A Good Child is a Calm Child: Mothers' Social Status, Maternal Conceptions of Proper Demeanor, and Stranger Anxiety in One-Year Old Cameroonian Nso Children

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Abstract

Our article questions the assumption that stranger anxiety develops universally in children; thereby our study is rooted in a long tradition in psychological anthropology of testing the universality of theories formulated in Western society. We argue that the infant's behavior towards strangers is the product of socialization processes that represent adaptations to cultural contexts. Our study investigates the ethnotheory of childrearing and the development of stranger anxiety in a Cameroonian community of traditional Nso farmers. The participants of the study were 29 Cameroonian Nso mothers with one-year old children. Using a multi-method approach, we demonstrate that Nso mothers value inexpressive infants that adjust easily to others. Accordingly, a considerably large number of one-year old Nso infants showed no stranger anxiety when encountered by a stranger. Maternal social status and her social support system proved crucial to successful implementation of the socialization goal of a calm child. Our data support the view that child behavior is a product of culturally constructed experiences of daily life. The acknowledgement of the cultural construction of stranger anxiety carries implications for developmental theories, especially for attachment theory, which relies on the universality of stranger anxiety in their most acclaimed paradigm, the Strange Situation.

Keywords: stranger anxiety, socialization processes, parental ethnotheories, culture and development
Introduction

In 2004, I (first author) went to live with the Cameroonian Nso in the North-West Province of Cameroon. My fair skin and straight hair, along with my strange habit of eating raw vegetables and walking too fast, made me the perfect stranger in the village. During my first days with the Nso, children called "kimbang, kimbang" (white man, white man) after me. I expected having a hard time getting accepted, but within a few days, all the children referred to me as auntie and sneaked away from their daily chores to spend time with me. I evoked curiosity in the Nso, but I obviously did not evoke fear. This was not the case with a Cameroonian colleague back in Germany, whose appearance once caused the children in our department to run away screaming.

These anecdotes of differences in fear reactions may more broadly reflect cultural differences in stranger anxiety, though stranger anxiety was conceived of as a human universal by developmental psychologists. Mary Ainsworth, the famous developmental psychologist described stranger anxiety as "... ranging in intensity from slight apprehension to panic" (Ainsworth, 1967, p. 363). It is reported as emerging during the second half of the first year with a peak around twelve-months of age. As such, the onset of stranger anxiety coincides with the ability to discriminate familiar and unfamiliar people as a necessary prerequisite (Kagan, 1966). Stranger anxiety is characterized by social avoidance behaviors and can lead to fearful crying; it evokes attachment behaviors, e.g. a clinging of the infant to a familiar caretaker (Ainsworth, Blehar, Waters, & Wall, 1978).

Psychology and ethology generally regarded stranger anxiety as part of a universal behavioral system. It is supposed to protect the infant and ensure survival, keeping the child away from unfamiliar conspecifics (Bowlby, 1973; Eibl-Eibesfeldt, 1977). In the 'Environment of Evolutionary Adaptedness' (EEA), to which human psychology is assumed to be adapted (Bowlby, 1969), strangers were depicted mainly as dangerous predators (Daly & Wilson, 1988; Hrdy, 2001). Marks and Nesse (1994) point out that stranger anxiety emerges when infants start to crawl and explore the environment, which may expose them to potential dangers, including strangers. Since inherited traits typically manifest themselves at an age when they become adaptive, this co-occurrence is taken as proof for the evolutionary underpinnings of stranger anxiety (Marks, 1987).

The assumption that stranger anxiety is a human universal became incorporated in one of the most influential developmental theories: Attachment theory (Bowlby, 1969, 1973, 1982). Attachment theory relies on the universality of stranger anxiety in their most acclaimed paradigm for assessing individual differences in attachment relationships, the 'Strange Situation Paradigm', SSP (Ainsworth et al., 1978). During the SSP, a one-year old child is put into a strange environment, confronted with a strange person, and separated twice from his/her caretaker. The entrance of a stranger is supposed to induce mild alarm in the child.
in presence of the caretaker (Ainsworth, Bell, & Stayton, 1974), but being left alone
with the stranger is presumed to heighten the child's distress enormously. This
stress response is not only observable in human infants, but also in young primates
(Miller, Bard, Juno, & Nadler, 1990).

However, a one-year old's response to a stranger is influenced by the child's
earlier experiences with others, and there is ample evidence that social experiences
vary widely across cultures: In some cultures, children grow up with only very few
social interaction partners. This is usually the case in nuclear families; this family
model is very prevalent in the so-called minority world, i.e. in Euro-American
middle-class families. Nuclear families typically follow a traditional division of
labor with mothers taking care of very few children and fathers providing the
family income. Here, mothers are by far the most important caregivers and children
grow up with only few close relationships during their first year of life. And though
an increasing number of Western children attend daycare, they still have less access
to and less stable allomaternal attachment figures than what is commonly
experienced by children in non-Western traditional contexts (Meehan & Hawks,
2014). The limited range of social relationships during their first year of life may
influence Western children's response to a novel person.

Sociobiological (e.g., Hrdy, 2005), and anthropological (e.g., Lancy, 2008)
research challenge the monotropic understanding of relationships prevalent in
Western nuclear families: Anthropologists portray the so-called 'cooperative
breeding model' as the reproductive strategy in ancient human history where
alloparents allowed mothers to redistribute the cost of raising offspring (Hrdy,
1999). From an evolutionary viewpoint, living in social units offered advantages
such as a lesser probability to be attacked, a better defense against aggressors and
more efficient food acquisition (Voland, 2000). Whilst nuclear families could
survive and reproduce, they were likely to fall short compared to families that can
rely on a more extensive network of support (Mace & Sear, 1997, 2006), which is
especially important in scant and unpredictable environments. If our ancestors lived
in larger social units, attachment relationships would have developed not only with
mothers, but with many social others that served similar functions (Belsky, 1997;
Porges, 2003; Trivers, 1996). Children in multiple-care contexts may therefore be
experienced to form new and diverse relationships on a regular basis, which may
also influence their response to an unfamiliar person.

Today, this model is found in many societies of the so-called majority world,
where mothers often lack the resources for exclusive caretaking, so caregiving is
socially distributed and also not only an adult responsibility per se (Weisner &
Gallimore, 2008). For example, Aka infants and young children in the Central
African Republic can be observed to interact with just over 20 caregivers each day,
and half of these caregivers invest in intensive forms of caregiving (Meehan, 2009).
Similar observations are reported for Beng infants from Cote d'Ivoire (Gottlieb,
Moreover, also the conception of ‘a stranger’ varies across cultures: In the 1970ies, Ainsworth described that strange people are by default regarded as a threat to our safety and the safety of our children (Ainsworth et al., 1974). Until today, Western Euro-American middle-class families teach their children to be cautious of strangers. However, different cultural contexts follow different cultural rules. There are traditional rural societies where the encounter with a stranger is a rare opportunity and the concept of a stranger is virtually unknown. Gottlieb (2004) reports for the Beng of Cote d'Ivoire in West Africa to conceive of strangers as neutral at worst, but more commonly as welcoming. They teach their children to be friendly towards strangers and infants are socialized to welcome strangers from early on. For example, newborn Beng infants are introduced to many different people on their first day of life, with the consequence that none of the Beng infants show stranger anxiety, not even towards an unfamiliar white anthropologist (Gottlieb, 2004). The Beng, as many other traditional societies rely on the communal responsibility of caretaking, which often grants children an extreme degree of freedom. For example, Cameroonian Nso parents allow their children to explore the whole village area and often do not know where the child exactly is or who is with the child (Keller & Otto, 2009; Yovsi, 2003). And though the environment of the Nso contains many risks, such as poisonous insects or open fireplaces, strangers are not among the worries of Nso parents.

As the literature review above indicates, the concept of a stranger and the rules for interacting with strangers should be regarded as subject to socio-cultural conditions. Therefore it is plausible to assume that—although stranger anxiety seems to represent an evolved disposition—its actual occurrence is nevertheless shaped by contextual factors. Accordingly, different environmental conditions should lead to different manifestations of stranger anxiety in children. Given the above-cited evidence, it is surprising that the impact of culture on the development of stranger anxiety has oftentimes not been taken into consideration. In order to fill this gap in the current literature, our study investigates the impact of culture on behaviors toward strangers in one non-Western cultural context, the Cameroonian Nso.

The Nso is the largest chiefdom in the Bamenda Grassfields (Goheen, 1992) and with a population of some 250,000 over an area of 2,300 square kilometers, a heavily populated agricultural region (DeLancey, 1989). The Nso are organized patrilineal and patrilocal, in extended multigenerational households with an average household size of eight persons (Goheen, 1996). Their traditional language is Lamnso (Trudell, 2006). Most Nso families live off subsistence farming and farm work is done cooperatively among family members (Goheen, 1996; Keller, 2007). Nso parenting is regarded as a communal activity that, from early on, aims at initiating a ‘fledgling’ into society through social priming (Nsamenang & Lamb,
The Nso social system is highly stratified and hierarchical so everybody knows his or her role and obligation (Yovsi & Keller, 2003). The Fon is the first authority and head of the traditional government. Men's social status is defined through the participation in political, administrative, judicial, and religious activities. These roles are either inherited by descent or assigned by the Fon. Women's social status is defined through marriage and childbirth. Unmarried women occupy a perpetual child status and are considered almost incongruous as social persons (Mbaku, 2005); "in fact they do not exist at all" (Vubo, 2005). Only after marriage, women rise to full status with rights, privileges, and obligations (Vubo, 2005).

We chose to study the Nso community, because their culture differs extremely from the culture of Western middle class families (Keller, 2007; Yovsi & Keller, 2003). We conceptualize culture as a dynamic social process of creating shared meaning systems and adaptive cultural practices within specific socio-economic conditions (Greenfield, 1997; Keller, 2007; LeVine et al., 1994; Rogoff, 2003). Shared meaning systems are cognitive models that explain the world and facilitate communication between group members; cognitive models also provide a framework for childrearing within a distinct developmental niche (Sigel, McGillicuddy-DeLisi, & Goodnow, 1992; Super & Harkness, 1986). Culture-specific norms for child development are translated into maternal ethnotheories. Ethnotheories form the bridge between culture and actual parenting behavior (Keller, 2003). They define the optimal way of rearing children, e.g., what children should be trained and taught. When mothers reflect on desired social behaviors of children, their ethnotheories become tangible. Nso mothers regard obedience, conformity and respect for authority as important socialization goals for children; the long-term consequences of this socialization process is a cohesive community where members are collaborative and cooperative, responsible for each other, having developed an Nso identity (Nsoness) and a sense of belonging (Keller, 2007; Nsamenang, 2006).

In light of these findings we hypothesize that the cultural shaping of stranger anxiety depends on local meaning systems that inform ethnotheories, which are translated into actual parenting practices. These practices may also comprise interaction rules with strangers. Specifically, we address four research questions: 1. What ethnotheories concerning proper social behaviors are prevalent among Cameroonian Nso mothers? 2. Do one-year old Cameroonian Nso children exhibit stranger anxiety in response to the visit of an unfamiliar person? 3. Are maternal ethnotheories concerning proper social behaviors and the expression of stranger anxiety in children interrelated? 4. Are differences in mothers' social status reflected in maternal ethnotheories or in the children's display of stranger anxiety?

In order to answer these questions, we chose a mixed method approach – combining (a) interviews with the mothers to assess ethnotheories with respect to
proper social behaviors, (b) video recordings of children's visit with a stranger in a quasi-experimental setting to observe if children exhibit stranger anxiety and (c) questionnaires to collect socio-demographic data to assess the social status of mothers. Thereby, we implement three different levels of analysis in accordance to the model of ecocultural development (Keller, 2007):

(a) Socio-demographic data: A comprehensive examination of the socio-demographic parameters of the participating families provides the basic foundation for understanding the adaptive value of their socialization strategies.

(b) Parental meaning systems: Maternal ethnotheories are analyzed because they embody solutions for child rearing within a cultural context. They are assessed with the help of interviews focusing on prevailing concepts of social relationships and desirable social behavior of children.

(c) Child behavior: We observe how children behave in reaction to a strange female visitor in order to realize culture-specific manifestations of stranger anxiety.

Method

Participants

The participants of this study were 29 Cameroonian Nso mothers with one-year old children. The first author obtained permission from a Shu-Fei, one of the Nso Community's leaders, to recruit participants on a voluntarily basis and was supported by local assistants throughout the data collection phase. Birth registers of local health centers were consulted to select mothers having children of the appropriate age. All families were of Christian faith.

The age of the participating 29 mothers ranged from 17 to 43 years (mean age =26.8) with a mean age at first birth of 20.2 years. Mothers had 2.7 children on average and 8.5 years of formal schooling. Most mothers lived of subsistence farming, while other occupations included seamstress, hairdresser, teacher or midwife. These demographics match demographic and occupational data previously reported in the literature for the rural Cameroonian Nso culture, indicating the sample is representative of the larger population (Keller, 2007; Keller, Voelker, & Yovsi, 2005; Yovsi, Kärtner, Keller, & Lohaus, 2009; Yovsi & Keller, 2003). However, with only 55% of married mothers a higher-than-average proportion of single mothers participated in this study. This departs from the established literature on the Nso that reports around 80% of mothers as married (e.g. Keller, 2007; Yovsi & Keller, 2003).
Measures and Context of Data Assessment

The design represents a mixed method approach, combining sociodemographic data, maternal interview data, and child behavioral data.

A questionnaire to obtain *socio-demographic information* about mother and child was completed, including maternal age, marital status, number of children, and years of formal education, living conditions, occupation and economic situation.

*Interviews with the mothers* took place at a local Nso eatery and not at the family home to ensure other family members or neighbors did not disturb. Interview questions were developed beforehand during two focus-group discussions with grandmothers. The interviews were conducted in Lamnso by a local research assistant and simultaneously translated into English. This enabled the first author to participate in the interview, ask clarifying questions and/or to acquire detail about issues raised by the interviewee. The interviews lasted about one hour each and were audio taped. Interview questions focused on prevailing concepts of childcare and parenting in the Cameroonian Nso mothers, particularly on the development of social bonds with others. Following warm-up conversations, specific questions were asked about the mothers' conceptions of social relationships. The questions pertained to several specific aspects of social relationships, as follows: *Exclusive relationships*: "When the child sticks to a particular person, following wherever this person is going, what does it signify?"; "Is this considered a good or bad habit?"; *The child's favorite caregiver*: "Who does the child like best?"; *The mother-child relationship*: "When everybody, who lives with you, is present, are there situations when the child wants only to be with you?", "What are the reasons that the child wants to be only with you?"; *Maternal conceptions of a good child*: "How would you describe a good child?"; *Maternal teaching strategies*: "When the child wants to be only with you, what do you do?"; "If the child sticks only to one person and does not like going to anybody else, what do you do?".

The analysis of the interviews followed the thematic content analysis technique (Giannantonio, 2010) with the help of the software system *Atlas.ti*, which allowed for a systematic 'bottom-up' analysis of the interviews. Thematically different codes were abstracted from the original interview material: Every answer was subsumed under a keyword, then keywords relating to similar concepts were grouped together. This procedure was repeated until a reasonable and mutually exclusive number of different codes remained for each question. Reliability for the coding system was ensured as pairs of coders discussed the assignment of keywords and codes while repeatedly relating to the original interview material. Thus, a coding system was inductively derived for each question containing a particular set of codes.

Answers for each question were analyzed separately using the respective
coding schema. The questions were coded for existence-only, i.e., codes would be counted only once per question, no matter how many times the related categories appeared or how much mothers elaborated on the topic. Inter-rater reliability was calculated in the basis of 12 interviews analyzed by to different coders. Cohen's Kappa scores for the coding of the interview questions ranged from .69 to 1.0.

In order to observe the children's reactions to a stranger, we induced a quasi-experimental setting, in which a native Nso female stranger visited the mothers and their infants. All visits took place in the afternoon to control for daytime effects and were videotaped by a local research assistant. At the arranged day, the first author and two assistants went to the place where infant and mother were. Normally other family members, neighbors or friends were present there as well. People present were greeted by the first assistant and told that they should continue with whatever they did and should not feel disturbed by our presence. The second assistant acted as the stranger. Her task was to first approach the infant, then pick the infant up and finally interact up to five minutes. When possible, this interaction occurred while holding the infant in her arms. The stranger would generally hold the infant unless the infant started to fuss or reach for their mother. Depending on the stranger's judgment and the infant's comfort-level, the stranger was free to move around with the infant, to stay close to the mother, or to return the infant to the mother. The mother and other observers received no further instructions on how to behave. The infants' experience of proximity or physical contact with a stranger was designed to elicit observable attachment behaviors in form of typical emotional reactions and approach/avoidance behaviors. This procedure is based closely on attachment theory's Strange Situation procedure (Ainsworth et al., 1978).

For the coding, the videotapes of the strangers' visits were segmented into two episodes according to content of interactional behavior. The 1st episode started from the point when the female stranger was noticed by the child and continued until the female stranger established body contact. Due to mechanical problems, 2 episodes had to be excluded so that, \( N=27 \) 1st episodes could be analyzed. Mean length of the 1st episode was 16 seconds (\( SD=3.48 \)). The guiding question for the analysis of the 1st episode was: "What emotion does the infant show in response to the approaching female stranger?".

The 2nd episode was defined as starting with the onset of body contact between female stranger and target child and to end when the child had shown a clear emotional reaction. If the child did not show an emotional reaction, the sequence was defined as ending 10 seconds after body contact has been established. \( N=28 \) 2nd episodes could be analyzed with a mean length of 8 seconds (\( SD=2.25 \)). The guiding question for the analysis of the 2nd question was: "What emotions does the infant show in response to the body contact with the female stranger?".

The 1st and 2nd episode are considered to induce different amounts of stress in the infants due to increasing proximity between infant and stranger and increasing distance between infant and mother. The occurrence of the following behavioral
dimensions within the two episodes was coded with the software program Atlas.ti.

Coded behaviors included the infant's observable emotional reaction to the female stranger, which were defined as joy (laughs, smiles), engagement (interacting with the stranger, complying with requests), curiosity (attentive gazing, neutral facial expression), wariness (apprehensive and attentive), fear (scared, negative facial expression), and anger (resisting, beating, crying). Additionally, times when the child did not show observable reactions were coded as no observable reaction.

Signs of approach or avoidance in the infant towards the stranger were coded as reaching out, leaning forward, turning away, or withdrawal. Infants who showed no signs of extending or diminishing the distance between stranger and him/herself were coded as no sign of approach/avoidance behavior.

Reliability of the measures used in coding 1st/2nd episodes were calculated using Cohen's kappa and ranged from .76 to 1.0.

Results

Maternal Ethnotheories

Exclusive Relationships

Maternal ethnotheories as assessed in the interviews revealed a reluctance concerning exclusive relationships. All mothers (100%) wanted their children to grow up with many different caretakers, not with only one or a few primary attachment figures. Mothers gave many reasons for this attitude. They justified it on the grounds that multiple caregivers provide optimal care for a child: "Because just one person can not take care of the child throughout" (Participant 22). Or considered integration into the community and equal love for everybody as fundamental: "It [following only one person] is not considered good, because I want her to be used to everybody and love everybody equally" (Participant 4). Another reason for multiple caregiving arrangements was the ability of the child to cope in case of a sudden maternal death: "Following only me? For me I don't think it's too good for her, because like now if she keeps on following only me, loving only me, if I'm not by her side now or if I maybe die, who will take care of her? She needs to at least love everybody or try to be used to everybody, so that in case I am not around, anybody can take care of her" (Participant 22).
Favorite Caretaker

The focus on shared caregiving might also account for the fact that only 1/3rd of the mothers considered themselves as representing the primary attachment figure of the child. In 2/3rd of the cases other persons, predominantly family members, like a mothers' younger sister, a sibling, or a grandmother, were designated by the mothers as being the person best-liked by the infant.

The Mother-Child Relationship

Though all mothers prioritized multiple caregiving arrangements, 83% of the mothers also described occasional situations when their one-year olds wanted to only be with them. The child's wish to be exclusively with the mother was most often attributed to the basic needs of hunger and sleep. Seventeen percent of the mothers regarded these two basic needs as the sole reasons for infants to spend time with a mother. When asked, "if the child is not feeling sleepy or hungry, are there other reasons when the child wants to be only with you?" they answered, "No, anybody else is good" (Participant 20) or "She plays equally with everybody. Unless when she wants to breastfeed, there is no time that she only wants to be with me" (Participant 4). However, apart from food and sleep, 64% of mothers also regarded physical closeness to be the drive behind the child's wish for being with them. Typical statements were "there are times that she just wants to come to me, so that I should carry her on my laps and we are together" (Participant 18). Only 20% of the mothers considered other reasons, such as fear of strangers, body pain or boredom to be the cause of the child's behavior. Seventeen percent of the mothers told us that their child never wants to be exclusively with them.

Maternal Conceptions of a Good Child

Good manners constituted the most important attribute when describing a good child. For all Nso mothers (100%), the concept of good manners includes learning to greet others and showing obedience and respect for elders. Moreover, it reflects aspects of the child's socio-emotional development: Mothers desired to have calm and even-tempered children who don't cry easily and who relate well with others. "A good child is one who is always calm. If her mother asks her for a favor, she does it readily. And if she goes out, she cannot talk carelessly to an elderly person" (Participant 18).

In contrast, crying without any reason, e.g., without feeling hunger or pain, was considered a bad habit by all mothers and children were supposed to "...not just cry like that" (Participant 7). Crying for no reason was interpreted as meaning "...that she is angry" (Participant 18) and the display of anger is regarded as nuisance at best. The typical reaction to a child who cries without reason was to "...make him to stop crying" (Participant 15).
Maternal Teaching Strategies

Maternal reactions to their child's wish of exclusiveness differed. Thirty-eight percent of mothers reported giving in to their child's need immediately: "then I take her and hold her" (Participant 9). Forty-five percent of mothers restricted exclusive time with the infant to short periods before handing the child back to others: "I will take him and stay with him for some time before I can give him to my sisters and brothers" (Participant 27). Seventeen percent of mothers restricted the time with the child because of their immediate workload: "If I'm doing work, at that time I forcefully give him to somebody else, even if he is crying" (Participant 5).

Accordingly, maternal reactions also differed when children did not like to go to anybody else. Half the mothers spoke of vigorous training sessions in order to habituate their children to others: "I will not like it. I will try to at least make him to know people around me and make them close to him by forcing him to them" (Participant 24). Even crying did not stop those mothers: "I will force him to go to other people [...] even if he cries, I force him" (Participant 5). The other half of the mothers did not put this strategy into practice at all, or at least not forcefully: "When he does not want going towards anybody, I make… I pamper him, maybe he will go" (Participant 21).

Children's Reactions Towards the Stranger

Emotional Reaction

During the 1st episode, in which the children were approached by the Nso female stranger but had no body contact with her, 44% of infants showed no emotional reaction at all, 26% showed curiosity, 15% were wary, 7% became angry, 3.5% reacted joyful and wary, respectively.

During the 2nd episode, when the Nso female stranger established body contact by picking up the child, 32% of the children did not show any visible emotional reaction. Of the children who did react, 25% of the children showed fear, 21% of the children became angry, 14% of the children reacted warily, 7% of the children became engaged. The distribution of the emotional reactions for the first two episodes is depicted in Figure 1.
According to the high number of children showing no emotional reactions, approach/avoidance behaviors towards the stranger during the 1st and 2nd episodes were rare (Figure 2). A large number of children did not show any sign of approach or avoidance behavior (52% in 1st episode, 36% in 2nd episode). The relationship between the emotional reactions of the children and approach/avoidance behaviors of the children was clear-cut: Approach behaviors towards the female stranger were mainly found in children who also displayed positive emotions, no approach/avoidance behaviors were most frequent in the group of unemotional children, avoidance in terms of turning away or withdrawal was most prevalent in wary, fearful and angry children (Cramer’s $V = .40$).
Emotion Regulation Patterns

We analyzed whether children showed the same emotional reactions in either episode or whether children changed their emotional reactions between the two episodes. About half of the children (N=14) changed in their behavioral reactions, mostly to a more negative emotional state; the other half of the children (N=13) displayed the same emotional behavior during both episodes. When simultaneously taking into account the valence and the change or stability of the emotional reactions, three distinct emotion regulation patterns can be identified: 1) Children not showing any (negative) emotional reaction (N=11) - Those children never displayed negative emotional reactions and therefore represent a distinct emotion pattern; 2) Children changing from a positive to a negative emotional state (N=9) - This group of infants displayed no observable emotional reaction in the 1st episode, but switched to a negative emotional state in the 2nd episode; 3) Children being in a negative emotional state during both episodes (N=7) - This group is composed of children showing negative emotional reactions during the 1st and the 2nd episode.

Relations Between Sociodemographic Factors, Maternal Meaning Systems, and Emotion Regulation Patterns

The sociodemographic profile of our sample revealed almost half the mothers (45%) being single mothers. Contrasting the single mothers' socio-demographic characteristics to the married mothers' sociodemographic characteristics revealed that the single mothers were younger at the time of first birth (t=2.66, p=.01; Single mothers: M=18.82; SD=2.30; Married mothers: M=21.95; SD=3.23, and had fewer children than the married mothers (t=2.44, p=.02; Single mothers: M=1.7; SD=1.10; Married mothers: M=3.32; SD=1.99). Almost all married mothers lived in extended families, whereas single mothers either lived alone or with family members (Fisher's exact test; p<.01). Most married mothers worked in subsistence farming, but only few single mothers did (Fisher's exact test; p=.027). Instead, the majority of single mothers held small-scale jobs such as hairdresser or shop assistant.

The two groups did not differ significantly with respect to formal education, but we found differences with respect to the mother-child relationship. Though both, married and single mothers, emphasized the concept of multiple caregiving arrangements equally, single mothers were more indulgent with their child's wish of exclusiveness compared to married mothers, who were more likely to restrict or inhibit exclusiveness (Fisher's exact test; p=.022; Figure 3). It is also of interest to note that those mothers who told us that their child never wants to be exclusively with them were all married and relied on extended family support for the upbringing of the child.
Both married and single mothers did not differ in their descriptions of a good child and both valued calm and obedient children equally. However, married mothers more often reported forcefully training their children to become used to others, sometimes even by beating children. Single mothers were less likely to use a rigorous teaching strategy (Fisher's exact test; \( p = .021 \); Figure 4).

Possible connections between demographic variables and the three emotional patterns were tested and revealed that only the availability of social support tended to be distributed differently across the three emotion patterns (Fisher's exact test; \( p = .07 \)). Children with no negative emotional reactions grew up embedded in a traditional extended family system or in the mother's family of origin. However,
infants with stable negative emotional reactions had mainly mothers with no familial support (Figure 5).

**Figure 5. Married and Single Mothers' Social Support in Relation to Their Infants' Emotion Patterns**

Discussion

This study was aimed at the eco-social analysis of children's stranger anxiety. We have argued that maternal beliefs embody cultural views of childrearing that are adaptive within particular contexts and represent frameworks for children's development. In this study we specifically analyzed Nso mothers' conceptions of caregiver-child relationships and the respective socialization goals. Our mixed-methods approach allowed the identification of distinct emotion regulation patterns in Nso infants in response to the visit of a stranger. A considerably large number of infants did not display stranger anxiety, independent of the degree of bodily proximity between stranger and themselves. Another group of children in this study changed to a negative emotional state the moment the stranger increased proximity between them. The third group of infants in our sample displayed extreme negative emotions from the very beginning of the stranger's visit, turning fearfully away from her, slashing at her, crying.

All children are socialized to adopt the norms of their culture. The Nso show general friendliness towards strangers. They are always ready to invite people to join in a meal and form warm and amicable relationships (Mbaku, 2005). Accordingly, Nso children are expected to greet strangers in the same manner from early on. The relative high percentage of children's ease with a stranger might be a reflection of this attitude and successful training.

From an evolutionary viewpoint, each pattern has to be regarded as
instantiating an adaptation of the infant to the individual living circumstances. In socio-cultural contexts characterized by high fertility and the heavy workload of mothers, infants' adaptability to multiple caregivers and their responsiveness to being soothed by nursing and back-carrying by siblings are central socialization goals of mothers (Super & Harkness, 1986). We found in our study that all mothers emphasized the importance of multiple caregiving arrangements as a basic principle for childrearing. Most Nso mothers in our sample were confronted with a heavy workload. With the help of multiple caregivers, the barring of an exclusive relationship between themselves and the child permitted them to pursue their daily work undisturbed. Mothers who successfully train their children to get used to multiple caregivers could accomplish their daily chores more easily than mothers whose children are not used to other caregivers. As such, these caregiving arrangements can be regarded as an adaptation to a mother's future time and energy demands (Cervera & Mendez, 2006; LeVine et al., 1994; LeVine & LeVine, 1988).

Multiple caregiving arrangements also foster the integration of children into the cultural community, as children interact with different individuals from an early age on. Especially in non-Western cultural contexts such as the Nso, maternal socialization behaviors emphasize establishing a feeling of unity and belonging between the child and members of the community (Nsamenang & Lamb, 1994; Yovsi & Keller, 2003).

Although all mothers held ethnotheories emphasizing the importance of multiple caregiving, our study also revealed an interesting difference between married and single mothers. In general, married mothers considered it harmful for a child to rely on only one caregiver and restricted or prohibited exclusiveness, whereas many single mothers reported allowing exclusive relationships. The different practices of single and married mothers most likely reflect their different social statuses within a hierarchical society that is stratified by a rigid social ranking system. Within the Nso society, marital status is crucial for ascribing a dominant or subordinate social status to women (Tegomoh, 1999). It is only through marriage that women move from low to high status, i.e., from daughter to wife in the patrilineage (Vubo, 2005). Through marriage and childbearing, a woman becomes accepted and respected as a full member of the society, with rights, privileges and obligations (Yovsi & Keller, 2003).

Hence, the married mothers in our sample enjoyed a high social status as fully accepted members in the Nso community. They prevented children from establishing exclusive relationships by forcefully giving their children away to other caregivers, sometimes even by beating children; these responses by the mothers were considered necessary to habituate children to multiple caretakers. Although not much existing literature describes maternal strategies for promoting adaptability to other caretakers in their infants, the findings of the present study suggest a very rigorous teaching strategy. Quinn (2005) suggests that this 'harsh' physical disciplining of children is common and normatively regarded as a proper
educational method in many non-Western cultures. We argue that because of their status, married mothers' emphases on the prevention of exclusive relationships through forceful training reflects the normative beliefs of the Nso society.

In contrast, unmarried women remain daughters with a subordinate status as long as they live among their kins, i.e., their father's household (Goheen, 1996). They occupy an inconspicuous position within the Nso kinship structure (Vubo, 2005). Goheen (1996) attributes the negative attitudes toward single mothers to the Nso hierarchical system, which is characterized by a strong male dominance. Single mothers may be regarded as threats to this traditional system, because they are gradually gaining some independence from men, violating the traditional kinship ties upon which the system is based. Most single mothers in our sample still lived with their relatives, which equates with the lowly status of a daughter. Additionally, it is against the tradition for unmarried women to have children (Tegomoh, 1999). As a result single mothers in the Nso society face social stigma. Because they bore a child without paternal family support, they remain dependent on their own family to compensate for the missing social support. As such, single mothers do not only degrade the family's reputation, but also become a burden on their family's resources. They are often forced to rely strongly on themselves to earn money for their own and their child's sustenance.

The single mothers' indulgence towards exclusive relationship may reflect an adaptation to their socially restricted living conditions. Although single mothers also acknowledged the importance of multiple caregivers, they often had no other choice than to take care of the infants themselves. So the single mothers face a behavior-attitude dilemma: Their attitude embodies the values and norms of Nso culture, but their behavior is driven by the reality of lacking social resources. They accept the child's wish to form an exclusive relationship with the mother out of necessity.

Both, married and single mothers raised their kids within certain living conditions. Their children's behavior may be regarded as an indicative of its adaptiveness within its respective context (Lamb, Thompson, Gardner, & Charnov, 1985). Children without stranger anxiety represent an adaptation to socio-demographic circumstances of mother-infant pairs, who followed the traditional living pattern of the Nso, characterized by an extended family system, many children and multiple caregiving arrangements, and a high maternal workload due to subsistence-based agriculture. They were embedded in an extended family system and therefore could rely on help from the mother's relatives as well as on the father's family. Their mothers translated the socialization goal of calm and obedient children into a parenting strategy aimed at teaching children indifference and aloofness towards different caregivers by forcing children onto other people on a regular basis. Probably due to the availability of other caregivers, their children were forced to adjust to multiple caregivers from an early age and had no difficulties in adjusting to a stranger as a result. This interpretation is supported by
similar observations in other non-Western cultures. Gottlieb (2004) reports that calmness and compliance are highly valued in Beng infants of Côte d'Ivoire who did not show any negative emotions towards the strange and white Anthropologist, who wrote: "the babies I observed went willingly to their new temporary caretakers, and it was rare for them to cry or otherwise express regret, fear, anxiety or anger when their mothers disappeared from view." (Gottlieb, 2004, p. 160). Like the Nso, the Beng mothers socialize their babies to be minimally attached to the mothers; at the same time, they provide a dense social network with many caretakers and a high comfort level with strangers. This socialization strategy and its developmental consequences are very similar to our findings with respect to Nso infants. In the present study, children who did not react emotionally towards the stranger can be said to typify the good, desirable, well-mannered child in the Nso community.

Children who changed to a negative emotional state reacted in a desirable way only at the beginning of the interaction, but subsequently changed to a less desirable reaction. The negative evaluation of this behavioral change becomes obvious from the maternal reactions: They verbally criticized these children as naughty or stubborn during the quasi-experimental procedure. As the sociodemographics of this group did not differ substantially from the demographics of the group without negative emotions, we propose that these children show a natural time lag in the acquisition of the desirable behavior; their mothers' reactions suggest that they are still in the process of teaching their children how to behave properly.

In general, we claim that Nso mothers who reported to rely on an extended family system had a functioning social support system. Research generally provides evidence that mothers who have sufficient positive social support, both in terms of perceived and received support, have better parenting skills and are more likely to have infants with excellent emotion regulation skills (Fish, 2001; Green, Furrer, & McAllister, 2007). Studies suggest that social support buffers maternal stress (Matthew, 2006), or maternal depression (Kuscu et al., 2008) and thus impacts on parental caregiving qualities and child development. In line with the literature we assume that socially supported Nso mothers should possess effective parenting skills; hence, it comes as no surprise that their children demonstrated culturally appropriate or almost appropriate emotion regulation competencies during the stranger's visit.

In contrast, Nso mothers lacking adequate social support were often found to have children displaying extreme negative emotions. Those mothers were depending on their own resources and often reported severe financial problems. Encountered by the stranger, the children did not regain their emotional balance as long as the stranger was present, even when handed back to their mothers. We argue that those children lack a functional coping mechanism at all due to their mothers' detrimental life circumstances. Nso mothers without social support were
faced with adverse contextual determinants: Nobody else may function as a maternal substitute by providing additional childcare, which leaves these mothers alone to carry the burden to care for the financial and socio-psychological needs of their infants. Hence, the extreme negative responses of those children may reflect the children's inexperience with other caregivers and indicate the lack of any proper behavioral coping mechanism for such situations.

Obviously, different conceptions of social relationships represent adaptations to different ecocultural demands (Bowlby, 1969; Greenfield & Keller, 2004; Super & Harkness, 2002). This may also hold true with respect to stranger anxiety: It is plausible to assume that stranger anxiety promotes survival only in an environment where danger lies in the social world and unknown others are potentially threatening; however, in a world where people rely heavily on others, stranger anxiety and withdrawal from people may be a hindrance for survival. When the expression of stranger anxiety is not the norm everywhere, it must be regarded as a cultural construct. Children have a universal propensity to discriminate between the familiar and the unfamiliar; their behavioral reaction, however, is culturally determined. Western middle-class parents teach their children to fear strangers, while Nso and Beng parents encourage children to interact friendly with strangers. This argument is further supported by researchers providing evidence that culture determines how and when certain developmental milestones are realized (Greenfield, Keller, Fuligni, & Maynard, 2003), e.g., night and day dryness of infants (deVries & deVries, 1977) or walking (Super, 1976). The acknowledgement of the cultural construction of stranger anxiety carries implications for psychological theories:

First, developmental psychology has to take a culturally informed perspective on stranger anxiety and exploration in children, emphasizing the broad cultural variations that are found in children all over the world. Second, ethological attachment theory integrated the child's reaction towards a strange person into the prominent paradigm of the Strange Situation. Given that stranger anxiety is culturally shaped, the integration of the child's reaction towards a strange person into this experiment represents a confounding factor. Third, attachment theorists assume that attachment patterns reveal themselves in the same kind of observable behaviors during the Strange Situation everywhere in this world, resulting in the same developmental consequences (Belsky & Rovine, 1988; Main & Solomon, 1990). However, considering the various socio-cultural conditions within our world and the plasticity of the attachment system, this assumption should be critically scrutinized. Fourth, attachment theory needs a re-conceptualization that accounts for the complexity of multiple caregiving arrangements and multiple attachment persons.

There are limitations of this study. The first concerns the small sample size, which limited the statistical analyses. However, the aim of this study was to explore culturally distinct features on the basis of eco-cultural and socio-cultural
parameters, maternal belief systems and infants' emotion regulation. The detection of culture-specific patterns was crucial, and pervaded all levels of analyses and not confirming hypotheses statistically.

A second potential limitation of the study lies in the fact that the behavioral observations were video-recorded. The visible presence of a camera might have altered the natural behavior of mothers and infants. In order to guarantee a culturally valid interpretation of the observational data, the first author watched the video recordings with two Cameroonian Nso assistants separately, comparing their interpretation of the ongoing activities with her own. The direct involvement of Nso assistants in the discussion of behavior patterns as well as the author's experience of Cameroonian everyday life should warrant cultural appropriate evaluations within the realms of possibility.

The data reported in this study point out that much of the discussion on psychological theories suffers from a severe ethnocentric bias of the dominant Western culture, especially from the culturally and temporally normative beliefs of motherhood and parent-child relationships. We showed that among Cameroonian Nso children, a mother's social status and her conceptions of proper demeanor are decisive factors influencing the manifestation of stranger anxiety. We conclude that the manifestation of stranger anxiety is subject to culturally defined socialization processes.

References


Un buen hijo es un hijo tranquilo: Estatus social de la madre, conceptos maternos del comportamiento apropiado y ansiedad ante los extraños en los niños cameruneses Nso de un año

Resumen

Este artículo cuestiona la suposición que la ansiedad ante los extraños se desarrolla universalmente en los niños; de ese modo nuestro estudio se basa en la tradición larga de antropología psicológica de investigar las universalidades formuladas en la sociedad occidental. Argumentamos que el comportamiento de los niños hacia los extraños es el producto del proceso de socialización que representa adaptaciones al contexto cultural. Nuestro estudio investiga la etnoteoría de crianza de los hijos y el desarrollo de ansiedad ante los extraños en la comunidad camerunés de los cultivadores tradicionales Nso. Los participantes del estudio fueron 29 madres cameruneses Nso con hijos de un año. Usando el enfoque de varios métodos, hemos demostrado que las madres Nso valoran los niños inexpresivos que se adaptan fácil a los demás. Por lo tanto, un número considerable de niños Nso de un año no mostraron ninguna ansiedad ante los extraños al encontrarse con un extraño. Estatus social de la madre y su sistema social de apoyo se han mostrado cruciales para la buena implementación del objetivo social del niño tranquilo. Nuestros datos apoyan la opinión que el comportamiento de los niños es el producto de experiencias cotidianas construidas culturalmente. El reconocimiento de la construcción cultural de la ansiedad ante los extraños lleva implicaciones para las teorías de desarrollo, especialmente para la teoría de apego, que cuenta con las universalidades de ansiedad ante los extraños en su paradigma más aclamado, la situación extraña.

Palabras claves: ansiedad ante los extraños, procesos de socialización, etnoteorías de los padres, cultura y desarrollo

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