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## ISSUES IN SOCIO-EMOTIONAL DEVELOPMENT

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### I. BACKGROUND AND HISTORY OF JAPAN-UNITED STATES COMPARATIVE STUDIES

Interest of American scientists in Japanese child rearing practices was mainly inspired by the World War II. Beginning with Ruth Benedict, its focus was on the relationship between culture and personality and Freudian-based factors such as breast feeding and toilet training were emphasized.

Observational studies comparing Japanese and American families suggest that the Japanese mother has more continuous and more physically intimate contact with her infant than typical American mother. However, because continuous observation on the same group of children during the first three years of life are not available, there has never been an adequate test of this important hypothesis.

The systematic and continuous observations of the social and emotional interaction of mother-infant dyads at homes and in lab situations are indispensable to validate or disprove tentative findings and generalizations on the cross-national differences in infant socio-emotional development to be reviewed in this section.

#### *Doi*

The Japanese psychoanalyst Doi (1973) has described a two-stage process of social development in Japanese infants. Prior to seven months of age, infants experience what Doi has called a sense of "perfect oneness" with his/her social environment, an experience similar to what in other cultures is called "symbiosis" (Mahler, Pine, & Bergman, 1975). Doi goes on to argue that the Japanese mother encourages in the infant the development of a unique characteristic he calls "*amae*" by which he refers to the tendency of a person self-indulgently to expect and even to take advantage of the help and support of individuals and group close to him or her.

*Amae* does not begin until the age of 7-8 month, when the infant starts to become aware that his/her mother exists as an entity separate from himself/herself. Not only does the Japanese infant long for a return to the state of "perfect oneness" with the mother, he or she also longs to preserve the state of *amae*. Thus, Doi's

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speculations suggest to us that for two reasons—one of which is unique to Japanese culture—the Japanese child is strongly motivated to prevent any separation from the mother. Doi asserts that this motive serves as a basis for, and colors, all later human relationships.

Centering his theoretical analysis around the concept of *amae*, Doi argues that the peculiar quality of the Japanese mother-child relationship has profound implications for the later personality of Japanese individuals. *Amae* is roughly translated as “dependency”, but in reality has no precise English equivalent.

It should be noted here that although the theoretical model of “symbiosis” is similar to that of “*amae*”, the stress is much more on development as a process of individuation than on the maintenance of oneness and closeness. Mahler et al., however, refer to the anxiety as basically maladaptive and as a hindrance to further development. They do not seem to allow for the possibility that this anxiety could actually become a major motivating force for later development.

### *Caudill*

Observational studies comparing American and Japanese mother-infant interaction suggest major differences between the interactional styles of the two different cultures. Caudill and Weinstein (1969) presented data suggesting that styles of maternal care in the United States and Japan are quite contrasting. Differences found between the mothers of the two countries suggest a more verbal interaction for the former and a more physically close contact for the latter. They note that it almost seems as if the American mother wants to have a vocal, active baby, and the Japanese mother wants to have a quiet, contented baby.

According to Caudill (1971), an American mother views her baby as, at least potentially, a separate and autonomous being. Therefore she helps him to learn ways of actively expressing his needs and wishes. In contrast, a Japanese mother views her baby much more as an extension of herself and feels that she knows what is best for the baby. Thus she places less importance on vocal communication. There is not as much need for verbal communication between the two.

Caudill conducted the follow-up study of his original subjects (at 2 1/2 and 6 of the child's age) to determine whether the differences in behavior in infancy between the United States and Japan lead to parallel differences at later age. Following statement is a summary of the conclusions of the follow-up study.

Compared to Japanese, Americans are more active, more vocally and physically emotional, more independent, and more likely to manipulate functionally both their social and physical environment (Caudill and Schooler, 1973).

With a sample of only 20 American and 20 Japanese children he was able to demonstrate conclusively meaningful and consistent cross-cultural differences in the behavior of children and their caretakers which persist from infancy through early childhood. Later study by Frost with a sample of 21 Japanese-American mothers and infants, demonstrated that the differences found between infants in Japan and the United States seem to be primarily the results of cultural, rather than genetic transmission (Caudill & Frost, 1973). The maternal care practices and infant behaviors were much

more similar to those of the American mother-infant pairs than they were to Japanese.

Caudill-Weinstein's study has been replicated recently by Sengoku, Davits & Davits (Sengoku, 1981). According to them, contemporary mothers in Japan are more likely to play with their infants than earlier, and American mothers are more likely to indulge their infant's negative states than they were before, though basic differences between the two groups still remain.

According to Kojima (in preparation) , however, there is some doubt about the extent to which the lack of intense playful interactions in Japan was the result of the mother's feeling of inhibition, and the unusual situation of observers in the home.

A few studies are in close agreement with Caudill & Weinstein's analysis about the Japanese mother's emphasis on proximal contact and emotional dependence.

### *Vogel*

A now classic participant-observation study of Tokyo was conducted by Vogel & Vogel. Vogel (1967) reports that Japanese children and their mothers are rarely apart and the American custom of babysitting is practically nonexistent. This is true even in contemporary nuclear Japanese families (Vogel & Vogel, 1961).

Physical contact is seen as a natural expression of affection, which is desirable and necessary for the proper rearing of children.

The mother's attitude that one must be careful in the presence of strangers is also communicated to the child before nursery school age.

The most important concern of Japanese mother was not absolute obedience, but rather, preservation of closeness between mother and child. "One of the principles implicit in the attempt to get the child to understand is that one should never go against the child" (Vogel, 1967).

### *Lebra*

Lebra (1976) describes the relationship between the maternal care practices and infant behavior as basically one of interdependency (e. g. breast feeding, co-bathing, sleeping together, communicating physically, carrying the child on the mother's back, toilet training the child by holding him/her above the toilet, etc.).

He also states that Japanese mothers try to sensitize their children to feeling of loneliness and dependency, keeping the child in close physical contact with the adult social world to the extent possible.

He describes the use of rewards by mothers, threats of abandonment, fearing, and appeals for empathy by the child (in which the mother presents herself as a victim of the child's misbehavior).

### *Lanham*

From the standpoint of the United States vs. Japan comparison of emotional obedience and compliance, work of Lanham should be cited at this point.

Lanham (1956, 1962) did her field study in an urbanizing city of 35,000, first in 1951-1952 and then again in 1960. Combining questionnaires, interviews and participant observation, she studied children whose ages ranged from three years to early junior

high with a median age of 7.3 years.

She emphasized the extremely positive nature of child training in Japan.

"The least one can say is that parents believe that proper training of children is positive rather than negative. Children are told that they are good, *ii*, great, or wonderful, *erai*, and clever, *orikoo*. The strongest negative sanction used to enforce compliance is the verbal threat of sickness" (1962).

"The mother's efforts are therefore not directed toward herself or the achievement and status of her offspring, but rather to the training of her children in proper interpersonal relationships. She will internalize and blame on herself her children's failure" (1962).

The reason why Japanese mothers are concerned about compliance is that they fear that the child will not do well outside of the family, and may hurt other's feelings. In the United States, maternal concern about compliance stems from a fear of disobedience.

"Obedience in itself is not a desired goal" (1962).

Mothers understand with great pains the reason why a child does not comply and they do not feel the need of authoritarian control over the child.

Mothers feel that a harsh punishment for incompliance and misbehavior may lead to weakening of the mother-child emotional tie.

Mothers try hard to help the child develop concern for other's feelings.

Lanham's findings remain to be proved by a carefully designed cross-cultural study on emotional obedience and compliance.

Hara and Wagatsuma (1974) present data to show that 166 out of 255 mothers say they told their children to behave properly, "otherwise they would be laughed at by other people".

#### *Hess & Azuma*

Although Hess & Azuma's study mainly focused on maternal variables and the cognitive development of the child, their findings concerning the socio-emotional development of the child are important, and therefore will be reviewed here.

The developmental tasks mothers believe should be mastered before age six differ between the two countries. Japanese mothers are likely to value emotional maturity, compliance to adult authority and courtesey in social exchange. while American mothers believe verbal assertiveness and social skills deserve more attention. Japanese mothers are more concerned than American mothers in the child's ability to relate appropriately to others and to regulate him/herself in the control of emotions.

Japanese and American mothers use quite different strategies for regulating the behavior of their children. Japanese mothers are more likely to base their requests on appeals to feelings and the consequences of the particular behavior (e.g. "that makes your dad angry"). American mothers on the other hand tend to base their appeals to the child on their authority in their roles as mother.

It seems that the Japanese mother wishes to avoid confrontation with the child. She may have confidence that the close bond with the child will bring him/her to conformity.

Some of the findings by Hess-Azuma study imply a need to study infant socio-

emotional development. Moreover, some of the conclusions their study have implications for future infant study using cultural comparison method.

## II. THE RELEVANCE OF THE STUDY OF EMOTIONAL COMMUNICATION

Although the study of emotional development in human infancy has a long history, a major change in the conceptualization of emotional processes is currently taking place which is creating in the field of emotions a renaissance of interest no less striking than the resurgence of interest in temperament. There are currently three novel themes which are guiding contemporary research on emotions :

1. The shift from the study of emotions as dependent variables to the study of emotions as independent variables.

2. The identification of cross-modal perceptual invariants that specify discrete emotional states and which regulate behavior in similar ways.

3. The study of how emotional states become socialized with experience. Although each of these themes has major relevance for understanding similarities and differences between Japanese and American infants, the first of these has been the topic of recent cross-national research and will be the focus of the ensuing discussion.

*Emotions : From dependent to independent variables.* For many years, the study of emotions was dominated by the search for the pattern of emergence of discrete emotional states. Accordingly, numerous studies were done on when phenomena like social smile, laughter, anger, stranger and separation anxiety, fear of heights, fear of looming stimuli, and attachment could first be identified. This search for times of onset typified the study of emotions as dependent variables. Moreover, it reflected a widespread belief of the time—that emotions were processes secondary to more fundamental perceptual or cognitive phenomena, and that emotions were epiphenomenal or non-causal by-products. The presupposition that emotions were epiphenomenal prevented psychologists from exploring the possibility that *receptive* aspects of emotional experience may have crucial importance in the regulation of behaviors of human infants, children and adults.

Several factors have led researchers to balance their interest in emotions as *outcomes* with exploration of emotions as *determinants*. First of all, contemporary cognitive theory has become dissatisfied with the lack of ecological relevance of the investigation of memory, perception, problem solving and information processing. Since emotions play such an important role in everyday applications of information processing like eyewitness memory, face recognition, and selection of behavior, the emphasis on real-life concerns in the area of cognition has led researchers like Bower (1981) and Zajonc (1980) to stress the possible role of emotions as determinants of the perceptual registration of events, and their storage, elaboration, and retrieval from memory.

Another factor is the strong evidence that has been obtained showing that emotional expressions are not cultural constructions, as was once believed, but reflect biologically adaptive patterns with an evolutionary history (Ekman, 1973). After innovative cross-cultural studies demonstrated universal recognition of several facial expression patterns of emotions (Izard, 1971 ; Ekman, Friesen, & Sorensen, 1969), interest

shifted to the role of facial expressions as *social signals* with possibly universal behavior regulatory consequences.

### *The concept of social referencing*

One of the most powerful demonstrations of the social regulatory consequences of emotional expression is the phenomenon of social referencing. This term refers to the tendency of an individual of any age, but especially infants, to seek emotional information from the face, voice or gesture of another to help disambiguate an uncertain event. Many researchers in the field of emotion (e.g. Schaffer, 1971; Kagan, 1974; Sorce, Emde, & Frank, 1982) had noted the tendency of infants to look back and forth between the mother and an approaching stranger. This tendency had been interpreted initially as an effort on the child's part to compare the face of the stranger with that of the mother, the outcome of which was discrepancy reaction of fearfulness. However, the fact that infants persisted in alternation of glances at the two faces even at ages when the mother's face is well known to the child suggested that the referencing behavior was serving a different purpose than of facial comparison. Moreover, a study by Carr, Dabbs, and Carr (1975) revealed a tendency of infants, even in the physical presence of the mother, to position themselves so as to be within "eyeshot" of her. Accordingly, Campos and Stenberg (1981) proposed that infants were seeking emotional information from the mother's face, and that such information then influenced the child's behavior.

Two studies clearly demonstrated the powerful regulatory influence of maternal facial expression poses. In one, testing 12-month-olds, mothers were instructed to pose the facial expression of fear, anger, sadness, interest, or joy when the infant approached the center of a visual cliff table. The table had been modified to create ambiguity: The dropoff, rather than being the usual 48 inches in depth, was set at 12 inches, a depth which pilot work showed to elicit hesitation but no clear avoidance of the height. This study demonstrated quite clearly that the emotion in the mother's face influenced the child's behavior: When mothers posed fear, no infant out of 17 tested crossed the deep side. When they posed anger, only 11% of the babies tested crossed. On the other hand, when the mothers posed either joy or interest, approximately 75% of infants tested crossed the deep side (Sorce, Emde, Campos, & Klinnert, 1984). Thus, emotional expressions were shown to have crucial behavior regulatory consequences.

In a second study, the issue of the affective quality of the infant's reactions to a stranger was investigated with 8.5 month old infants (Boccia & Campos, 1983). A standard stranger approach, similar to that used in previous studies of stranger distress (e.g. Campos, Emde, Gaensbauer & Henderson, 1975) was employed. However, immediately upon the entrance of the stranger, the mother (who was seated within view of the infant) uttered either a cheery hello and posed a broad smile, or said a stern greeting and posed a facial frown. Heart rate was the variable of major importance in this study, and revealed once again clear regulatory effects of the maternal emotional expression pose: When the mother posed happiness at the entry of the stranger, the infant's heart rate typically decelerated and stayed so over the course of the stranger

approach. Only when the stranger picked up the infant did heart rate accelerate in this condition. By contrast, when the mother posed concern, heart rate accelerated from the point the infant referenced the mother, and stayed acceleratory, reaching significantly higher levels during stranger pickup than in the maternal joy condition. This study thus confirmed the importance of maternal emotional expressiveness as a determinant even of social reactivity in infants as young as 8.5 months.

*The study of emotional communication : Japan and United States*

There are several reasons for studying similarities and differences between American and Japanese infants in the consequences of emotional expressions. In the first place, the personal space of the mother and child differs in the two countries. Japanese mothers are much physically closer to their infants, carrying the infant on their backs for longer periods of time each day, and until the infant is much older than is the case in the United States. Such physical proximity must influence the channels used for emotional communication, with tactile and low intensity vocal expressions being expected in the Japanese more frequently than in the American mother. Moreover, the Japanese mother emphasizes indulgence of the child's emotional states more than the American mother does. Accordingly, emotional communications in the context of anger and prohibition must differ from what is typically seen in America. Finally, child-rearing practices in the United States are directed more toward eliciting obedience, especially through threats and external rewards and punishments, such as praise and blame. Accordingly, there may be differences evident in anger expression even in infancy between the two cultures. Specifically, the reception of anger signals must be a rarer event for the Japanese child than for the American.

As a first step in the study of differences between the two cultures in emotional regulation, we investigated the consequences of vocalic expression of emotions directed toward the infant in a sample of infants in Denver, Colorado, and another in Sapporo, Hokkaido. Both groups were 11 months of age, from middle and upper middle class families. Different groups of infants were presented with vocal expressions of joy, anger, or fear when an interesting but somewhat abruptly-moving toy entered the room. Dependent variables included the latency to resume movement following the utterance of the vocal affect signal, the distance moved to approach the mother following each signal, and the tendency to approach another similar toy on a subsequent trial.

The results of this study reveal quite striking differences between the Japanese and the American infants in their responses following the mother's utterance of an *anger* vocal expression, but no cross-national differences following the mother's utterance of either joy or fearfulness! For instance, the latency to resume locomotion toward the toy in the Japanese infants following vocalization of joy (N=4) it was 17.50 seconds, and following anger (N=10) it was 48.89 seconds. For the 11 month old American infants, the corresponding figures were, for joy (N=12) 8.00 seconds, for fear (N=12) 14.65 seconds, and for anger (N=12) it was 17.50 seconds. Thus, the Japanese infants showed far greater behavioral inhibition following maternal vocalization of an anger expression when the infants moved toward a toy than did the American

infants. Moreover, because the differences in inhibition between American and Japanese babies were not found following the expression of fear by the mother, the findings cannot be attributed to *temperamental* differences between the Japanese and American babies. Rather, it suggests that the vocal expression of anger has already assumed much greater behavior regulatory control among the Japanese infants (for whom it may be a signal reserved only for extreme occasions of discipline) than it is for the American infant (who may hear anger expressions much more frequently, thus attenuating its effectiveness).

### *Conclusion*

This study on the regulatory consequences of emotional expressions in different national groups is in progress, and findings, should be considered tentative pending replication of the initial results. Nevertheless, the data obtained so far reveal the usefulness of addressing several issues about emotional communication among Japanese and American mother-child dyads. These studies should include both naturalistic assessments of similarities and differences in use of different emotional signals in the home, and public areas such as supermarkets and playgrounds, but also how infants in the two cultures develop the capacity to note and respond to experimentally-manipulated emotional expressions in the laboratory.

### III. THE RELEVANCE OF INFANT TEMPERAMENT

There has been a renaissance of interest in the concept of infant temperament, where temperament refers to a relatively stable individual difference disposition that has partial roots in genetic or prenatal factors. The very small set of temperamental dimensions that has been studied by developmental scientists includes activity, fussiness, fearfulness, sensitivity, attentiveness, and vigor of reaction. These were selected because they were relatively easy to observe and seem to be related to the child's future adaptation. These are reasonable criteria to employ when a new area is being explored. However, it is likely, as new methods are being developed, that additional temperamental dimensions will be discovered.

There is good reason to believe that the temperamental qualities of the child have a very strong influence on parental handling and socialization and, therefore, the concept of "goodness of fit" has become increasingly popular in more recent discussions of development.

#### *Inhibition and Lack of Inhibition to the Unfamiliar*

Of all the temperamental qualities that have studies, including activity, irritability, and fearfulness, and initial display of inhibition and lack of inhibition to the unfamiliar are two qualities that seem to persist from the first birthday to late childhood. Children who belong to the former class are usually called by their parents shy, cautious, or timid, while those belonging to the latter class are usually called sociable, bold, exploratory, or fearless. Inhibition to the unfamiliar can be seen in the eight or nine-month-old child but is displayed most clearly after the first birthday when the child encounters an unfamiliar room or person. Most two-year-olds differ in how easy it is to

elicit this inhibitory reaction and how consistently it is displayed across many different unfamiliar situations. About ten percent of American two-year-olds consistently show an extreme degree of inhibition to non-threatening but unfamiliar events, for example, an unfamiliar woman talking to them. They stop playing, become quiet, and assume a wary facial expression. Other infants will smile, talk to the adult stranger, and allow her to play with them. The inhibited child may recover after ten to twenty minutes and play with the stranger in a relaxed manner. Even though the inhibition is temporary, it is a reliable reaction during the second, third, and fourth years.

Research in our laboratory at Harvard has been following two cohorts of children from the second year through the fifth year of life. These children were selected from larger populations to represent the approximately top and bottom ten percent of a sample of volunteer children from the Boston metropolitan area. The children were observed in interactions with unfamiliar children and in cognitive testing situations. The results revealed remarkable stability of the tendency toward inhibition or lack of inhibition with an unfamiliar child. No uninhibited two-year-old has become inhibited over the course of the study and about one-third of the inhibited children have become less inhibited.

Additionally, the inhibited children show loss of respiratory sinus arrhythmia while working on cognitive tasks. Also, more of the inhibited than uninhibited children had, as infants, frequent nightmares, unusual fears, and were generally obedient to parental requests. When tested by an unfamiliar woman, the inhibited children rarely made interrupting comments, looked at the examiner frequently, and more often spoke in soft, hesitant voices. Finally, the inhibited children are more likely to show larger pupillary dilations to mild cognitive challenge and are more likely to show an increase in fundamental frequency and decrease in variability of the pitch periods of the vocal spectrum when they are speaking single words under mildly stressful conditions. These data indicate that the inhibited children have a lower threshold to become physiologically aroused by mild cognitive stress. In searching for adjectives to capture the differences between the two classes of children, recognizing that any word distorts what is observed, the words restrained, watchful, vigilant, and gentle capture the essence of the inhibited child, while free, energetic, exploratory, and spontaneous capture the style of the uninhibited youngster.

Because many have noted that Japanese children seem to socialize more easily than Caucasian children, it would be of great importance to determine whether more Japanese than Caucasian children have a tendency to fall into the temperamental type we have called inhibited, rather than uninhibited. Such a study could be implemented by observing Japanese and Caucasian children in similar circumstances, especially in interactions with unfamiliar people, during the second and third year of life and gathering comparable data on cardiac, vocal, and pupillary reactions to mild cognitive stress.

#### *Measurements of Attitudes*

The procedures designed to assess the attitudes of adults, both within and across cultures, have been limited largely to direct verbal report obtained either through questionnaire or interview. These methods are more likely to be valid when a

particular belief does not have a complementary inconsistent attitude, is relatively free of an evaluative dimension, and is easily accessible to conscious report than when the attitude has an inconsistent complement, engages in evaluation of its desirability, and is not completely accessible to conscious report. Thus, direct questioning is likely to be more valid when a person is asked to judge the desirability of one soap product over another than when the judgement has to do with the desirability of a law permitting or denying federal funds for abortion. For more controversial issues, it would be useful to have other indices of the degree to which a person is committed to a particular attitude. Selective recall of information favoring one or the other of the two complementary attitudes presented simultaneously is one possible strategy that might be used to evaluate differential commitment. The use of selective recall is based on the hypothesis that the amount of information favorable or in opposition to an attitude are equal, then a person's recall will be better for the information that supports his or her preferred belief. This prediction is based on the hypothesis that incoming information that matches the person's beliefs will be better preserved in memory than information that is unfamiliar or inconsistent with the individual's frame, as long as the amount of information favoring each is equal.

We have applied this method to measure attitudes in Japanese and American parents. Briefly, mothers in the two cultures listened to recorded essays on three different themes. Each essay contained balanced arguments favorable to or opposing the two sides of each theme. Each essay contained several reasonable arguments favorable to each attitude, the number of words in each of the arguments was approximately the same, and the opposing argument alternated during the recorded essay. The first essay dealt with the importance of giving infants a great deal of physical affection. The argument favorable to affection claimed that kissing and hugging would make the child more secure. The opposing argument stated that too much physical affection could spoil the child and make him or her too dependent upon the parents for approval. American parents believe that both arguments have some truth value, but some mothers are more committed to the former, some to the latter attitude. The second essay contrasted the importance of the child attaining emotional independence from the family with the desirability of retaining a close dependent tie to one's parents throughout adolescence and early adulthood. The third essay compared a restrictive and a permissive socialization regimen. The argument for the former was based on the desirability of rearing a child who will be reasonably obedient to authority and, as a result, will do well in school and gain job security. The argument for permissiveness was based on the desirability of socializing a child who is not overly fearful of parents and authority figures and, hence, is resistant to coercion and free to pursue gratification of his or her motives.

After a practice essay acquainting the subjects with the task, the essays were presented in the same order—affection, independence, and restrictiveness—and immediately after each essay the mother's recall was recorded. Each protocol was typed verbatim and scored in the following way. Each statement in the recall protocol was first classified as being neutral in content or favoring one or the other of the two complementary themes. After each statement had been classified as neutral or favoring

either one of the arguments and tangential comments and successive repetitions of words had been eliminated, one primary variable was quantified. It was the total number of words recalled that favored each of the two arguments. Data obtained on American samples revealed that middle-class, in contrast to working-class, mothers recalled more of the pro-affection than the anti-affection theme and more pro-restrictive than anti-restrictive theme. There were no class differences with respect to Essay Two on independence.

When this procedure was replicated on 20 middle- and 20 working-class Japanese mothers living in Hokkaido, we found that, as in the United States, middle-class Japanese mothers recalled more words from the pro-affection than the anti-affection theme, while working-class mothers showed the opposite profile. This suggests that across both cultures middle-class status is associated with a more favorable attitude toward physical affection. However, the direction of difference on the essay on restrictiveness was opposite, with middle-class mothers more likely to recall more words favoring permissiveness. We take this to mean that middle-class Japanese mothers want to avoid creating anger and fear in their child for these emotions impede the establishment of the inter-dependent relation that is the goal of socialization. Many more working, than middle-class Japanese parents believe that the child must be prepared for the difficult challenges of life, especially the financial pressures associated with economic disadvantage. As result, working-class parents feel they should not spoil their children with too much affection or yield to their demands for material gifts. These result suggest that the use of selective memory is a potentially useful tool in cross-cultural studies of parental attitudes.

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