
Conceptions of Parenting in Different Cultural Communities: The Case of West African Nso and Northern German Women

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Abstract

The present study compares conceptions about parenting in two cultural communities that may be expected to hold different views on parent–child relationships. Socio-demographically diverse samples of 46 Northern German and 39 West African Nso women evaluated parenting behavior observed in 10 Nso and 10 German videotaped mother–infant interaction sequences. The individual evaluations were assessed in group contexts. The statements were analyzed with respect to their reference to parenting systems and interaction mechanisms as conceptualized in the component model of parenting. As expected, the Nso respondents addressed primary care, body contact and body stimulation more often than the German respondents who focused more on face-to-face communication and exclusive attention. Contrary to our expectations, distress regulation was addressed more often by the German respondents. Quantitative analyses are combined with the qualitative elaboration of the respondents' evaluative comments. The identified ideas about parenting are discussed as reflecting the conscious nature of parenting as a shared cultural activity and related to cultural goals.

Keywords: ethnotheory; parenting; culture

Parents all over the world hold specific beliefs about proper care and handling of small children (e.g. Bornstein, 1989; Munro, 1975; Pomerleau, Malcuit, & Sabatier, 1991; Shweder *et al.*, 1998). These parental ideas (Goodnow, 1992) or parental ethnotheories (Super & Harkness, 1996) may be assumed to express conceptions on the nature of children, parenting, and development, specifying how to become a competent adult in a respective environment (cf. Harkness, Super & Tijen, 2000; Lin-Huber, 1998; Stewart, Bond, Deeds & Chung, 1999). Thus, ideas about childcare practices are related to developmental goals (LeVine, 1974; LeVine *et al.*, 1994; Richman, Miller & LeVine, 1992). Although interindividual differences are prevalent with respect to parenting goals and practices in every culture (e.g. LeVine *et al.*, 1994; Palacios & Moreno, 1996), nevertheless, members of cultural communities may be viewed as groups of individuals who co-construct a shared reality in different domains of life

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(Harwood, Schoelmerich & Schulze, 2000). In particular, the conceptions of individualism and collectivism as cultural normative dimensions (Hofstede, 1980; Kagitcibasi, 1997; Singelis, 1994; Triandis, 1995) and independent and interdependent construals of the self as individual value orientations (Markus & Kitayama, 1991) are understood by developmentalists as specifying different developmental goals which are correlated with different socialization contexts and parenting styles during different stages of development (Greenfield & Suzuki, 1998; Keller & Eckensberger, 1998; Shweder *et al.*, 1998). Parental ethnotheories may thus be conceived of as the mediating links between these cultural meta-models and behavioral contexts and practices (Harkness *et al.*, 2000). It may therefore be expected that cultural communities who differ with respect to these value orientations also differ with respect to the nature of parental ethnotheories.

This paper focuses on the early developmental phase of infancy, when the foundations for different developmental pathways are laid with different caretaking arrangements (e.g. co-sleeping or separate sleeping) and practices (e.g. multiple caretaking or monotropic relationships; cf. Keller & Eckensberger, 1998; Morelli, Rogoff, Oppenheim & Goldsmith, 1992; Rogoff, Mistry, Göncü & Mosier, 1991; Shweder *et al.*, 1998). Distinct differences in the evaluation of these caretaking arrangements and practices have been reported across cultures (Bornstein *et al.*, 1992; Brazelton, 1977; LeVine *et al.*, 1994). Differences in cultural expectations for the timing of developmental milestones have further supported differences in the attention to behaviors which may be related to independent and interdependent value orientations (e.g. an early focus on cognitive achievements as compared to an early focus on social achievements; autonomous as compared to symbiotic relational orientations; cf. Hess *et al.*, 1986; Keller, Miranda & Gauda, 1984; Morelli *et al.*, 1992; Rogoff *et al.*, 1991; Rothbaum *et al.*, 2000; Shweder *et al.*, 1998; Super & Harkness, 1996).

The present study compares the conceptions of parenting with infants in two different cultural communities that may be expected to be prototypical for the expression of independent and interrelated conceptions of relationships and competence.

The interrelated value orientation that has been developed mainly with respect to East Asian cultures (Kagitcibasi, 1997; Markus & Kitayama, 1991) has also been identified in traditional rural areas across other parts of the world (Harwood, Miller & Irizarry, 1995; Kagitcibasi, 1996, 1997; LeVine *et al.*, 1994). Also traditional African cultures in general (Lancy, 1996; Zimba, 2002) and the cultural community of the Nso in Cameroon in particular (Nsamenang, 1992; Nsamenang & Lamb, 1994; Tchombe, 1997; Yovsi, 2001) have been described in terms of a high appreciation of inter-relatedness in their conceptions of relationships and competence (Keller, 2003; Nsamenang, 1992; Nsamenang & Lamb, 1994; Tchombe, in prep.).

The independent value orientation is mainly represented in urban settings of Western industrialized societies (cf. Harkness *et al.*, 2000; Kagitcibasi, 1997; Markus & Kitayama, 1991; Triandis *et al.*, 1988). Germans have been described as representing individualistic or independent value orientations. Northern Germans in particular seem to promote independent parent-child relationships from early on (Grossmann, Fremmer-Bombik, Rudolph & Grossmann, 1988; Zach & Keller, 1999).

The documentation of family life and socialization patterns among the Nso cultural community reflects a high esteem of harmonious and hierarchically organized relationships between family members and a wide social reference group, mostly the village (Nsamenang, 1992; Nsamenang & Lamb, 1994; Tchombe, in prep.). Childcare is aimed at instilling acceptance of the moral authority of parents and obedience

(Yovsi, 2001). Compliance, conformity, and respect are the major socialization instructions (Yovsi, 2001; Yovsi & Keller, 2001). Mothers, especially primiparae, are often taught basic child psychology by elderly and experienced women or by their mothers-in-law. These instructions range from spiritual communication to health concerns, when, for example, body movements, especially during sleep, are believed to express messages from the ancestors identifying specific signals of illnesses.

The infancy or 'wan' period sees the child under the strict surveillance and over-protection of the mother, siblings, grandmother, and other family and community members. The child undergoes traditional rituals as he or she proceeds through infancy (e.g. burial of the placenta and navel stock, ritual massaging, bathing and oiling) which are believed to influence the life of the child and the mother. The infant is carried almost the whole day on the lap, back and loins of his or her caretakers and co-sleeps with the mother and the other siblings. A special sensitivity exists towards negative signals of the child which are attended to immediately, mainly with breastfeeding. A major focus is being laid on motor stimulation which is supposed to contribute to the development of muscle strength and early achievement of motor milestones (Super, 1976; cf. Bril, 1989; Geber & Dean, 1957; Keller, Yovsi & Voelker, 2002; Super, 1981). Early motor competence is considered to support children's responsibility training enabling them to contribute early on to the subsistence of the family by performing daily chores (Ogunnaike, 1997).

In Germany, interpersonal independence and cognitive competence are highly valued. Childcare is aimed at developing and fostering exploration and creativity as mechanisms to become unique agencies. Socialization instructions center on independent sleeping, sleeping through the night and early self-regulation. Infants are almost exclusively cared for by their mothers who usually take a maternity leave of one year. The major sources of information about childcare and child psychology are pediatricians, books, and magazines (Keller *et al.*, 1984). Infants spend almost all of their waking hours in the presence of their mothers who try to orientate the children from early on to objects and the external world. Cognitive development is supported with extensive language input (Keller, Loewer & Runde, 1990) and an interaction focus on face-to-face exchange (Keller & Zach, 1993). Contingent responses towards infants' positive communicative signals support the perception of causality and an early manifestation of an independent agency (Keller, 1998).

As a consequence of the differing developmental goals, there should be differences in sensitivity and attention to different domains of parenting between these cultural communities. In order to capture these differences within one system, Keller and collaborators (Keller, 2000, 2003; Keller, Voelker & Zach, 1997) have proposed a component model of parenting. It is argued that humans are biologically predisposed with multiple parenting systems and interaction mechanisms which have evolved during phylogeny. These components are considered to be basically independent from each other. The universal repertoire of independent components allows the development of contextually appropriate profiles as local conceptions of parenting which can describe cultural patterns of parenting as well as interindividual differences within cultures. It is further assumed that the experience of the different parenting profiles has different developmental consequences for the emerging concepts of self and self-other relationships, and thus cultural value orientations. Parenting systems are conceived of as contexts for specific practices. The following parenting systems are differentiated: primary care (mainly nursing/feeding and health-promoting activities), body contact (close physical proximity and carrying), body stimulation (stimulating motor behavi-

ors or massaging), object stimulation (eliciting infants' interest for objects), and face-to-face contact (as the exchange of facial/vocal communicative communication). The practices within these systems are modeled by the following interaction mechanisms: *Attention* may be focused exclusively on the infant or divided and shared between the baby and other chores, *Warmth* may be expressed as close bodily proximity and the expression and sharing of positive affect, *Contingency* describes the speed and promptness of reactions towards infants' signals. Furthermore, there may be a general perceptual bias in terms of *sensitivity towards positive or negative infants' cues*.

Different studies have documented differential relationships between the components of this model and later developmental outcomes in terms of facets of different self-construals. The development of interrelatedness is, thus, supported by the experience of warmth (in the body contact and face-to-face system, fostering relational closeness and compliance; MacDonald, 1992; Rohner, 1986, 1994), and contingency to negative stimulation with basic primary care (e.g. blurring the self-other distinction, Rothbaum *et al.*, 2000; Yovsi & Keller, 2001). Body stimulation may accelerate the achievement of gross motor milestones and thus foster the training of responsibilities in the family (Ogunnaiké, 1997; Yovsi, 2001). A shared attentional focus further supports the infant's role as a part of the community (Saraswathi & Pai, 1997). The development of independence is mainly promoted with face-to-face exchange, object stimulation, exclusive dyadic attention, and sensitivity to positive signals (Keller, 2002; Keller & Greenfield, 2000; LeVine *et al.*, 1994; Morelli *et al.*, 1992; Rabain-Jamin & Sabeau-Jouannet, 1997; Verhoef, Morelli & Anderson, in press). These parenting practices support the infant's perception of being a unique agent (Keller & Eckensberger, 1998). We assume that parental ethnotheories reflect differential evaluations of these parenting practices for members of the Nso and the Northern German cultural communities.

In particular, we expect Nso women to focus their attention mainly on primary care, body contact and body stimulation and to be sensitive towards negative infant signals. On the other hand, German women are expected to focus their attention on object stimulation, face-to-face exchange and to be sensitive towards positive infant signals.

We tried to include participants of different ages and different educational attainments in the two cultural groups in order to be able to describe a broad cultural picture. Age and education have been demonstrated as relating to socialization goals and ideas about parenting. Tchombe (1997) analyzed the developmental goals of women belonging to three generations from four Cameroonian cities. The young mothers aged between 25 and 35 years who also held a comparably high educational status stressed the uniqueness of the individual child whereas for the young women's mothers and grandmothers who were between 37 and 95 years old and held a comparably lower education responsibility was the major socialization goal. In a German pilot study, we interviewed women of different generations with respect to their socialization goals and valued parental practices. Women older than 40 years supported more interdependent socialization goals, such as stressing the importance of body contact and attention to negative infant cues than did women younger than 40 years who focused more on independent socialization goals with stressing object play and contingent reactions to positive stimuli (cf. Keller & Demuth, under review).

We decided to assess parental ethnotheories as reactions to videotaped prototypical interaction situations. We therefore assessed the belief systems of German and Nso women as evaluative reactions to videotaped interactions of Nso and German mothers with their 3-month-old babies (cf. Voelker *et al.*, 1999). We thus focused on

behavior that is displayed in cultural practices as an avenue of the understanding of parenting beliefs (e.g. Goodnow, 1996). This procedure has been proven as revealing cultural patterns in cross-cultural research on teacher and classroom evaluation (Tobin, Wu & Davidson, 1989). It is assumed that the respondents use their cultural framework with all the cultural standard operating procedures and unstated assumptions which qualify the comment as reflecting the culture of the respondent (Triandis, 2000). This approach is evaluated as most fruitful when practices are chosen for analysis that involve long-term goals and are part of a larger 'developmental project' (Super & Harkness, 1996).

Method

Participants

The participants in this study included women from the cultural communities of Cameroonian Nso and Northern Germany. The selection of cultures included in this study is based on differing cultural conceptions of relationships and competence that may be attributed to independent and interrelated world views. Although Cameroon is not part of Hofstede's large-scale assessments of cultural values, neighboring West African societies (Ghana, Nigeria, Sierra Leone) rank between 39 and 41 on Hofstede's Individualism Index. This index ranks 50 countries and three geographical regions for national individualism with higher values indicating lower levels of individualism (rank 1: USA, rank 2: Australia, rank 52: Equator, rank 53: Guatemala; Hofstede, 1980, 1983). The decision to study Cameroonian Nso was based on the accessibility of information about the Nso ethnopsychology (Nsamenang, 1992; Nsamenang & Lamb, 1994; Tchombe, in prep.; Yovsi, 2001) and the indigenous knowledge of the third author who is a native Nso, who could interview the Nso participants in the local language Lamnso. The decision to study German samples among the individualistic cultures (rank 15 in Hofstede's I-C dimension) was based on the indigenous knowledge of German culture by the first and the second author.

The samples in the different locations participated by voluntary consent. Participants in group sessions should include women of different ages, education and parity, since these variables might exert systematic culture independent influences on conceptions of parenting (cf. Shweder *et al.*, 1998).

Table 1 presents the sociodemographic information on the subsamples of participants. Forty-six German and 39 Nso women participated in this study. The women's mean age did not differ significantly, $t = 1.31$, $p = .19$. Age ranged from 17 to 84 years within the Nso and from 21 to 71 years within the Germans. The Nso sample consisted of fewer single women, $\chi^2 = 3.84$, $p = .08$; what might be more important for the purpose of our study—the German women had fewer children than the Nso, $t = 3.56$, $p = .001$, with more German than Nso women having no child at all (36% to 16%, respectively). Thus, the German respondents may have been less experienced with infant care. On the other hand, this reflects the cultural reality of the two cultural communities. The educational range of the samples did not even overlap. While the Nso women attended school for seven years at the most with half of the sample being illiterate, the German women attended school for at least ten years. More than half of the German sample reached the university entrance qualification (Abitur).

The assessments were made in six German and three Nso groups of women with five to ten participants who were asked to comment freely on 20 videotapes during two sessions. The women comprised a group who knew each other beforehand. Not

Table 1. Sociodemographic Characteristics of Participating Nso and German Women

Culture of Respondent	Total N	Mean Age (SD, Range)	Level of Education*		Marital Status				Mean Number of Children (SD, Range)
			Low	High	Married	Single	Widowed	Divorced	
Nso	39	41.10 (18.13, 67)	13	26	29	6	3	1	2.72 (2.34, 9)
German	46	36.72 (12.55, 50)	20	26	27	16	1	2	1.24 (1.21, 5)

Notes: * *low / high* means *illiterate / literate* for the Nso and *no Abitur / Abitur* for the Germans (Abitur is the entrance qualification for the university in Germany).

all of them could complete all 20 assessments because, due to other obligations, they arrived later or had to leave the presentation earlier. Thus there were deviations within the groups with respect to the number of women who commented on each tape. We did not apply standardized questions because such a procedure might have directed the women's thoughts, and triggered reflection, and thus disturbed the original, spontaneous working status of existing ethnotheories.

Procedure

Sample recruitment and procedure were exactly the same for the Nso and German respondents. Groups were recruited by anchor women such as nurses, midwives, and women's group leaders. Women gathered in private houses or public rooms such as schools or community centers. The two sessions of video assessments lasted for about two to three hours each, depending on the number of participating women.

The decision to assess the information during group sessions was for several reasons. For the Nso, individual interview situations are unfamiliar in general (Nsamenang, 1992; Tchombe, in prep.). Moreover, childcare is a community concern for the Nso that is publicly regulated (Yovsi, 2001). The German women were also used to group sessions (women's league, private daycare group) and discussing childcare matters publicly. The Nso group sessions were conducted by the third author, and the German group sessions by the first and the second author.

At the beginning of each group session, the experimenters introduced the general aim of this study and gave the instructions for the procedure. The study was introduced as follows: 'We are a group of psychologists who are interested in child development and socialization patterns in different cultures. We regard women as specialists for these questions. Therefore we ask women in West Africa and Germany for their opinions related to proper childcare. Of course, there are no right or wrong answers. We are interested in your personal views. Any personal data will be treated confidentially. After we have finished with the data assessment and analyses, we will get back to you and explain what we have found out.'

After this introduction, women were asked again for their consent to participate. No woman refused participation. After the explanation of the procedure, the women answered a sociodemographic questionnaire.

In the first session the videotapes of the own culture were demonstrated; in the second session the videotapes of the foreign culture. Each video sequence lasted for six minutes. After each sequence, the tape was halted and the women were invited to give their subjective comments about what they felt was good or bad in the interaction session and why. The comments were audiotaped. Each woman had approximately two minutes to give her comments. The women did not consult with each other before commenting on a tape but, of course, listened to what the others said before. Since we were interested in the shared cultural constructions with respect to parental ethnotheories, a public discourse seemed to be appropriate. Parental ethnotheories may be assumed to be generated by cultural models that set the prevailing standards of *common* sense in cultural communities (LeVine, Miller, Richman & LeVine, 1996). To control primacy and recency response tendencies, we randomly changed the order of respondents for each tape.

Stimulus Material

In both cultural groups we wanted to activate the respondents' cultural parenting scripts by the presentation of videotaped mother–infant interactions that were both, in

high accordance and in contrast with these scripts. Thus, we paralleled the familiarity and strangeness of the stimulus material with regard to the respondents' scripts of parenting. Because we can assume that not only parenting behavior but also parenting scripts correspond with SES, education and infant birth order, we selected ten tapes with mothers who belonged to the same sociodemographical background as the respondents and presented these in the first session. To parallel the total set of stimuli for both cultural respondent groups, the Nso and German respondents viewed as script contrasting stimuli the ten tapes of the other cultural group in the second session.

The videotaped sequences were selected from observational studies of mother-child interactions with their 3-month-old babies (Lohaus *et al.*, 1997; Voelker, 2000; Yovsi, 2001). The videotaped German mothers all belonged to the middle class and were videotaped in their homes. The German infants were all firstborns. The videotaped Nso mothers were farmers and traders, and the infants included first- and laterborns.

Selection criteria for the tapes from the pool of available tapes were further:

- informed consent of the mothers to use the tapes for the specific purpose
- good visibility and quality of the videotape
- the sequences should contain episodes with positive and negative infant cues if possible
- the video sequences of both cultural communities should contain all parenting systems and interaction mechanisms.

In particular, each videotape was expected to trigger simultaneously *several* of the comment domains we wanted to assess (cf. coding system) so that the responses could reflect biases or choices. For example, some of the presented tapes showed mothers who exercised motor stimulation with little or no episodes of distress regulation or primary care which were more central on other tapes. Some videos presented episodes of object stimulation and face-to-face dialogues with different degrees of body contact. Thus, every respondent was confronted with the different components of parenting displayed by mothers of her own and of the other culture. Accordingly, it was for her to select or emphasize specific aspects of the observed maternal behavior.

Scoring System

The audiotapes were transcribed for further data analyses. The Nso statements were literally translated from Lamnso into English by the third author. The verbal material was classified by a coding system operationalizing the component model of parenting (Keller, 2000, 2003; Keller *et al.*, 1997).

All responses of a woman towards an individual video sequence were considered as one *statement*. Statements were split into content units (*comments*) according to the following criteria: First, all evaluations or descriptions of *maternal infant-related behaviors* (relevant descriptions) were separated from descriptions or evaluations of the videotaped episodes that did not refer to maternal infant-related behavior (irrelevant descriptions; examples of irrelevant descriptions are: 'Babies cannot talk or say they are hurt or uncomformable', 'I think this situation is a very typical one'). All aspects of relevant descriptions that addressed different behavioral facets or dimensions of maternal behavior were further separated from each other. The resulting content segments constituted the final units for classification. The classification system consisted of ten content categories. *Vocal stimulation* and *focus of attention* are coded as extra categories outside the face-to-face system. The categories are listed together with definitions and evaluative examples in Table 2.

Table 2. Definitions of Categories and Examples

Category	Definition	Example
Primary Care	Comment refers to maternal care for the infant's health and security	—When the toy fell down, she wiped the dirt from it which is good. —She should have looked for a traditional healer or 'naah' to cook medicine against the cough.
Body Contact	Comment refers to body contact between mother and infant	—She has cuddled/embraced (<i>koyti</i>) her baby as they should do. —She should have brought him closer to her.
Body Stimulation	Comment refers to motor stimulation and exercise	—She lifts the child up and down, so that the 'places' of the child become relaxed. —The way she holds the infant from the arm, lifting it up so hard is not good.
Object Stimulation	Comment refers to object stimulation	—She shows things to the child that he can learn and know which is good. —There were too many objects for such a small child.
Face-to-face Contact	Comments refers to eye-contact and face-to-face exchange	—Mother and infant talked to each other. That was nice. —The facing-out position is not good. If she is the only caretaker of a baby, she will recognize her only through speech and would not know her facial image.
Vocal Stimulation	Comment refers to mother's vocal behavior (talking, singing, naming)	—She is asking questions and answers them for the baby which is good. —She does not talk to the child.
Focus of Attention	Comment refers to the attention directed to the infant	—The mother seems not interested much in an interaction with the child. —The mother is engaged in the interaction very much—maybe it is too much for the infant.
Warmth with Positive Signals	Comment refers to caressing and expression of positive affect	—The child feels warm and fine as well as the mother. —She seems so distant.

Table 2. *Continued*

Category	Definition	Example
Contingency with Positive Signals	Comment refers to the promptness of maternal responses towards looking, smiling, and vocalizing	—She always answered when the infants made sounds. —She didn't react when the infant looked at her face.
Sensitivity to Negative Signals	Comment refers to maternal regulations of negative infant signals	—The way she soothes the infant was nice. —How can a woman keep the child laying and crying and she cannot pick him up.

Each content category was noted only once per statement, even if several comments referred to the same content. We coded appearance and not frequency of categories per statement to control for differences in Nso and German women's response styles due to many more repetitions used by the Nso women. The Nso women's repetitive style included saying the same thing with different words and made it difficult to differentiate repeated statements from comments of the same category that focus on a new aspect of maternal behavior.

We realize that our coding system does not assess parenting conceptions but attentiveness and sensitivity for particular practices. We assume, however, that the attentiveness and sensitivity for parenting practices correspond with the importance of the respective dimensions of parenting as a function of parental conceptions. We applied this indirect assessment method because a classification of the evaluative nature of comments was not possible for a substantial number of cases. Although we gave the clear instruction to evaluate behavior, many respondents either did not express evaluations at all or expressed evaluations very indirectly, perhaps to avoid the risk of personal confrontation. Thus, we decided to use the indirect measures described above for a statistical analysis of parenting conceptions. We selected clearly evaluative comments for the demonstration of categories in Table 2 and for the qualitative analysis when we discuss the results because we feel that these evaluations yield most information on the respective conceptions.

Observer Reliability

Splitting statements into comment units was done by two trained students. After training they attained an interrater agreement of 83% with 45 independently split statements from both cultural groups of respondents. The agreement score was calculated as number of identical comment units divided by number of all identified units (number of agreements plus Coder A's misfits plus Coder B's misfits).

With regard to the classification of units the assessment of reliability had to take into account that cultures differ with respect to the mode and content of verbal expressions. It was therefore decided that a coder from each culture should be involved in the coding procedure (Relindis Dzeaye Yovsi and Heidi Keller). Both coders were trained in the coding system. In a first step, they coded 50% of all statements

independently from each other. Overall agreement for all categories was over 80%. Discrepancies were jointly discussed. In these cases, the culture-specific nuances that the cultural coder could best understand were important for the decision. There was no case of disagreement that could not be resolved immediately. To obtain an independent measure of reliability a third coder was trained to categorize the comments. This coder assessed 30 randomly selected Nso and German statements without any information about the respondents' cultural origins. Cohen's Kappa with the original categorizations was .82.

Results

From the total of 780 Nso ($N = 39 \times 20$ tapes) and 920 German statements ($N = 46 \times 20$ tapes), 29% of each cultural group's statements were missing values because not all of the women viewed all of the 20 tapes. Although this proportion is rather high, we decided, for reasons explained below, to substitute each respondent's missing values for each content category by means of the respective ethnic group's comments to the specific videotapes. Since every content category was coded by appearance that is only once per video, values between 0 and 1 were supplemented for the missing comments on the tapes a respondent did not view. To compute individual category scores, each respondent's real and substituted comments on the respective categories were accumulated yielding values of between 0 and 20.

We decided to accept the high amount of supplemented missing values because with the described procedure of computing individual scores per content domain missing values contributed only partially to a respondent's category score. Means and standard deviations of the final category scores are presented for the different Nso and German education groups in Table 5.

To prove whether the individual category scores hold some internal consistency with respect to responses towards Nso and German videotapes they were split respectively and intercorrelated.

Table 3 presents the Pearson coefficients and *p*-values of the split individual category scores for Nso and German respondents separately. The correlations were significant and positive for most of the categories. No correlations were mainly found for categories with low occurrence and variance in the Nso respondent group (see Table 5). The correlations indicate that the women responded similarly towards both cultural sets of tapes and, thus, justify an overall score that may reflect attention processes.

Table 4 demonstrates the zero-order correlations of category codes for the Nso and German respondents separately. Within the Nso sample 22% of the correlations were significant compared to 47% within the German sample. The higher percentage of correlations within the German sample could be due to the fact that German respondents with Abitur received more codes with regard to most of the context categories than German respondents without Abitur (see analysis presented below). Because this tendency was distributed equally across context categories it produced positive intercorrelations within the German sample.

Since there was no overlap of educational status between Nso and German respondents, two out of four education groups were identified with the Nso respondents (illiterate, literate) and the other two with the German respondents (no Abitur, Abitur). To examine both differences between education and culture groups, a multivariate analysis for the four education groups was calculate with the ten content categories as dependent variables. Age and parity of respondents were entered as covariates.

Table 3. Pearson Correlations Between Individual Category Scores Derived Separately From Comments on Nso and German Tapes

Category	Nso Respondents		German Respondents		All Respondents	
	R	p	R	p	R	P
Primary Care	.45	.004	.02	.92	.65	.000
Body Contact	.63	.000	.54	.000	.63	.000
Body Stimulation	.35	.03	.37	.01	.53	.000
Object Stimulation	.03	.88	.30	.045	.24	.03
Face-to-face Contact	-.15	.36	.66	.000	.71	.000
Vocal Stimulation	-.03	.88	.61	.000	.46	.000
Focus of Attention	-.11	.50	.31	.03	.62	.000
Warmth with Positive Signals	.34	.03	.53	.000	.51	.000
Contingency with Positive Signals ^a	—	—	.77	.000	.80	.000
Sensitivity to Negative Signals	.19	.25	.30	.045	.34	.001

Notes: $N = 35$ Nso respondents, $N = 42$ German respondents.

^ano variance of Nso respondents' codes.

The multivariate results revealed a significant effect of *education group*, $F(30,210) = 5.91$, $p = .000$. *Age* and *parity* were not significant. The univariate analyses (see Table 5) showed differences between the four respondent groups for all content categories. As demonstrated in Table 5, pair comparisons revealed that both Nso groups differed from both German groups with respect to six out of ten content categories. Both Nso groups referred more to *primary care*, *body contact*, and *body stimulation* than both German groups when they evaluated the quality of parenting. Both German groups focused more on *face-to-face contact*, *focus of attention*, and *sensitivity to negative signals* than both Nso groups. The category scores did not differ between the Nso education groups with the exception of *primary care* that was addressed more often by literate than by illiterate Nso. However, Germans with Abitur gained higher category scores than did Germans without Abitur for eight out of ten context categories.

In a further step of analysis we proved how far the overall picture that Nso respondents exceeded German respondents in addressing *primary care*, *body contact*, and *body stimulation* while German respondents exceeded Nso respondents in addressing *face-to-face contact*, *focus of attention*, and *sensitivity to negative signals* was true for the nine German and three Nso subgroups who watched the videos together. A multivariate analysis for differences between these subgroups with the scores of the ten content categories as dependent variables and *age* and *parity* controlled yielded a significant multivariate effect for *subgroup*, $F(80,576) = 5.40$, $p = .000$. *Age* and *parity*, again, did not reveal significant effects. Table 6 demonstrates the numbers and percentages of significant pair comparisons within the German and Nso subgroups and across German and Nso subgroups for the different categories. The directions of differences across cultural subgroups were all in line with the results of the analysis

Table 4. Zero-order Correlation Matrix of Nso and German Respondents' Category Codes (Above Diagonal: Nso Respondents' Codes; Below Diagonal: German Respondents' Codes)

Category	1	2	3	4	5	6	7	8	9 ^a	10
1. Primary Care	—	.37*	-.004	-.12	.28	-.20	-.16	-.46**	—	.38*
2. Body Contact	-.08	—	-.04	-.17	.27	-.26	.05	-.22	—	.34*
3. Body Stimulation	.07	.38**	—	.19	.06	.24	.11	.08	—	.02
4. Object Stimulation	.13	.39**	.28	—	.10	.46**	-.007	.18	—	-.21
5. Face-to-face Contact	-.17	.34*	.47***	.45**	—	.10	.33*	-.06	—	.19
6. Vocal Stimulation	-.22	.59***	.36*	.50***	.64***	—	.29	.44**	—	-.20
7. Focus of Attention	-.17	-.06	.08	-.09	.31*	.15	—	.52***	—	-.02
8. Warmth with Positive Signals	-.22	.10	.10	.06	.53***	.48***	.40**	—	—	-.17
9. Contingency with Positive Signals	-.02	.31*	.28	.50***	.51***	.20	-.04	.10	—	—
10. Sensitivity to Negative Signals	-.14	.43**	.52***	.36*	.43**	.47***	.22	-.04	.26	—

Notes: $N = 35$ Nso respondents, $N = 42$ German respondents.

^a no variance of Nso respondents' codes.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 5. Means and Standard Deviations (in Brackets) of Individual Category Scores Together With Summary Statistics for Univariate Measures Analyses of Respondents' Culture With Respondents' Age and Parity as Covariates and Significant Pair Comparisons

Category	Nso Respondents		German Respondents		Significant Pair Comparisons ^b	Education Group ANOVA statistics	
	Illiterate 1 ^a	Literate 2	No Abitur 3	Abitur 4		F _(1,80)	p
Primary Care	6.60 (2.82)	8.71 (2.98)	3.28 (1.34)	2.26 (1.21)	12** 13*** 14*** 23*** 24***	39.66	.000
Body Contact	9.80 (3.75)	8.57 (2.77)	3.82 (1.34)	6.99 (3.53)	13*** 14* 23*** 24* 34***	15.66	.000
Body Stimulation	5.88 (2.47)	5.65 (1.80)	2.33 (1.01)	3.39 (2.02)	13*** 14* 23*** 24*** 34*	13.41	.000
Object Stimulation	1.80 (1.12)	2.36 (1.15)	2.59 (1.13)	3.64 (1.94)	14** 24*** 34*	4.92	.004
Face-to-face Contact	0.55 (0.49)	0.47 (0.83)	2.72 (0.97)	6.23 (4.06)	13* 14*** 23*** 24*** 34***	24.95	.000
Vocal Stimulation	4.46 (1.83)	4.13 (1.98)	4.17 (1.06)	8.68 (5.28)	24*** 34***	9.29	.000
Focus of Attention	0.50 (0.86)	0.28 (0.35)	4.70 (1.61)	6.61 (2.85)	13*** 14*** 23*** 24*** 34***	54.70	.000
Warmth with Positive Signals	4.03 (2.43)	4.27 (1.97)	5.01 (2.07)	6.81 (3.50)	14* 24*** 34*	4.25	.008
Contingency with Positive Signals	0.00 (0.00)	0.00 (0.00)	0.48 (0.27)	1.22 (1.98)	14* 24***	5.42	.002
Sensitivity to Negative Signals	4.14 (2.53)	4.34 (1.51)	6.65 (2.26)	9.00 (2.42)	13** 14*** 23*** 24*** 34***	19.49	.000

Notes: N = 35 Nso respondents, N = 42 German respondents.

^a number represents group for the demonstration of pair comparisons.

^b numbers represent pair comparisons.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 6. Significant Pair Comparisons Between the Different German, Nso, and German-Nso Respondent Groups

Category	Nso Groups Total Number of Group Comparisons: 3		German Groups Total Number of Group Comparisons: 15		Nso and German Groups Total Number of Group Comparisons: 18	
	Number	Percentage of Total	Number	Percentage of Total	Number	Percentage of Total
Primary Care	2	67	0	0	18	100
Body Contact	2	67	10	67	15	83
Body Stimulation	0	0	4	27	13	72
Object Stimulation	0	0	5	33	6	33
Face-to-face Contact	0	0	9	60	17	94
Vocal Stimulation	1	33	9	60	7	39
Focus of Attention	0	0	11	73	18	100
Warmth with Positive Signals	0	0	9	60	8	44
Contingency with Positive Signals	0	0	5	33	6	33
Sensitivity to Negative Signals	0	0	7	47	15	83

calculated for the four education groups (see Table 5). In spite of the very strong differences between the cultures as demonstrated by the first MANOVA, there were also many significant differences between the subgroups of the same culture.

Discussion

The results confirm our expectations with few exceptions. We could demonstrate that Nso women, as representatives of an interdependent culture, considered primary care, body contact, and body stimulation as parenting systems more often than did German women. We could also demonstrate that German women, as representatives of an independent culture, addressed the face-to-face system more often than did Nso women and concentrated much more than Nso respondents on the mother's focus of attention. Higher educated German women with Abitur addressed the mothers' contingency towards positive infant signals and the infant's stimulation with objects more often than did Nso women.

We expected Nso respondents to stress distress regulation more than German respondents. Distress regulation was assessed implicitly by the category *primary care* and explicitly by the category *sensitivity to negative infant cues*. We assumed both categories to be stresses more by Nso than by German respondents. The result was true only for *primary care*. We found the reverse for *sensitivity to negative signals*. This content was addressed more often by German than by Nso women. We will explain this result below with the help of qualitative analyses of comments.

Educational differences may be considered as part of the cultural environment when rural-traditional and urban-Western samples are compared. Accordingly, the Nso and German women's educational levels did not overlap at all between the samples. However, in order to better understand the effects of education as an isolated factor we examined different educational levels *within* both cultures. A clear education effect was only visible within the German sample with higher educated women talking more about most of the content domains. This result may reflect a more differentiated style of response. There are distinct cultural differences in narrating styles reported in the literature. Individuals with a more independent sociocultural orientation produce more voluminous narrations than do individuals with a more interdependent sociocultural orientation. The same differences are also reported from intracultural comparisons of different social classes. Individuals from higher social classes produce more of a high elaborative style (as e.g. expressed in a larger volume), compared to individuals from lower socioeconomic backgrounds who produce more of a low elaborative style (Bernstein, 1971; Han, Leichtman & Wang, 1998; Reese, Haden & Fivush, 1993). The result that higher educated German respondents gained more codes irrespective of content may support these findings since social class corresponds highly with education in Germany.

Our data did not reveal any age or cohort effects. However, due to small-sized subsamples we could not investigate interaction effects of age and culture independently of respondents' education. In order to understand age-related, generational changes as well as changes that may be attributed to education, it would be necessary to analyze these effects systematically.

In the following, the ethnotheories are elucidated in more detail. The women's transcribed statements that were clearly evaluative allow us to illustrate the quantitative differences from a qualitative ethnographic perspective. These examples, however, should be taken tentatively, since we found significant differences between the

subgroups of the same cultural sample. Nevertheless, common tendencies and typical statements may be identified in both cultural samples.

The Nso conception of good care of infants seems to rest on three columns which are regarded as conditional: primary care, body contact, and body stimulation. Women are very conscious about the hygiene and health of infants. Breastfeeding is regarded as the *sine qua non* of early care. A good mother 'puts the breast into the child's mouth already as soon as he opens it'. Close proximity between mother and infant is claimed as the normative developmental context by statements like: 'The mother and the child are supposed to feel each other's skin in order to be happy' and 'the mother is supposed to bring the baby close to her chest and 'l6'ti' (comfort)'. Bodily warmth is thus the major interaction mechanism. The developmental domain that should be accelerated is clearly motor development and the major tool used to achieve this goal is a special Nso practice of body stimulation: that is, lifting the child up and down in a vertical position. 'When you lift the baby, virée or places become stronger and stronger' and 'lifting the baby up and down makes the child grow well, and faster' (cf. also Keller *et al.*, 2002). The Nso women appreciate women's talking to their babies, since 'talking is necessary for language development' and language input increases children's language skills 'from talking a child can learn pronouncing words and learn about things'. Talking, however, seems to be an optional parenting strategy as compared to the conditional parenting described so far, since its absence is never regretted.

The Nso ethnotheory also becomes apparent when they comment on the German mother–infant tapes. They are concerned about the German mothers' attitudes to primary care ('What surprises me is whether the traditionalists are now more sensitive to hygiene than Westerners, since the German mother is wiping the child's mouth with the hand instead of using a cloth'). They miss German mothers' breastfeeding their infants ('When the child is crying, the Germans just try to soothe it in a very funny way—without breastfeeding'). They are concerned about the lacking physical and emotional closeness. Especially the position of the baby as laying on the back with the mother sitting next to the baby or leaning over him or her is strange to understand for the Nso women ('Taking into consideration the age of the child, his back must be aching through this extended lying on the back', 'Even when they take them on their laps, they lay them in a curled up position which is still uncomfortable for the child'). The Nso women even suspect that it may be forbidden in Germany to hold babies on the mother's body ('They handle them as if they are not their babies, as if it belongs to somebody else or as if they are a babysitter'). Moreover they miss body stimulation ('Lifting the child up and down is not done there, and can lead to a retardation in the child's motor skills'). Nso women appreciate the focus on language input of German mothers, 'The Germans are good in that they talk to their infants and that can enable their infants to learn language faster and to a better degree than Nso children', since 'for them, they believe every child is supposed to be intelligent'.

The German women built, as was expected, on the face-to-face system with a distinct focus on exclusive dyadic attention. They refer to language, warmth, and contingency when faced with positive interaction cues. Face-to-face interaction for them is mainly constituted through eye-contact ('The infant does not look at the mother and even avoids her looks'). Within this interaction frame verbal exchange is evaluated ('She adapts her style of talking nicely to the child') and maternal responsiveness towards infants' looking and smiling is highlighted ('The mother tries to get the infant smiling' and 'the mother is frustrated since the baby is not opening its eyes

big and bright'). German women judge it as necessary that the mother gives the child her undivided attention ('The mother is completely involved with the baby—that is nice').

In addition, German women are somehow reluctant in accepting the obviously different care practices of the foreign culture. They miss the focus on face-to-face exchange ('She plays nicely, but does not have eye-contact with the baby') and the exclusivity of attention ('The mother holds the baby nicely on her body, but directs her attention too often to other targets'). Yet, they positively evaluate the Nso mothers' focus on body contact. The Nso practice of body stimulation, however, is strange for German women ('They should not shake a small baby like this'). The accelerated development was unanimously noticed with the consequence that the children's age of 3 months was doubted.

Contrary to our expectations, German women focused more on negative stimulation and distress regulation than did the West-African women. This does not mean, however, that the Nso women did not pay attention to distress regulation. Yet, their focus on primary care and breastfeeding, which is even anticipatory to infants' distress signals, masks their attention towards negative affect. German women, on the other hand, were more concerned with the helplessness of the videotaped mothers in terms of what to do with a distressed child.

In general, our results can help to clarify the psychodynamics of parenting. It is argued in the literature that parenting is a universal, non-conscious and non-intentional quality expressed in caretakers' intuitive lessons (Papoušek & Papoušek, 1987), which are directed at unconscious goals (e.g. LeVine *et al.*, 1994). Without denying that parenting comprises intuitive characteristics, our approach highlights the shared cultural commonsense conceptions, demonstrating that parenting goals and practices are also, to a large extent, deliberate and conscious, representing the 'moral judgments of a particular society at a particular moment in history' (LeVine, 1995). However, it may also be a result of our method to raise attitudes to consciousness even if they are not fully conscious. Stylistic analyses of the verbal reports may reveal more unconscious aspects of parental ethnotheories (Keller *et al.*, 2004). Furthermore, the interaction between interviewer and interviewee needs to be explored in terms of its effect on the elaborations of cultural knowledge (Houtkoop-Steenstra, 2001).

With different developmental goals and the explicit and intuitive character of parenting practices, the cultures differ with respect to what is regarded as sensitive parenting. Nso ethnotheory centers on stimulation whereas German cultural informants consider responsivity as adequate parenting, thus deviating from Bowlby's ideal of one healthy developmental path (Ainsworth, 1977; Bowlby, 1982; Keller, 2003). Based on a universal parenting repertoire, the component model of parenting allows specifying parenting styles as responses to different contextual demands with different perspectives for developmental goals. The conceptions of the parenting style of the Nso participants as outlined in this paper are expected to prompt the dimension of inter-relatedness more than the dimension of independence. The conceptions of the parenting style of the German participants, on the other hand, are expected to prompt the dimension of independence more than the dimension of interdependence.

Our method of analyzing responses to videotaped mother–infant interactions worked well to elicit information on parenting conceptions. The results demonstrate that methods of this kind may help to highlight cross-cultural meanings of good parenting in a detail that yields fascinating insights to ethnotheories about the earliest period of life. Future research should extend this approach towards a more

sophisticated integration of qualitative and quantitative information. This goal may be supported by the statistical consideration of both the evaluative quality of comments and the cultural origin of the stimulus material. Because many respondents of this study gave descriptions of the observed mothers' behaviors that were only indirectly evaluative, a stimulus presentation procedure has to be developed that forces the expression of direct evaluations more than did our procedure. In order to investigate parenting conceptions systematically by the comparison of responses towards own and foreign tapes, objective analysis of tapes have to be conducted to control for vignettes on the tapes that address specific categories.

Furthermore, longitudinal, intra-cultural, and cross-cultural research is needed in order to substantiate the cultural roots and the contextual parameters (e.g. education and generation) of conceptions of early developmental processes, their relationships with parenting behaviors and their developmental consequences for the child in context.

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