*amae*. This raises the possibility that as well as culturally-dependent responses toward children's overall *amae* behaviours, mothers' attitudes toward Anxious-*amae* behaviours may be the key to understanding the non-normative classification of Japanese mother-infant dyads in the Strange Situation paradigm.

Anxious-*amae* can be defined as behaviours shown by young children when they are separated from their mother, or when they are not willing to be away from their mothers; for instance, clinging to the mother in an unfamiliar situation or throwing a temper tantrum when facing separation from her. Of all four *amae* categories, then,

this is the one with the most obvious overlap with attachment behaviour. Notably, in the Strange Situation paradigm, attachment classification is *partially* based on the intensity of these kinds of behaviours on separation and reunion. In this circumstance, children's Anxious-*amae* behaviours among 4 types are obviously the most likely to be triggered. Therefore, the finding in Study 1 that Japanese mothers showed the most tolerant attitudes toward this type of *amae* among the four types of *amae* behaviours supports the notion that the Japanese dyad's *amae* relationship might underlie the disproportionate classification of children as insecure-ambivalent in the Strange Situation procedure, and that children's Anxious-*amae* may play a key role in understanding Japanese patterns of attachment classification.

Prior to the present study, however, research to date had not yet directly addressed the possible association between attachment patterns in Japanese mother-child dyads and *amae* behaviour. Japanese post-infancy attachment patterns had also not been investigated using the MCAST. Further attachment research using the MCAST was meaningful because it appears to be more culturally sensitive than the other attachment doll play measures for preschoolers, and therefore was more likely to serve as a valid measure of preschool children's attachment. The results from the AAS and the MCAST, as well as their associations will be addressed in turn below.

Maternal attitudes towards children's *amae* behaviours

As was found in the first study, the Japanese mothers who took part in Study 2 showed more tolerant attitudes towards their children's *amae* behaviours than their British counterparts. Furthermore, in line with the first study, this study found that

the difference between the attitudes of the Japanese and British mothers was most pronounced for the *Anxious-amae* category of behaviours. The current finding together with the one obtained from the first study suggest that *Anxious-amae* may be an important component of the *amae* construct.

Minor additional differences between the AAS findings from the first and second studies in this thesis should also be noted. Firstly, Japanese mothers' pure *amae* scores were slightly higher than in the first study. Secondly, whereas Japanese mothers in the first study showed more tolerant attitudes towards their children's *amae* behaviours than Scottish mothers in all 4 sub-categories of *amae* behaviours explored (pure, asking, frustrated, and anxious), Japanese mothers in this study did not show significantly more tolerant attitudes towards asking and frustrated *amae* compared to British mothers. The possible explanations for this will be discussed in further detail in Chapter 8.

Child attachment distributions as measured by the MCAST

Contrary to what has been found in a previous Strange Situation study with Japanese infants (e.g. Takahashi, 1986), the distribution of MCAST pre-school attachment classifications in this study proved to be similar in the two countries. Among 40 Japanese children, 12 children (30%) were classified as A, 20 (50%) were classified as B, 4 (10%) were classified as C, and 4 (10%) were classified as D. Among 40 British children, 10 (25%) were classified as A, 21 (52.5%) were classified as B, 6 (15%) were classified as C, and 3 (7.5%) were classified as D.

Surprisingly perhaps, numbers of Japanese children classified as avoidant (A) in this study were higher than those classified as ambivalent (C). While similar to the UK pattern of attachment found in the present study, this tendency is contrary to what was found in Takahashi's (1986) study, in which no avoidant A pattern of insecure attachment was found. These were also conflicted with the findings of Yamakawa's (2006) study, in which 17.9% of 5-6 years old children were classified as avoidant A, 33.9% were classified as secure B, 37.5% were classified as ambivalent C, and 10.7% as disorganised D using the Attachment Doll Play procedure (George & Solomon, 1990, 1996, 2000, as cited in Yamakawa, 2006). As described in the introduction to this chapter, a higher percentage of insecure-ambivalent children might have been found in Yamakawa's study due to the contents of the scenarios used, as these included reference to a monster in one case and a babysitter in another, concepts that could have quite different implications for Japanese versus Western preschool age children.

Another possibility for the difference in findings is that because the Attachment Doll Play protocol does not emphasise any kind of 'mood induction' procedure during the presentation of each scenario, it is questionable whether an appropriate level of felt distress has been produced and hence whether the representation of attachment has in fact been triggered in the child. One of the specific and most distinctive features of the MCAST, and a central reason for selecting it as a measure in this study, is its emphasis on the importance of 'mood induction' (Green, et al., 2007). The authors of the MCAST see this part of the protocol as analogous to the 'mildly stressful situation' introduced in the Strange Situation procedure. Therefore, it is not surprising that, like Behrens' (2007) study which used a reunion task based on the

Strange Situation, the present study found the proportion of C children to be lower than A children. This suggests that when the ‘mood induction’ is appropriately used, it is possible to accurately identify secure/insecure and ambivalent/avoidant/disorganised types of attachment.

It is particularly interesting that more Japanese children were classified as avoidant A than ambivalent C in the present study, because avoidant behaviour involves predominantly non-interpersonal means to assuage distress. This sometimes involved an overwhelming use of self-care strategy, by, for instance, making a child-doll go to bed in the tummy ache scenario and stating that the mummy-doll does not know about the child-doll’s illness, or making a child-doll put on a plaster by himself without notifying the mother-doll about the hurt knee.

Japanese children who were classified as avoidant (A) did indeed show this non-interpersonal behaviour. It is perhaps rather surprising that this behaviour was seen in Japanese children and it is a finding that sits at odds with what is argued in some of the literature on attachment and on the self. It is a widely accepted notion that the Western concept of “independent construal of self” (Markus & Kitayama, 1991) is based on the belief of the inherent separateness of a distinct person, whereas the prevailing belief in Japanese culture in the fundamental connectedness of human beings to each other conveys “dependent construal of self” (Markus & Kitayama 1991; Mizuta et al. 1996; Takahashi 1986; Rothbaum et al. 2000). Rothbaum et al. (2000), in fact, found that, in contrast to American mothers, Japanese mothers encourage their infants’ orientation to themselves more than they encourage their infants’ exploration of the environment, which suggests that in Japan dependent

behaviour is exercised more and exploration behaviour is exercised less within the caregiver relationship than in the United States. Similarly, a study with preschool-age children and mothers conducted by Dennis and his colleagues (2002) found that U.S. mothers expressed more autonomy, and maintained physical distance, whereas Japanese mothers expressed more relatedness toward their children.

However, in line with Behrens's (2007) study, the present study showed that, although A classification was more common than C, only 12 (30%) of the Japanese children showed an avoidant A attachment pattern in the doll play interview. So although this non-interpersonal behaviour was evident, it was not the predominant form of behaviour amongst the Japanese children. Furthermore, the fact that it was seen at all shows that notions of culturally-specific kinds of interpersonal behaviour cannot be expected to apply to every child in a country and that individual differences and within-country variations in styles of interaction must be expected.

Furthermore, among Japanese children who were classified as secure B, more than half of them (25% of the total Japanese sample compared to 20% of the total British sample) were given B3 as a subcategory. As described in the method section, this is considered the 'optimal version' of interpersonal strategy according to the MCAST protocol. In this strategy, the child clearly represents an interpersonal transaction that results in the assuagement of distress. The child-doll turns towards the mother-doll to share and resolve distress, and it is clear that the child's expectation is that distress will be largely mediated through contact with another.

The key characteristic of B3 children is the high scores on assuagement and

exploratory play. While the essential concept of B4 classification is that continuing assuagement depends on continuing contact with the caregiver by, for instance, not getting out of the maternal bed after the nightmare vignette, the scenario of B3 children includes a 'fresh quality' with the topic moving on. An example of this would be creating the story that the child-doll goes out to play football after the mother-doll has given him medicine and he has rested for a while on a sofa. It is perhaps especially remarkable that similar percentages of children in both countries showed this optimal B3 pattern of attachment behaviours during the MCAST, when it is taken into consideration—that, compared to the British mothers, the Japanese mothers in this study showed more tolerant attitudes towards their children's *amae* behaviours. It is also important to note, however, that a few more Japanese than British children were classified as B4 and a few more British than Japanese children were classified as B2. This does suggest that there were slightly more Japanese children who, despite being were classified as secure B, assuage their distress by continuing to be close to their mothers rather than moving onto the new activity. If these subtle differences in subcategory within a secure attachment group are replicated in larger studies, it would suggest that there are in fact subtle cross-cultural differences in patterns of attachment, despite the overall similarities between the two countries. Interestingly, these findings are in line with Durrett et al.'s (1984) infants Strange Situation study conducted in Tokyo.

The fact that broadly similar patterns of attachment were found across the two countries, despite differences in maternal *amae* attitudes may support the notion that attachment and *amae* are separate concepts and can often serve different purposes in slightly different contexts (Behrens, 2004; Behrens et al., 2007; van Ijzendoorn &

Sagi-Schwartz, 2008). Behrens (2010) states that *amae* lacks the biological roots of the concept of attachment and that it is not necessarily associated with the regulation of stress, but can occur any time there is a desire or motivation on the part of *amae* provider. Japanese children also showed exploratory behaviours once a stressful situation is dismissed, and this suggests that the secure base hypothesis of attachment theory is relevant for Japanese children as well as for British children.

Japanese childrearing does seem to involve individualistic values such as respect for autonomy, competence, and self-development of young children (Yamada, 2004) as well as the notion of *amae*, the dependence on another's benevolence or indulgence, which characterises harmonious interpersonal relationships (Azuma, 1986; Doi, 1971, 2001; Lebra, 1994). These dual values are understandable considering that typical Japanese preschool classes are large by American or British standards, averaging 30 students (and just one teacher) per class (Tobin, Wu, & Davidson, 1987). Japanese children might be emotionally dependent, but instrumentally independent so that they can adapt to their preschool life. These dual values may also be reflected in the findings that Japanese mothers showed significantly more tolerant attitudes towards Pure-*amae* than towards Asking-*amae*, suggesting that the mothers differentiate their attitudes depending on the kinds of *amae* expressed by their children. More specifically, Japanese mothers are tolerant towards children's *amae* that is mostly affectionate in nature but they facilitate children's instrumental independency by not accepting their Asking-*amae*.

Empirical studies on maternal expectations concerning child development have shown that Japanese mothers expect preschool-aged children to be instrumentally

independent (Miura et al., 1992) at an earlier age than American mothers (Hess, Kashiwagi, Azuma, Price, & Dickson, 1980) and English mothers (Joshi & MacLean, 1997). Tobin, Wu, and Davidson (1989) also found in their cross-cultural study that 80 percent of Japanese mothers, 67 percent of Chinese, and 66 percent of American mothers chose “to make young children more independent and self-reliant” as one of their top priorities for their young children before sending them off to preschools. Thus, as mentioned in Chapter 3, although the indulgent aspect of Japanese socialisation tends to attract attention in research, it is only a part of the whole picture of social development in Japanese children. This may explain some of the apparent contrasts found in this study, such as that in spite of relatively high maternal *amae* score in the AAS (Pure- and Anxious-*amae* in particular), some children chose more independent strategies to deal with distress in the MCAST. It might be that although Japanese mothers indulge their children’s *amae* behaviours that are emotional in nature, they do not always welcome those that are instrumental in nature and they do facilitate their children’s instrumental independence as reflected in the MCAST.

Children’s verbal expression of needs during the MCAST

Although it was not necessarily reflected in the attachment classification, there were some qualitative and quantitative differences in mother-child relationships represented in MCAST. It was found that Japanese children represented the child-doll as less expressive of his needs to the mother-doll, and when they did, the descriptions of the problem the child-doll had was less complete and less detailed than those which the British children represented. These findings were based on

additional exploratory analysis within this study, and as such the reliability of the coding was not tested, and the results need to be discussed with care. However, these subtle differences in the children's representation of the interaction with their mothers across the two cultural groups do warrant discussion.

Specifically, 12 of the Japanese children played out that the child-doll approached the mother-doll, and without verbally expressing their problem (by e.g. saying 'Mummy, I fell down, and my knee hurts.' or 'I had a nightmare, mummy.'), somehow the mother-doll understood the situation and treated them appropriately (by e.g. getting a plaster from a first-aid kit). After completing the whole MCAST procedure, the researcher asked 5 of the Japanese children who played out in this way e.g. "The child-doll did not say to his mother that he has got a tummy ache. How did she understand that he is ill?"

Child A (a six year old Japanese boy who classified as secure B) stated:

"My mom understands how I feel, so I don't need to say anything."

Similarly, child B (a five year old girl who classified as secure B) stated:

"Mhhh....Mummy's *kokoro* (heart) and my *kokoro* (heart) are... *tsujiteru* (connected) because she *dajini omou* (takes care of/cherishes) me. So mummy understood how the child-doll felt...I think."

These findings imply that although both British and Japanese children who were classified as secure B successfully used their mothers as a secure base from which to explore, the way they approached the mothers was slightly different across cultures. Rothbaum et al. (2006) pointed out this difference in their work too. They claimed

that maternal sensitivity in the West, and in the United States in particular, may have more to do with responsiveness to children's explicit expression of need. Western caregivers may expect children to verbally express their distress (e.g., by explicitly stating "My tummy hurts") and they may be reluctant to respond to children's needs prior to receiving such requests. Not surprisingly, Western investigators often use the term 'sensitivity' and 'responsiveness' interchangeably.

By contrast, as Rothbaum and his colleagues continue, maternal sensitivity in non-Western communities, and in Japan in particular, may have more to do with anticipation of children's needs and receptivity to subtle and nonverbal cues. Japanese caregivers may believe that it is their duty to anticipate children's needs before the child expresses the need (e.g. by asking if there is something wrong with the child's tummy based on situational cues and knowledge of their child). As Markus and Kitayama (1991) state, in cultures where interdependence is valued, the requirement is to 'read' the other's mind and thus to know what the other is thinking or feeling. It involves the willingness and ability to feel and think what others are feeling and thinking, to absorb this information without being told, and then to help others to satisfy their wishes and realise their goals.

As briefly touched on in Chapter 3, cultural differences in sensitivity have also been observed in adult-adult interaction in Japan. As Clansy (1989) points out, in Japan the ideal interaction is not necessarily one in which the speakers express their wishes and needs adequately and listeners understand and comply, but rather, it is the one where listeners receives contextual cues and understand the needs of speakers even in spite of actual verbalisation. This style of communication is called '*ishin-denshin*'

(tacit understanding) and is a major characteristic of Japanese communication.

As Clansy argues, the view of this type of communication arises from, and contributes to, *amae*. According to Doi (1974), all interpersonal communication in Japanese society has the emotional undertone of *amae*. It is a style that epitomises *amae*, with the speaker presuming upon the listener's willingness to cooperate, empathise, and intuit what he has in mind. Thus, the Japanese communicative style places speaker and hearer in the prototypical social relationship, namely one that is based on *amae*; the values reflected and reinforced by the mode of communication constitute an integral part of Japanese culture.

Interpreted in this way, the interaction between the child-doll and the mother-doll demonstrated by some of the Japanese children could be seen as *amae*. Although it is not expressed as an overt 'behaviour', the emotion of *amae* is hidden underneath the tone of the interaction. During the MCAST, in spite of their implicit non-verbal expression of needs, the securely attached Japanese children played out the child-doll showing clear proximity seeking and physical contact, and the mother-doll making clear and direct verbal communication, with this followed by clear signs of assuagement and exploratory play. This illustrates how attachment behaviours and *amae*-based interaction can coexist even among securely attached children.

Association between maternal attitudes towards their children's *amae* behaviours and the children's attachment classification

As would be predicted from the results of the first study the Japanese mothers' total

amae scores were significantly higher for the securely attached and insecurely attached groups of children than those of their British counterparts. However, a tendency for the mothers of securely attached children to score significantly lower for *amae* items than those of insecurely attached children was found in both countries.

Interestingly moreover, the results also showed that the effects of nationality and attachment security were both significant influences on maternal attitudes towards children's anxious *amae* behaviours: mothers of securely attached children showed less tolerant attitudes towards their children's anxious *amae* when compared to mothers of insecurely attached children. No significant differences were observed between mother of securely attached and insecurely attached children towards other types of *amae*. The descriptive data, however, showed that scores of the Japanese mothers of securely and insecurely attached children on Anxious-*amae* were higher than the British mothers of securely and insecurely attached children.

These findings suggest a link between the maternal attitudes towards children's Anxious-*amae* and the children's attachment security. However, the fact that British mothers of insecurely attached children showed somewhat less tolerant attitude towards their children's Anxious-*amae* than the Japanese mothers of securely attached children may imply that higher maternal scores on children's anxious-*amae* do not automatically associate with insecure attachment relationships with their children. Nevertheless, the finding that mothers of securely attached children showed significantly less tolerant attitudes towards children's anxious *amae* behaviours than those of insecurely attached children suggests at least a partial effect of maternal

attitudes towards children's Anxious-*amae* behaviours on attachment classifications.

Cassidy and Berlin (1994), in their discussion of maternal strategy with insecurely attached children, ambivalent C type in particular, describe the child's mother as one who "(consciously or unconsciously) wants to be particularly assured of her importance to the infant, or his dependence on her, and of his availability to meet her own attachment needs" (p. 984). Such maternal behaviours resemble what Watanabe (1992) describes as maternal behaviours that promote *amae* to fulfil the mothers' egoistic needs. Watanabe regards this as problematic from the mental health point of view. As Behrens (2010) argues, mothers who engage in excessive *amayakasu* behaviours (i.e. facilitating the child *amae* behaviours) may do so out of guilt for being insensitive to the child's needs at other times. They may be demonstrating inconsistent maternal behaviours by mixing insensitivity with excessively indulgent behaviours. This results in inconsistent maternal behaviours similar to Ainsworth et al.'s (1978) description of mothers of ambivalently attached children. Thus, it may be that excessively indulgent behaviours, especially towards children's anxious *amae* behaviours, do affect children's attachment classification even beyond infancy. Further research is clearly needed to examine this possibility; investigating maternal attachment security using the Adult Attachment Interview and exploring its association with maternal attitudes towards children's *amae* behaviours would also be an interesting approach.

Mothers of securely attached children, on the other hand, may have 'sensitivity' in distinguishing different types of *amae* behaviours in children. For instance, they may indulge affectionate Pure *amae* expressed by the children and enjoy emotional and

physical closeness, but they do not welcome similar behaviours expressed in a socialising situation or when the children need to be more independent e.g. at the nursery. It could be that mothers of securely attached children have the sense of security to say 'no' to the children's Anxious-*amae* behaviours and in this way tend to facilitate their children's autonomy. At this stage, however, this remains a speculative explanation of the finding that mothers of securely attached children (both Japanese and British) were less tolerant of children's *amae* behaviours overall, and of the Anxious-*amae* behaviour in particular.

6.6 Study 2 summary and the next study in this thesis

The study reported above provided cross-cultural data on three central aspects of the mother-child relationship. Firstly, the study successfully replicated the first study in showing that Japanese mothers have more tolerant attitudes towards children's *amae* behaviours when compared to their British counterparts, with cultural differences most marked in maternal attitudes towards their children's anxious *amae* behaviour. Secondly, although the distribution of patterns of attachment classifications did not differ across cultures, even some of the Japanese children who had developed secure attachment with their mothers still demonstrated *amae*-like interpersonal strategies when seeking proximity in a distress situation during the MCAST.

Thirdly, an interesting and rather complicated picture was found in the association between attachment security and maternal attitudes towards children's *amae* behaviours. It was found that in both cultural groups, mothers of securely attached children were less tolerant of children's *amae* behaviours in general and anxious

amae in particular than mothers of insecurely attached children. Japanese mothers of both securely attached and insecurely attached children showed more tolerant attitudes towards children's anxious *amae* than their British counterparts. The findings suggest that although tolerant attitudes towards children's *amae* behaviours in general do not automatically lead to insecure attachment, excessive indulgence of children's anxious-*amae* behaviours may have an influence on children's attachment behaviours in both countries. It may also be the case that the level of indulgence that affects children's attachment behaviours differs across cultures.

What we do not yet know is how maternal attitudes and children's attachment behaviours as demonstrated in the MCAST procedure relate to actual mother-child behaviour. The next study will therefore examine if and how mothers' attitudes relate to mother-child behaviours when observed in a naturalistic setting.

CHAPTER 7

STUDY 3: CROSS-CULTURAL STUDY ON THE MOTHER'S EMOTIONAL AVAILABILITY AND ITS ASSOCIATION WITH MATERNAL *AMAE* ATTITUDES AND MOTHER-CHILD ATTACHMENT

7.1 Introduction

Bowlby's (1969, 1982) attachment theory explains that attachment is a species-wide, in-built behavioural system in the young for survival, based on evolutionary and ethological perspectives. From these perspectives, attachment formation is considered to be a universal phenomenon. As reviewed in the previous chapter, some attachment researchers (e.g. Takahashi, 1990; Rothbaum, Weisz, et al., 2000) voiced their concern that attachment theory would not accurately explain parent-child relationships in Japan. They argued in part that Japanese child-rearing ideals are based on the concept of '*amae*' (emotional one-ness between mother and child), whereas attachment theory is often associated with independence/autonomy.

Study 1 of this doctoral research partially supported the argument that Japanese caregivers (mothers in this case) have attitudes that might lead them to indulge children's *amae*. They were found to be more tolerant in general than British mothers of their child's *amae* behaviours, in all 4 sub-categories of the *Amae* Attitude Scale (AAS: pure, asking, frustrated, and anxious *amae*), with cultural differences most marked in maternal attitudes towards their child's anxious-*amae* behaviour, that is the child's *amae* behaviour shown when facing the separation from his mother.

Interestingly however, Study 2 indicated more complex associations between

attachment and *amae*, not only in Japan, but also in Britain. Contrary to what has been found in some of the previous Strange Situation studies with Japanese infants (e.g. Takahashi, 1986) and in an Attachment Doll Play study conducted in Japan with preschool children (Yamakawa, 2006), the distribution of MCAST attachment classifications in Study 2 was found to be similar in the Japanese and British samples, thus supporting the findings of Behrens et al.'s (2007) study that used Main and Cassidy's separation-reunion procedure with Japanese 6 year olds. As predicted from the results of Study 1, the AAS scores of the Japanese mothers in Study 2 also showed that they were significantly more tolerant of their child's *amae* behaviours than their British counterparts. This was true for both mothers of securely and insecurely attached children. It was also found that mothers of securely attached children had significantly less tolerant attitudes towards children's *amae* behaviours than those of insecurely attached children. These findings suggest that firstly, it is not either attachment or *amae* that relates independently to children's close relationships with their mothers, as previously debated by some of the cross-cultural attachment researchers but rather, that these two concepts might be intertwined, and have a combined effect on mother-child relationships, not only in Japan, but also in Britain. Specifically, findings from Study 2 showed that when mothers have highly tolerant attitudes towards children's *amae* behaviours (Anxious-*amae*, in particular) their children tend to be classified as insecure in both countries, possibly because the maternal behaviour stemming from these attitudes prevents children's exploratory behaviours.

Secondly, the results from Study 2 suggest that although attachment classifications did not differ across cultures, mothers' attitudes towards children's *amae* behaviours

expressed during a non-stressful situation may differ. This seems to indicate, as Behrens (2010) suggests, that there is a functional difference between attachment and *amae*. Although attachment behaviours are defined as “any form of juvenile behaviour that results in proximity to the mother” (Bowlby, 1969, p. 226), the most fundamental aspect of attachment theory is its focus on the biological bases of attachment behaviours (Bowlby, 1969). According to this theory, attachment behaviour has the predictable outcome of increasing the proximity of the child to the attachment figure, thereby affording survival advantage to the child. Ainsworth (1963) and Schaffer and Emerson (1964) list hunger, fatigue, illness, unhappiness and pain as the typical triggers of infant attachment behaviours. In contrast, the Japanese would not call behaviours stemming from such factors *amae*. In fact, *amae* behaviour becomes more evident in later, post-infancy developmental stages. For instance, if a three-year-old child shows a desire to be picked up or buries his face in his mother’s chest when not in distress, then the child would be demonstrating *amae*, perhaps to enjoy the pleasurable feeling of the warmth of the mother, or of basking in the mother’s arms (Behrens, 2010). Behrens continues further that *amae* can be seen when children demonstrate behaviour which demands their caregivers’ attention even when there is no cue of danger or distress, for instance, by acting helplessly or immaturely in everyday, non-threatening situations.

Another interesting cultural difference which emerged in Study 2 was in the way Japanese and British children expressed the maternal needs of the child doll during the mildly stressful scenarios in the MCAST. Some of the Japanese children demonstrated the ‘mother doll’ as responding more sensitively to non-verbal cues of the child’s needs, whereas British children more often showed her responding to the

child's explicit verbal expression of needs. This finding is in line with findings from previous studies (e.g. Rothbaum et al., 2006) that Japanese parents and teachers emphasise the importance of anticipating children's needs based on subtle and indirect cues, such as situational factors.

Studies 1 and 2 have provided evidence of cross-cultural differences in maternal attitudes towards children's *amae* behaviours and cross-cultural similarities in attachment classifications patterns and in the relationship between attachment and *amae*. However, what is not yet clear is how the maternal attitudes measured in the AAS and the children's attachment behaviours demonstrated in the MCAST relate to the actual interactions between the mother and child in everyday life. It would also be fruitful to explore maternal sensitivity during such naturalistic interactions, and how this relates to their *amae* attitude and to their child's security of attachment. These issues will be explored in Study 3, to be presented in this chapter. The concept of 'emotional availability' is central to any such research, and so some discussion of this is required, prior to presentation of the study and its findings.

7.1.1 The concept of emotional availability

Bowlby (1969, 1982) argues that the development of the attachment system is a function of caregivers' physical presence, but that the quality of attachment relationships between infants and caregivers is dependent upon the degree to which caregivers serve as a secure base for infants. Ainsworth et al. (1978) also emphasised maternal sensitivity as an important antecedent factor for infants' attachment security. According to Ainsworth and her colleagues, the sensitive caregiver is accessible and appropriately responsive, as well as tuned to the infant's signals.

Since maternal sensitivity was identified as a cornerstone of caregiving that promotes infants' attachment security, numerous studies have attempted to validate this construct. Many have confirmed the association between maternal sensitivity and infants' secure attachment (e.g. Belsky, Fish, & Isabella, 1991; van den Boom, 1994), although there have been exceptions (Rosen & Rothbaum, 1993; Seifer, Schiller, Sameroff, Resenick, & Riordan, 1996). Such inconsistent findings, along with a smaller than expected effect size of sensitive parenting on attachment security (Goldsmith & Alansky, 1987), have been interpreted to reflect differences between studies in research methodology, such as observation strategies employed and the validity levels of the coding schemes utilised (Rosen & Rothbaum, 1993). Another criticism is that studies have used a multidimensional definition of the sensitivity construct that is too broad and hence difficult to operationalize tightly (Seifer & Schiller, 1995).

In fact, De Wolff and van IJzendoorn (1997) concluded, on the basis of a meta-analytic investigation, that maternal sensitivity is an important condition for the development of attachment security but that it is not the only parenting antecedent of infant attachment. Accordingly, it has been argued that to truly understand the antecedent relations between parenting behaviour and children's attachment, it is necessary to specify all of the parenting components that are supportive of secure attachment (De Wolff & van IJzendoorn, 1997). While a number of components have been put forward (e.g. mother's acceptance and accessibility), one central factor is thought to be the regulation of affect in the caregiving relationship and the contributions of both partners to the affective relationship (Cassidy, 1994; Cassidy &

Berlin, 1994).

However, this emphasis on emotion in the attachment relationship is not new. Indeed, some time ago, Mahler, Pine, and Bergman (1975) characterised caregivers' ability to provide a secure base for their infants as 'emotional availability'. Accordingly, they described the emotionally available caregiver as promoting an atmosphere of 'quiet supportiveness' for autonomous play, thus encouraging infants' exploration. Sorce and Emde (1981) also stressed the importance of affective relationships for secure attachment. They quote Bowlby's (1973) statement that "a mother can be physically present but 'emotionally' absent" (p. 23), and they hypothesised that not only is the mother's physical presence or sensitive response necessary to promote secure attachment but also her 'emotional availability' is required.

Based on this view, Emde and Easterbrooks (1985) theorised that emotion is likely to be a sensitive barometer of the relationship between a parent and child. They stated that "emotional availability will, therefore, refer to the degree to which each partner expresses emotions and is responsive to the emotions of the other" (p. 80). Emde and his colleagues (Emde, 1980, 1983; Emde & Easterbrooks, 1985; Sorce & Emde, 1981) also stated that affective attunement to a wide range of emotions, negative as well as positive, is an important facet of emotional availability. Further, they state that it is not simply physical availability but emotional availability of the parent that promotes infant's self- and emotional expression (Sorce & Emde, 1981). Since then, the concept of emotional availability has been used to refer to the quality of emotional exchange between parents and their children, encompassing both emotional signalling and emotional understanding in each partner and the emotional

accessibility of one to the other (Biringen & Robinson, 1991).

Biringen and colleagues (e.g. Biringen, Robinson, & Emde, 1993) have further developed this concept of emotional availability, drawing on, and integrating elements of, both attachment (Ainsworth et al., 1978) and previous emotional availability theory (Emde, 1980; Mahler et al., 1975). Their conceptual underpinnings of emotional availability have some distinctive attributes which are somewhat different from Ainsworth et al.'s idea of maternal sensitivity. Firstly, as Biringen (2000) explains, one of the important differences is that in their emotional availability framework, maternal sensitivity is described not only as responsiveness to child cues and signals but also in terms of emotional features (i.e., the emotional expressiveness of the parent and his or her understanding of the child's emotional cues). Secondly, within Biringen's framework, emotional availability in mother–infant/child dyads is considered to be founded on a mutually rewarding communication system. Thus a greater degree of emotional availability would be characterised by an emotional atmosphere that is marked by positive affect rather than by absence of negative affect. Thirdly, emotional availability is viewed as a dyadic composite that involves mutual regulation and willingness to share activities and affective states between parent and child. Consequently, children are regarded more as active contributors to the interactive exchange and its shaping, and not just viewed as passive recipients who are influenced by their mothers' behaviour (Biringen, 2000).

7.1.2 Development of the Emotional Availability Scale

In order to directly assess emotional availability in mother-infant/child dyads,

Biringen and colleagues developed the Emotional Availability Scale (EAS: Biringen & Robinson, 1991; Biringen, Robinson, & Emde, 1993). This scale is used to assess naturalistic interactions between caregivers and children and is the only standardised measurement for assessing emotional availability (EA). The EAS is designed to capture facets of emotional transactions in the dyad by focusing on the behavioural contributions of both partners by scoring both the mother and the infant (Biringen & Robinson, 1991; Biringen et al., 1993). This approach emphasises the positive shared meaning of the parent–infant/child interaction, and does not allow non-concordance between parent and child scores, such as high sensitivity for a parent and non-responsiveness for the child (Biringen et al., 1993). In other words, a parent who shows positive affect but receives only negative responses from the child cannot be regarded as ‘emotionally available’ according to this approach.

In the first published account of the EAS, Biringen & Robinson (1991) described the importance of parental sensitivity, structuring, and nonintrusiveness, as well as child responsiveness and involvement, to understanding the quality of emotional availability in the parent-child relationship. Since then, the EA conceptualisation has been refined (Biringen, 2000) and has come to include parental nonhostility, as well as distinct dimensions for parental structuring and nonintrusiveness. Separate versions of the scales have also been created for infancy/early childhood and for middle childhood. In the following section, the conceptualisation of these four parental dimensions and two child dimensions of the EAS are described, and the findings of research using the EAS will then be reviewed.

7.1.3 Parental emotional availability (EA)

The parental side (in the context of this thesis, the mother) of the EA concept consists of parental sensitivity, structuring, nonintrusiveness, and nonhostility. The concept emphasises the emotional features of interactions - both parental emotional signalling and adult understanding of the child's signalling. Assessment of parental EA is based on certain precepts. Each dimension is judged in context. The judgement is “holistic and clinically sensitive, not founded on counts of discrete types of behaviour” (Biringen 2000, p.105); for example, amount of parental smiling is less indicative of sensitivity than is a generally calm, contented, and relaxed emotional presence. As previously mentioned, EA is a dyadic construct: although parental and child aspects are viewed in terms of separate dimensions, it is the interaction or relationship between the two that characterises EA - neither parent nor child can ‘look good’ without taking the interactive partner into account. Thus, a parent overwhelmed by a child's lack of clarity in emotional signalling (e.g., parents of children with autism or Down's Syndrome) may be viewed as less emotionally available in this system, because the construct is dyadic, not individual. On the other hand, a parent who copes well with such challenges to dyadic emotional communication should not be viewed as individually less emotionally available merely because the child is, for example, autistic (Biringen, 2000).

Parental sensitivity

The dimension of parental sensitivity in EA is inspired by Ainsworth's conceptualisation of maternal sensitivity that emphasises the importance of clarity of perception and prompt responsiveness to the child's signals and communications, mother's awareness of timing and flexibility (Ainsworth et al., 1978). The EA view

of sensitivity, however, is broader in that it also emphasises affective interactions and negotiation of asynchronous interactions. According to Biringen (2000), the most critically important aspect of EA sensitivity, though, is the role of emotion (appropriate emotional expression and reception). How parents not only pick up children's emotional signals but also emit their own is central. For example, a parent acting very warmly can be viewed as highly sensitive only if the parent's affect is perceived as genuinely positive, rather than pseudo- or forced-positive, referred to as 'apparently sensitive' (Biringen, 1998). Thus, sensitivity includes both physical and emotional responsiveness to children's physical and emotional signals and communications.

Parental structuring

Parental structuring refers to the ability of the parent to support learning and exploration without overwhelming the child's autonomy and in a way to which the child is receptive. It involves providing rules, regulations, and a framework for interactions. Because EA is a dyadic construct that takes emotional signalling and its reception into account, structuring is adequate only if the parent's bids or attempts at support are successful.

The parent can only structure in the "zone of proximal development" (Rogoff 1990; Vygotsky, 1962) by attending to the child's cues, and it is the interaction, not the parent's individual or discrete behaviour, that is taken into account. EA structuring, therefore, is not a means of evaluating the cognitive-growth fostering, quality of teaching, or quality of stimulation offered to the child. Optimal structuring in the context of interactions refers to an appropriate degree of support that allows for the

child's reactions to the support. Parents whose structuring is optimal seem to provide consistent (but not excessive) clues and suggestions, as well as framework, rules, regulations, and expectations for the child and for the relationship.

Parental nonintrusiveness

In contrast to parental structuring, parental nonintrusiveness refers to the ability to be available to the child without being interfering, overprotective, or overwhelming. The quality of emotionally 'being there' and available when needed is indicative of nonintrusiveness. In the early years, important aspects of nonintrusiveness include the parent's ability to be emotionally present, both verbally and nonverbally, without taking charge; to use indirect and diversionary, rather than direct, techniques to control behaviour and instil obedience; and to interact at a moderate level that neither abandons nor overpowers the child with parental initiations for contact (Biringen, 2000). As the child grows older, nonintrusiveness comes to include the ability to listen with an emotional presence rather than 'filling in' or talking for the child, and to grant some autonomy in making important daily decisions. At all ages, when children experience difficult or challenging moments, nonintrusive parents are less prone to 'rescue' and more likely to allow the children to discover their own solutions (Biringen, 2000). Parental nonintrusiveness has to do with patience and allowing children to experience the world, particularly its challenging aspects, with confidence that they are equipped to meet the challenge.

Parental nonhostility

Nonhostility, covert or overt, refers to ways of talking to or behaving with the child that are generally patient, pleasant, and harmonious. Although the definition is

clearly tipped toward the positive, nonhostile parents can nevertheless be assertive when necessary and appropriate, express ‘anger in a titrated and appropriately controlled’ fashion, and manage the child’s aggressive impulses. With younger children, nonhostile parents are able to remain calm and suitably controlled, even in such challenging conditions. As children grow older, nonhostile parents are able to reason and explain without ‘acting out’ their frustrations. Thus, the nonhostile parent's emotion regulation is context- appropriate, and takes the child into account.

7.1.4 Child emotional availability (EA)

Children's EA to parents may also be viewed in terms of attachment and emotional frameworks.

“It is manifest in children's affective interactions with parents and in their secure base behaviour, a term used here much as it is in attachment theory, in that it takes into account the child's balance between connection and autonomy.” (Biringen, 2000, p. 106)

Whereas Ainsworth's use of the term referred predominantly to children's physical exploration away from followed by return to the parent (Ainsworth et al., 1978), here the term refers to the balance of emotional connection and emotional autonomy between parent and child. Connection and autonomy may be shown through physical proximity-seeking and distancing, visual contact with the parent followed by independent activity, or by topics arising in conversation and play. The interaction between parent and child is then judged in terms of relatedness and autonomy. In the EAS, the child dimensions consist of *child responsiveness* and *child involvement*.

Child responsiveness

Child responsiveness to the parent refers to children's age- and context-appropriate ability to explore on their own and to respond to the parent in an affectively available way. A balance between connection and autonomy, plus emotional responsiveness to the parent, are the best indications of this quality and, presumably, of good adjustment in the context of the parent-child relationship. In younger children, such responsiveness might take the form of a happy atmosphere in interaction and a balanced connection with the parent. As children grow older, their emotional availability to the parent is also manifested in more symbolic ways. For instance, they may take the lead in creating intersubjective relatedness (Stern, 1985), expressing joint attention, laughing or smiling as if child and parent shared a memory of experiences, as well as present interactive connectedness (Biringen, 2000). In narrating themes of play, children may show clear positivity, in both nonverbal affect and the verbal domain. In play, they depict parental figures as kind and loving, while separation experiences are resolved warmly and promptly. The child views the world as safe, secure, and benevolent. To be considered responsive in this framework, a child would show appropriate emotional connection with the parent, and responsiveness that was balanced with autonomy.

Child involvement of the parent

Children's emotional availability to the parent can also be expressed by involving the parent in interaction. Optimally, this would entail initiating eye contact, asking questions, narrating a storyline, or showing and demonstrating materials to the parent in a comfortable, non-urgent, and positive manner. The child would also 'socially reference' (Klennert, Emde, Butterfield, & Campos, 1986) the parent in times of

uncertainty, such as novel or stressful situations. The balance of involving behaviour and independent activities indicates secure base behaviour. In the early years, the child involves the parent by visually, behaviourally, or vocally ‘checking in’ with the parent. In the older child, optimal involvement is manifest through a balance between seeking out the parent and independent activity. In pretend activities, the child may assign a particular role to the parent or space silences skillfully enough to give the parent the role of respondent. Optimally, the level of involvement of the parent would be well balanced and would not entail over- or under-involving styles of interaction.

Each of above six individual EAS dimensions focuses on behaviour of one partner; however, all EA dimensions are viewed as relationship variables because each takes the other partner’s behaviours into account. Thus, while the EAS assesses specific behaviours of individuals, global ratings of dyads are also designed to capture joint interactional style at the same time.

Maternal Sensitivity ranges from 1 (*highly insensitive*) to 7 (*highly sensitive*); maternal Structuring ranges from 1 (*nonoptimal*) to 7 (*optimal*); maternal Nonintrusiveness ranges from 1 (*intrusive*) to 7 (*nonintrusive*); and maternal Nonhostility ranges from 1 (*markedly hostile*) to 7 (*nonhostile*). Child Responsiveness ranges from 1 (*nonoptimal*) to 7 (*optimal*); and child Involving of Mother ranges from 1 (*nonoptimal*) to 7 (*optimal*). These six dimensions can be summed to produce a total EA dimensional sum score (from 1 to 42). Although the EAS dimensions were developed within a European American research context, operationalisation of the EAS attest that they are applicable to parenting and child

development in at least some other cultures (Bornstein, Putnick, Heslington, Gini, Suwalsky, Venuti, Falco, Diusti, & Galperrin, 2008).

7.1.5 Previous research into the relationship between EA and attachment

Although there has as yet been no work exploring the relationship between maternal *amae* attitude and naturalistic mother-child interaction (using EAS), there has been some work exploring cross-cultural differences in EA and work on the relationship between attachment and EA, and this will be reviewed. The following section will first look at cross-cultural differences found in EA studies, and then it will go on to look at relationships between the concept of EA and attachment, and cross-cultural research on this.

There is some evidence of cross-cultural differences in EA. A cross-cultural framework was used to examine the concept across nations by Bornstein, et al. in 2008. In their large-scale study, 220 Argentine, Italian, and U.S. mothers from both rural and metropolitan areas took part in home observations with their firstborn children when they were 20 months old. In terms of country, they found that Italian mothers were more sensitive and structured the interaction in the most optimal fashion, and that Italian children were more responsive and involving than in the Argentine and U.S. dyads. As the authors discuss, this difference accords with cultural findings from another study showing that in comparison to U.S. mothers, Italian mothers display high levels of social-affective and hand-holding behaviours when with their young infants, and Italian dyads are more likely to openly express affection to each other (Hsu & Levelli, 2005). Bornstein et al.'s finding may reflect

Italian mothers' central cultural belief in the importance of socio-emotional interactions with their children. Within-country regional differences also seemed to relate to EA in their study. They also found that, regardless of country, rural mothers were more intrusive than metropolitan mothers, and that boys from metropolitan areas were more responsive than boys from rural areas.

Research has also explored the relationship between attachment and EA in a purely Western context. One such study was a longitudinal study conducted in the US by Easterbrooks, Biesecker, and Lyons-Ruth (2000). They examined the extent to which differences in early patterns of mother-infant attachment would be apparent in aspects of EA between mothers and children more than 5 years later, in middle childhood. Forty-five infants (19 girls, 26 boys) and their mothers, primarily of European-American background (80%), were seen in the standard laboratory Strange Situation to assess quality of attachment. They were then followed up at 7 years of age and observed in a laboratory playroom. Assessments of EA in the dyad were conducted based on a 5–10-minute child–mother reunion following an hour-long separation. This was evaluated using the Middle Childhood version of the EAS (Biringen *et al.*, 1993).

Easterbrooks *et al.* found that each of the indicators of EA in middle childhood (maternal sensitivity, maternal structuring, child responsiveness, and child involvement) was predicted by security of attachment in infancy. Secure attachments in infancy, characterised by open emotional communication and the ability to give and gain comfort in times of stress and distress, were associated with more open and well- functioning emotional dialogue when children were 7 years old. More

specifically, the emotional communication among dyads identified as securely attached was not restricted to positive emotions. A range of emotions was expressed; children appear feisty towards their mothers, challenging them, but the communications were direct, met with good humour by mothers, and easily resolved, rather than escalating. The dyads characterised by insecure attachments, disorganised attachment in particular, showed that some mothers sat listlessly, watching their children and failing to respond to the child's repeated questions. Other mothers entered the room and engaged with play material on their own, with little regard to engaging their children in interaction, or responding to them. These children showed greater impairment in their efforts to involve their mothers in interaction, either ignoring them, or seeming overly involved with them, by showing a sense of 'diminished autonomy' and being always responsive to the mother.

Although the Easterbrooks et al. study found significant association between the security of attachment, maternal sensitivity and maternal structuring when the child was an infant and child, it is important to note that the sample was distinctive in that half had been referred to a home-visiting program due to maternal caregiving difficulties in infancy and most families were of low income. In addition, a disproportionate percentage (40%) of the dyads were characterised as showing disorganised attachment in infancy. Thus, Easterbrooks et al.'s sample was not representative, and further research with samples drawn from other socio-economic groups will be necessary.

A very small body of work has explored the relation between EA and patterns of attachment security in non-Western contexts. For example, Aviezar and colleagues

(Aviezar, Sagi, Jpels, & Ziv, 1999) examined the associations between emotional availability and attachment within Israeli kibbutz communities. In their study, 48 mother-infant dyads from 2 kibbutz sleeping arrangements (communal and home-based) were examined in terms of several factors, including mother-infant attachment (using the Strange Situation paradigm) and emotional availability (using the EAS). The participating infants (26 boys and 22 girls) were 14-22 months old.

Security of infant attachment (using the Strange Situation classifications) was found to be related to EA, particularly the maternal sensitivity dimension, with securely attached infants more likely to display greater EA during interactions than insecurely attached infants. In home-sleeping arrangements only, secure infants had mothers with greater EA (structuring and sensitivity). Such relations between EA and infant-parent attachment were absent for those in the collective-sleeping arrangement of the kibbutz. These findings suggest that the relations between attachment and EA are conditional on the ecological context of child care. They also indicate that the context might play a determining role in the associations between emotional availability and attachment. Although sleeping arrangement of infants were not mentioned in their study, the concurrent associations between attachment security and EA (maternal sensitivity and structuring, infant responsiveness and involvement) were replicated in the large scale research with 687 Israeli mother-infant dyads reported a year later by the same research group, Ziv and colleagues (Ziv, Aviezer, Gini, Sagi, & Koren-Karie, 2000).

In sum, research carried out to date on EA and attachment suggests that the two are linked, not only in Western countries, but also in at least one non-Western country.

However, there have been no studies as yet that have assessed the association between child attachment security and maternal sensitivity using either Ainsworth's maternal sensitivity scale or the EAS in Japan. Moreover, until now, there have been no published reports of the EAS being used in East Asia⁴. Therefore, one of the main purposes of the next study to be reported was to examine any association between child attachment security and maternal sensitivity as assessed within the EAS framework. In addition, the relation of these factors to maternal attitudes towards their child's *amae* behaviour will be explored.

7.2 The present study

As will be seen below, Study 3 utilises the EAS, AAS and the MCAST to explore associations between child attachment and emotional availability in Japanese and British mother-child dyads and to investigate any cross-cultural differences in any linkages identified. The AAS and the MCAST have been described in full in preceding chapters. The EAS was chosen for this study as it is the only standardised measurement that allows us to assess EA. In comparison to Ainsworth's maternal sensitivity scale, the EA approach additionally opens up the possibility of examining combinations of sensitivity and moderate intrusiveness, or sensitivity and low responsiveness in relation to attachment. The differentiation of the parental structuring and nonintrusiveness dimensions in the current version of the EA scales also opens up the possibility of examining the combined and differential effects of

⁴ There is now one published study (Komatsu, 2010; Appendix E), based on an extension of the data to be reported here.

these dimensions on attachment. Given the recent debate about the modest effect sizes in predicting attachment from maternal sensitivity (van IJzendoorn, 1995), the EA approach was also chosen as it was thought it might provide context for a more multifaceted look at the interactional correlates of attachment.

Another significant aim of the current study was to observe children's *amae* behaviours as expressed during the EA observation. Because the EAS does not restrict the context of observation, it was expected to provide a good opportunity to observe mother-child *amae* interaction at home. There was, however, a dilemma in terms of the choice of the home context. Although naturalistic observation may help in arriving at a better understanding of the *amae* relationship between mother and child, it could potentially make EAS scoring more difficult because it is generally better to include the slightly challenging structured task for the children when applying the EAS in order to provide a context in which parental-structuring might be observed. In addition, given that the study sought to compare mother-child interactions across two cultures, some further potential differences (e.g. size of the house, numbers of the rooms, differing toys) also needed to be taken into account and controlled as far as was possible. Therefore, rather than naturalistic observation, a semi-structured approach to observation at home was chosen as the context of EA scoring and *amae* observation.

In conducting this study, it was hypothesised:

- i) AAS findings would be similar to those from Studies 1 & 2, with Japanese mothers being more tolerant in their attitudes towards their children's *amae* behaviours than British mothers

- ii) Attachment classifications in the MCAST would again be similar across cultures, as in Study 2
- iii) A positive association between children's attachment security and EA would be found in both Japan and Britain, as found in Israeli and U.S. studies of attachment and EA
- iv) Japanese children, compared to their British counterparts, would show more frequent *amae* behaviours during the semi-structured observation at home.

7.3 Methods

7.3.1 Participants

40 mother-child dyads participated in this study, 20 Japanese and 20 British pairings. A letter with a detailed description of the study and contact details of the researcher was distributed to parents of 4-5 year old children in Japan and Britain via kindergarten and nursery schools. Research leaflets in Japanese were distributed at 3 private and 2 state kindergartens in suburban and central areas of Tokyo; those in English were distributed in 4 state and 6 private nurseries in Edinburgh, with permission from the Edinburgh City Council and the head teachers of each nursery school.

In Japan, 17 of the 20 dyads were recruited through the above procedure and 3 dyads through word-of-mouth amongst participants. The response rate in Japan was 11%. The Japanese sample consisted of 8 boys and 12 girls, and their mean age was 61.0 months (range 54-71 months, $SD=6.71$). Mothers (all married) ranged in age from 26

to 38 years ($M=33.20$, $SD=3.46$); 14 of Japanese mothers being housewives and 6 of them working part-time.

In Britain, 15 of the 20 dyads were recruited via nurseries and 5 dyads through word-of-mouth amongst university colleagues. The response rate at the nurseries in Britain was less than 5%. The British sample consisted of 10 boys and 10 girls, and their mean age was 59.0 months, with a range of 50-71 months ($SD=5.39$). Mothers (all married) ranged in age from 27 to 43 years ($M=36.40$, $SD=4.16$); 7 of the British mothers being housewives, 1 of them studying part-time, 2 of them working full-time, and 10 of them working part-time.

The birth order of children from Japan and Britain is shown in Table 7.1 below, and shows that the groups were very similar in this respect. For this study, a question regarding mother's educational qualification was added to the *Amae* Attitude Scale (AAS) and the responses are as shown in Table 7.2 below.

Table 7.1 Breakdown of children's birth order

	Japanese ($n=20$)		British ($n=20$)	
	Frequency	Percent	Frequency	Percent
Only child	6	30	2	10
Oldest among 2 children	8	40	8	40
Middle among 3 children	1	5	1	5
Youngest among 2 children	2	10	7	35
Youngest among 3 children	1	5	0	5
Twin	2	10	2	10

Table 7. 2 Breakdown of mothers' highest educational qualification

	Japanese (<i>n</i> =20)		British (<i>n</i> =20)	
	Frequency	Percent	Frequency	Percent
A levels/Highers or equivalent	2	10	2	10
College qualification or equivalent	11	55	1	5
University degree	7	35	8	40
Post graduate qualification	0	0	9	45

An independent samples *t*-test showed no significant difference between the Japanese and British participants in children's age, ($t(38) = 1.39$, ns) and in children's verbal age level as assessed by the Picture Vocabulary Test (PVT)/ British Picture Vocabulary Test (BPVS) respectively - see Chapter 6 and below ($M=61.2$ months, $SD=13.61$ and $M=58.32$ months, $SD=13.41$ respectively; $t(38) = 1.25$, ns). However, British mothers' age was significantly higher than that of Japanese mothers ($t(38) = 2.65$, $p < .05$, $d = .84$). There was also a significant difference in mothers' educational qualification between the two samples, ($\chi^2 = 17.64$, $p = .01$); compared to Japanese mothers, British mothers had higher educational qualifications.

7.3.2 Materials and procedure

The data collection was conducted at each participant's home. Home visits were usually carried out in the afternoon after the children had come back from the nursery, but 3 visits in Japan and 4 visits in Britain were made during the weekend, mostly because the family had younger children and additional childcare help was necessary to allow testing to be carried out without any interruptions. After the researcher explained the study in detail and had obtained a written consent from the mother (see 'ethical considerations' section below), data were collected as follows:

Emotional availability

The mother and child were asked to sit either at their dining room table or their coffee table and to play with an Etch-A-Sketch. The mother was asked to operate the vertical dial and the child was asked to operate the horizontal dial to create first a house and then a boat. A sketched house and boat were placed in front of the mother-child dyads, but it was emphasised that the task was not to see how well they could draw. After the researcher had explained this procedure, the mother and child dyads were left in the room alone. This episode lasted for 5 minutes. Following the Etch-A-Sketch game, the researcher returned to the room and replaced the Etch-A-Sketch with Playmobile toys (knights and princesses). The mother-child dyads were instructed to interact as they would normally with these toys. The researcher again left the room at this point. After a period of 15 minutes, the researcher returned and asked the child to help clean up the toys. Each interactive session (including instruction) was videotaped for later analysis. The Emotional Availability Scales: Infancy to Early Childhood Version⁵ (EAS, 4th ed.; Biringen, 2000) were used to evaluate these 20 minutes of mother-child play.

Amae attitude scale

After the EA session, the mother and the child were then separated, with the mother going to a different room to fill out the AAS privately and the child remaining in the room with the researcher for the language assessment and MCAST session.

⁵ The researcher completed a 4-day Emotional Availability Training on the 4th edition of the EA Scale and EA sub-scales lead by Prof. Zeynep Biringen in Boulder, Colorado in April, 2009. Reliability of administration and subsequent coding technique were assessed by Prof. Biringen after the training and the researcher was deemed to be a reliable coder in July, 2009.

Language assessment /verbal mental age

As in Study 2, the BPVS was administered to the British children and the PVT to the Japanese children. It took 10 to 15 minutes to administer each version of the test. At the end of this small task, a small thank-you sticker was given to the child.

MCAST

Following the language assessment, the MCAST was administered. Administration and coding procedure for this measure was the same as in Study 2. All videotaped sessions were coded by the researcher, a qualified reliable MCAST coder, and 10% of the Japanese data (2 sessions) and 10 % of the British data (2 sessions) was coded by a qualified reliable MCAST coder who was blind to the hypotheses of this study. Inter-coder agreement on each of the four MCAST attachment categories for every session was 100%. Inter-coder agreement on the ten subcategories for one of the Japanese cases was not achieved (between B2 and B4), but final agreement was obtained after discussion. Inter-coder agreement on all other subcategory data was achieved. Because the amount of re-coded data was so small, inter-coder agreement rates were not analysed statistically.

7.3.3 Ethical considerations

As in the previous studies, this study followed The University of Edinburgh Research Ethics Policy and Procedures. Furthermore, renewed Disclosure Scotland clearance was sought and gained because the researcher would be visiting nurseries to recruit participants. For the Japanese data collection, it was considered important, as before, to follow Japanese ethical guidelines and Japanese law in addition to Scottish Law.

Thus, the Personal Information Protection Law (enacted on 1st of April, 2005) and the Ethical Guidelines of Tokyo University were adhered to.

The purpose of the study was fully explained to the mother and the child together prior to the session. Although written consent was obtained only from the mother, the child was asked if it was okay for them to participate and for the session to be filmed. It was especially made clear to the dyad that participation in this research was entirely voluntary, but that at any time they could change their mind about this and would be free to withdraw from the research without having to give any explanation to the researcher or anyone else. (Loewenthal, 2001; The British Psychological Society, 1995). It was also explained that the names of the participants would be kept anonymous in any publication, report, paper or presentation of the findings. They were told that all identifying information would be kept confidential with the one exception that in the unlikely event of being given reason to suspect that a child was at risk, the relevant authorities would be notified (see Appendix D for full details of the information/consent materials).

7.3.4 Analysis

Analysis of EAS data

As described earlier in this chapter, EA is conceptualised as an interactive construct, and the EAS coding system consists of four parent variables (sensitivity, structuring, nonintrusiveness, nonhostility) and two child variables (responsiveness, involvement). Each of these is coded from 1 to 7 as described above, with low scores representing non-optimal interactions and high scores optimal interactions.

All videotaped sessions were scored by the researcher, a formally-recognised reliable coder of the EAS. Because there is no other trained Japanese coder for the 4th version of EAS, all Japanese scripts were translated into English by two bilingual researchers, and then the two translations were compared and discussed. Agreed translation was then added as a subtitle to each of the Japanese video clips. Eight Japanese clips (40% of all Japanese data) and 4 British clips (20% of all British data) were randomly selected and cross-rated by Prof. Biringen's research assistant for inter-rater reliability. All of these videos and coded scores were also checked by Prof. Biringen herself. All inter-rater reliabilities were at least 80% (Pearson's correlation 82-91%).

Amae/amayakashi behaviours during the EAS observation

For each EAS session children's *amae* expression was rated from 1 to 3, 1 being the lowest and 3 being the highest frequency of *amae* behaviours. The *Amae* behaviour focused on in this observation was in line with the behaviours explored in the AAS, such as clambering up on the mother's lap, burying the face against the mother's chest, sustaining close physical contact, asking the mother to do something which the child could clearly do himself, and persistent requests or demands for the mother's attention. Although intensity of *amae* (e.g. being persistent) was taken into account, frequency of such behaviour was mainly reflected in the score. Scores did not reflect a precise number of occurrences of *amae* behaviour, but children with an *amae* score of 1 displayed no *amae* behaviour, whereas those with a score of 3 displayed around 5 occurrences of the behaviour during the EAS session.

After observed the EAS video clips, it was noticed that it was not only the child who

initiated *amae* behaviours, but also that the mother often initiated the *amae* relationship by, for instance, inviting the child on her lap. Although recent *amae* research has focused on the child's *amae* behaviours towards the mother, the EAS video clips showed that it may not be the case that the child is always the instigator of *amae* behaviours. In fact, Lebra (1976) claimed that the mother can also take an active role in *amayakasu* behaviour (letting/inviting *amae* behaviours), for example, by encouraging and inviting the child to be physically close to her and to be cuddled. Therefore, the coding of maternal *amayakashi* (noun of *amayakasu*) behaviours was added into the analysis. Mother's *amayakashi* expression in each EAS session was also rated from 1-3, 1 being the lowest and 3 being the highest degree of *amae* behaviours. Similar to the coding of *amae* behaviours, although intensity of *amae* (e.g. being persistent) was taken into account, frequency of such behaviour was mainly reflected in the score. Scores did not reflect a precise number of occurrences of *amayakashi* behaviour, but mothers with an *amayakashi* score of 1 displayed no *amayakashi* behaviour, whereas those with a score of 3 displayed around 5 occurrences of the behaviour during the EAS session. As with the analysis of *amae* behaviour, inter-rater coding of these behaviours was outwith the scope of this thesis.

In the following section, firstly, data from the AAS will be compared across the Japanese and British samples. Secondly, attachment classification patterns obtained from the MCAST sessions will be described, followed by an examination of the association between AAS data and MCAST data. Thirdly, EA scores from the EAS will be compared across the two cultural groups, and then the association between EA and attachment classification will be analysed. Finally, *amae* behaviours of children and *amayakashi* behaviours of mothers during the EAS observation will be

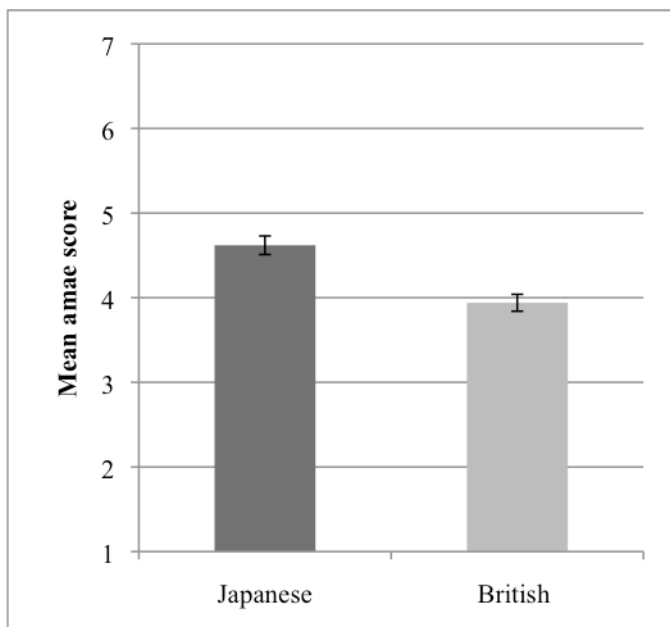
examined. The correlation between these behaviours and AAS scores and EAS scores, and any association with attachment classification patterns will be also analysed.

7.4 Results

7.4.1 AAS scores

In the initial analysis, the averaged maternal scores across all 29 AAS items were compared across the two groups. As shown in Figure 7.1 below, an independent *t*-test indicated that the Japanese mothers showed more tolerant attitudes overall towards their children's *amae* behaviours than did the the British mothers ($M=4.62$, $SD=.49$, and $M = 3.94$, $SD =.45$, respectively; $t(38) = 4.53$, $p<.01$, Cohen's $d = 1.45$).

Figure 7.1 Mean total *amae* score



As in Study 2, the next part of the analysis looked at, firstly, the difference between

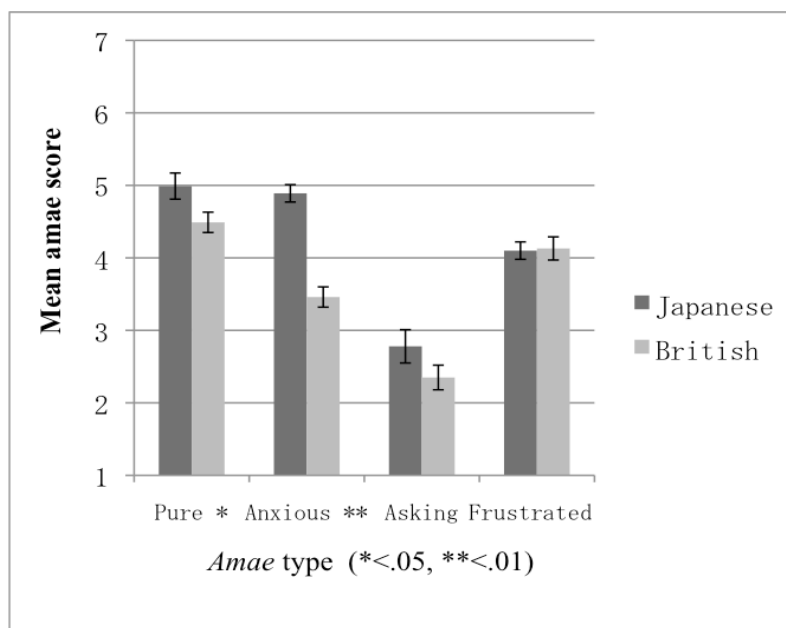
Japan and Britain in scores for each AAS category, and then, within each country, at whether there were differences in attitude to each type of *amae*. The mean *amae* attitude scores of each *amae* category in both samples are shown in Table 7.3.

Table 7.3 Mean (SD) AAS score for the 4 *amae* categories in the Japanese and British samples

<i>Amae</i> type	Japanese (n=20)		British (n=20)	
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>
Pure	4.99	0.79	4.49	0.61
Anxious	4.89	0.55	3.46	0.62
Asking	2.78	1.02	2.35	0.76
Frustrated	4.1	0.53	4.13	0.72

A MANOVA (nationality (2) x *amae* types (4)) revealed that maternal attitudes towards these distinctive types of children's *amae* behaviours differed significantly in the Japanese and British mothers ($F(1, 75) = 17.69, p < .01$), with Japanese mothers showing more positive attitudes than British mothers towards 2 categories of children's *amae* behaviours: Pure ($F(1, 38) = 4.99, p < .05$) and Anxious ($F(1, 38) = 59.96, p < .01$). There were no significant differences in the Japanese and British mothers' attitudes towards Asking ($F(1, 38) = 2.30, ns$) or Frustrated ($F(1, 38) = .02, ns$) *amae*, as shown in Figure 7.2 below.

Figure 7.2 Mothers' attitudes towards specific child *amae* behaviours



A one-way, repeated measures ANOVA was then carried out in each cultural group in order to examine whether maternal attitudes were different depending on the specific type of child *amae* behaviours being rated. The results showed that Japanese mothers' *amae* attitude scores were significantly different depending on the type of *amae* ($F(3, 57) = 47.73, p < .01, r = .83$). Bonferroni post-hoc tests revealed significant differences between maternal attitudes towards Pure and Asking ($p < .01$), Pure and Frustrated ($p < .01$), Anxious and Asking ($p < .01$), Anxious and Frustrated ($p < .01$), but not between Pure and Anxious *amae* ($p = ns.$).

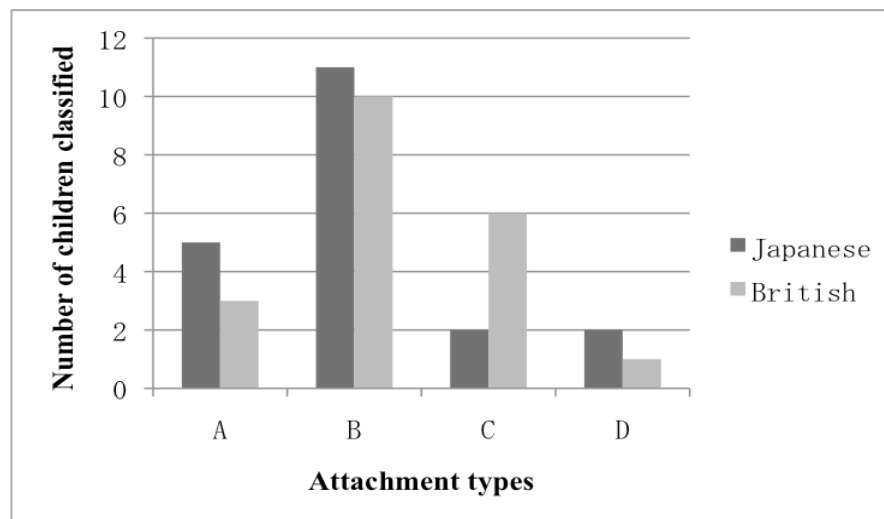
A significant effect of different types of *amae* behaviours was also found in the British sample ($F(3, 57) = 43.17, p < .01, r = .69$). Bonferroni post-hoc tests revealed significant differences between Pure and Anxious ($p < .01$), Pure and Asking ($p < .01$), Anxious and Asking ($p < .01$), Anxious and Frustrated ($p < .01$), but not between Pure and Frustrated *amae* ($p = ns.$).

7.4.2 MCAST data

Children’s attachment classifications based on their MCAST responses are presented in Table 7.4 and Figure 7.3 below. As shown in the table, around half of the children were securely attached B in both countries, with avoidant A being the next most common attachment classification in Japan and ambivalent C being the next most common attachment classification in Britain.

Attachment	Japanese			British		
	boys	girls	total (%)	boys	girls	total (%)
Avoidant (A)	5	3	8 (40)	4	2	6 (30)
Secure (B)	4	7	11 (55)	4	6	10 (50)
Ambivalent (C)	1	1	2 (10)	4	2	6 (30)
Disorganised (D)	2	0	2 (10)	1	0	1 (5)
Total	8	12	20 (100)	10	10	20 (100)

Figure 7.3 Attachment classifications in the Japanese and British samples



The distribution of children’s attachment classifications broken down into sub-categories is shown in Table 7.5 below. Although numbers were too small to allow statistical comparison, the pattern of sub-categorical classification of B type

children seemed broadly similar across cultures. Within this B type, however, slightly more children were classified as B4 in Japanese sample compared to the British sample.

Table 7.5 Attachment distribution including sub-categories in each country

		Japanese	British
Avoidant	(A1)	3	2
Avoidant	(A2)	2	1
Secure	(B1)	3	2
Secure	(B2)	1	3
Secure	(B3)	4	4
Secure	(B4)	3	1
Ambivalent	(C1)	1	3
Ambivalent	(C2)	1	3
Disorganised	(D1)	1	1
Disorganised	(D2)	1	0
Total		20	20

7.4.3 The association between maternal attitudes towards *amae* behaviours and children's attachment classification

The mean and *SDs* of mothers' *amae* scores for each AAS category and for total AAS score, divided according to the MCAST classifications of their children, are shown in Tables 7.6 and 7.7, and in Figures 7.4 and 7.5 below.

Table 7.6 Mean *amae* scores of Japanese mothers in each child attachment group

Attachment type	Pure		Anxious		Asking		Frustrated		Total	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
A (5)	4.57	0.78	4.78	0.60	2.80	0.67	3.77	0.28	4.34	0.51
B (11)	5.09	0.73	4.89	0.63	2.73	1.21	4.24	0.63	4.69	0.50
C (2)	5.25	0.24	4.94	0.08	2.25	1.06	4.33	0.00	4.76	0.05
D (2)	5.21	1.70	5.17	0.39	3.50	0.71	3.92	0.35	4.81	0.71

Figure 7.4 Mean *amae* scores of Japanese mothers in each child attachment group

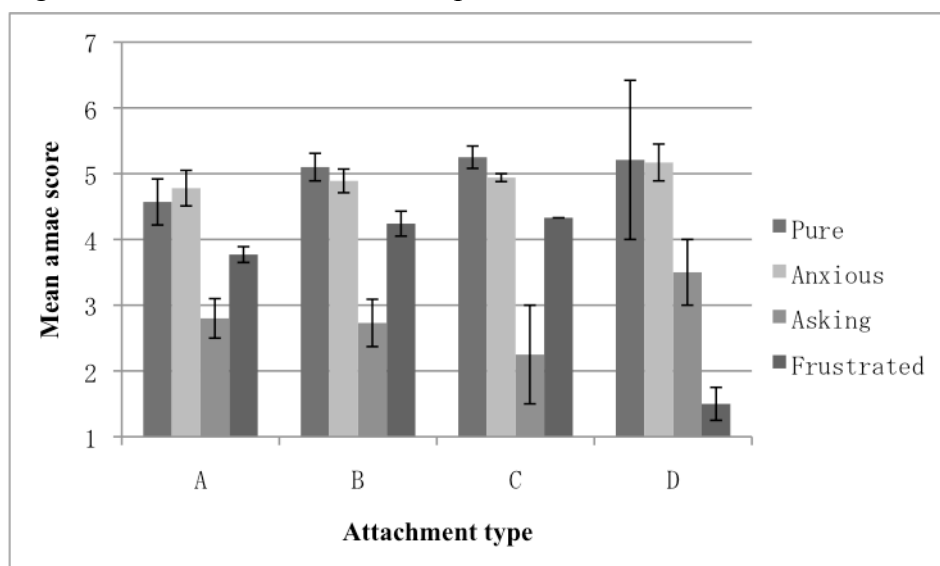
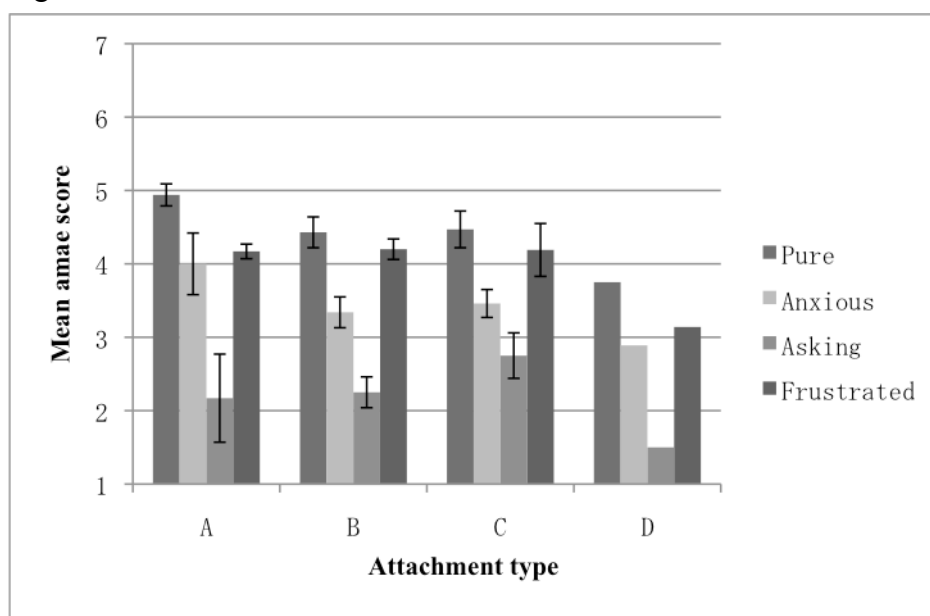


Table 7.7 Mean *amae* scores of British mothers in each child attachment group

Attachment type	Pure		Anxious		Asking		Frustrated		Total	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
A (3)	4.94	0.25	4.00	0.73	2.17	1.04	4.17	0.17	4.30	0.24
B (10)	4.43	0.66	3.34	0.65	2.25	0.68	4.20	0.68	4.20	0.67
C (6)	4.47	0.61	3.46	0.47	2.75	0.76	4.19	0.87	3.98	0.44
D (1)	3.75	n.a.	2.88	n.a.	1.50	n.a.	2.83	n.a.	3.14	n.a.

Figure 7.5 Mean *amae* scores of British mothers in each child attachment group



Because the numbers of children who were classified as avoidant A type, ambivalent

C type, and disorganized/disoriented D type were small, these 3 groups of insecure attachment (A, C, and D) were combined in the next analysis of these data in order to allow the effect of nationality and attachment classification (secure/insecure) on total *amae* score to be investigated. A two-way independent ANOVA (nationality (2) x attachment security (2)) was carried out. A main effect for nationality was found ($F(1, 36) = 19.27, p < .01, r = .35$), but there was no significant main effect for attachment classification and no significant nationality x attachment classification interaction.

As the earlier analyses showed, nationality significantly affected the average total *amae* score, with Japanese mean AAS scores significantly higher for both the securely and the insecurely attached dyads in comparison to those of their British counterparts. However, the main effect of attachment classification (secure/insecure) on total *amae* score was not significant ($F(1, 36) = .03, ns$), meaning that mothers of securely attached children did not score significantly differently on the AAS when compared to mothers of insecurely attached children. Nor was the nationality x attachment classification significant ($F(1, 36) = .65, ns$). These results indicate that AAS scores were higher for Japanese mothers of both securely and insecurely attached children than for British mothers of securely and insecurely attached children, as in Study 2. However, unlike the findings from Study 2, the tendency for mothers of securely attached children to score lower on the AAS than those of insecurely attached children was not found in this study.

7.4.4 Cross-cultural comparison of EA scores

In the initial analysis, the EA dimensional sum scores (sum of all of the 6 scales) were compared across the two cultural groups. An independent *t*-test indicated that

the EA dimensional sum scores did not differ between Japanese mothers and British mothers ($M=30.50$, $SD= 6.98$, and $M = 33.75$, $SD = 6.06$, respectively; $t (38) = 1.57$, ns).

In the next level of analysis, each of the EA dimensional scores were compared across cultures. The mean EA dimensional scores for each group are shown in Table 7.8 below. A one-way repeated measures ANOVA showed that the mean scores of Japanese dyads were significantly lower than those of British dyads on adult sensitivity ($F (1, 39) =7.98$, $p<.05$, $\eta^2 = .17$) and adult structuring ($F (1, 39) =8.22$, $p<.05$, $\eta^2 = .18$). However, no significant differences were found between the two cultures on adult nonintrusiveness ($F (1, 39) =.11$, ns), adult nonhostility ($F (1, 39) =1.05$, ns), child responsiveness ($F (1, 39) =.06$, ns), and child involvement ($F (1, 39) =.65$, ns).

Table 7.8 Mean EA dimensional scores of mother-child dyads in each country

	Japanese		British	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Adult sensitivity	5.10	1.25	6.10	0.97
Adult structuring	5.00	1.34	6.05	0.95
Adult nonintrusiveness	4.90	1.25	5.05	1.64
Adult nonhostility	5.55	1.43	5.95	1.00
Child responsiveness	5.00	1.21	5.10	1.41
Child involvement	5.05	1.47	5.40	1.27

7.4.5 The association between AAS and EA

The correlations between AAS scores and EA scores were calculated separately for each cultural group. For the Japanese sample, significant negative correlations were found between maternal attitudes towards children's Asking-*amae* behaviours and parental nonintrusiveness ($r = - .56$, $p< .05$), Anxious- *amae* and parental

non-hostility ($r = -.49, p < .05$), Asking-*amae* and parental non-hostility ($r = -.49, p < .05$), and Asking-*amae* and child-responsiveness ($r = -.45, p < .05$). No significant correlation was found between any other pairs, including between total *amae* scores and EA dimensional sum score ($r = -.07, ns$). These results indicate that Japanese mothers who were intrusive towards their children during the EA observation had more tolerant attitudes towards their children's Asking-*amae* behaviours, and those who showed hostility during the observation had more tolerant attitudes towards their children's Anxious- and Asking-*amae* behaviours. The results also show that Japanese mothers of children who showed positive engagement with their mothers had less tolerant attitudes towards their children's Asking-*amae* behaviours.

For the British sample, no significant negative or positive correlations were found between any of the scores on the AAS and EAS, including between total *amae* scores and EA dimensional sum score ($r = -.22, ns$).

7.4.6 The association between EA and children's attachment classification

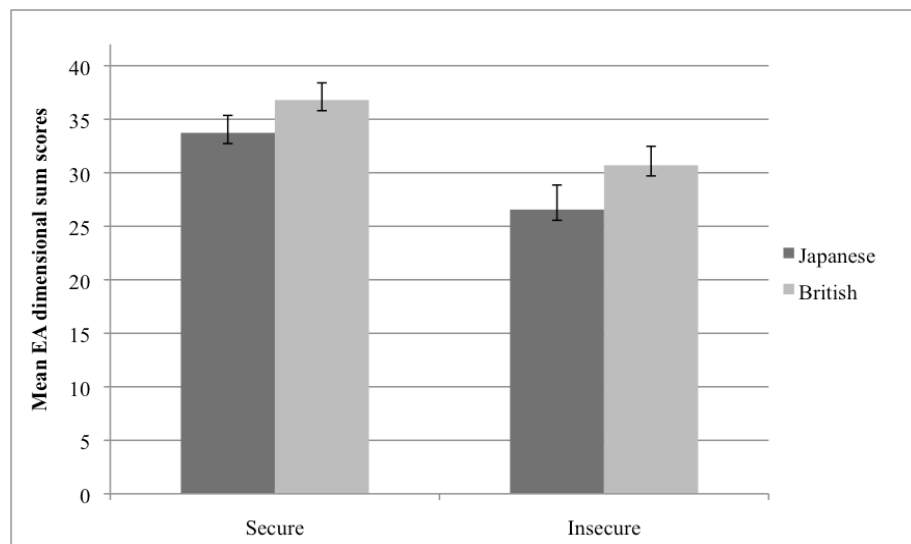
Firstly, the associations among nationality, attachment security (secure/insecure), and EA dimensional sum score were examined. The mean EA dimensional sum scores and *SDs* of each attachment category in both samples are shown in Table 7.9 and in Figure 7.6 below. A two-way ANOVA (nationality (2) x attachment security (2)) revealed that there was a significant main effect of attachment security on EA dimensional sum score ($F(1, 36) = 13.34, p < .01, \eta^2 = .27$), but no significant effect of nationality was found ($F(1, 36) = 3.95, ns$). The interaction effect of attachment security and nationality was also non-significant ($F(1, 36) = .09, ns$). This suggests that EA dimensional sum scores did not differ significantly across cultures and that

the tendency for the securely attached mother-children dyads to show significantly higher scores than the insecurely attached mother-children dyads was found in both countries.

Table 7.9 Mean EA dimensional sum scores of each child attachment group in each country

	Japanese		British	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Secure	33.73	5.41	36.8	5.05
Insecure	26.56	6.88	30.7	6.98

Figure 7.6 Mean EA dimensional sum scores of each child attachment group in each country



Secondly, A MANOVA (nationality (2) x attachment types (2) x EA dimensions (7)) was carried out in order to more closely examine which EA dimension contributed to the differences reported above. The mean EA scores for each cultural group are shown in Table 7.10 below, along with the MCAST classifications of the children. As would be predicted from the above finding, there was a main effect of dyads' nationality on *adult sensitivity* ($F(1, 36) = 11.31, p < .01, \eta^2 = .24$) and *adult*

structuring ($F(1, 36) = 10.37, p < .01, \eta^2 = .22$). However, there was no effect of nationality on adult *nonintrusiveness* ($F(1, 36) = .18, ns$), *adult nonhostility* ($F(1, 36) = 1.73, ns$), *child responsiveness* ($F(1, 36) = .15, ns$), or *child involvement* ($F(1, 36) = 1.36, ns$). A significant effect of children's attachment group was found on all 6 EA dimensions: *adult sensitivity* ($F(1, 36) = 12.1, p < .01, \eta^2 = .25$), *adult structuring* ($F(1, 36) = 8.81, p < .01, \eta^2 = .18$), *adult nonintrusiveness* ($F(1, 36) = 4.67, p < .05, \eta^2 = .12$), *adult nonhostility* ($F(1, 36) = 8.68, p < .01, \eta^2 = .19$), *child responsiveness* ($F(1, 36) = 6.49, p < .05, \eta^2 = .15$), and *child involvement* ($F(1, 36) = 18.09, p < .01, \eta^2 = .33$). In all cases, this was because the securely attached group obtained significantly higher scores than the insecurely attached group. The interaction effect of dyads' nationality and children's attachment security was found to be non-significant on each of the EA dimensions.

Table 7.10 Mean (SD) EA scores in each child attachment group in each country

	Japanese				British			
	Secure		Insecure		Secure		Insecure	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Adult sensitivity	5.64	1.03	4.44	1.24	6.60	0.70	5.60	0.97
Adult structuring	5.45	1.29	4.44	1.24	6.50	0.71	5.60	0.97
Adult nonintrusiveness	5.27	0.79	4.44	1.59	5.60	1.27	4.50	1.84
Adult nonhostility	6.18	1.08	4.78	1.48	6.30	1.06	5.60	0.84
Child responsiveness	5.45	1.04	4.44	1.24	5.60	1.17	4.60	1.51
Child involvement	5.73	1.72	4.22	1.32	6.20	1.03	4.60	0.97

7.4.7 *Amae* behaviour expressed during the EA observation

Possibly because the EAS observation did not include a separation episode, Anxious-*amae* type behaviours were not shown by children in either cultural group. The kinds of *amae* behaviours which were shown during the observation were, for instance, sitting on the mother's lap while playing with the Etch-A-Sketch, or insisting that the mother should draw the picture using both knobs, saying 'I can't do

it' although the task was designed to be appropriate for this age group, and the child had been asked to use one of the knobs and to draw a picture together with the mother.

In both cultural groups, there were children who did not show any kind of *amae* behaviours during the observation and surprisingly perhaps, Japanese children did not show significantly more frequent *amae* behaviours than British children during the EA observation (Mean *amae* behaviour observation score (SD) = 1.85, (.75), M (SD) = 1.45, (.69) respectively, $t(38) = 1.77$, ns). Interestingly, *amayakasu* behaviour (mothers encouraging children's *amae* behaviour) was seen in mothers from both countries. This took the form, for instance, of the mother nestling her child or drawing her child on her lap even when the child did not show any sign of *amae* expressions. These *amayakashi* behaviours of the mothers could be distinguished from accepting children's *amae* behaviours in instances where the *amae* had been initiated by the child. Interestingly, this maternal initiation of *amae* behaviours was seen in both countries, but Japanese mothers showed significantly more frequent *amayakashi* than British mothers (Mean *amayakashi* behaviour observation score (SD) = 1.85 (0.81), M (SD) = 1.30 (0.66), respectively, $t(38) = 2.35$, $p < .05$, $d = .75$).

Also interesting was that although *amae* and *amayakashi* behaviours during the EA observation were not significantly correlated in the Japanese sample ($r = .39$, ns), these two types of behaviour showed a significant positive association in the British sample ($r = .50$, $p < .05$).

7.4.8 Association between *amae/amayakashi* behaviour expressed during the EA observation and AAS scores

Pearson's correlations between children's *amae* behaviours expressed during the EA observation and maternal attitudes towards children's *amae* behaviours were examined in each cultural group. For both the Japanese and British samples, no significant correlations were found between children's *amae* behaviours expressed during the observation and maternal attitudes towards children's *amae* behaviours as measured by the AAS. As shown in Table 11 below, an interesting difference between the two cultural groups, however, was that mostly positive correlations were found in the Japanese sample (*Anxious-amae* being the highest, $r = .24$, ns) whereas mostly negative correlations were found in the British sample.

As show in Table 7.11, Pearson's correlations between maternal *amayakashi* behaviours expressed during the EA observation and maternal attitudes towards children's *amae* behaviours in the AAS also showed no significant associations.

Table 7.11 The correlation coefficients between *amae/amayakashi* scores and AAS scores

	Japanese <i>r</i>	British <i>r</i>
<i>Amae</i> x Pure	0.18	-0.32
<i>Amae</i> x Anxious	0.24	0.14
<i>Amae</i> x Asking	0.13	-0.37
<i>Amae</i> x Frustrated	-0.10	-0.30
<i>Amae</i> x Total	0.20	-0.26
<i>Amayakashi</i> x Pure	-0.15	-0.40
<i>Amayakashi</i> x Anxious	0.04	-0.05
<i>Amayakashi</i> x Asking	0.21	-0.04
<i>Amayakashi</i> x Frustrated	-0.11	-0.31
<i>Amayakashi</i> x Total	-0.08	-0.34

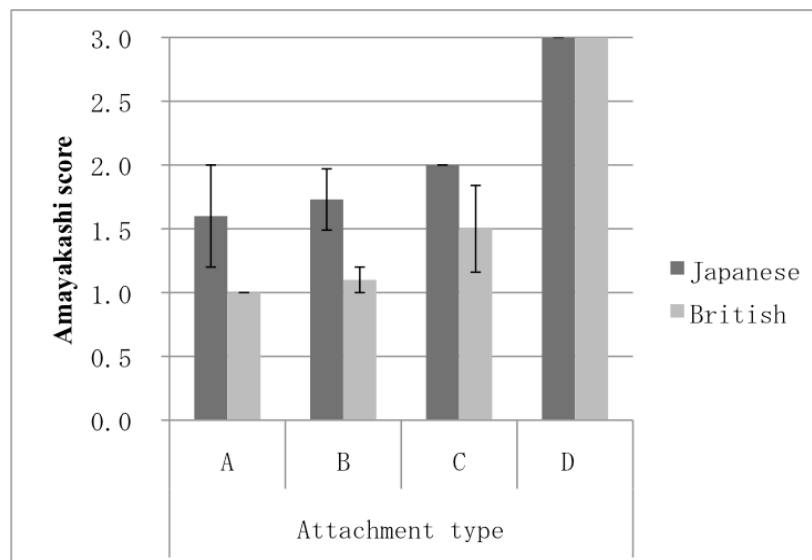
7.4.9 Association between mothers' *amayakashi* behaviours and their AAS scores in relation to children's attachment classification

Because the numbers of children in each attachment group were too small for statistical analysis, descriptive data is presented in Table 7.12 and Figure 7.7 below. These indicated that there was a similar tendency in both cultural groups for maternal *amayakashi* scores to be lowest among mothers whose children were classified as insecure/avoidant, and highest among mothers whose children were classified as insecure/disorganised.

Table 7.12 Maternal mean *amayakashi* scores and SDs in each child attachment group in each country

Attachment type	Japanese			British		
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>
A	1.60	0.85	5	1.00	0.00	3
B	1.73	0.79	11	1.10	0.32	10
C	2.00	0.00	2	1.50	0.84	6
D	3.00	0.00	2	3.00	n.a.	1

Figure 7.7 Maternal mean *amayakashi* scores in each child attachment group in each country



7.4.10 Association between children's verbal expression of needs during the MCAST

As assessed in the second study of this thesis, the child's verbal expression of child-doll's needs and the mother-doll's verbal responses to it were coded on a 9 point scale ranging from 0: no verbal expression at all, 1: call the mother-doll but not express the child-doll's distress, 2: express in a word (e.g. tummy), 6: describe the child-doll's problem in a sentence 7: full verbal description of their distress to 9: full verbal description of their distress situation in details. Contrary to what was found in Study 2, children's verbal expression of needs during the MCAST did not differ across cultures ($t(38) = 1.81, p = ns$), possibly due to the smaller sample size.

7.5 Discussion

The results from Study 3 showed broad cultural similarities and subtle and intriguing cross-cultural differences between Japan and Britain in the close relationships between mothers and their children in early childhood. This study replicated and extended some of the findings from the two earlier studies in this thesis, and some of the findings lend further support to the picture which emerged from Studies 1 and 2.

Firstly, analysis of the AAS showed that, when compared to the British mothers, Japanese mothers showed more tolerant attitudes towards their children's *amae* behaviours in general, and that this difference in attitudes was particularly marked in relation to the Pure and Anxious type of *amae* behaviours, replicating the findings from Study 2.

Secondly, analysis of the MCAST data showed that, as in Study 2, there was no significant difference between the two cultures in the distribution of children's attachment classifications, with about half of the dyads from each country classified as secure B attachment. In addition, the tendency for the Japanese sample to have more dyads in the insecure/avoidant group than in the insecure/ambivalent was again found in the present study. These findings are not in line with what has long been described as the 'Japanese pattern of attachment', ever since Takahashi's Sapporo study (1986) reported more than twice as many insecure/ambivalent infants than had been seen in other studies of attachment worldwide. They are, though, consistent with the more recent study conducted by Behrens et al. (2007) with 6-year-olds living in Sapporo, Japan.

The findings from Studies 2 and 3 regarding the children's attachment classification, together with Behrens et al.'s study (2007), might serve as evidence that 21st century Japanese preschool age children do form attachment patterns that are similar to those found in Western settings. This adds to the debate on 'Japan's Challenge' to attachment theory and research which emerged after Takahashi's study (Rothbaum et al., 2000; van IJzendoorn & Sagi, 1999). As discussed in earlier chapters, some researchers attributed the earlier findings to Japanese infants' lack of familiarity with separations, coupled with the unusually long separations that stemmed from procedural problem occurred in the Tokyo study (e.g., Grossmann et al., 1990; Grossmann & Grossmann, 1989; van IJzendoorn et al., 2006). Others suggested that the differences might relate to the concept of *amae* upon which Japanese child-rearing ideals are based.

Although some of the cross-cultural attachment researchers (e.g. Rothbaum et al., 2000; Takahashi, 1990) implied that the attachment theory may be less appropriate for Japanese children, Japanese preschool age children who were classified as securely attached in the MCAST in Studies 2 and 3 in this thesis created surprisingly similar doll-play scenarios to their British counterparts, for example, by spontaneously bringing the child-doll to the mother-doll to share and resolve distress. They also showed the 'secure base' behaviours that attachment theory emphasises as a barometer of a healthy parent-child relationship (Ainsworth, et al., 1978). The findings from the present study, along with those from Study 2 suggest that the MCAST can be used to assess attachment security in a non-Western sample and that at least among preschool children living in Tokyo, the majority of the children have a secure attachment relationship with their mothers.

As with Study 2, there were subtle cross-cultural differences in the MCAST attachment findings. Equivalent numbers of children from each country ($n = 4$) were classified as B3, an optimal version of secure attachment, in which the child engages the dolls in exploratory play after the resolution of distress, indicating that the topic has 'moved on'. There was a difference, though, in the number of children who were classified as B4 (3 Japanese children compared to 1 British child). This B4 classification relates to the children showing more 'contact maintenance' behaviours during the vignette. Typical scenarios were staying in the mother-doll's bed in the nightmare story or ending the stomach-ache vignette with the child-doll being cuddled on a sofa showing that continuing assuagement depended on continuing contact with the mother-doll. The difference in numbers classified as B4 is extremely

small, so must be viewed with caution. However, this difference was also found in Study 2. It indicates that, while there may not be gross cross-cultural differences in patterns of attachment, there may be differences at a more subtle level. It may be that in Japan the mother-child *amae* relationship affects how securely attached children ‘move on’ from the secure base of the mother after resolving the distress.

One of the central aims of this study was to explore cross-cultural differences in emotional availability (EA), and to extend the findings of studies 1 and 2 by exploring how EA relates to mothers’ attitudes towards their child’s *amae* behaviours and to the patterns of attachment found in each country. In this way, the study aimed to link maternal attitudes and attachment relationships with what actually occurred during naturalistic mother-child play. As with the attachment findings, the results from the EAS indicated broad cross-cultural similarities, with no difference between Japanese and British mothers in terms of their total EAS scores. Again though, differences were found at a more subtle level, with cross-cultural differences in some of the individual EA dimensions. It was found that compared to their British counterparts, Japanese mothers scored lower on *adult sensitivity* and *adult structuring* during the interaction with their children.

As outlined in the introduction, *Adult sensitivity* in the EAS is a broad construct that relates closely to Ainsworth’s definition of this concept (e.g. clarity of perceptions, prompt responsiveness, accessibility) as well as to the role of affect and conflict resolution in mother-child interactions (Biringen, Brown et al., 2000). More precisely, 7 points have to be taken into account when coding the *Adult sensitivity* scale. These are: affect, clarity of perceptions and appropriate responsiveness, awareness of

timing, flexibility, variety and creativity in modes of interactions, acceptance, amount of interaction, and conflict situations (skill in moving conflict toward resolution). *Adult structuring* refers to the ability of the mother to structure/scaffold the activity in a way that is well received by the child. Seven points again need to be taken into account when coding this dimension: appropriate guidance and suggestions, success of attempts, amount of structure, limit setting (setting boundaries proactively), remaining firm in the face of pressure, and channels of structuring (verbal and nonverbal).

Compared to the British mothers, the Japanese mothers in Study 3 showed a tendency to be less aware of timing (as reflected in *Adult sensitivity*), e.g. moving on to the next activity while the child is still occupied, spoke/acted in occasional slightly disrespectful way although in a joking manner (as reflected in *Adult sensitivity*), provided too little or too much verbal structuring (as reflected in *Adult structuring*), and the interaction with their children was relatively repetitive and less creative (as reflected in *Adult structuring*). These resulted in lower scores of these two EAS dimensions among Japanese mothers. However, it is too early to conclude that these differences are due to the cultural differences because different maternal education cannot be eliminated as a possible explanation. In the previous research conducted by Biringen, Brown et al. (2000) it was found that maternal sensitivity, structuring, and nonhostility were significantly associated with maternal education. In the present study, the British mothers had significantly higher educational qualifications than the Japanese mothers, and this might affect these data. In future cross-cultural studies of EA, it will be important to take mothers' educational background into account when recruiting the participants.

In terms of the association between AAS scores and EA, no significant association was found within the British sample. However, a significant negative correlation was found between maternal attitudes towards children's Asking-*amae* behaviours and parental nonintrusiveness, between Anxious-*amae* and parental non-hostility, between Asking-*amae* and parental non-hostility, and between Asking-*amae* and child-responsiveness. These imply that Japanese mothers who were intrusive towards their children during the EA observation had more tolerant attitudes towards their children's Asking-*amae* behaviours, and those who showed hostility during the observation had more tolerant attitudes towards their children's Anxious- and Asking-*amae* behaviours. These findings also indicated that Japanese mothers of children who showed positive engagement with them have less tolerant attitudes towards their children's Asking-*amae* behaviours.

It is possible to interpret these patterns as showing that the mothers who valued independence and exploratory behaviours in their children did not show intrusiveness and hostility during the EA observation and that their children tended to respond positively, showing a good balance between autonomous pursuit and responsive behaviours towards their mothers. These mothers had less tolerant attitudes towards children's Asking-*amae* behaviours. In the Japanese sample, although significant associations were found in only 4 correlated pairings, *Adult sensitivity* and *Pure-amae* ($r = .38$) and *Adult structuring* and *Pure-amae* ($r = .32$) also showed moderate positive association. Further, moderate negative associations were found between *Child involvement* and *Anxious-amae* ($r = -.33$) and *Asking-amae* ($r = -.43$). These may suggest that Japanese mothers' tolerant attitudes towards children's

Pure-*amae* do not lead to the lower scores of *Adult sensitivity* and *Adult structuring* in the EAS. Although this study with its relatively small number of participants did not show significant associations in all of the possible pairings, the results may nevertheless contribute to understanding better the association between each dimension of the EAS and maternal attitudes towards each *amae* subcategory, and further research with larger number of participants could well be fruitful.

Study 3 also explored the link between attachment security and EA. In both countries, mothers of securely attached children had higher EA than those of insecurely attached children, in all 6 dimensions. This finding is significant in that this is the first study that has demonstrated an association between maternal sensitivity and children's attachment security among Japanese dyads. It is also the first to show the relationship between EA and attachment in an East Asian context. It is important to bear in mind that all of the participants in this study were from central Tokyo, probably the most modern and Westernised city in Japan or from one of its suburbs. However, the finding may still move forward attachment and EA research in Japan and other non-Western cultures, research which has hitherto been considered to be less applicable to such contexts.

This study also presented a unique opportunity to explore cross-cultural similarities and differences in children's *amae* behaviours, by coding this from the mother-child interactions which had been filmed for the EAS assessments. The findings from this arm of the study indicated that Japanese children did not show more *amae* behaviour than the British children. Contrary to what has been described as characteristic of Japanese youngsters, Japanese children in this study did not show significantly more

clinginess during play nor asked their mothers to do something they could obviously do themselves any more than the British children did. This is partly because some of the Japanese children showed independent behaviours by for instance, saying ‘no, I can do it!’ if the mother tried to help, and also showed what appeared to be age-appropriate autonomy-seeking and exploration during their play, and partly because some children in the British sample expressed *amae* behaviours towards their mothers during the observation. Interestingly, a few children in both countries did show typical *amae* behaviours, and in a similar fashion, insisting, for example, on sitting on the mother’s lap or grizzling after being told that she would leave the room after the EA observation. However, these behaviours were no more common in the Japanese than in the British preschool children.

Strikingly, what did differ across cultures was the extent to which mothers appeared to encourage their child’s *amae* behaviour during the interactions. This behaviour, known as *amayakasu*, is distinct from the tolerance (or ‘acceptance of’) the child’s *amae* behaviour that was explored using the AAS in Studies 1 and 2. It suggests a more active encouragement of the child’s *amae* behaviour. This behaviour was not explored in the earlier studies, but became apparent with the benefit of the EAS recordings of the mother-child interaction. The Japanese mothers showed significantly more *amayakasu* behaviours towards their children when compared to the British mothers.

Behrens (2004) referred to the word *amayakasu* as an act of letting someone *amaeru*. Taketomo (1986) states that mutually satisfying *amae* can be achieved only when one who *amaeru* and one who accept this *amae* are both in agreement. It is believed

that in an affective mother-child relationship, the child is likely to be the one who actively *amaeru* and the mother is likely to be the one who lets or accepts the child *amaeru* more or less passively (Doi, 1973).

As implied above, it has been a common view that it is the child who initiates *amae* behaviour and the mother is the one who tolerates or accepts her child's *amae* behaviours. Labera (1976), on the other hand, claimed that the mother can also take an active role in *amayakasu* behaviour, for example, by encouraging and inviting the child to be physically close to her and be cuddled. Maruta (1992) also criticises Doi for only focusing on the child who *amaeru*, and disregarding the role of the mother who *amayakasu*, without which *amae* cannot exist. Maruta argues that either the infant or the mother can initiate the *amae* process in search of renewed intimacy or a sense of security (p. 15).

The present study indeed supports Labera and Maruta's notion that it is not always a child who initiates *amae* relationships, at least among children older than 4 years old. An interesting observation was that even when the mother initiated the child's *amae* behaviour by, for instance, saying 'do you want to sit on my lap?' or putting her arm around the child while the child was concentrating on playing with the toys, the child did not always 'accept' these behaviours. The child's behaviour in these situations did not seem to be particularly avoidant; rather the child moved away naturally, merely concentrating on play or wanting to explore the play materials instead of being closer to the mother.

Watanabe (1992) claims that when a mother *amayakasu* her child, in the respect that

this fulfils the child's needs, it can be secure and beneficial to the child. However, it can be insecure and harmful if the mother *amayakasu* her child to fulfil her own egoistic needs. (p. 28). In both Japan and Britain, maternal *amayakashi* scores were found to be high among mothers whose children were classified as insecure/ambivalent or disorganised. Although more research and with larger numbers of participants is essential, these findings suggest that *amae* relationships do indeed relate to attachment security, but that it is maternal *amayakashi* behaviours rather than children's *amae* behaviours that may need to be focused upon. It would also be fruitful to examine the link between maternal attachment security (using Adult Attachment Interview; George, Kaplan, & Main, 1985) and their *amayakashi* behaviours during the mother-child interaction in future studies.

There are several limitations to the present study. Although the inter-rater reliability coding of EAS scores achieved 80% agreement between raters, there was a tendency for the inter-rater reliability scores of the British video clips to be higher than those of the Japanese video clips. This was because the Japanese video clips were scored slightly higher by the second coder who had to rely on the English subtitles. From the perspective of the researcher, it seemed that some of the Japanese mothers' ironic comments or silent poses that might have made the child somewhat uncomfortable were not fully picked up by the non-Japanese coder. Therefore, especially for EA coding, which requires sensitive observation of both verbally and non-verbally expressed emotion, in future studies EA observation sessions should be coded and recoded by native speakers of the language of the participants. This is not currently possible as no Japanese researcher has trained under the 4th edition of EAS to date. The lack of inter-rater reliability coding of the *amae* and *amayakashi* behaviour

during the EAS session was a further limitation, and this should be addressed in future research.

7.6 Study 3 summary

Although this study may be limited by its relatively small sample size and by the low response rate to recruitment approaches, meaningful findings were nevertheless drawn from the participating dyads in both countries studied. Firstly, replicating the findings from Study 1 and 2, Japanese mothers showed more tolerant attitudes towards children's *amae* behaviours than British mothers, despite the similar attachment classification patterns found across the two cultures. Secondly, this first EA study in an Eastern Asian country revealed not only that there is a significant association between maternal sensitivity and children's attachment security, but also that attachment security is associated with 5 other dimensions of the EAS among Japanese mother-child dyads. Thirdly, a rather surprising finding was that Japanese children did not show more frequent *amae* behaviours towards their mothers than British children and that *amae* behaviours were expressed by the British children. This indicates that although the equivalent English word for *amae* does not exist, the phenomena can be observed among British dyads. Finally, an unexpected but important finding was that at least among preschool age children, it may be the mother's *amayakashi* behaviours, rather than the children's *amae* behaviours that relates to children's insecure attachment. Development of a more systematic and standardised measurement of both *amae* and *amayakashi* behaviours would therefore be fruitful for attachment research and theory, not only in Japan but also in Western contexts.

CHAPTER 8

GENERAL DISCUSSIONS OF THE FINDINGS OF THE THREE STUDIES AND SUGGESTIONS FOR FUTURE RESEARCH

8.1 Introduction

Attachment theory addresses young children's biological and psychological need to elicit their mother's protection and care, and seeks to explain the emotional bond that forms between them in the early years of life. Several researchers have pointed out that the Western concept of attachment might be less relevant for Japanese parent-child dyads because Japanese child-rearing ideals are based on the concept of *amae*, whereas attachment theory emphasises the link between attachment and independence/autonomy (Bowlby, 1969; Bretherton, 1985). Ainsworth's (1969) emphasis on autonomy is evident in her description of what represents a high level of maternal sensitivity. She states that a sensitive mother views her baby as a separate, active, autonomous person, whose wishes and activities have a validity of their own. Since the mother respects the child's autonomy, she avoids situations in which she might have to impose her will on his.

Prior to this thesis, however, research had not yet directly addressed the possible association between maternal *amae* attitudes and attachment patterns in Japanese mother-child dyads. This doctoral thesis consists of three cross-cultural empirical studies which aimed to address this gap in the current literature. In the first study, a 39-item prototype *amae* attitude scale (AAS) was constructed based on responses from Japanese focus groups and an earlier study of *amae* behaviours (Vereijken et al., 1997). This prototype scale, divided into 4 distinctive categories of *amae* behaviours, was

subsequently completed by Japanese and British mothers. On the basis of these data, the scale was modified to 29 items (Appendix B). The second study addressed two questions: whether attachment behaviours differ in Japanese and British 4-5 year olds (measured with the Manchester Child Attachment Story Task /MCAST: Green et al., 2000) and whether there is a relationship in Japanese and British dyads between children's MCAST attachment classifications and maternal attitudes towards children's *amae* behaviours (measured with the AAS). The third study examined actual mother-child interaction in both countries, measuring the mother's emotional availability to the child (measured with the Emotional Availability Scale/EAS: Biringen, 2000) and relating this to both maternal AAS and child MCAST data. Children's *amae* behaviour and mothers' *amayakashi* behaviour were also examined in this final study, and related to the other measures. This final chapter will synthesise the findings from all three studies, the overall patterns found in the research will be discussed, and links to the relevant theory in the existing literature will be made where possible. The chapter will conclude with some consideration of the limitations of the research and possibilities for future work in this field.

8.2 Cross-cultural similarities and differences in maternal attitudes towards children's *amae* behaviour

As mentioned above, cross cultural research into attachment which has studied Japanese mother-child dyads has not to date directly addressed the possible association between maternal *amae* attitudes and attachment patterns in Japanese mother-child dyads. This is most likely, in part, due to the lack of any assessment tool to measure mothers' responses to their children's *amae* behaviours. One of the main purposes of

this doctoral research was therefore to construct a prototype *amae* attitude scale. This process was considered to have particular relevance because prior cross-cultural studies of attachment have almost always employed measurement instruments developed within Western society (Rothbaum & Morelli, 2005), and as a result it has not always been possible to capture local conditions and indigenous concepts which may be related to the formation of mother-child close relationships.

Across the three empirical studies of this thesis, the *Amae* Attitude Scale (AAS) was completed by a total of 139 Japanese and 112 British mothers. These data provided five main findings of interest. First, in all three sequential studies, Japanese mothers showed significantly more tolerant attitudes than British mothers towards their children's *amae* behaviours. This echoes with Mizuta et al.'s (1996) argument that the kinds of behaviours mothers accept and expect from their young children differ across cultures, and that the nature of these similarities and differences in child-rearing practices and attitudes are not sufficiently well understood.

Second, among the four categories of *amae* represented in the AAS, it was found that differences in the attitudes of Japanese and British mothers were always most pronounced for the Anxious-*amae* behaviours. It might be that mothers whose culture (as in Japan) emphasises the fundamental connectedness of human beings to each other (Markus & Kitayama, 1991) tend to be more tolerant towards the kinds of *amae* behaviours expressed when children are separated from their mothers, or when they are not willing to be away from them; as demonstrated, for instance, by them clinging to their mothers in an unfamiliar situation or showing reluctance to be physically distant from her. The finding is also in line with the proposition that

Japanese mothers tend to enjoy emotional oneness (*ittaikan*) with their children (Rothbaum, Rosen, Ujiie, & Uchida, 2002). In everyday life in Japan, both boys and girls are constantly within their mothers' reach, and co-sleeping and co-bathing by mother and child are still commonly practiced in Japan today in the form of *amae*, even beyond infancy (Mizuta et al., 1996).

The finding outlined above also suggests that mothers within any one culture may differentiate their attitudes towards their children's *amae* depending on how these behaviours are expressed and in which contexts. This supports the notion that *amae* is not a unitary construct, that it conveys multiple meanings, and that it serves complex and subtle functions in diverse interpersonal interactions (Okonogi, 1992; Behrens, 2004).

Possibly linked to this point, the third consistent finding from the AAS data collected in Studies 1-3 related to the British mothers' attitudes towards the four different categories of *amae* behaviours. In all three studies, they showed the most tolerant attitudes towards their children's Pure-*amae* and the least towards Asking-*amae* behaviours, with second least-tolerated being Frustrated- and the third being Anxious- *amae*. Although British mothers' scores on Pure-*amae* in the first study ($M = 3.64$) were below the mid-point (4 = neither agree nor disagree), those in the second and the third study ($M = 4.13$) were slightly above the midpoint ($M = 4.33$ and 4.13 respectively). These data indicated that to some extent it is not only Japanese mothers who enjoy emotional closeness and close body contact with their children, especially when this kind of *amae* desire is expressed straightforwardly by their preschool age children. As Yamaguchi and Ariizumi (2006) point out, the

apparent distinctiveness of an indigenous concept does not necessarily imply that the behavioural pattern the concept describes is entirely unique to a single country. Although many international scholars believe that *amae* is similar to dependence and that the Japanese (when compared to Westerners) are uniquely dependent in their interpersonal relationships (e.g. Rothbaum et al., 2007), the present research empirically showed that mothers in Western countries not only recognised in their own children the kinds of *amae* behaviour described in the AAS, but also showed tolerant attitudes towards certain kinds of their children's *amae* behaviours.

The fourth consistent finding from the AAS was that mothers in both countries had the least tolerant attitudes towards their children's Asking-*amae* behaviours. This was also reflected in the findings that the scores for this category were below the midpoint in all three studies, for both cultures. In other words, requests for maternal help, when the child was considered truly able to manage by himself, tended not to be seen as acceptable behaviour by the mother, either in Japan or in Britain.

There was also one inconsistent finding from the AAS across the three studies. Although the pattern of more tolerant attitudes towards Pure- and Anxious-compared to Frustrated- and Asking-*amae* were consistent throughout the studies in Japan, the mothers in Study 1 showed more tolerant (albeit non-significant) attitudes towards Anxious-*amae* than towards Pure-*amae*, whereas the reverse was the case in Studies 2 and 3. This might be due to the fact that Study 1 included mothers whose children were younger than in the other two studies. More specifically, only Study 1 included 3-year-olds, an age group not included in Studies 2 and 3 in order to fit the age requirements of the MCAST. It might be that Japanese mothers of younger

children are particularly tolerant towards their children's *Anxious-amae* behaviours.

Nonetheless, the three studies using the AAS filled part of the gap in the literature showing that there are cross-cultural differences in mothers' attitudes toward children's *amae* behaviours. The next part of this chapter will look at how these differences in attitudes associate with children's attachment classifications, both in Japan and in Britain.

8.3 Cross-cultural similarities in mother-child attachment

Following a 1986 study reporting a three times greater prevalence of insecure/ambivalent attachment among insecure Sapporo infants (Takahashi, 1986) when compared to global patterns, the generalisability of attachment theory and methodology to the Japanese culture has been repeatedly questioned (see Behrens et al., 2007). As discussed in Chapter 2, some researchers concluded that the Sapporo results could be attributed to the standard length of separation episodes in this Strange Situation-based study (Grossman, Fremmer-Bombik, & Grossman, 1990; Grossman & Grossman, 1989), as this was likely to be responded to differently by Japanese infants because of their lack of separation experiences (e.g. LeVeine & Miller, 1990; Takahashi, 1986). An alternative explanation for the Sapporo study findings that has been offered widely, however, is based on the concept of *amae*. It has been suggested that the high and continuing distress exhibited by infants categorised as insecure-ambivalent might be 'widely regarded as adaptive in Japan' (Rothbaum et al., 2000, p. 1100).

The second study in this doctoral research was undertaken primarily to investigate present-day Japanese and British mother-child attachment patterns using the Manchester Child Attachment Story Task (MCAST: Green et al., 2000), a more recent, doll-play attachment measurement for children aged between 4 and 8 years old which until now has been used mainly only in Western contexts. Among several attachment measurements, the MCAST was selected because it appeared to be the most appropriate measurement for Japanese preschool children and several small adaptations to the vignettes ensured that these remained meaningful and culturally appropriate in both Japan and Britain (for example, the substitution of ‘futon’ for ‘bed’, etc. – see Chapter 6).

One of the most important findings from this second study was that, contrary to what has been found in some of the previous Strange Situation studies with Japanese infants (Miyake, et al., 1985; Takahashi, 1986), the distribution of MCAST attachment classifications proved to be highly similar in Britain and Japan. The majority of the children in both countries were classified as securely attached, with a higher percentage of children in both countries classified as insecure/avoidant than as insecure/ambivalent. These findings were replicated in the third study, with different mother-child dyads, adding strength to this finding.

Although these findings contradict those of Yamakawa (2006), they are in line with the most recent attachment research conducted in Japan, Behrens et al.’s (2007) study, in which the attachment distribution of Japanese 6-year olds was examined based on their behaviour in Main and Cassidy’s (1988) reunion task. Behrens et al. found that the majority of the children were classified as secure (68%), with only

22% classified as avoidant, and 10% as ambivalent. The findings from Studies 2 and 3 of the current research, together with Behrens et al's study, indicate that, at least among children aged between 4 and 6 years in Japan, the majority are securely attached, and that insecure /ambivalent is not the dominant pattern of insecure attachment.

In terms of the differences between the findings of the present study and those of Takahashi's (1986) Sapporo study, it is conceivable that the differences are at least partially explained by the age differences of the participants: in the current study participants were 4-6 years, whereas in the Sapporo study they were infants. It is possible that some of the preschool age children in the Japanese sample in the present study who were classified as secure might have shown ambivalent behaviours during the Strange Situation procedure had they been studied a few years earlier, as in the Sapporo study; that is, ambivalent behaviours such as these may have simply disappeared in the course of development as the children's lives gradually came to include normative separation experiences such as nursery. A longitudinal study from infancy to childhood would be helpful in demonstrating the pathway of the development of secure and insecure attachment over these early years

Rothbaum et al. (2000) claimed that "attachment theory is laden with Western values and meaning" (p. 1093). They also argued that the exploratory 'secure base' patterns considered optimal in Western studies might well be considered insecure in Japan. Further, they claimed that child behaviours labelled as insecure/ambivalent in U.S. studies would likely be viewed as *amae* behaviours in Japan and would therefore be considered appropriate and welcomed, using their argument to explain the findings

of Takahashi's Sapporo study (1986). As described above, however, Studies 2 and 3 did not entirely support this claim of a distinctively Japanese element influencing attachment patterns.

In this doctoral research, a total of 60 Japanese children and 60 British children took part in the MCAST across Studies 2 and 3. It was found that not only were a half or more of the children in both countries classified as secure B (31 Japanese and 30 British children), but that even among those Japanese children who were classified as secure, more than a half (14 Japanese children compared to 12 British children) were further classified as B3. This sub code is considered to be an optimal version of an interpersonal strategy in which children showed well developed and elaborate exploratory play that included a 'fresh quality' to the content, with the story moving on after the child-doll's distress has been resolved. These findings suggest that not only British securely attached children but also Japanese securely attached children do show the link between attachment and exploration.

Surprisingly, moreover, the number of Japanese insecure children classified as avoidant was higher than those classified as ambivalent. During the MCAST, these children who classified as insecure/avoidant created story lines that involved predominantly a non-interpersonal strategy to assuage their distress, focusing towards self-care or a displacement strategy, or on denial of the original distress. While this may seem at odds with the emphasis on interdependence within Japanese society, as discussed in Chapter 6, such individual variation across a country is not unexpected, and indeed may fit with findings showing that Japanese mothers do tend to encourage instrumental independence amongst their preschool children (e.g.

Kobayashi, 2001). Indeed, during the MCAST it was notable that, after the mildly stressful situation was introduced into the story, securely attached children from both cultures used the mother-doll as a secure base, by creating clear and direct proximity and by showing good final resolution of distress within the vignette. While it is perhaps unexpected to observe such similar secure base phenomena among children from different cultures who have been brought up in different childrearing contexts, the attachment studies in this thesis indicated that attachment theory is not inadequate for Japanese children and it could provide rich understanding of mother-child relationships as in the West.

8.4 Cross-cultural differences in mother-child attachment

Despite the clear cross-cultural similarities in patterns of mother-child attachment described above, there were also some fascinating and subtle differences between-culture differences in the ways in which the children expressed secure base behaviour and represented mother-child relationships in the MCAST. This was not necessarily reflected in the attachment classifications. The most striking of these differences was that a number of Japanese children showed the 'mother doll' as responding more sensitively to the non-verbal cues of the child's needs, whereas British children more often showed her responding to the child's explicit verbal expression of needs. This difference was shown even between Japanese and British children who were classified as securely attached.

Japanese securely attached children, like the British securely attached children, showed clear and direct proximity of the child-doll to the mother-doll, good final

resolution of the distress, and some exploratory play with a 'moving on' quality. What differed were the apparent expectations of some of the Japanese children that their mothers would understand their distress without verbalising it. As Iwao (1993) points out, although direct verbal communication is a hallmark of close relationships in the Western countries, in Japan, absence of verbalisation is a sign of a close interpersonal relationship. Kobayashi (2001) and Roland (1988) similarly claimed that Japanese parents emphasise the importance of empathy, obligation, and meeting others' expectations and they prefer indirect verbal instructions to direct ones. Japanese children are similarly discouraged from making their wishes known directly, but instead, encouraged to rely on others to sense and meet their needs. As Markus and Kitayama (1991) state, in cultures where interdependence is valued, the requirement is to 'read' the other's mind and thus to know what the other is thinking or feeling. It involves the willingness and ability to feel and think what others are feeling and thinking, to absorb this information without being told, and then to help others to satisfy their wishes and realise their goals. Thus, in Japanese culture, nonverbal communication is often as important as, or even more important than, verbal communication. Expressing oneself too clearly is often considered to be impolite or inadequate (Nagashima, 1973). It is more a receiver's responsibility to empathise with the sender's feelings and act in such a way that the sender does not become placed in the awkward position of having to be more direct. These cultural values in interpersonal relationships were evident in the way Japanese children expressed the child-doll's distress during the MCAST.

As described in Chapter 3, sensitivity in Western countries, such as Britain, may have more to do with responsiveness to the child's explicit expression of need.

Hence, British mothers may expect their children to verbally express their desire or needs and they may be reluctant to respond to the children's needs prior to receiving requests. Not surprisingly, Western attachment theorists often use the term 'sensitivity' and 'responsiveness' interchangeably (Rothbaum et al., 2006). By contrast, sensitivity in Japan may have more to do with anticipation of children's needs and receptivity to subtle and nonverbal cues. What these findings suggest is that differences in expressing distress during the MCAST doll-play interview are better understood as differences in the meaning and dynamics of relatedness rather than in the security or non-security of the attachment relationship. Although the difference in the way children expressed their needs did not necessarily affect the overall attachment classifications, the findings from the current studies highlight the need for attachment theorists to recognise alternative ways of expressing needs during mildly stressful situations. In doing so, they will add a much richer texture to the theory. There are also obvious connections between the Japanese notions of empathy and 'reading' others' minds, and the concept of 'theory of mind'. Future research examining the relations between this Japanese style of interaction, 'theory of mind', and mother's responses to children's *amae* behaviour would undoubtedly be of interest.

Further subtle cross-cultural differences were seen in studies 2 and 3 in relation to the distribution of attachment classification at the subcategory level. For example in study 2 although the majority of securely attached children in both countries were classified as B3 (10 and 8 in the Japanese and the British sample respectively), a relatively high proportion of Japanese children were classified as B4 (7) and a relatively high proportion of British children were classified as B2 (6). In study 3

similar tendencies were also observed. These differences tie in with previous findings of cross-cultural differences in attachment classification pattern at the subcategory level (Durrett, et al., 1984), and suggest that, while at a broad level attachment classification in Japan is similar to that found in Western societies, nonetheless, more subtle differences may exist. Such differences may relate to the Japanese mothers' tolerant attitudes towards children's *amae* behaviours in general. However, it was not possible to explore these differences statistically, and further research with larger participant numbers is required in the future to explore these in more detail.

8.5 The association between maternal attitudes towards *amae* behaviours and children's attachment classification

This doctoral research sought to go further than simply comparing the attachment classification patterns of preschool children in Japan and Britain. In order to examine a possible association between children's attachment security and maternal attitudes towards children's *amae* behaviour, the relationship between the data from the AAS and the data from the MCAST were examined in the second and the third studies of this thesis. To the best of the author's knowledge, this was the first attempt to date to directly assess any association between the concepts of *amae* and attachment.

In the second study, involving 40 Japanese and 40 British dyads, results revealed that although Japanese mothers' total *amae* scores were significantly higher for both the securely and the insecurely attached dyads in comparison to their British counterparts, there was a significant tendency in both countries for mothers of

securely attached children to score lower on the AAS than mothers of insecurely attached children.

Interestingly moreover, the results from the second study also showed that the effects of nationality and attachment security were both significant influences on maternal attitudes towards children's anxious *amae* behaviours in particular. Japanese mothers of securely attached children showed less tolerant attitudes towards their children's anxious *amae* when compared to mothers of insecurely attached children, although Japanese mothers of both secure and insecure children showed more tolerant attitudes towards this type of *amae* behaviour than British mothers of either secure or insecure children. Although a statistically significant difference was not found in the third study involving 20 Japanese and 20 British dyads, descriptive data again indicated that mothers of securely attached children in both cultural groups have less tolerant attitudes towards children's anxious *amae* behaviours compared to mothers of insecurely attached children.

The finding of the second study that Japanese mothers of securely attached children showed more tolerant attitudes towards children's anxious *amae* behaviours than British mothers of insecurely attached children indicates that tolerant attitudes towards their children's *amae* behaviours are not necessarily associated with insecure attachment relationships with their children. On the other hand, the finding that Japanese mothers of securely attached children showed less tolerant attitudes towards children's anxious *amae* behaviours than those of insecurely attached children does suggest at least a partial effect of maternal attitudes towards children's *amae* behaviours on attachment classifications.

The implications of these findings are important in that they demonstrate that *amae* is indeed a context-based, multifaceted construct, as described by Behrens et al, (2007), and that it is not *amae* in general, but maternal attitudes towards children's anxious *amae* in particular, that might be one of the important factors in the development of Japanese children's attachment security. Interestingly, this might also be the case for British mother-child relationships as well. Mothers of securely attached children in both countries apparently have tolerant attitudes towards, for instance, children's behaviours classified as pure-*amae*, but they do not always accept their anxious-*amae* behaviours. This indicates that mothers of securely attached children have a 'sensitivity' in distinguishing when to accept their children's *amae* behaviours and when not to do so. Therefore, the broad concept of *amae* per se is not necessarily a challenge to some of the tenets of attachment research and theory, and *amae* research might well be able to contribute to understanding of preschool children's attachment relationships with their mothers in the West as well as in Japan.

To take a slightly different perspective on these findings, it is also perhaps useful to note that they were congruent with the position taken by Doi (1971, 2001), who argues that having opportunities to exhibit *amae* behaviour and to receive indulgence from mothers in early childhood does not automatically mean that opportunities to be independent are absent for Japanese children. Kagitchibasi (1994) similarly states that autonomy and relatedness are not mutually exclusive attributes but dimensions that coexist within individuals and cultures and vary with situational context. In fact, empirical studies on maternal expectation concerning child development have shown that Japanese mothers expect preschool-aged children to be instrumentally

independent at an earlier age (Miura, Nakazawa, Magara, & Kaneko, 1992) than both American mothers (Hess, Kashiwagi, Azuma, Price, & Dickson, 1980) and English mothers (Joshi & MacLean, 1997).

8.6 Emotional availability and the association with attachment and maternal *amae* attitudes

The third study in this thesis used the Emotional Availability Scale (EAS) developed by Biringen (2000). This was the first time this measure had been used in an Asian context. Mother-child dyads in Japan and Britain were compared in order to examine cultural similarities and variations relating to the concept of emotional availability (EA) and its association with children's attachment security and with maternal *amae* attitudes was also explored.

The results showed that while there were no differences between Japanese and British mothers in terms of their total EAS scores, differences were found at a more subtle level, with cross-cultural differences in some of the individual EA dimensions. Specifically, it was found that compared to their British counterparts, Japanese mothers scored significantly lower on *adult sensitivity* and *adult structuring* during the interaction with their children. It is possible that the higher frequency and degree of Japanese mothers' *amayakashi* behaviours (letting/inviting *amae* behaviours), observed during the EA observation provides some explanation for these cross-cultural differences.

For instance, EA *adult sensitivity* has 7 sub-scales, one of which is 'awareness of

timing'. Biringen (2000) describes how an adult who is sensitive to timing and rhythmicity in the activity of a child would be careful not to introduce abrupt transition between activities, to initiate play or other types of interaction 'out of the blue', or to interact at a constant high intensity to the point of overstimulation. As noted in Chapter 7, Japanese mothers (of insecurely attached children in particular) tended to show more frequent intrusive behaviours than British mothers, such as putting their arm around the child when the child was concentrating on building a castle with LEGO or inviting the child to sit on her lap even although the child was showing eagerness to explore the available toys. These kinds of behaviours resulted in higher scores of *amayakashi* behaviours and lower scores within this EAS subcategory of *adult sensitivity*. Although total EAS scores did not differ across cultures, the significantly different scores on this dimension within EAS might have stemmed from the higher scores for *amayakashi* behaviours among Japanese mothers than British mothers.

The Japanese mothers' higher scores of *amayakashi* behaviours may also explain the lower scores of the 'peer vs. adult role' sub-scale in EA *adult structuring*. Biringen (2000) describes that structuring is also about an emotional presence that conveys that the adult is the 'older and wiser' one, and that assuming a peer vs. adult role is important to the interaction. According to Biringen, such a presence may be able to give a sense of containment and a feeling of security to children. Interestingly, this echoes with Doi's (2001) claim that accepting the *amae* behaviours of the child can offer security to him, but *amayakasu* behaviours from the mother toward the child may take the opportunity from the child to express *amae* feeling and as such may lead to an unhealthy relationship.

Another reason behind the lower scores of Japanese mothers in *adult structuring* might stem from the more minimal verbal structuring of the interaction offered by the Japanese mothers. This tendency was observed among Japanese mothers regardless of their children's attachment security. *Adult structuring* in EAS considers both verbal and nonverbal modes of structuring. Optimal structuring would involve some verbal facilitation, as this would reinforce what is created at the nonverbal level (Biringen, 2000). Japanese mothers gave lots of praise, encouragement, and eye contact to their children, as British mothers did, but Japanese mothers did not tend to provide as many verbal suggestions or an explicit framework so that children could move to a higher level of activity (e.g. suggest adding a window to the house or suggest making LEGO play more challenging). British mothers, on the other hand, tended to provide verbal structuring and suggestions to their children in a relaxed and unforced way. As noted in the previous chapter, however, maternal educational level was significantly higher in the British sample, and this difference, rather than cultural differences, may have driven the variations in the way the mothers and children interacted during the semi-structured EAS play session. Further cross-cultural study of emotional availability with larger and more closely matched samples would therefore be very helpful to the field.

In terms of the association between EAS and attachment security, it was found that mothers of securely attached children had higher EA than those of insecurely attached children, in all 6 dimensions and in both countries. The foundation of the EAS comes from the integration of Ainsworth et al.'s (1978) sensitivity scale and emotional perspectives (Emde, 1980; Mahler, Pine, & Bergman, 1975). In particular,

the EAS *parental sensitivity dimension* is the dimension of the EAS which is most similar to the Ainsworth sensitivity scale in that it emphasises global behavioural style rather than discrete behaviours (Biringen, 2000). Therefore, findings from the present study suggest that the maternal sensitivity hypothesis of attachment theory does seem to hold true in both countries. Because prior cross-cultural attachment studies are largely based on merely comparing separation-based attachment classifications patterns between countries, finding maternal behavioural phenomena in a non-Western country that relate clearly to one of the core hypotheses of attachment theory is especially meaningful.

8.7 Observations of children's *amae* behaviours and mothers' *amayakashi* behaviour

The interactive sessions recorded for the EAS assessment also afforded the possibility of additional coding of the child's *amae* behaviour towards the mother and the mother's *amayakashi* behaviour towards the child. Although this behaviour was observed during a semi-structured session as opposed to a more naturalistic environment, it nonetheless provided the opportunity to observe this behaviour in a comparative setting in each of the two cultures. What was found was that Japanese children did not show more *amae* behaviour during the EA assessment than the British children. Contrary to what has been described as characteristic of Japanese youngsters, Japanese children in Study 3 did not show more clinginess during play nor asked their mothers to do something they could obviously do themselves any more than the British children did. As with the British children, they also showed clearly independent behaviours by, for instance, saying 'no, I can do it!' to the

mother when she tried to help, and showed age-appropriate autonomy-seeking and exploration during the play part of the assessment.

While one could argue that children might have expressed more *amae* behaviour if a separation episode had been included, there was in fact an informal opportunity to observe separation behaviour when the mothers left the room so that the children could take part in the MCAST sessions with the researcher who was a stranger to them prior to the session. None of the 20 Japanese children showed hesitation or anxious *amae* behaviours when facing this brief separation from their mother. Whereas previous research and the literature report that Japanese infants are constantly within their mothers' reach (Takahashi, 1990), and co-sleeping and co-bathing by mother and preschool children are still commonly practised in Japan today (Behrens et al., 2007), the present study showed that Japanese preschool children nevertheless do show independence and exploratory play in a similar way to British children. Although the indulgent aspect of Japanese socialisation tends to attract attention in research, it appears that it is not entirely an accurate or full picture of social development in Japanese preschool children.

Strikingly, what did differ across cultures was the extent to which mothers appeared to actively encourage their child's *amae* behaviour during the interactions, a behaviour known as *amayakashi*. While none of the literature on cross-cultural attachment has focused on the mother's *amayakashi* behaviour, the current study found that the Japanese mothers showed significantly more *amayakashi* behaviours towards their children than the British mothers. An interesting informal observation, however, was that even though Japanese mothers showed more frequent *amayakashi*

behaviour towards their children, not all Japanese children ‘accepted’ it. As noted in Chapter 7, some of the children naturally moved away from the mother’s arm and explored the toy materials, or replied with a “no” to the mother’s offer of help. These observations were reflected in the finding that there was no association between maternal *amayakashi* scores and child *amae* scores in the Japanese sample.

Slightly different interaction was observed among Japanese mothers and their children who were classified as disorganised in their attachment. Because only 2 children were classified as this attachment group any discussion needs to be presented with caution. However, the results showed that as in the British sample, mothers of children who were classified as disorganised attachment type showed the highest score on *amayakashi*, while analysis of the observation period showed that they also tended to show slight anger when their children did not accept their *amayakashi* behaviours. These findings can be related to Watanabe’s (1992) claim that

“when a mother amayakasu her child, in the way that fulfils the child’s needs, it can be secure and beneficial to the child. However, it can be insecure and harmful if the mother amayakasu her child to fulfil her own egoistic needs.” (p. 28).

A further perspective on the significance of the mothers’ *amayakashi* can be also found in Doi (2001). Although Doi’s viewpoint on *amae* has attracted wide attention from psychologists and psychiatrists across the world, he also noted at the end of his book that:

“in a relationship between parents and child (it could also be applied

to other relationships), when the parents show amayakashi towards the child, the child may appear as if he is also showing amae to the parents. However, the reality is that when the parents initiates, one can no longer express amae emotion freely toward the parent.When the parent shows amayakashi behaviours towards the child, it is not the child who is expressing amae emotion, but it is the parent who is expressing it.” (p. 284, researcher’s translation).

Considering that secure attachments develop in an environment where a range of emotions are flexibly and freely expressed (Cassidy, 1994), it may be the *amayakashi*, not the child’s *amae* behaviour (with the possible exception of anxious *amae* behaviours), that leads to insecure attachment. Further research with larger number of participants must be conducted to establish the possible association between mothers’ *amayakashi* behaviours and children’s attachment patterns. Such research would also help in clarifying how maternal *amayakashi* behaviour is similar to and distinct from maternal behavioural patterns which have already been identified in Western research as being associated with insecure attachment with the child.

Previously, Mizuta et al. (1996) compared Japanese and U.S. children’s *amae* behaviours within the attachment context, using Crowell, Feldman, and Ginsberg’s (1988) separation/union task. They defined *amae* behaviours of preschoolers as “seeking close physical contact, such as climbing up and sitting on mothers’ lap, and burying face against mother’s chest” (p. 144), and found that Japanese children did show more *amae* behaviours than U.S. children but that overall attachment behaviours did not differ. The finding that Japanese children showed more *amae* behaviours (these could be classified as pure-*amae*) than their U.S. counterparts has been focused on in subsequent cross-cultural attachment studies. However, the fact

that attachment security did not differ across cultures even though the Japanese children showed more pure *amae* behaviours in this study might also be important to focus on.

It appears reasonable to assume that children's sense of 'security' in freely expressing *amae* emotions towards their mothers would not lead to children's insecure attachment, and that mothers' 'sensitivity' in distinguishing anxious-*amae* from other types of *amae* and showing less tolerant attitudes towards the anxious-*amae* behaviours might facilitate children's autonomy and would help in developing secure attachment. Furthermore, the mother's sensitivity in not overly expressing her own *amae* emotion towards her child by showing frequent *amayakashi* might also foster secure attachment.

8.8 Limitations of the current studies and suggestions for further research

Across the three studies of this thesis a total of 139 Japanese and 112 British mother-child dyads participated. Nevertheless, as is often the case in this type of research, the implications that can be drawn from any single study were limited by the relatively small sample size within each, with this in turn making it difficult to conduct statistical analysis on any of the individual insecure attachment categories. For instance, given the preliminary nature of the present studies, it would be useful in future to recruit larger samples of participants in order to further investigate the extent to which *amae* is separable into distinct and identifiable components by conducting a factor analysis of maternal response profiles.

It is also important to note that the Japanese data were collected in Tokyo in which individualism is increasing, in part due to the Japanese government's explicit attempt to make the educational curriculum more individualistic (Holloway, 1997) and in part because it is the most modern and probably the most Westernised city in Japan. Thus, the current findings may be limited to central Tokyo and its suburbs to some extent. Future studies would benefit from having mother-child dyads drawn also from more rural parts of Japan where families operate slightly differently from in Tokyo (e.g. living with extended family, and where the mother may not be a primary caregiver).

Furthermore, future research into *amae* should use a more fully developed observational coding scheme to look at the child's *amae* behaviour and the mother's response to it both in a more naturalistic environment and in a context that includes separation episodes to see if/how/to what extent preschool children express anxious-*amae* behaviours and the response of their mothers towards these behaviours. Similarly, further development of the observational coding scheme for maternal *amayakashi* behaviour would also be helpful.

Nevertheless, it is hoped that these three studies have provided additional texture to our understanding of cross-cultural similarities and variations in some of the key attachment theory phenomena. Firstly, the majority of the preschool children involved in these studies demonstrated that they had developed a secure attachment with their mother, both in Japan and in Britain, even though Japanese mothers showed more tolerant attitudes towards children's *amae* behaviours in general. Secondly, and probably more importantly, the association between EA and security

of attachment was also found in both countries. Thirdly, although several researchers have pointed out that the Western concept of attachment might be less relevant for Japanese parent-child dyads because Japanese child-rearing ideals are based on the concept of *amae*, the current studies suggest that *amae* in general may not automatically influence the attachment security of children in Japan or indeed in Britain. It was maternal attitudes towards anxious-*amae* in particular and mothers' *amayakashi* behaviours that seemed to affect the secure attachment relationships. As Study 3 showed, other forms of *amae* behaviours expressed by the children during the EA play session, such as pure *amae*, were not associated with their attachment relationships with their mothers in either country.

What we do not know, however, is the consequences of strong or weak attachment security in early development in Japanese children. According to Western attachment theory, children who are secure become more socially and emotionally 'competent' children than children who are insecure. Studies conducted in the West have indicated that children who developed secure attachment tend to be more autonomous and less dependent, can better regulate negative affect, are less likely to have behavioural problems, and are more likely to form close, stable peer relationships than those who have an insecure attachment relationship with their mothers (Cassidy & Shaver, 1999). Although some of the core attachment phenomena were indeed observed in Japan, we do not know whether attachment security has similar consequences to those found in the West, and further research will be necessary to investigate what attachment security means in the real lives of Japanese children. In such research, close examination of cross-cultural variations in the notion of 'social competence' would be essential. The findings of such research,

as well as those of further research into *amae* and *amayakashi* behaviour would have obvious practical applications for those working with Japanese children in childcare and educational settings, both in Japan and in other countries, in terms of what they expect of the child, how they relate to the child, and how they support the child's social development.

Further research on attachment as well as on *amae* could also extend the present studies' findings by examining the multiple contexts of socialisation and behaviours in contrasting cultures. Although the present studies focused on only mothers and their children, it may be unrealistic to assume that the mother is the single and primary agent in the socialisation of all or most children. Some children may develop a primary attachment to other family members, such as their father or a grandparent. Since preschool children are surrounded with many people, both family and non-family, research related to children's socialisation would benefit from the examination of range of social contexts and from inclusion of a wider range of adult groups.

Relating to this point, further studies that examine how *amae* relates to other aspects of the child's development, such as socialisation with peers and sibling relationships, would also be interesting, not only in Japan but also in Western contexts. For these studies, it would indeed be useful to have an *amae* attitude scale such as the one developed in this doctoral thesis. Future *amae* research, as well as future attachment and EA research, will undoubtedly provide us with a greatly widened and deepened understanding of early mother-child relationships and lead to a theory of attachment that is capable of encompassing and explaining the wide diversity in cross-cultural

child-rearing practices that exists. It is hoped that the studies reported in this thesis have contributed in some small way to that effort.

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Appendix A

***Amae* attitude scale with 39 items**

Questionnaire for British mothers

Please be assured that the information you provide will be kept confidential and used only for research purposes for this specific study. There are no right or wrong answers. Please give YOUR instinctive opinion.

Section A comprises questions about you and your child. Please tick the most appropriate answer.

In **Section B**, please read each sentence carefully and then circle the number which most closely reflects your level of agreement.

THIS QUESTIONNAIRE IS FOR A BRITISH MOTHER WHO HAS A CHILD AGED BETWEEN FOUR AND FIVE. PLEASE ANSWER THE FOLLOWING QUESTIONS ONLY ABOUT YOUR 4 OR 5 -YEAR-OLD CHILD, THOUGH YOU MAY HAVE SEVERAL CHILDREN. THE QUESTIONNAIRE REFERS TO THE CHILD AS 'HER'; THIS IS JUST A CONVENTION AND THE QUESTION APPLIES TO BOTH GENDERS EQUALLY.

Section A PLEASE TICK THE MOST APPROPRIATE ANSWER, THANK YOU.

- A1. Your name ()
- A2. Your child's name ()
- A3. Your age: () years old
- A4. Your child's age () years and () months
- A5. Your nationality
 British
 Other- Please specify ()
- A6. Your child's nationality
 British
 Other- Please specify ()
- A7. Is this child
 Only Child
 Youngest Among Siblings
 Middle Among Siblings
 Oldest Among Siblings
 Other ()

A8. Gender of this child Boy Girl

A9. The number of children

I have () child/children in total.

A10. Your Occupation (you may tick more than one)

- Full Time Worker
- Part Time Worker (I work days a week)
- House Wife
- Part Time student
- Full time Student
- Other - Please specify ()

A11. What is your highest level of qualification?

- None
- O'levels/GSCE or equivalent
- A Levels/Highers or equivalent
- College qualification or equivalent
- University degree
- Postgraduate qualification
- Other (please specify)

Section B

PLEASE READ EACH SENTENCE CAREFULLY AND CIRCLE THE NUMBER THAT MOST CLOSELY REFLECTS YOUR VIEW.
THANK YOU.

	Strongly Disagree	Neither/nor	Strongly Agree
1	1	2 3 4 5	6 7
2	1	2 3 4 5	6 7
3	1	2 3 4 5	6 7
4	1	2 3 4 5	6 7
5	1	2 3 4 5	6 7
6	1	2 3 4 5	6 7
7	1	2 3 4 5	6 7
8	1	2 3 4 5	6 7
9	1	2 3 4 5	6 7
10	1	2 3 4 5	6 7

		Strongly Disagree	Neither/for	Strongly Agree				
11	If my child is afraid to use the toilet at home by herself even though she is able to, I would accompany her.	1	2	3	4	5	6	7
12(a)	It is inappropriate for a child who no longer breast feeds to try to drink, or pretend to drink from her mother's breast.	1	2	3	4	5	6	7
13(b)	If my child pretends to drink, or asks to feed from my breast, I would say no.	1	2	3	4	5	6	7
14	If my child expects me to feed her, even though she can feed herself, I would feed.	1	2	3	4	5	6	7
15	It is quite natural for children to be shy.	1	2	3	4	5	6	7
16	If my child throws a temper tantrum and does not want to go to nursery, I should talk to her until she wants to go.	1	2	3	4	5	6	7
17	If we are at a birthday party, I think it would be all right if my child clings to me and does not socialize.	1	2	3	4	5	6	7
18	I would consider it normal behavior if my child hides behind me while I was talking to a stranger.	1	2	3	4	5	6	7
19	If my child comes to hold my hand while I was watching TV, I would feel this is sweet and hold her hand too.	1	2	3	4	5	6	7
20	If my child cries without any specific reason, I would feel this is attention seeking and would not try to comfort them.	1	2	3	4	5	6	7

		Strongly Disagree	Neither/nor	Strongly Agree				
		1	2	3	4	5	6	7
21	I sometimes enjoy my child acting playfully, like a baby.	1	2	3	4	5	6	7
22	If my child is reluctant to go to nursery, I should be strict and tell her that she has to go.	1	2	3	4	5	6	7
23	If my child clings to me and do not play with other children at the birthday party, then I would encourage her to socialize.	1	2	3	4	5	6	7
24	If my child asks me to hold them but I am busy doing some work, I would say "I cannot do it right now." and would not hold her.	1	2	3	4	5	6	7
25	If I heard that my child had been crying because she wanted me at nursery, I would feel happy that she needed me.	1	2	3	4	5	6	7
26	If my child calls me after she wakes up from her nap, I would go to her immediately.	1	2	3	4	5	6	7
27	If my child asks me to do something she can do by herself, I usually do it for her.	1	2	3	4	5	6	7
28	When my child is cranky, I try to treat her strictly.	1	2	3	4	5	6	7
29	If my child sits on my lap while I eat with families in the restaurant, I would happily accept that.	1	2	3	4	5	6	7
30	I would say "no" to my child if she interrupts and tries to get my attention if I am talking to someone.	1	2	3	4	5	6	7
31	If my child keeps insisting "NO!!", it is better to leave her alone to see what would happen.	1	2	3	4	5	6	7

		Strongly Disagree	Neither/nor	Strongly Agree				
32	If I respond to my child whenever she acts unreasonably (in order to get my attention), it may lead to my child becoming spoiled.	1	2	3	4	5	6	7
33	If my child gets into my bed at night, I would welcome her.	1	2	3	4	5	6	7
34	If my child demands attention or wants something "Now", I would give it to her immediately.	1	2	3	4	5	6	7
35	Even if my child asks me to carry her when she is tired, I let her walk by herself if it is possible.	1	2	3	4	5	6	7
36	If my child nestled her cheek next to mine while I was talking to my friends in a restaurant, I would happily accept that.	1	2	3	4	5	6	7
37	Children cannot help clinging to mothers in an unfamiliar situation.	1	2	3	4	5	6	7
38	I feel sad if my child does not upset if I leave even for a short while.	1	2	3	4	5	6	7
39	I feel it is sweet if my child finds something new to play with and carries it to me or shows it from across the room.	1	2	3	4	5	6	7

THANK YOU VERY MUCH FOR FILLING OUT THIS QUESTIONNAIRE.
IF THERE IS ANY COMMENT ABOUT THIS QUESTIONNAIRE, PLEASE WRITE HERE.

Appendix B

***Amae* attitude scale with 29 items**

Questionnaire for British mothers

Please be assured that the information you provide will be kept confidential and used only for research purposes for this specific study. There are no right or wrong answers. Please give YOUR instinctive opinion.

Section A comprises questions about you and your child. Please tick the most appropriate answer.

In **Section B**, please read each sentence carefully and then circle the number which most closely reflects your level of agreement.

THIS QUESTIONNAIRE IS FOR A BRITISH MOTHER WHO HAS A CHILD AGED BETWEEN FOUR AND FIVE. PLEASE ANSWER THE FOLLOWING QUESTIONS ONLY ABOUT YOUR 4 OR 5 -YEAR-OLD CHILD, THOUGH YOU MAY HAVE SEVERAL CHILDREN. THE QUESTIONNAIRE REFERS TO THE CHILD AS 'HER'; THIS IS JUST A CONVENTION AND THE QUESTION APPLIES TO BOTH GENDERS EQUALLY.

Section A PLEASE TICK THE MOST APPROPRIATE ANSWER, THANK YOU.

- A1. Your name ()
- A2. Your child's name ()
- A3. Your age: () years old
- A4. Your child's age () years and () months
- A5. Your nationality British
 Other- Please specify ()
- A6. Your child's nationality British
 Other- Please specify ()
- A7. Is this child Only Child
 Youngest Among Siblings
 Middle Among Siblings
 Oldest Among Siblings
 Other ()

A8. Gender of this child Boy Girl

A9. The number of children

I have () child/children in total.

A10. Your Occupation (you may tick more than one)

- Full Time Worker
- Part Time Worker (I work days a week)
- House Wife
- Part Time student
- Full time Student
- Other - Please specify ()

A11. What is your highest level of qualification?

- None
- O'levels/GSCE or equivalent
- A Levels/Highers or equivalent
- College qualification or equivalent
- University degree
- Postgraduate qualification
- Other (please specify)

Section B

PLEASE READ EACH SENTENCE CAREFULLY AND CIRCLE THE NUMBER THAT MOST CLOSELY REFLECTS YOUR VIEW.
THANK YOU.

	Strongly Disagree	Neither/nor	Strongly Agree
1-1	I would happily accept if my child sits on my lap while I watch TV.	1 2 3 4 5 6 7	
2-2	If my child sulks after I have scolded her, I should go and talk to her to try to comfort her.	1 2 3 4 5 6 7	
3-3	If my child asks for help getting down from somewhere that she could get down from by herself, I would tell her to try it on her own.	1 2 3 4 5 6 7	
4-4	Children cannot help being cranky when they are tired.	1 2 3 4 5 6 7	
5-6	I would get annoyed if my child nestle her face in my lap while I watch TV.	1 2 3 4 5 6 7	
6-7	If my child starts speaking a baby talk, I would ask her to speak more age-appropriately.	1 2 3 4 5 6 7	
7-8	If my child asks to lie on my lap while I watch TV, I would happily let her.	1 2 3 4 5 6 7	
8-9	Mothers need not worry if children always cling to them, because that will change over time.	1 2 3 4 5 6 7	

	Strongly Disagree	Neither/for	Strongly Agree
9-12(a)	1	2 3 4 5	6 7
It is inappropriate for a child who no longer breast feeds to try to drink, or pretend to drink from her mother's breast.			
10-13(b)	1	2 3 4 5	6 7
If my child pretends to drink, or asks to feed from my breast, I would say no.			
11-17	1	2 3 4 5	6 7
If we are at a birthday party, I think it would be all right if my child clings to me and does not socialize.			
12-18	1	2 3 4 5	6 7
I would consider it normal behavior if my child hides behind me while I was talking to a stranger.			
13-19	1	2 3 4 5	6 7
If my child comes to hold my hand while I was watching TV, I would feel this is sweet and hold her hand too.			
14-20	1	2 3 4 5	6 7
If my child cries without any specific reason, I would feel this is attention seeking and would not try to comfort them.			

	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
15-21									
	I sometimes enjoy my child acting playfully, like a baby.	1	2	3	4	5	6	7	
16-23									
	If my child clings to me and do not play with other children at the birthday party, then I would encourage her to socialize.	1	2	3	4	5	6	7	
17-24									
	If my child asks me to hold them but I am busy doing some work, I would say "I cannot do it right now." and would not hold her.	1	2	3	4	5	6	7	
18-25									
	If I heard that my child had been crying because she wanted me at nursery, I would feel happy that she needed me.	1	2	3	4	5	6	7	
19-26									
	If my child calls me after she wakes up from her nap, I would go to her immediately.	1	2	3	4	5	6	7	
20-27									
	If my child asks me to do something she can do by herself, I usually do it for her.	1	2	3	4	5	6	7	
21-28									
	When my child is cranky, I try to treat her strictly.	1	2	3	4	5	6	7	
22-29									
	If my child sits on my lap while I eat with families in the restaurant, I would happily accept that.	1	2	3	4	5	6	7	
23-31									
	If my child keeps insisting "NO!", it is better to leave her alone to see what would happen.	1	2	3	4	5	6	7	

		Strongly Disagree	Neither/nor	Strongly Agree
24-32	If I respond to my child whenever she acts unreasonably (in order to get my attention), it may lead to my child becoming spoiled.	1	2 3 4 5	6 7
25-33	If my child gets into my bed at night, I would welcome her.	1	2 3 4 5	6 7
26-36	If my child nestled her cheek next to mine while I was talking to my friends in a restaurant, I would happily accept that.	1	2 3 4 5	6 7
27-37	Children cannot help clinging to mothers in an unfamiliar situation.	1	2 3 4 5	6 7
28-38	I feel sad if my child does not upset if I leave even for a short while.	1	2 3 4 5	6 7
29-39	I feel it is sweet if my child finds something new to play with and carries it to me or shows it from across the room.	1	2 3 4 5	6 7

THANK YOU VERY MUCH FOR FILLING OUT THIS QUESTIONNAIRE.
IF THERE IS ANY COMMENT ABOUT THIS QUESTIONNAIRE, PLEASE WRITE HERE.

Appendix C

Leaflet used in Study 2



Contact

If you have any questions, please do not hesitate to contact me directly:

Kaori Kimura

**Room 2.15
The Graduate School
Moray House School of Education
University of Edinburgh
Holyrood Road
EDINBURGH EH8 8AQ**

Tel: 0131 651 6387 or 07787 301125

Email: K.Kimura@sms.ed.ac.uk

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The British Council Japan Association
The University of Edinburgh College Scholarship
The University of Edinburgh Development Trust

Can you help me?

I would be delighted if you would accept a **book token worth £5 as a thank you** for you and your child taking part.

Cross-cultural research on children's attachment and social development in the U.K. and Japan

Who am I?

My name is Kaori Kimura and I am a PhD student at the University of Edinburgh. I am interested in finding out about culture-specific factors involved in children's attachment and social development.

What would I like you to do?

- ♣ I would like British mothers of children aged 4 or 5 to complete 2 questionnaires. One will take you about 15 minutes and another will take 5 minutes.
- ♣ I would like to carry out a doll-play session and a vocabulary assessment with your son or daughter at nursery. The doll-play session will take around 30 minutes, and your child will be asked to tell me stories based on scenarios using a dollhouse and props. The vocabulary assessment will take around 10 minutes, and he or she will be asked to pick appropriate pictures which matches with description. Both sessions will be video recorded for later analysis. The videotape will be kept in a locked office within the University premises and will only be seen by myself and other people working on the study (e.g., my PhD supervisors).

What is the aim of this research?

My aim is to find out if there is a relationship between mothers' attitudes towards children's dependent behaviours (this is what the mother's questionnaire measures) and the children's behaviours as expressed during the doll-play session.

Voluntary participation

Participation in this research is entirely voluntary, and if you would like to take part, you would be free to withdraw from the research at any time without having to give any explanation. You can also have the videotape of your child deleted at this same time.

Confidentiality

The names of you and your child will be kept anonymous in any publication, report, paper or presentation on my findings. All identifying information will be kept confidential. The questionnaires and videotapes will be placed in a lockable cabinet, and only my co-researchers and I will have access to these.

If you are happy to participate, please return the signed consent form and your completed questionnaires. I will arrange to meet up with your son or daughter sometime soon after I have received these and send you a book token.

Thank you very much for considering my request.

* **Limits to Confidentiality**

In the unlikely event of being given reasons to suspect that a child is at risk, I will need to consult appropriate agencies.

Appendix D

Leaflet used in Study 3



Cross-cultural research on mother-child relationships in the UK and Japan

I would be pleased if you would accept a gift token for **£10** as a thank you to you and your child for taking part.

THIS INFORMATION LEAFLET IS FOR BRITISH MOTHERS OF CHILDREN AGED BETWEEN 4 AND 5 YEARS OLD.

You are being invited to take part in a research project. I would be grateful if you would take some time to read the information presented here as it explains what the study is about and what it involves. If, after reading it, you think you would like to help with this research, please return the attached form to the nursery and I will get back in touch with you as soon as possible. If before deciding, you have some further questions, please do not hesitate to contact me directly (my contact details are below).

Who am I?

My name is Kaori Kimura and I am a PhD student at the University of Edinburgh.

What is this research all about?

I am interested in finding out about culture-specific factors involved in children's social development and in how this is reflected in the close relationships between mothers and their young children. I would like to visit your home, at a time convenient to you and your child, so that I can observe how you and your child interact in a home setting. I would also appreciate it if you would fill out a brief questionnaire for me while your child and I have a doll-play session and play a picture matching game. It will be a one-off visit and should take no more than 90 minutes in total. (anytime is fine including holidays and weekends)

- **Observation session (mother and child: 30 minutes)**
You and your child will play with a jigsaw puzzle for 15 minutes and then read a book together for 15 minutes. I would like you and your child to play just as you normally do.
- **Questionnaire (mother: 15 minutes)**
After the observation session, I would like you to fill out a questionnaire about your child.
- **Doll-play session and vocabulary assessment (child: 30 minutes)**
While you are filling out the questionnaire, your child will take part in the doll-play session and picture naming session. In the doll-play session, your child will be asked to tell me stories based on scenarios using a dollhouse and props. In the picture-naming session, he or she will be asked to pick the picture matching a description which I read out (e.g. of a house).

The observation session and doll-play session will be video recorded for later analysis. The videotape will only be seen by myself and other people working on the study (e.g. my PhD supervisors).

What is the aim of this research?

I am particularly interested in the way children express their dependent behaviours and the way mothers react to these behaviours. The data obtained in the UK will be compared to Japanese data to find out if there are any culture-specific aspects to communication patterns when mothers and children interact with each other.

Voluntary participation

Participation in this research is entirely voluntary, and if you would like to take part, but at any time change your mind about this, you would be free to withdraw from the research without having to give any explanation to me or anyone else. You can also ask to have the videotape of you and your child deleted at this same time.

Confidentiality

The names of you and your child will be kept anonymous in any publication, report, paper or presentation on my findings. All identifying information will be kept confidential. The questionnaires and videotapes will be held in a lockable cabinet, and only my co-researchers and I will have access to these¹.

**If you are happy to participate, please return the signed consent form to one of the nursery teachers, and I will call you to arrange my visit. Alternatively, you can also contact me directly via telephone or email me to let me know.
Thank you for considering taking part in this project.**

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¹ Limits to Confidentiality

In the unlikely event of being given reasons to suspect that a child is at risk, I will need to consult appropriate agencies.

Appendix E

Publication

Komatsu, K. (2011). Emotional availability in Japan: Linkages with children's attachment representations. *The Journal of Family Education Research Institute*, 32, 102-111.

日本人母子におけるEmotional Availabilityと
愛着との関係性を探る

エジンバラ大学発達心理学研究科

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日本人母子におけるEmotional Availability と愛着との関係性を探る

エジンバラ大学発達心理学研究科 小松 かおり

要 旨

本研究では、母子間のemotional availability (EA)が、子どもの愛着形成にどのような影響を及ぼしているかということを検討した。EAとは、母親と子どもが互いの情緒信号に波長を合わせ、どの程度有効な情緒的關係を築けているかという概念であり、今回は34組の幼児を対象にEmotional Availability Scale (EAS)による測定を行った。MCASTを用いて測定された子どもの愛着タイプ別に母子間のEAスコアを比較した結果、母親との愛着状態が安定している子どもとその母親のスコアが最も高いという結果が得られた。日本人母子においてEASを用いたEAの測定がされるのは初めてである。またその結果が、母子間の愛着の安定性と関連しているという結果が非欧米圏で得られた事も意義深いであろう。今後は、EAと愛着それぞれの概念が、どの程度日本の子どもの日常における一般的特徴を反映しているかを追究する研究が不可欠である。

1. 問題

「Emotional availability:以下、EA」という概念を、母子関係の質を表す一つの指標として最初に提案したのはMahalerら¹⁾である。Mahalerらは、子どもにとってサポーティブな存在である母親とはいかなるものかを描写する際にこの用語を使用した。特に、子どもの自立心が芽生え始めた時に、その探索欲求を認め、子どもが情緒的なエネルギーを充電する為に母親の元に戻ってきた際にはそれを受け入れるという、母親の「ひかえめな手助け (quiet

supportiveness)」が重要であるとした。また、Emde (1980)²⁾は母子の關係に限定しないながらも、個人が、別の個人の感情や情緒の動きに敏感に反応して相手のニーズやゴールに応えることのできる能力をEAと呼んだ。喜びや興味といった正の感情のみでなく、怒りや恐れ、悲嘆、嫌悪といった負の感情も含めた幅広い種類の情動に応答できることが要であるとした。Emde & Easterbrooks (1985)³⁾は更に、相手の情緒を読み取りそれに応答できるかどうかのみならず、相手がこちらの情緒を読み取れるだけの情緒表現ができることも大切であるとい

う見解を打ち出した。養育者と子どもの関係性においては、養育者の物理的な存在だけでなく、養育者と子どもの間に相互に働く情緒交流システムがあることが重要であるとしたのである。母親(父親)は子どもの情緒の動きを敏感に読み取りその波長に合わせた応答し、子どもの側も母親に情緒信号を送ることで母親(父親)と波長を合わせることができるその関係性をEAの高い関係性としたのである⁴¹⁻⁶⁾。

日本でEAが語られるされる際には、先のEmde(1980)²⁾の見解が引用されることが多く、EAが「情緒応答性」と訳されているのもそれに起因しているのであろう。しかし、「情緒応答性」という訳を英語に訳し直すと「emotional responsiveness」となり、EAの概念の一部分しか反映していないことになり誤解を招きやすい。また、EAを測定する方法として、日本版IFEEL Pictures (以下、JIFP)⁷⁾が使用されていることが多いが、もともとEmde et al.⁸⁾によって提案されたIFEEL Pictures は、乳幼児の感情や情動を読み取る力を測定するツールであり、EAを測定するものではない。Osofsky & Emde (1993)⁹⁾は、その文献の中でIFEEL Picture を使用して測ることのできる情緒を的確に読み取る能力は、どの程度EAがあるかどうかを示す一つの「指標(index)」になるとしているが、EAを測定するツールであるとは述べていない。こちら側が相手の情緒を適切に読み取り、それに合わせた応答をするだけでなく、相手がこちら側の情緒信号を読み取り、それに応答する力をも含めた情緒のやりとりをするシステムがEAであるからである。例えば、養育者が泣いている乳児の感情を「不快」と理解し、おむつを交換したり母乳を飲ませたりするといった対応をとるだけでなく、子どもに笑いかけたり、話しかけたり、子どもの喃語に反応したりするような情緒的なやりとりを交わすことがあるが、このような情緒的な交流にも着目しているのがEAの概念なのである。これは、「愛着(attachment)」の観点からAinsworthら¹⁰⁾が提案した「maternal

sensitivity: 養育者の子に対する敏感な応答性」の概念とも一線を画す点である。BowlbyやAinsworth et al. は養育者と子どもの間に安定した愛着パターンが形成されるためには、養育者が子ども(主に乳児)の発する身体的、情緒的欲求に敏感に応答することが重要であると説いたが¹⁰⁾⁻¹²⁾、養育者と子どもの間でやりとりされる情緒の役割についてはあまり強調していない¹³⁾。むしろ愛着理論が強調するのは、「安全基地(secure base)」の概念である。「maternal sensitivity: 養育者の子に対する敏感な応答性」の高い養育者の子どもは、養育者を探索行動の拠点にして、安心して外の世界を探索することができる。そして不安になった時にはまた、その基地に戻って安心感を回復させるのである。その探索行動を可能にするのは、必要な時には自分のためにそこにいてくれる養育者がいるという安心感と、そこへ戻った時には喜んで受け入れてもらえるはずだという自信なのである¹⁰⁾。

この愛着理論と、従来のEAの概念¹¹⁾⁻²⁾を融合させて、EAを測定するツールとして提案されたのがBiringen, et al.¹⁴⁾による、Emotional Availability Scale (以下、EAS)である。注目すべきは、養育者の側と子どもの側両方の情緒的な関わり方がEAの高さを表すスコアに反映される点であろう。養育者側は「養育者の子に対する敏感な応答性」、「養育者の子に対する指導力」、「養育者の子に対する過度な介入の無さ」、「養育者の子に対する非攻撃性」の4つの側面に分類され、子どもの側は、「子の養育者への応答性」、「子の養育者との関わりへの参加意欲」の二つの側面に分類されている。養育者と子どもとのやりとりの中で相互から表現される情緒の質に注目すべき点は6つのどの側面においても強調されている¹⁵⁾。

EASを用いたこれまでの研究では、EAと愛着の間に関連性があることが明らかにされている。例えば、イスラエルの14-22ヶ月の幼児を対象にした研究では¹⁶⁾、Strange Situation Procedure (以下、SSP10)によってB型(安

定型)と分類された幼児とその母親の間には高いEAが見られ、子どもとの間に高いEAが見られた母親は、「成人愛着面接(Adult Attachment Interview:以下、AAI)」¹⁷⁾でF型(安定・自律型)であると分類される傾向が有意に高いことがわかった。更に、アメリカ・コロラドで実施されたBiringenら¹⁵⁾の研究でも、AAIでF型(安定・自律型)とされた母親とその5歳児の間には高いEAが見られた。更に、幼稚園に入園する前の4歳児とその母親のEAが、入園後の子どもの幼稚園生活をどの程度予測しようかということを検証したアメリカ・コロラドの研究では、入園前に高いEAを測定された母子の子どもは、幼稚園入園後の教師や友人との関係が良好で、暴力的な行為が少なく、仲間の中で孤立することが少ないという有意な傾向が見られた¹⁸⁾。また、耳が不自由であるか、難聴をかかえる幼児とその母親との間の高いEAは、2年後の子どもの言語習得率の高さを予測したという研究もあり¹⁹⁾、EAが子どもの実生活に密着したものであるということを示唆している。

一方、日本における愛着の研究は、1980年代に遡る。Durrettらが東京在住の39名の乳児を対象に実施した研究²⁰⁾では、13%がA(回避型)、61%がB(安定型)、18%がC(アンビバレント型)、そして8%が分類不可と分類され、欧米諸国と類似した結果になった。札幌在住の60名の乳児を対象にした同様の研究^{21)・23)}では、68%がB(安定型)に、そして32%がC(アンビバレント型)に分類され、A型(回避型)に分類された乳児がいなかったことから、日本における育児環境や生活習慣の違いや、日本特有の「甘え」の概念が不安定型の分類パターンへの偏りを説明し得るのではないかと²³⁾と、世界の愛着研究者達の注目を集めた。しかし、両研究において6割以上の乳児がB型(安定型)と分類されたことは、愛着理論が文化を越えた一定の普遍性を持していることを示しているとも考えられよう。近年においては、2000年に東京近郊在住の50組の母親と幼児をを対

象に行われた数井らの研究²⁴⁾で、AAIで測定された母親の愛着表象と、愛着Qセット²⁵⁾によって測定された子ども愛着行動との間に関連性が確認された。この研究で、AAIに反映される母親の愛着表象の安定／不安定の差異が、日常場面での子どもの愛着行動の性質をある程度予測するということが明らかになり、非欧米圏において初めて愛着の世代間伝達が実証的に支持されたことになる。更に、2007年に公開された、児童期の子どもを対象にした愛着研究²⁶⁾において、札幌在住の43名の6歳児の愛着分類パターンが欧米諸国のそれと類似していたばかりでなく、AAIによって測定された母親の愛着型とその子どもの愛着型との間の関連性が再現され、日本における愛着研究の妥当性が窺える結果が示された。

本研究は、4歳と5歳の幼児とその母親を対象に実施された。母子間のEAはEAS(4th Edition)により測定され、幼児の愛着状態の測定には、ドールプレイの手法(Manchester Child Attachment Story Task:以下、MCAST)²⁷⁾が使用された。これは、ドールハウスや人形を使って、子どもが愛着に関するテーマで自由にお話を作り、それをもとに子どもの愛着状態を測定する手法である。ドールプレイの手法が日本の子どもにも実施可能であるかを検討した山川(2006)の研究²⁸⁾で使用されたのはGeorge&Solomon²⁹⁾のAttachment Doll Playであったが、MCASTはそれとコンセプトや手法を同じくするものである。両者とも、幼児期・児童期の子どもが愛着対象(本研究では母親)に対してどのような心的モデルを持っているかを測定することを意図したものである。「maternal sensitivity:養育者の子に対する敏感な応答性」の高い母親の子どもは、実生活における経験から、母親に対して「お母さんは困った時には自分のことを助けてくれる存在である」という心的モデルを構築する。逆に、maternal sensitivityが低かったり、その一貫性を欠如したりしている場合には、「お母さんは自分を拒絶する」あるいは「場合によっては

拒絶されるかもしれない」という心的モデルが子どもの中に構築される。このAttachment Doll PlayやMCASTの中で子どもが作るお話の中に、この心的モデルが投影されるというのがこれらの手法の前提となっている。Attachment Doll PlayとMCASTの相違点は、愛着に関連したテーマの場面設定にある。前者には「ひざの怪我」「寝室のお化け」「分離と再会」の3場面に基づいて愛着状態が測定されるのに対して後者は「真夜中に怖い夢を見て飛び起きた」「ひざの怪我」「お腹が痛くなる」「ショッピングセンターで迷子になる」の4場面である。前者の「分離と再会」の場面では、本来ベビーシッターが登場することになっているが、母親が親戚や知り合い以外の人に子どもを預けて外泊をするという習慣が日本には殆ど無く³⁰⁾、子どもがその場面設定を理解できるのかどうか定かではないこと、また、山川²⁸⁾の研究で、日本人の子どもは「おぼけのQ太郎」のようなアニメの影響か、「お化け」を必ずしも怖い存在であると認識していないのではないかという興味深い考察が得られたことから、本研究ではより日本の子どもの実生活にも近い場面設定を導入しているMCASTを使用することとした。

わが国におけるEAの研究は、先に述べた通りJIFPを使って間接的にEAを測定した研究が主で、EASを使用して母親と子どものEAを調べた研究は未だ公開されていない。よって、日本人母子において、母子間のEAの高さと子どもの愛着の安定性の間に関連性に着目した研究はこれまでに無く、その連関を検討することが本研究の企図するところである。先述の通り、イスラエルで実施された先行研究¹⁶⁾で、B(安定型)と分類された幼児とその母親の間には高いEAが見られ、子どもとの間に高いEAが見られた母親は、AAIでF型(安定・自律型)であると分類される傾向が有意に高いことがわかったこと、更に、アメリカ・コロラドで実施された先行研究¹⁵⁾でも、AAIでF型(安定・自律型)とされた母親とその5歳児の間には高い

EAが見られたこと、そして日本においてもAAIによって測定された母親の愛着表象と子どもの愛着行動に関連性が示されたこと^{25)・26)}を基に、日本においてもB(安定型)と分類された幼児とその母親の間には高いEAが見られるであろうという仮説が立てられた。

2. 方法

(1) 調査対象

研究協力者は、東京とその近郊の公立(4校)・私立(2校)の幼稚園に通う34組の母子であった。子どもの年齢は4.5歳から5.5歳であり(平均年齢4.9)に、母親の年齢は27歳から38歳(平均年齢33.4)に分布していた。子どもの性別は、女兒19名、男児15名であった。34名のうち、1名の家庭のみが母子家庭であった。第一子が16名(47%)、第二子が16名(47%)、第三子が2名(6%)であった。また、有職の母親は10名(29%)であったが、そのうち週4日の家業の手伝いが1名、週3日程度のパートが7名、週2日のパートが2名であった。幼稚園を通して協力者を募った為か、フルタイムで働く母親とその子どもは本研究には含まれていない。

(2) 手続き

幼稚園を通じて研究内容が記載されたパンフレットを配布した。担任の先生に参加同意書を提出するか、本研究者に直接連絡を取るか、どちらかの方法で応募していただき、その回答率は11%であった。後日、協力者の都合のいい時間帯に家庭訪問を行い、再度研究に関する詳細説明をした後、最初に母親と子どもによるEA測定の為の20分間の観察実験を実施した。その後、子どもの言語能力の測定と、子どもの愛着状態を測定するためのMCASTが実施された。言語能力の測定には10分から15分、MCASTの測定には15分から40分程度の時間を要した。その間母親には別室にて学歴や就労体制に関する質問用紙への回答を依頼した。

(3) Emotional Availability Scale (EAS)

1) EAトレーニング

EASを使用するためには、開発者であるBiringen教授によるトレーニングプログラムに参加することが必須とされている。本研究者は、2009年4月にアメリカ・コロラド州Boulderで開催された4日間のワークショップに参加し、プログラム終了後に実施される、EASコーダーの信頼性テストに合格した正式コーダーの資格を有する。

2) EA観察の実施

この20分間の観察実験は、研究協力者の了承を得てビデオ撮影され、実験内容の説明をしている時間以外は部屋には協力者親子のみがいる状態で実施された。最初の5分はEtch-A-Sketchと呼ばれるお絵かきゲームを実施し、その後、再度本研究者が入室し、次の15分間に使用する玩具セットが持ち込まれた。Playmobil社のこの玩具セットには、大人の人差し指程度の大きさの王様やお姫様、農夫や子どもの人形や小物が入っている。その他に、お城や家を作ることができるレゴのセットも提示され、「これを使って15分間、普段のように二人で自由に遊んでください。」という説明がなされた。

3) コーディング

コーディングは、EASマニュアルに厳密に準拠する形で行われた。コーディングの信頼性を計る為、8組の母子(24%)のビデオクリップがコロラド州立大学Biringen教授のリアサーチアソシエートによって、クロスコーディングされた。EAS, 4th Editionの信頼性テストに合格した日本人がいない為、全ての会話を英語に訳す必要があった。本研究者によって英訳された会話は、本研究者以外のバイリンガルの日本人研究者によって再度和訳され、もとの日本語と合致するかを吟味する「back translation」にかけられた。一致しなかった訳に関しては合議の上、決定がなされた。このプロセスを経

て英訳された会話を字幕としてビデオクリップに挿入し、クロスコーディングを行った結果、8組の母子の6つの項目に関して全て80%以上(Pearson's correlation 82%–91%)の合致率を得た。

(4) MCAST

1) MCASTトレーニング

MCASTのスコアリングを使用に際し、開発者であるGreen教授によるトレーニングプログラムに参加することが必須である。本研究者は、2007年4月にイギリス・マンチェスター大学で開催された3日間のワークショップに参加し、プログラム終了後に実施される、2回の信頼性テストに合格した正式コーダーの資格を有する。

2) MCASTの実施

MCASTは、4つの部屋で構成されるドールハウスと家具、母人形と子ども人形を使用して行う4歳から8歳の子どもを対象に開発された愛着測定ツールである²⁷⁾。まず、「朝ごはん」の場面から面接が開始される。この場面には、愛着行動が誘発されるとされる「適度なストレス」[mildly stressful situation]は盛り込まれていない。ストレスのない場面設定下における子どもと親の関わり方を観察するためである。また、小道具や面接の進め方に慣れてもらう目的もある。愛着状態を測定するための4つの場面は、前述の通りである。各場面で最初に本研究者によって場面の導入が与えられた後、子どもが母人形と子ども人形の二つを使って自由に話を完成させるという課題である。

第一場面の「怖い夢を見る」という場面では、本来子どもと母親は別の寝室で寝ているという設定にすることになっているが、事前の調査で半数以上の子どもが母親のと同じ寝室で寝ていると回答したため、Green教授との討議の結果、普段同室で寝ている子どもに関しては同室の右側と左側にベッドを置くこととした。また、布団で寝ている家庭も多いことが予想され

た為、脚の高いベッドではなく、ベッドのマットレス部分のみを使用して、これを寝具とした。使用したドールハウス、人形、小道具は、Green教授によって使用可能と判断された物である。また、適切に場面の導入ができていないかのチェックを同教授から受けてから実施された。

3) コーディング

コーディングは、MCAST Coding Manualに厳密に準拠する形で行われ、A型(回避型)、B(安定型)、C(アンビバレント型)、D(無秩序/無方向型)に分類された。本来は、例えばB型は更にB1、B2、B3、B4と再分類化されるのだが、本研究では被験者の数が少ないこともあり、上記のように4分類化されたものを愛着状態を示唆する指標として使用した。コーディングにあたっては、子どもが作る話の内容と共に、子どもの視線や表情、声色や手の動きなどにも注目する必要があった。例えば、膝を怪我した子どもが母親のもとには行かず、自分で怪我の処理をするという話を作ったとしても、その際に目線がちらりと母人形の方へ向けられたり、子ども人形を母人形の方へ僅かながも動かしたりする様子が観察された場合はA(回避型)だけでなく、C(アンビバレント)の傾向も視野に入れる必要がある。最終的には4場面を通しての愛着行動から愛着状態が測定された。

コーディングの信頼性を計る為、「back translation」にかけられた日本語訳を字幕として挿入された、8人分(24%)のビデオクリップがマンチェスター大学Green教授のリサーチアソシエートによって、クロスコーディングされ、7人分の分類が合致した(Kappa = 0.78, $p < 0.01$)。合致しなかった1つに関しては合議の上、決定がなされた。

(5) 言語能力の判定

子どもの言語能力測定には、「絵画語彙発達検査方(PVT: Picture Vocabulary Test)³¹⁾」が使用された。

3.結果と考察

(1) MCASTによる母親への愛着タイプの測定結果

34名の4歳～5歳を対象に実施したMCASTによる愛着タイプの分類結果は、A回避型が7名(21%)、B安定型19名(56%)、Cアンビバレント型6名(18%)、D無秩序/無方向型2名(6%)であった。安定型(B)とその他の不安定型(A、C、D)の間に性差と子どもの言語能力の差は認められなかった。

この分類結果は、半数以下(33.9%)の5～6歳児がB型と分類され、安定型と分類された子どもの割合がCタイプに分類された子どもの割合(37.5%)を下回った。山川(28)の結果とは異なるものであった。むしろ、Aタイプに分類された子どもの割合が、Cタイプに分類された子どもの割合よりも高いという本研究の傾向は、6歳児の再会場面における愛着タイプの測定をした先述のBehrens et al.²⁶⁾の結果に類似するものであった。しかし、本研究においては、協力者自由意志によって参加を募り、そのレスポンス率は低かったこともあり、この分類結果を日本の幼児の愛着パターンとして一般化するのは難しい。またそれは本研究の企図するところではない。

(2) 子どもの愛着タイプと母親のEAの関連性

子どものMCASTにおける4分類別でみた母子間のEAトータルスコアは表1のような結果となった。4類型による子どもの愛着タイプ(A、B、C、D)を独立変数とし、母親のEAトータルスコアを従属変数とする一元配置の分散分析を行った結果、子どもの愛着タイプと母子間のEAスコアとの間に有意な主効果が認めら

表1 子どものMCASTにおける4分類別でみた母子間のEAトータルスコア

	n (%)	母親のEA平均スコア	母親のEA平均スコアのSD
A (回避型)	7 (21)	24.14	4.88
B (安定型)	19 (56)	32.74	5.73
C (アンビバレント型)	6 (18)	26.5	6.56
D (無秩序/無方向型)	2 (6)	18.5	9.19

れた ($F=6.65$, $p=0.01$)。事後検定では、BタイプとAタイプ ($p=0.05$)、BタイプとDタイプの間 ($p=0.05$) のEAスコアに有意な差があることがわかった。

本研究では、BタイプとCタイプの間の有意差は認められなかった。その理由の一つとしてCタイプに分類された子どもとその母親の間の真のEAを測定することの難しさが挙げられる。EASを使った観察実験の測定時間の長さやEAを測定する正確さとの間の関係性を調べたBiringer et al. (2005)の調査³²⁾で、15分間の測定でもEAの高さは子ども愛着タイプを予測したものよりそれを顕著にするのは30分～45分の測定時間であったという結果が出ている。特にC(アンビバレント型)については測定時間を長くした場合の効果が著しかった。これは、測定時間を長くすることによって、母親の子どもへの対応性の一貫性の欠如³³⁾や自身の情動をコントロールすることが困難な側面³⁴⁾を見出す機会が増えたことに起因していると考えられている³²⁾。今後のEA観察実験の時間は30分以上であることが望ましいということを示唆している。

また、日本における、C(アンビバレント型)の母子関係の意味についても考察する必要があるであろう。MCASTでCタイプ、その中でもC2タイプと分類される子どもの特徴として、母親に対してストレス信号の発信が弱かったり、受身的であったりすることがある。これらの要素だけでなく、自分でストレス信号を発信したにもかかわらず母親から隠れたりするなどの矛盾する行為が見られた場合にC型と分類されるため日本でのMCASTの使用は妥当であると考えられるが、ストレス反応が弱かったり、受身的であるというのはB型に分類された子どもにも見受けられた、日本の子どもの特徴的なパターンであった。「ママ(お母さん)、怖い夢を見たよ」「お腹が痛いよ」と言語化した信号を発さずとも母人形がお腹が痛い時に効く薬を持ってくれるなどの対応をするという話を作る子どもが多かったのは、「以心伝

心」「つうかあの仲」というような関係性が、肯定的に捉えられている日本の文化が反映されているとも考えられる。MCASTの面接実験が全て終了した後で、本研究者が子どもに「○○ちゃん人形はさっきお母さん人形に、お腹が痛いよとか、怖い夢を見たよ、って言わなかったけれどどうしてお母さんはそれをわかったんだらう。」と質問したところ、「お母さんは、言わなくてもわかってくれるの。」と答えた子どもがいたことは興味深い。先述の通り、自分でストレス信号を発信したにもかかわらず母親から隠れたりするなどの矛盾する行為が見られた場合や母親とのやり取りが母親との間の怒りの感情表現に発展するというアンビバレントな愛着関係が見られた場合のみCタイプと分類されるので、愛着タイプとしてはC型として問題ないと思われるが、日本におけるC型が諸外国のそれと意義を同じくしているかといったことを、今後の愛着の研究で検討するのは意味のあることであろう。

本研究において最も注目すべきは、日本の4～5歳児の愛着タイプと母子間のEAとの間に関係性が見られたという点である。特にD型に分類された子どもとその母親のEAが著しく低かった。D型に分類された子どもは2名であったため、一般化するには注意が必要であるが、EA観察実験中の遊びの中で見られた母親の特徴として、急激な口調や表情の変化があったり、口調にいらいらした感情がこもっていたり、攻撃的一面が見られる傾向があった。これは、Bタイプの母子と比較した時のDタイプの母子の「養育者の子に対する非攻撃性」のスコアの低さ反映されている ($p=0.05$)。また、EA観察実験中の愛着タイプD型の子どもは、母親に笑いかけることが少なく、無表情であったり、前半は不自然に母親に媚びる様子を見せるが後半はすねたような態度をとるなど、一貫性を欠いた母親への働きかけが見受けられた。そしてMCASTでのD型の子どもの特徴としては、言語能力を測定するテストまでは意欲的に取り組み、MCASTの面接が始まってから

も子ども人形を選ぶところまではスムーズにできて母人形を選ぶことを拒んだり、スムーズに面接を進められたケースでも母親に対する「組織化されない」あるいは「方向性の定まらない」愛着行動を示す傾向があった。

また、A型に分類された子どもとその母親は、B型に分類された子どもとその母親に比べて特に「養育者の子に対する敏感な応答性」と「養育者の子に対する過度な介入の無さ」の項目のスコアが有意に低かった(共に $p=0.05$)。この結果から、子どもの情緒や感情を読むことや、子どもの情動に合った対応をすることが困難で、子どもの遊びや学びにタイミングを逸した過度な介入をする傾向のある母親の子どもは、子どもが日常生活の中で困った状況になった時でも母親には助けを求めず自分で何とか解決しようとしたり、ストレス下にあるという自分の状況を否定しようとしたりする傾向があることがわかった。

そして、上記の比較からも明らかのように、子どもの情動の変化に対する応答性が高く、子どもの遊びを見守り、何かを教示する際には子どものタイミングに合わせた介入の仕方をして、口調や表情が穏やかで攻撃性の無いやりとりをする傾向のある母親の子どもは、困った状況に置かれた時に、母親を安全基地として利用するという、安定した愛着行動を示すことがわかった。

4. 全体的考察

本研究では、母子間のEAをEASを通して、子どもの愛着安定性をMCASTを用いて測定し、両者の関連性を検討した。EAの概念を基にした研究を実施するにあたり強調すべき点は、EASによって測定されるemotional availabilityは、養育者としての「質」や「特徴」を示唆するものではないという点である³⁵⁾。養育者と子どもとの相互関係は、子どもの年齢によっても、下の子が生まれたといった環境の変化によっても変わり得るものだからである。む

しろ、EAとは、養育者と子どもとがその関係を構築する歴史の中で互いに発展させていく情緒的なやりとりのクオリティを示唆するものである³⁵⁾。

わが国において、愛着タイプと子どもの社会性や学校適応性との関連性を調べる研究はあまり進んでいないが、諸外国では愛着関係の安定が子どもの自己肯定感、社会性、学校での適応力と関連しているという研究結果が報告されており³⁶⁾、本研究で愛着関係の安定性とEAの高さとの間に関係性が見出されたのはきわめて意義深いことである。母子関係だけでなく、子どもの生活全般をも向上しうるEAの概念が日本でも広く認識されることは、意味のあることではないだろうか。今後は、EASに拠って測定された母子間のEAがどの程度日本の子どもの日常における一般的特徴を反映しているかを追究する研究が不可欠であろう。また、EAとAAIとの関連を実証的に検討する研究も興味深い。

EASは母親に限定する測度ではなく、父親や教師を含めた広い意味での養育者に対応するツールであり、アメリカでは教師を対象にしたトレーニングや児童虐待のケースに介入した後の養育者への子育て支援トレーニング構築の際の参考資料としても利用されている。今後は日本でも父親や祖父母、教師といった母親以外の養育者と子どもとの間のEAをも考慮することで、子どもと養育者を取り巻く情緒的環境の向上にEAの概念を、日本の養育環境や文化に適した形で活かすことができるのではないだろうか。

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