Child-mother interaction and child secure- base behaviour in Zambia.

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By

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to mom and dad

Declaration

I, Haatembo Mooya, declare that this thesis represents my own work and has not previously been submitted for a degree, diploma or any other qualification at this or another University.
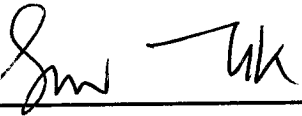
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CERTIFICATE OF APPROVAL

This dissertation by **Haatembo Mooya** is submitted as partial fulfillment for the award of the degree of Master of Arts in Child and Adolescent Psychology of the University of Zambia.

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ABSTRACT

Twenty families from three medium density areas in Lusaka participated in this study to investigate patterns of child-mother interaction and attachment; and the secure-base phenomenon in Lusaka, Zambia. The children were aged between 2 and 5 years (Mean age – 3 years). Data were collected in 3 stages; 2 home visits and 1 visit to the University. On the first and second visits to the home, the researcher and his assistant administered the Physical Punishment Questionnaire; did a video recording while the mother fed the child; and explained the Attachment Q-Sort to the father. The third visit involved the family coming to the University laboratory for the Strange Situation Procedure and another video recording of a laboratory interaction between the mother and the child. Descriptive statistics using, SPSS 14.0 for Windows, were computed to describe and sum the findings on attachment; parental sensitivity; secure-base behaviour; and physical discipline. Correlation coefficients were also computed to test for any relationships between attachment and parental sensitivity; secure-base behaviour and physical discipline; and parental sensitivity and secure-base behaviour. Results revealed the existence of attachment behaviours among the sample and the majority of the sample was securely attached to their mothers, supporting the existence of the universality and normativity hypotheses of attachment theory. Results also showed the existence of the secure-base phenomenon among the Zambian children. Correlations revealed a positive association between parental sensitivity and attachment security, confirming the sensitivity-security hypothesis of attachment theory, as hypothesized. Further it was found that Zambian parents use physical discipline and the most frequently used was spanking, slapping or hitting. The least used disciplinary strategy was beating. There was no association between parents' use of physical discipline and child-secure base behaviour whilst a strong association was found between parental sensitivity and secure-base behaviour.

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List of Abbreviations and Acronyms

AQS   Attachment Q-Sort

EAS   Emotional Availability Scales

SSP   Strange Situation Procedure

SPSS   Statistical Package for the Social Sciences

CHAPTER ONE

1.0 <u>INTRODUCTION</u>

The infant-mother relationship is perhaps one of the most important relationships any

individual can experience and as Bowlby noted, in a much quoted phrase, 'the

provision of mothering is as important to a child's development as proper diet and

nutrition' (Kobak, 1999, 23). This is especially true because our early childhood

experiences can positively or negatively affect various components of development,

particularly the personality and socio-emotional dimensions, later manifesting in

various (dys-) functional developmental trajectories (Nzewi, 1989). Bowlby

suggested that the parent-child relationship provides for an irreplaceable context for

socio-emotional development. It should be noted that Bowlby, from the very start,

talked about 'mother figures' to indicate the caregiver who is most involved in child

rearing. The mother figure would in many cases be the biological mother –though

not always the case.

The complexity of caregiver and child interactions has long attracted interest from

developmental and cross-cultural psychologists. Specifically, the behaviours

exhibited by both mother and infant have been extensively reported to explain the

factors most critical to an infant's optimal development. The infant-mother

attachment emotional relationship is a result of their interaction and the variations in

infant-mother interaction histories will lead to different outcomes in the quality of

infant-mother attachment relationships (Ainsworth, 1969). Infants in attachment

relationships characterized by flexible exchanges and smooth interactions where the

infant's pleas and communications are sensitively responded to by caregivers are

likely to be described as securely attached and infants in attachment relationships

characterized by difficult and conflictive interactions in which the infant's pleas and

communications are not attended to sensitively, from the infant's perspective are

likely to be described as insecure (Bowlby, 1982).

1.1 THEORETICAL FRAMEWORK

Attachment theory, as it is known today, is the joint work of John Bowlby and Mary

Ainsworth (Bretherton, 1992). Drawing on concepts from ethology, cybernetics,

information processing, developmental psychology, and psychoanalysis, Bowlby

formulated the basic tenets of the theory which include adaptiveness; robustness of

development; experience; internal working model; social interaction as causes of

attachment thereby introducing a revolution to our thinking about a child's tie to the

mother and its disruption through separation, deprivation, and bereavement

(Bretherton, 1992).

One of Bowlby's core beliefs was that the behavioural system of an attachment

relationship was an adaptation fixed in place through the process of natural selection,

and as such, evidence of the secure-base relationship should be observable in any

human socio-cultural setting (Bowlby, 1982).

Ainsworth was greatly influenced by Bowlby's ideas on attachment. Her pioneering

work includes her Uganda and Baltimore studies where she embarked on

observational projects whose thoroughness could be said to be second to none

(Bretherton, 1992). In her Uganda study Ainsworth's sample comprised 26 families with unweaned babies whom she observed every 2 weeks for 2 hours per visit over a period of up to 9 months. She was particularly interested in determining the onset of proximity-promoting signals and behaviors, noting carefully the frequencies when these behaviours occurred and when they became preferentially directed toward the mother (Bretherton, 1992).

In Baltimore, she recruited 26 families before their babies were born, hoping to replicate her Ugandan study but this time with an emphasis on meaningful behavioral patterns in context, rather than on frequency counts of the specific behaviors.

From these studies she found that mothers who were excellent informants and who provided much natural detail were rated as highly sensitive, in contrast to other mothers who seemed slow to grasping the discreet variations in their children's behaviours. Three infant attachment patterns were observed: securely attached; insecurely attached; and not-yet attached infants and it turned out that secure attachment was significantly correlated with maternal sensitivity. Maternal sensitivity was associated with more pleasant mother-infant relationships.

Ainsworth greatly contributed to attachment theory especially by her innovative methodology which not only made it possible to test some of Bowlby's ideas empirically but also helped expand the theory itself and is responsible for some of the contemporary directions it has taken today. She also contributed to attachment theory by postulating the concept of the attachment figure as a secure-base from which an infant can explore the world. In addition, she formulated the concept of

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maternal sensitivity to infant signals and its role in the development of infant-mother attachment patterns (Bretherton, 1992).

At the centre of the Bowlby/Ainsworth theory of attachment is the assumption that the attachment figure is a secure base for the infant's exploration and is a haven of safety for the infant in times of stress (Ainsworth, 1967; Bowlby, 1988; Ainsworth, Bell & Stayton, 1974), and in whichever way attachment relationships may be classified, they always imply the secure base phenomenon (Ainsworth et al., 1978; Zimmermann, 2004). From the caregiver's perspective, the secure-base phenomenon implies sensitive and cooperative attention to the location and state of the attached person and, from the perspective of the attached person (child), it implies the belief that the caregiver is able and willing to intervene on her or his behalf if needed and/or called. This has led to the reference by some scholars, to attachment relationships as 'secure-base relationships' (Waters & Cummings, 2000)

The securely attached infant is confident in a caregiver's availability, responsiveness and power to serve as a secure-base in support of ordinary exploration and, when necessary, as a haven of safety in retreat. Securely attached infants are more able, compared to insecurely attached children, to use one or more caregivers as a secure-base from which to explore and as a haven of safety. Studies conducted in the field of attachment have show that maternal sensitivity is significantly related to attachment security, in middle class samples (de Wolff and van IJzendoorn, 1997; Thompson, 1998)

1.2   BACKGROUND

1.2.1   _Traditional child-rearing practices in Zambia_

Although urban Zambian child-rearing practices have been modified as a result of contact with non-African cultures, there are still some residues of the traditional child rearing practices. Mostly, parents adopt some Western methods while basically still being traditional in their orientation and beliefs. Traditionally, many if not most Zambian societies view the child as basically good, being an innocent and perfect work of nature, yet immature with limited competence and ineligible for full moral responsibility. Parenthood is therefore viewed as a major goal in life, while barrenness is considered a serious mishap for any woman. Consequently, many Zambian babies arrive into a warm and receptive environment (Serpell, 1993).

Accordingly, the initial years of life for the infant result in the provision of the maximum comfort and well-being for him or her. The baby is breast fed on demand and there is always a close warm contact maintained by having the baby tied to the mother's back. This contact is only temporarily broken when the infant is asleep during the day, because at night the baby sleeps by the mother's side. Breastfeeding goes on for about two years and weaning is lenient and gradual. This is usually done when the baby is old enough to eat solid food and the frequency of breast feeding is reduced gradually until the baby volunteers to give up breast feeding. Toilet training also goes through a gradual and lax process and is started when the child has acquired some language and can indicate his needs. Sphincter control is therefore with minimal stress and frustration (Serpell, 1993). This pattern of child-rearing appears to provide many basic and emotional needs of the child (Bowlby, 1958).

It is also worthwhile to note that there may be slight variations between the different ethnic groups within Zambia on the specificities of child rearing but in general the trend seems to be the same. This is not only true for Zambia but for most African societies (Nzewi, 1989), especially sub-Saharan countries. One particular issue worth noting is parenting and/or childrearing beliefs and attitudes of Zambian parents. Despite the heterogeneity of parenting practices found within communities (Serpell, 1993), there are certain parenting beliefs and attitudes that are prevalent. Phillip Kingsley (1977) examined preferred methods of training and disciplining children in a Bemba-speaking village in Zambia. Accordingly, techniques recommended for instructing children varied with the content of the lesson. Practical skills were thought by more than half of the respondents (N=21, n=14 (men) and n=7(women) to be best taught by demonstration. Some respondents felt that the trial and feedback (correction) method is a good way of teaching practical skills. Parent opinions on the issue of physical punishment were clearly divided. A minority of respondents expressed unqualified approval of beating as a technique of discipline but many apparently felt that it should not be used or should only be used selectively. They mentioned various other forms of punishment including scolding and withholding food (Kingsley, 1977).

Physical discipline of children is still widely practiced in Zambia. A quantitative and qualitative survey of 2705 Zambian children, as well as a study of 225 pupils from five schools in Lusaka, conducted by "Save the children, Sweden (2005), clearly indicated the wide prevalence of corporal punishment and other forms of humiliating and degrading punishment in Zambia.

Although physical discipline of children, in schools, is prohibited by law in Zambia, the above study points to the fact that it is still practiced by a large number of teachers as a way of disciplining pupils. However, the legality of physical discipline in Zambian homes is debated since there is no law prohibiting parents to use physical discipline on their children. In terms of customary law and the cultural beliefs, parents have the right to bring up their children as they see fit. Seemingly that includes the right to physically discipline their children (Save the children, Sweden, 2005).

1.2.2 *Cross-cultural research in attachment*

One of the first things that strikes an attachment scholar and indeed any scholar that tries to gain a deep understanding of attachment theory is the amount of literature produced on studies that have been conducted in the West, particularly the United States of America (USA) and Europe. It is also worth noting here that because of Western scholars' predominant position in world views of ideas, there is always a temptation to apply theories they formulate based primarily on research restricted to Western samples, to people throughout the world. Perhaps the best remedy to this problem is a systematic involvement in cross-cultural studies in the field of attachment.

If the behavioural system of a secure-base relationship was an adaptation fixed in place through the process of natural selection, as it appears, evidence of the secure-base relationship should be observable in any human socio-cultural setting, as Bowlby (1982) believed. This is the more reason why a cross-cultural examination of attachment theory is very important. Besides, more than just being interesting

replications, cross-cultural studies are essential to evaluate primary hypotheses of the Bowlby-Ainsworth perspective (Waters and Cummings, 2000). African countries, such as Zambia present a good opportunity to conduct these tests. Zambia presents a rich culture in child rearing practices and attachment patterns with characteristics different from those of the Anglo-American culture. Bowlby (1982) proposed that his attachment theory is applicable to the human species as a whole, not just members of a single culture, propounding on what has come to be known as the *universality* hypothesis of attachment.

The *universality* hypothesis of attachment predicts that attachment bonds will be established in any given culture and proof of the secure-base relationship will be observed in any given society. The theory has grown and expanded to show that the association between the quality of early care (i.e. sensitivity) and infant attachment security holds across a variety of situations, contexts and cultures, pointing to what has come to be known as the *sensitivity* hypothesis of attachment theory- that attachment security is dependent on childrearing antecedents, particularly parental sensitivity (van IJzendoorn & Sagi, 1999). After all, Ainsworth conceptualized the construct of maternal sensitivity based on her experiences in rural Uganda and middle-class Baltimore, in the United States.

A comparative analysis of the few cross-cultural studies that have been conducted in this field has revealed results that compel for more effort to be channeled into this area, if the resulting differences are to be understood and explained properly. In the majority of cross-cultural comparison studies, mother-infant dyads from developing countries are compared with mother-infant dyads from relatively developed

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environments. One study that made a comparative analysis between an African and Western society (Whalley et al., 2002) revealed that there are distinct care giving differences between caregiver-infant interactions in Kenya and the U.S.A. For instance, whereas a lack of visual and vocal interaction may be regarded as a risk factor for development in the U.S.A, it may not be a central contributor in cultures in which mother-child interaction is not perceived in the same manner, such as Kenya. Other caregiver-child relationships may be more important for providing such stimulation in certain contexts.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 ATTACHMENT AND SECURE-BASE BEHAVIOUR

Is maternal/caregiver sensitivity an important condition for the development of a secure attachment relationship between the infant and mother/caregiver? According to attachment theory, the relationship between the quality of early care and infant security holds firm, not only within the culture most studied (i.e. the West) but also across a wide range of cultures (Bretherton, 1985). Research findings have indicated that the secure-base phenomenon is common to children from different cultures and socio-economic contexts. Moreover, despite skepticism that may arise from time to time, many scholars have continued to embrace Bowlby's original proposition that maternal sensitivity is a crucial antecedent of attachment security (Bretherton, 1985; Main, 1990 & Sroufe, 1988).

In a meta-analysis of 66 studies (N=4176) on parental antecedents of attachment security, addressing the question of whether maternal sensitivity is associated with infant attachment security and the strength of the relationship (de Wolff & van IJzendoorn, 1997), it was found that maternal sensitivity is significantly, if moderately, related to attachment security in middle-class, non clinical samples. The combined effect size for the association between maternal sensitivity and attachment

was r (1664) = .22 (K=30, N=1666). However, when they adopted a more strict definition of the predictor variable and included only studies that measured sensitivity using Ainsworth's original rating scale, the effect size increased to r (835) = .24 (K=16, N=837). Moreover, de Wolff and van IJzendoorn (1997) have estimated that 862 studies yielding null findings would be needed to reverse the conclusion that the two variables are significantly related. These findings are amazing, to say the least, especially considering that most studies subsequent to Ainsworth's, have drastically reduced the window of observation time and thus, perhaps the representativeness of the phenomenon being studied.

It can be argued that to date no study has come close to Ainsworth's study (Ainsworth et al., 1978) as far as observations of infant-mother interactions are concerned. Specifically, Ainsworth conducted extensive and frequent observations of infant-mother dyads at home observing them from the time the infants were 3 weeks, until they were 51-54 weeks old at intervals of 3 weeks, and her observations lasted between 3 and 4 hours each time. Most subsequent research has observed maternal behaviour in unnatural settings, only once per day, and for periods mostly lasting for less than 1 hour, most of the work being conducted in Western industrialized countries like the US and Europe. Nevertheless, few studies have failed to replicate Ainsworth's findings.

2.2   CROSS-CULTURAL STUDIES IN ATTACHMENT

There has been a concern about the cross-cultural generality of core attachment constructs like the sensitivity-security link and the context specificity of early maternal care even though most of the work done in this field seems to support Bowlby's assertions and assumptions on the secure-base and has produced consistent results, even in non-Western societies (van IJzendoorn & Sagi, 2001; Waters, E., 2002).Only a few studies in non-western societies has been done so far and the hypotheses investigated in Western societies need to be thoroughly tested in non-Western countries.

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Despite the bulk of evidence on attachment research reported to date being consistent with Bowlby's assumption (Posada et al., 1995; van IJzendoorn & Sagi, 1999), aspects of its general model and especially its assumptions about consequences of secure-base relationships, have been largely criticized as being narrow-mindedly Anglo-centric (Harwood & Miller, 1991; Miyake & Weisz, 2000). The fact that the association between sensitivity and security appears to hold in different cultures, in the few studies conducted so far, they argue (Harwood & Miller, 1991; Miyake & Weisz, 2000) is by no means an indication that there are not context-related or culture specific differences in the manner in which maternal and child behaviours are exhibited.

Central to these criticisms is the perception that some cultures uphold values that are inconsistent with Bowlby's assumption that secure-base relationships foster

behavioural outcomes such as self reliance and independence. In these cultures, these critics have suggested either that the social milieu (i.e. parental preferences for the children's behaviour and attributes) will lead to a different style of interaction and behaviours than that supporting attachment security, or that security itself will denote a unique meaning for these cultures, in response to the preferred mode of adaptation of the culture.

For example, studies of infant-caregiver interaction in countries such Kenya (Whaley et al., 2002) have, in comparison to the US, revealed an absence of visual and vocal maternal behaviour toward young infants (Dixon et al., 1981; LeVine et al., 1994; Bradely & Cadwell, 1984). Specifically, mothers from the Gusii tribe in Kenya were found to talk to their infants less and engage in minimal eye contact with their infants. This work with the Gusii implies that risk factors need to be defined within the context of culture. Whereas a lack of visual and vocal interaction may be regarded as a risk factor for child development in the US, it may not be a central contributor in cultures in which mother-infant interaction is not valued in the same manner. This is also because both visual and vocal interactions are taken care of by other caregivers in the community. Moreover, the observed absence of maternal visual and vocal responsiveness in countries such as Kenya may be a behavioural artifact of the social milieu in which the infant is raised.

In addition, patterns of shared care giving by multiple family and community members as practiced in several countries including Botswana (Konner, 1976); Democratic Republic of Congo (Tronick, Morelli, & Winn, 1987); and Guatemala

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(Rogoff, Mistry, Goncu, & Mosier, 1991) are not generally practiced by middle-class families in the US. Sibling caretaking is very limited and siblings do not play a significant role in infant care giving unless they are considerably older than the infants. Based on these differences in rearing styles between African societies (Kenya in particular) and the US, it comes as little surprise that studies of mother-child interaction in the two cultures reveal explicit differences. In fact, the intimate face-to-face mother-infant interaction in the two countries that is often the focus of infant research in the US may be very unusual in the cultural settings where infants are not brought up as conversational partners with their mothers but more as group-focus community members (Rogoff et al., 1991).

In another study, Posada and colleagues (1999) reported differences in the way maternal sensitivity was expressed in ordinary and emergency situations. In that study, sensitive mothers of sick children exhibited more physical contact and increased monitoring of the child's environment, making sure that the child was comfortable than did sensitive mothers of healthy children. Therefore it is important not to confound issues of function with issues of expression. The core attachment constructs like the sensitivity-security link may hold across contexts and cultures, while simultaneously, differences in the way caregivers' sensitivity is behaviourally expressed may exist. Consequent results might show different levels/types of secure-base behaviour across socio-cultural groups or reveal different patterns of correlation between maternal care and child attachment patterns.

There has been an ongoing debate about the cross-cultural generality of attachment theory. Rothbaum and colleagues (Rothbaum, 2000; Rothbaum, Weisz, Pott, Miyake & Morelli, 2001) challenged the notion that the theory can inform our understanding of close relationships across cultures. They instead proposed developing distinct theories for each human culture and subculture. Specifically they questioned the cross-cultural generality of core attachment constructs and hypotheses such as maternal sensitivity, the secure-base phenomenon, the sensitivity-security link and the implications of the attachment relationship for child development. They suggested that such notions are the result of Western ideological biases that do not apply to other cultural contexts.

In response, rebuttals based both on theoretical and empirical grounds were issued. van IJzendoorn & Sagi (2001) stated that any claim to cross-cultural validity of a theory can only be considered a bold but tentative hypothesis. They argued that Rothbaum et al (2000, 2001) cited existing empirical studies on attachment in Japan only selectively, and, in so doing neglected important evidence in favour of the validity of attachment theory in the Japanese context. The Japanese case is not yet a falsification of the nomological network that constitutes attachment theory's claim to cross-cultural validity.

In another rebuttal, Kondo-Ikemura (2001) stated that although the Rothbaum et al study is particularly important to Japanese investigators, as the validity of attachment theory has sometimes been taken for granted too easily in Japan, they overlooked important empirical results that clarify the validity of attachment theory in Japanese

samples. Kondo-Ikemura further stated that Rothbaum et. al. (2000, 2001) misunderstood or distorted the meaning of measures that are usually applied in attachment studies, and thus the arguments offered by Rothbaum and colleagues resulted in a superficial critique of the cross-cultural validity of attachment theory.

In another rebuttal Chao (2001) further stated that culture must be defined before considering attachment in cultural contexts, and that the Rothbaum et al. article compared the Western middle class with the whole Japanese population, with all of its various social groups. Such a casual attitude on the part of Rothbaum and colleagues shows a naive enthusiasm for cultural varieties and specifics that, without being balanced with generality, kills theorization. According to Chao (2001), a lack of a proper definition in context combined with naive enthusiasm was the reason for theoretical disaster.

In an unrelated study, Posada and colleagues (2004) conducted a study among a middle to middle-low class sample of 30 infant-mother dyads (14 boys, 16 girls) in Bogota, Colombia. All the children in this study were healthy and came from a non-clinical sample. Mothers were the primary caregivers. The study aimed at studying the association between maternal behaviour and the organization of infants' secure-base behaviour as assessed by the Attachment Q-Sort (AQS). A Pearson correlation index indicated that the constructs of maternal care giving/sensitivity and the security score for the infants were positively and significantly related (r= .61, p< .001). Results interestingly showed that the higher the overall quality of care a mother obtained, the higher her infant's security score. In addition, maternal sensitivity,

measured using the *Maternal Behaviour Q-Sort (MBQS) and child security were*

found to be significantly associated (r= .42, p= .01). In Posada and colleagues' quest

to investigate the cross-cultural generality of the sensitivity-security link, the

evidence supports the notion that maternal sensitivity and infants' use of the

caregiver as a secure-base is not just a construct exclusively relevant to middle-class

samples from the Western countries, but is applicable to infant-mother dyads in other

populations as well.

In a separate study Posada, Jacobs & Richmond (2002), investigated whether the

sensitivity-security link holds in two different cultural contexts. They investigated

the infant-mother attachment relationship in middle-class samples from Colombia

and the US. The sample included 60 US (29 boys and 31 girls from Denver,

Colorado) and 61 Colombian participants (33 boys and 28 girls from Bogota). These

were non-clinical and healthy mother-infant dyads from the middle-class from each

country. They came from intact families and lived with both parents. Q-methodology

was used to describe maternal behaviour in both cultures. On the basis of theoretical

considerations, the researchers hypothesized that maternal sensitivity would be

related to a secure organization of attachment. As hypothesized results indicated that

the two constructs of maternal sensitivity and infant security were significantly and

positively associated. The point biserial correlation index was r= .33, p= .05. A

Pearson correlation index indicated that the global scores on maternal sensitivity and

attachment security were significantly and positively associated (r= .46, p= .01).

Thus, it was found, once again that maternal sensitivity and attachment security are

associated, cross-culturally.

Another attachment study that was conducted in a non-Western country was conducted in China by Posada et al. In this study, the researchers sought to address the existence of the secure-base phenomenon and whether Chinese mothers and experts evaluated secure attachment in the same way that Western mothers and experts did(van IJzendoorn & Sagi, 1999). With a sample consisting of 41 mothers living in Beijing, the researchers used a Chinese version of the Attachment Q-Sort to stimulate mothers and experts to give descriptions of real and ideal children the perspective of attachment theory.

It was found that the Chinese parents and the experts found the concept of attachment applicable to their culture. It was also found that Chinese mothers are comparable to other mothers living in other societies in terms of their descriptions of the relevance of the secure-base phenomenon to their own children and that this appeared to be the case for the Chinese mothers' descriptions of the ideal child. The results showed that the experts' opinion about the optimally secure child was highly related with the mothers' view of the ideal child (van IJzendoorn & Sagi, 1999).

2.3   CHILD REARING AND PHYSICAL DISCIPLINE

Studies that have not taken ethnic and cultural background into account have generally shown that physical discipline is associated with child behaviour problems such as aggression (Eron, Huesman, & Zelli, 1991), delinquency (Farrington & Hawkins, 1991) and criminality (McCord, 1991). However in a variety of domains, parenting behaviours have been found to relate differently to children's adjustment

depending on the contexts in which these behaviours are situated, suggesting that the effects of parental discipline may not be direct or universal (Florsheim, Tola, & Groman-Smith, 1996).

One theory that can account for some apparently discrepant findings across cultures is Rohner's (1986) parental acceptance-rejection theory which suggests that if children interpret their parent's behaviour as rejection; this will have deleterious effects on their adjustment. For example, in one of the many empirical tests of the theory, Rohner, Kean & Curnoyer (1991) found that parents' use of physical discipline negatively affected children's adjustments in part through its effect on children's perception of being rejected by their parents. Rohner's theory has been examined across several cultures and the findings show that children's perception of parental rejection is the strongest predictor of their maladjustment.

Further, Grusec & Goodnow (1994) provide a useful theoretical framework in which to understand differences in how parents' disciplinary strategies affect children's adjustment. In particular, their framework argues that the extent to which children accurately perceive their parents' disciplinary messages and accept those messages contributes to the impact of the discipline. For example, if children perceive their parents' discipline as unfair and unreasonable, they are less likely to internalize the message their parents are trying to convey and may show long term maladjustment (Grusec & Goodnow, 1994). Thus the effect of discipline may depend on the context in which it is used and the meaning it delivers for the parent and the child and it has been shown that culture plays a moderating role on the effects of discipline. In

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cultures where physical discipline is considered normative, the negative effects are to an extent buffered (Lansford et al., 2005).

2.4   RATIONALE OF THE STUDY

After review of the literature, it could be stated that the current cross-cultural data base was "almost absurdly small" (van IJzendoorn and Sagi, 1999), compared to the domain that should be covered. In cultural anthropology, the number of different cultures (past and present) has been estimated at more than 1,200 and data on attachment, to date, covered only a few studies in China, Japan, Israel and Africa. Data from the Middle East was totally lacking. Studies in this area in Zambia were absent and therefore this study attempted to bridge this gap in knowledge and add to the little body of literature available in this field in the region.

It also appeared that to explore the appropriateness of attachment theory of early care *in a cultural context different from the one that research had used for the most, was* of utmost importance. This could be seen from the controversy that surrounded the generality and applicability of attachment theory's core constructs like maternal sensitivity, the secure-base phenomenon, and the sensitivity-security link. As was shown, the few studies conducted in non-Western societies had produced interesting results, mostly conforming to attachment theory but that needed to be understood in light of the socio-cultural milieu in which the samples are derived.

Although only a few studies have failed to replicate Ainsworth's findings, more research is still needed to clarify the cross-cultural generality of these constructs and

this study aimed at doing just this. For instance, True et al. (1997) found an absence of avoidantly attached children in her sample from two societies, rural and peri-urban, in Dogon (Mali) and the Whaley et al. (2002) study in Kenya found that when all caregivers are taken into account, as opposed to the mother only, remarkable similarities between Kenyan and U.S. children cultures in styles of interacting with young infants become apparent. When infant-caregiver interaction in Kenya was compared with infant-caregiver interaction with U.S. preterm infants, previously reported differences between Kenya and U.S. care giving behaviours also became less evident. This was in line with the assertion that Kenyan mothers' absence of visual and vocal maternal behaviour towards young infants, which in U.S. culture are perceived as cardinal predictors for optimal development of children, led to the development of risk behaviour in Kenyan infants. It was later elucidated that such risk behaviour needed to be defined within the context of their culture.

All these are findings that are not normative for most of the attachment research that has been conducted and to replicate and validate these phenomena have not only added to the knowledge gap in cross-cultural attachment research but have also been of great help to reconcile the controversy that lies in understanding the causes of certain cultural disparities in the development of attachment. After all, more than interesting replications, cross-cultural studies are essential to evaluate primary hypotheses of the Bowlby-Ainsworth perspective (Waters and Cummings, 2000) and African countries, like Zambia present a good opportunity to conduct these tests. For this study, Zambia presented a rich culture with characteristics different from those of the Anglo-American culture.

2.5   AIM OF THE STUDY

This study aimed at examining the patterns of child-mother interaction and attachment; and the secure-base phenomenon in Lusaka, Zambia.

2.6   RESEARCH QUESTIONS

In this study on attachment, the researcher addressed the following issues:

- examined patterns of child-mother interactions and infant attachment (classifications) in a Zambian sample living in a medium density area in Lusaka.

- investigated the existence and nature of the secure-base phenomenon among those Zambian families in Lusaka selected in (1) above.

- examined whether there was a relationship between the quality of emotional interaction between the mother and child, as measured with the Emotional Availability Scales (EAS), and the child's secure-base behavior, as measured with the Attachment Q-Sort (AQS), in the Zambian families.

- investigated the cross-cultural generality of the 'sensitivity-security' link in Lusaka, Zambia.

- investigated whether there were differences in the use of the secure base between children whose parents use physical discipline and those whose parents do not.

2.7   HYPOTHESES

It was hypothesized that;

1. The majority of children would be classified as securely attached.

2. The secure-base phenomenon exists in Zambia and Zambian children use their mothers as secure-bases for exploration and havens of safety.

3. There would be a significant positive correlation between maternal sensitivity and the child's secure base behavior.

4. There would a significant positive association between maternal sensitivity and child attachment security.

5. Finally, it was hypothesized that there would be no association between infant use of the secure base and parents' use of physical discipline.

2.8   OPERATIONAL DEFINITIONS OF CONSTRUCTS

Attachment: the close emotional relationship between the child and the mother characterized by mutual affection and a desire to maintain proximity.

Child: A child was defined as an infant between the ages of 1-5 years.

Haven of safety: This implied, from the child's perspective, the belief in the parent to protect, comfort, delight in and organize the child's feelings and that the caregiver is

able and willing to intervene on her or his behalf if needed and/or called. It simply implied the provision of a place of safety for the child by the parent.

Maternal sensitivity: the mother's ability to perceive her baby's signals accurately, and to respond to them promptly and appropriately.

Medium density areas: these were residential areas where you find the majority of civil servants and included places like Chelstone, Kabwata, Libala and Chilenje, in Lusaka

Physical discipline: physical discipline and/or the threat of it included beating the child with the hand or with an object (such as a cane, belt, whip, shoe, e.t.c); grabbing/shaking, and/or slapping/spanking the child.

Secure-base behaviour: this is behaviour that seeks to increase proximity to or maintain contact with a particular attachment figure. From the mother's/caregiver's perspective, secure-base behaviour implied sensitive and cooperative attention to the location and state of the infant and, from the perspective of the infant, it implied the belief that the caregiver is able and willing to intervene on her or his behalf if needed and/or called.

CHAPTER THREE

3.0 <u>METHODOLOGY</u>

3.1 STUDY TYPE

This was a descriptive/correlational study which involved mainly naturalistic observations and a laboratory observation.

3.2 STUDY POPULATION

The sample in this study comprised of 20 families from three medium density areas in Lusaka. Most of the population in these areas were engaged in formal employment; most being civil servants, though some were involved in the informal sector. In most cases, both the father and mother were in full-time employment. During the daytime, when the parents were at work, children would be taken care of by a maid or other caregivers, including members of the extended family like aunties and grand-mothers. In still some cases, children were usually taken care of by older siblings, mostly, if not all the time, this being the older sister.

During the parents' absence, the caregiver(s) would look after the child, monitoring the child's whereabouts and ensuring that the child was safe. The child is bathed and fed and if the child wants to sleep, the caregiver would put the child to sleep. This care continues even after the return of the mother from her job, even though the mother will now spend time with the child, usually bringing the child small gifts

which are given to the child, especially if she receives a report that the child was 'good' in her absence. In all this, the child mostly experiences care from more than one caregiver to whom s/he eventually gets used and can spend time with, even in absence of the mother. The father comes home later and rarely participates in care giving.

3.3   INCLUSION/EXCLUSION CRITERIA

3.3.1 *Inclusion:*

To be included in the study

- the child came from an intact family (child living with both parents)

- the child came from a non-clinical background.

- the child was aged between 2 and 5 years.

- the families were resident within the medium density area under study.

3.3.2 *Exclusion:*

Children and/or families

- living with a single parent

- with a clinical history.

- below the age of 2 years and above the age of 5 years.

- from either high or low density areas

were *not* included in the study.

3.4   SAMPLING PROCEDURE

In this study, a purposive sampling procedure was employed. Initially, the sample was meant to be recruited from pre and primary schools for the sake of obtaining a sample of children from a large population of children within the required age range of two to five years. However this was not possible due to non-responsiveness from the teachers. Families and parents were then targeted and these were obtained from the local churches. Nevertheless, the researcher ensured that the inclusion/exclusion criteria were strictly followed.

3.5   STUDY PROCEDURE

To obtain this sample, subjects were recruited from churches located within the study areas. The church ministers were approached and informed about the details of the study. They then invited the researcher and his assistants to make an announcement in the church, inviting families with children between the ages of 2 and 5 years willing to participate in the study. The families (mostly mothers and their children, but occasionally fathers), then registered to participate in the study after the church service, by signing the consent form (*Appendix A*). Still at church they were further taken through a screening test to assess whether they met the inclusion criteria e.g. area of residence, clinical history. Families that met the inclusion criteria were enrolled in the study.

The data were collected in 3 stages which included 2 home visits and a visit to the University. On the first visit, the researcher and his assistant visited the family at home where they administered the **Physical Punishment Questionnaire** (Appendix

B). On the second visit, **a video** was recorded at home, while the mother fed the child. The recording of a feeding session was chosen and not another activity was chosen because this is an activity that involves an interchange of behaviours between the mother and child and is a "rich" interactional experience where mother and child both have to sacrifice something to ensure smooth interaction. This was done between 11:30 and 14:00, as this is the time Zambian families normally have their lunch. In a few cases, the video was done during supper time, between 17:00 and 20:00, for the cases where it was not possible to make a lunch-time recording. On the second visit, the **Attachment Q-Sort** (Appendix B) was also explained to the father and was asked to try to sort it before the final visit to the University for the **Strange Situation Procedure (SSP)** (Appendix B). The third visit involved the family coming to the University observation room for the **SSP** and another **video** recording of a laboratory interaction between the mother and the child. After the laboratory sessions, the family was given a token of appreciation.

3.6   THE CENTRAL INSTRUMENTS

3.6.1   The Attachment Q-Sort (AQS): The AQS was developed to describe the behavior of children aged between 1-5 years, who were observed at home to assess the quality of secure-base behavior in the home. It was developed to provide structure to observations of secure base behaviour and to help formalize the definition and quantification of individual differences in secure base functioning. Despite the use of the Strange Situation Procedure (SSP) in most cross-cultural research, the Q-Sort has been used as a viable alternative (van IJzendoorn et al. (2004). It is an economical alternative to Ainsworth's observational methodology,

one that covers essentially the same behavioral content as her approach yet allows studying larger samples in naturalistic settings; keeps the observers blind to the constructs being measured; and lends itself to an array of quantitative analyses.

The *Q*-set for the AQS consists of 90 items designed to tap a range of dimensions believed to reflect either the secure-base phenomenon or behavior associated with it in children. Its validity has been documented in many studies (e.g., Park & Waters, 1989; Pederson & Moran, 1996; Vaughn & Waters, 1990; Waters & Deane, 1985). Van IJzendoorn et al. (2004) suggested that the AQS constituted one of three "gold standard" attachment measures (with the Strange Situation and the Adult Attachment Interview).

3.6.2 The Emotional Availability Scales (EAS).

The *Emotional Availability Scales*, created in the late 1980's by Zeynep Biringen and colleagues, is a rating system designed to examine and measure the quality of the emotional interaction between parent and child. It consists of six dimensions of the emotional availability of the parent (including caregiver) towards the child and of the child towards the parent. Parental dimensions include *sensitivity, structuring, non intrusiveness* and *non hostility* and the child dimensions include *child's responsiveness to the parent* and the *child's involvement of the parent* (Biringen, et al., 2000). It is the first system based on attachment theory and research that provides a comprehensive and scientific understanding of not only parental behavior toward a child, but also the child's side of the experience. It can be used in research studies, in clinical work with parents and children, and in child custody evaluations. The scales include: parental sensitivity, parental structuring, parental non intrusiveness, parental non

hostility, child responsiveness and child involvement. Although the EAS to our knowledge have never been used in Zambia before, the use of video ensures objectivity in coding and therefore can be said to be a valid measure in research conducted in developing countries.

3.6.3   The Strange Situation Procedure (SSP). The *"Strange Situation"* is a laboratory procedure used to assess infant attachment classification. The procedure consists of the following eight episodes (Connell & Goldsmith, 1982; Ainsworth, Blehar, Waters, & Wall, 1978).

1. Parent and infant are introduced to the experimental room.

2. Parent and infant are alone. Parent does not participate while infant explores.

3. Stranger enters, converses with parent, then approaches infant. Parent leaves inconspicuously.

4. First separation episode: Stranger's behavior is geared to that of infant.

5. First reunion episode: Parent greets and comforts infant, then leaves again.

6. Second separation episode: Infant is alone.

7. Continuation of second separation episode: Stranger enters and gears behavior to that of infant.

8. Second reunion episode: Parent enters, greets infant, and picks up infant; stranger leaves inconspicuously.

The infant's behavior upon the parent's return is the basis for classifying the infant into one of three attachment patterns. The SSP has been used in several developing countries (Nigeria, Mali and Kenya) and its validity has been documented. In fact, the first SSP was done in Uganda by Ainsworth (van IJzendoorn& Sagi, 1999)

3.6.4 Discipline interview (mother and child reports). The parent-report version of the Discipline interview was developed for the cross-cultural study by Lansford et. al (2005) and includes items regarding the frequency (1-Never, 2-Less than once a month, 3-About once a month, 4-About once a week, 5-Almost every day) with which mothers use 17 particular discipline strategies that were adapted from other instruments that assess parents' disciplinary strategies. Questions regarding how frequently other parents use each disciplinary strategy (rated on the same 5-point scale ranging from never to almost every day) were added to assess perceived cultural normativeness of the behaviors.

The Discipline interview has been used in developing countries such as Kenya and its validity has been documented (Lansford et al., 2005).

In spite the fact that most of the measures have been validated in developing countries, the measures were however tested for suitability in a pilot in the present study, and were found to be suitable for use with the Zambian sample.

3.7   ETHICAL CONSIDERATIONS

Because the study involved a vulnerable group of participants, i.e. children; involved some sensitive topics, i.e. parents were asked about their child rearing attitudes and beliefs, especially concerning issues of discipline, which may have made them feel uncomfortable; and because the research induced mild psychological stress in the child, i.e. during the Strange Situation Procedure (SSP), ethical clearance was sought and obtained from the University of Zambia ethics board.

The participants were made aware that their participation in the study was voluntary and free from coercion. In addition, informed consent was obtained from the participants (see appendix A for the consent form). Information obtained during the study, either through questionnaires, interviews and/or video recordings was kept confidential and was available only to the researcher and his research team.

3.8   STATISTICAL ANALYSES

All statistical analyses were performed using the Statistical Package for Social Sciences (SPSS) 14.0 for Windows. Descriptives, correlations and ANOVAs were computed for the various variables under analysis. All correlations, unless indicated were two-tailed. Coding for the observational measures i.e. video recordings for the assessment of attachment classification and maternal sensitivity were done by three Graduate students inclusive of the author.

There was a high inter-rater agreement among the three coders. Inter-rater reliability for the observational measures (SSP and EAS) was established through consultation with experts with a good theoretical background, well versed in the use of the measures.

CHAPTER FOUR

4.0   <u>RESULTS</u>

This chapter presents the findings of the study. These findings are presented according to each hypothesis.

4.1   PARTICIPANT DEMORGRAPHICS

Twenty families (n=20) participated in this study, from Chelstone (n=6, 30%), Kabwata (n=9, 45%) and Chilenje (n=5, 25%) as shown in Figure 1 below. The children ranged in age from 2 to 5 years (M=3, SD=.933) and included 11 (55%) males and 9 (45%) females (*Figure 2*). To ensure sample representativeness, participants were picked from three residential areas, reasonably spread apart, though with similar characteristics to the study population, as shown in the inclusion/exclusion criteria. From the initial recruitment, there was an attrition rate of 20%. With an initial recruitment of 25 participants, 5 participants decided either not to participate at all or to fall out of the study before completion.

Figure 1- Residential areas from which the sample was drawn
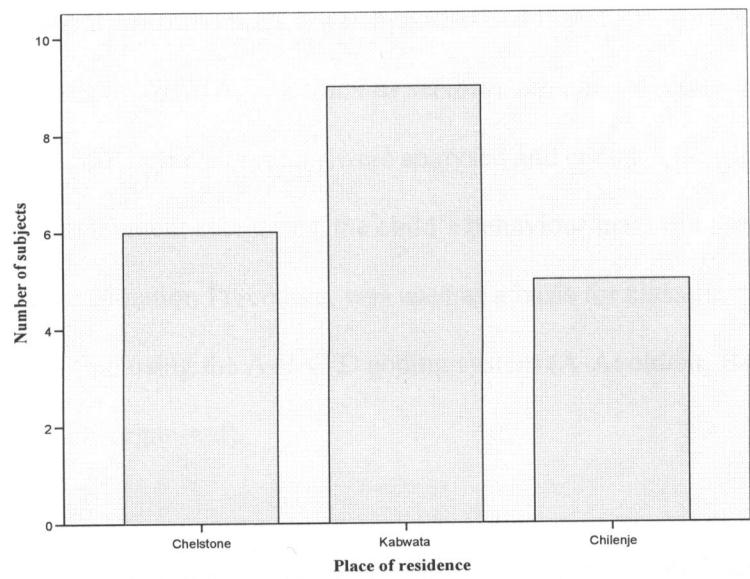
Figure 2- Sample age distribution
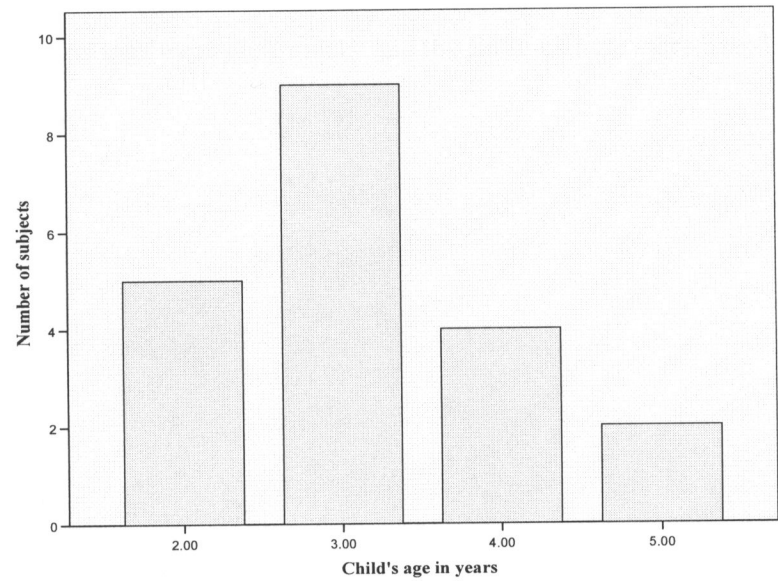
4.2   HYPOTHESIS 1

Based on theoretical considerations it was hypothesised that the *majority of the children in the sample would be classified as securely attached.* To assess this, video recordings of the SSP in the laboratory were analysed and coded. To assign a child into one of four attachment categories, the child's behaviour upon the parent's return, during the Strange Situation Procedure, was used as a basis for classification. The sample was classified using the A-B-C-D coding system (A-Avoidant, B-Secure, C-Resistant, and D-Disorganised).

An analysis of the videos of the Strange Situation Procedure indicated that 60% of the children in the sample showed patterns of secure attachment to their mothers; 25% of the children exhibited patterns of avoidant attachment to their mothers; 15% showed patterns of resistant attachment to their mothers; and no child showed patterns of disorganised attachment (*Figure* 3 below). It should be pointed out here that these video ratings were preliminary and the findings here were based on these preliminary ratings.

Figure 3- Attachment classifications

Secure
Avoidant
Resistant
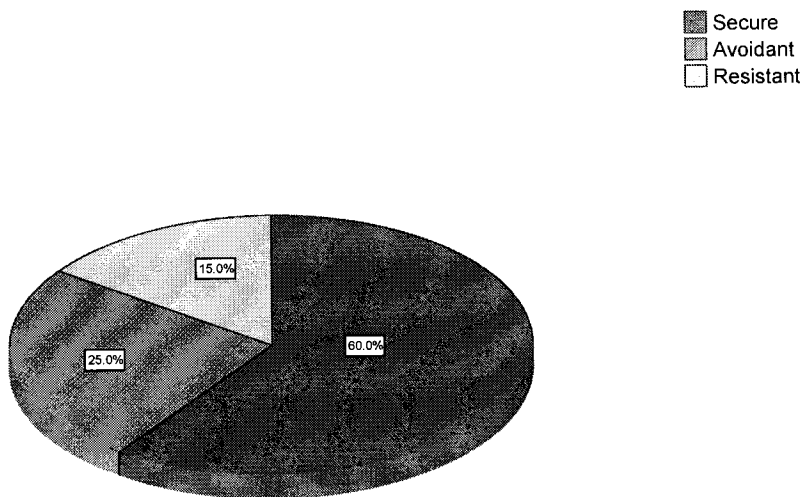
4.3   HYPOTHESIS 2

It was hypothesised that *the secure-base phenomenon exists in Zambia and Zambian children use their mothers as secure-bases for exploration and havens of safety*. To assess the existence and nature of secure-base behaviour among the participants, the *Attachment Q-Sort* was sorted. The results showed that the use of mothers as a secure-base for exploration and haven of safety in times of stress is existent in Zambia! In fact, 100% of the children exhibited secure-base behaviours, one way or another.

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The results revealed that 40% of the children in the sample exhibited secure-base

behaviours 'sometimes'; 35% of the children 'frequently' used their mothers as a

secure-base; and 15% of the children exhibited secure-base behaviour 'almost all the

time'. 10% of the children in the sample 'rarely' used their mothers as a secure-base

and haven of safety. No child was scored/sorted as 'never' exhibiting secure base

behaviours (Table 1).

Table 1: The use of mothers as secure-bases among Zambian families

Use of mother as secure-base/haven of safety	Percentage
Never	0%
Rarely	10%
Sometimes	40%
Frequently	35%
Almost all the time	15%

4.4   HYPOTHESIS 3

It was hypothesised that *there would be a significant positive correlation between*

maternal sensitivity and the child's secure base behavior. To assess this, scores on

the various scales of the Emotional Availability Scales were correlated with scores

from the Attachment Q-Sort. Scores on the EAS were based on the coding of video

recordings of play sessions at the laboratory and feeding sessions at the participants'

home. These videos were also preliminary and scores were based on the preliminary video assessments.

The Emotional Availability Scales consists of six dimensions of the emotional availability of the parent towards the child and of the child towards the parent. The Parental Dimensions include parental sensitivity, parental structuring, parental nonintrusiveness, and parental nonhostility and the Child Dimensions include the child's responsiveness to the parent and the child's involvement of the parent.

4.4.1 *The parental Dimensions*

15% of the parents were scored as highly sensitive on the *Parental Sensitivity* scale; 55% were scored as generally sensitive on the parental sensitivity scale; 15 % were scored as inconsistently sensitive; and 15% were scored as somewhat insensitive. No parents were scored as highly insensitive. For the *Parental Structuring* measure, 75% of parents were scored as inconsistently structuring their child in terms of following their child's lead, and setting limits for appropriate child behavior and/or misbehavior. 20% were scored as providing optimal structuring to their children and 5% were scored as providing non-optimal structuring of their child's play.

On the *Parental non-intrusiveness* measure, 65% of the parents were scored as 'somewhat intrusive'; 15% were scored as 'non-intrusive' and 5% were scored as 'intrusive'. In terms of the degree of *Parental nonhostility*, towards the child, 55% of the parents were scored as 'non hostile'; 30% were scored as 'covertly hostile'; and 15% were scored as 'markedly and overtly hostile' towards their children.

4.4.2 _The Child Dimensions_

For the scale of the _Child's Responsiveness_ to the parent, 20% of the children were scored as 'optimal in responsiveness' towards the parent and 35% were scored as 'moderately optimal in responsiveness' towards the parent. 40% of the children were scored as 'some-what non optimal in responsiveness' and 5% were scored as 'clearly non-optimal in responsiveness'. For the measurement of the _Child's Involvement_ with the parent, 15% of the children were scored as being 'optimal in exhibiting involving behaviours' towards the parents; 60% were scored as being 'moderately optimal in involving behaviour'; 40% of the children were scored as being 'some-what non optimal in responsiveness'; and 5% were scored as 'clearly non-optimal in responsiveness'.

4.4.3 _Association among the variables of the Emotional Availability Scales_

Results showed that _parental sensitivity_ was significantly and positively associated with _parental non-hostility_, $r(18) = .635$, $p<.01$; _child's response to parent, $r(18) = .738$, $p<.01$; and _child's involvement with parent_, $r(18) = .620$, $p<.01$. Parents who scored high on parental sensitivity also scored high on parental non-hostility. Their children scored high on response to the parent and on involving the parent. Parental structuring was significantly associated with child's response to parent, $r(18) = .610$, $p<.01$; and child's involvement with parent, $r(18) = .498$, $p<.05$. The two variables with the strongest positive association were the _Child's Response_ to the parent and the _Child's Involvement_ with the child. Apparently, the children that most favourably responded to their parents also involved their parents in their activities most favourably (_Table 2_).

Table 2: Correlational matrix showing the various scales on the EAS. Scores with asterixes indicate significant associations.

Correlational Matrix-Emotional Availability Scales

	1	2	3	4	5	6
1. Parental Sensitivity	-					
2. Parental Structuring	.388	-				
3. Parental non-intrusiveness	.443	.382	-			
4. Parental non-hostility	.635**	.399	.623**	-		
5. Child's response to parent	.738**	.610**	.473*	.598**	-	
6. Child involvement with parent	.620**	.498*	.450*	.581**	.743**	-
SD-	1.847	.979	1.21	1.509	1.73	1.490
M -	3.600	2.700	3.100	2.200	3.600	3.300

(** Correlation is significant at the 0.01 level (2-tailed and * Correlation is significant at the 0.05 level (2-tailed).

4.4.4 *Association between maternal sensitivity and secure-base behaviours*

Results showed that of the various scales on the *EAS*, the child's secure-base behaviours were strongly and significantly correlated with the scales of *parental sensitivity*, $r(18) = .726, p<.01$ and the *child's response to the parent*, $r(18) = .707, p<.01$. The strongest correlation was between the child's secure-base behaviours and *maternal sensitivity*, $r(18) = .726, p < .01$ (*Table 3*).

The results showed that parents who scored high in terms of sensitively reading and accurately responding to their child's signals were the most used by their children as secure bases for exploration and havens of safety. The results also showed that children that scored high in terms of showing willingness to engage with the parent

following a proposal for exchange; and displayed clear signs of pleasure in the interaction, tended to display more secure-base behaviours than those that did not.

Table 3: Correlational matrix for secure-base behaviour and the different scales on the EAS

Correlational Matrix-Secure-Base and Emotional Availability Scales (EAS)

	1	2	3	4	5	6	7
1. Secure-base behaviour	-						
2. Parental Sensitivity	.726**	-					
3. Parental Structuring	.285	.338	-				
4. Parental non-intrusiveness	.446*	.443	.382	-			
5. Parental non-hostility	.362	.635**	.399	.623**	-		
6. Child's response to parent	.707**	.738**	.610**	.473*	.598**	-	
7. Child involvement with parent	.530*	.620**	.498*	.450*	.581**	.743**	-
SD-	.887	1.846	.978	1.209	1.507	1.729	1.490
M -	3.550	3.600	2.700	3.100	2.200	3.600	3.300

(**Correlation is significant at the 0.01 level (2-tailed) and * Correlation is significant at the 0.05 level (2-tailed).

4.5   HYPOTHESIS 4

It was hypothesized that *there would be a significant positive association between maternal sensitivity and child attachment security*. To assess this, a one-way Analysis of Variance was computed between scores on the Emotional Availability Scales (EAS) and the Strange Situation Procedure (SSP).This was assessed during feeding and play sessions at home and at the laboratory, respectively; and children's

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attachment classifications were assessed at the laboratory during the SSP. Before the computation of the Analysis of Variance, an examination of Levene's test for the homogeneity of variances revealed that it was not significant. This entails that variances of the sample were not significantly different and therefore no assumption in the performance of an ANOVA were violated. It was found that there was a positive, and statistically significant effect of sensitivity on attachment classification $(F(2,17) = 6.577, p < .05)$. Attachment classification accounted for more of the effect in parental sensitivity than the variance accounted for by error variance.

4.6   HYPOTHESIS 5

It was finally hypothesised, that *there would be no association between child's use of the secure-base and parents' use of physical discipline*. To assess this, ANOVAs were computed for scores on the Physical Punishment measure and scores derived from the AQS were compared.

4.6.1   *Physical Discipline*

Results from the Physical Punishment Questionnaire were based on three physical disciplinary strategies (*spank,* slap *or hit; grab or shake*; and *beat up*) that were conceptually relevant to the hypothesis and operational definition of physical discipline.

4.6.1.1 *Spank, slap or hit*

The results showed that 20% of the parents reported that they *spank, slap* or *hit* their children almost everyday; 30% of the parents *spank, slap or hit* their children about once a week; 15% did it about once a month; 25% of the parents did it less than once

a month; and 10% reported that they never *spank, slap or hit* their children, (*Figure 4* below). In assessing perceived cultural normativeness, it was observed that 25% of the parents perceived that other parents *spank, slap or hit* their children *almost everyday*; 25% *about once a week*; 10% about once a month; 25% *less than once a month*; and 15% never used this disciplinary strategy (*Figure5*).

Figure 4: The frequency that parents use *spank, slap or hit* as a disciplinary strategy
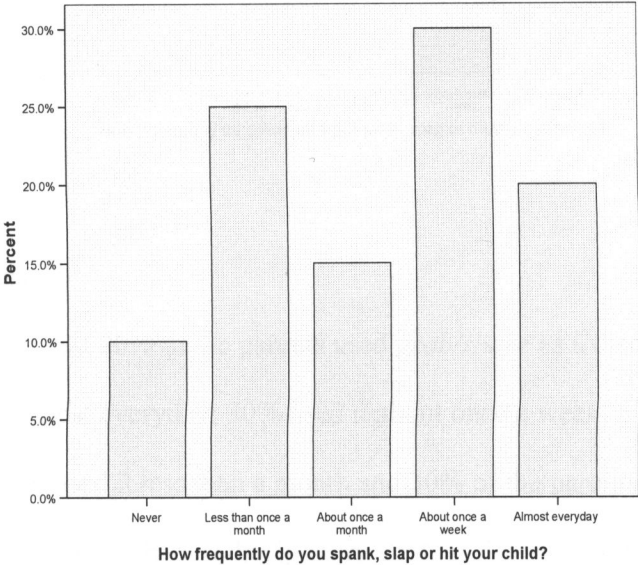
Figure 5: Parents' perception of the normativeness of *spank slap or hit* as a disciplinary strategy.

How frequently do other parents spank, slap or hit their children?
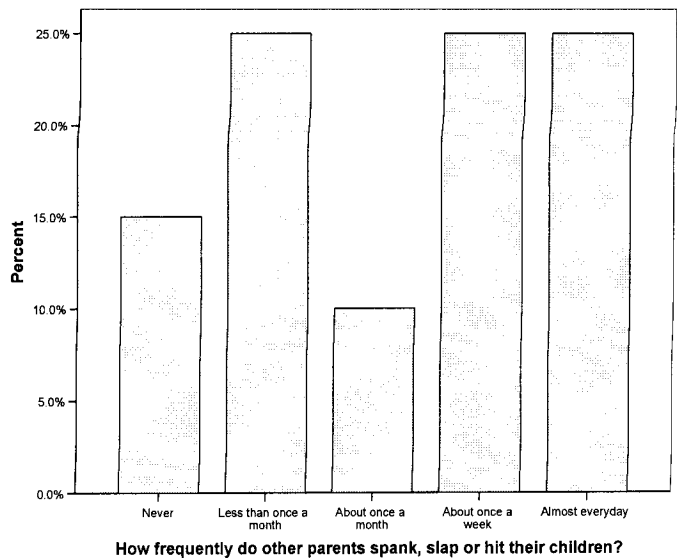
4.6.1.2 <u>Grab/shake</u>

The results showed that 20% of the parents used *grab/shake* as a disciplinary strategy on their children almost everyday; 30% used it about once a week; 5% used it about once a month; 15 % used it less than a month and 30% of the parents reported that they never used to *grab/shake* as a disciplinary strategy (*Figure 6*). In assessing perceived cultural normativeness, the results showed that 20% of the parents perceived that other parents used *grab/shake* as a disciplinary strategy on their children almost everyday; 35% were perceived to use it about once a week; 25% to use it about once a month; 10% to use it less than once a month and 10% of the parents were perceived by the respondents never to use *grab/shake* as a disciplinary strategy on their children (*Figure 7*)

Figure 6: The frequency that parents use *grab/shake* as a disciplinary strategy

How frequently do you grab/shake your child?
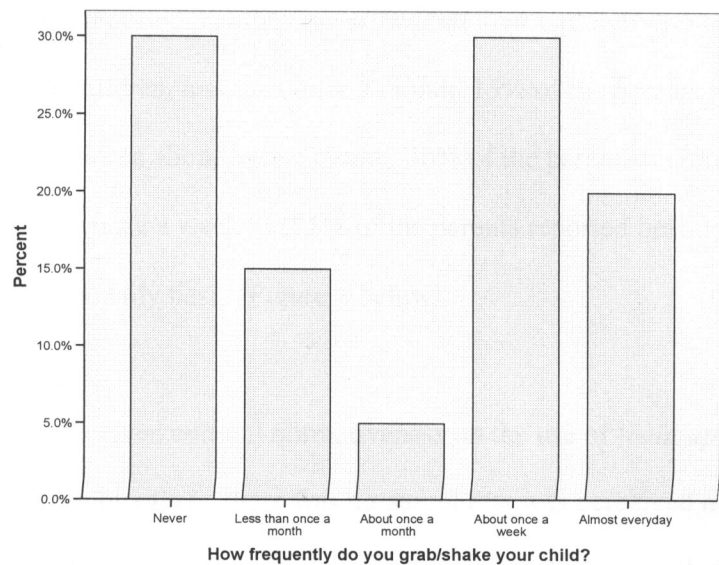
Figure 7: Parents' perception of the normativeness of *grab/shake* as a disciplinary strategy.

How frequently do other parents grab/shake their children?
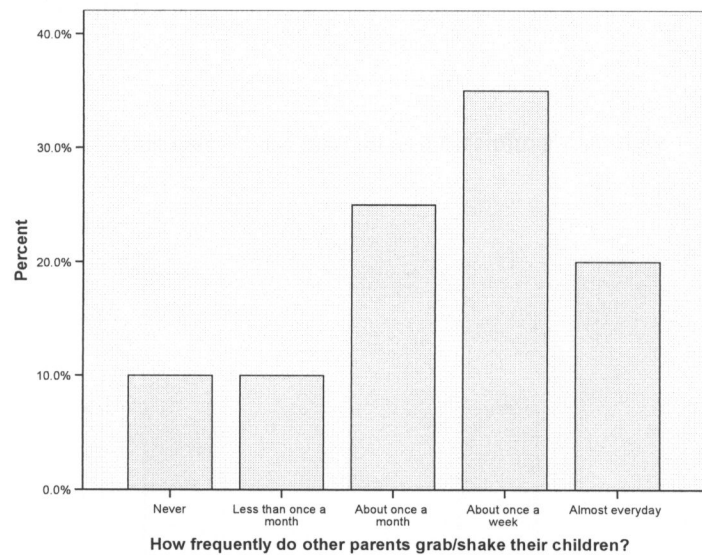
4.6.1.3 *Beat up*

45% of the parents reported that they never *beat up* their children; 5% reported that they *beat up* their children, less than once a month. 15% of the parents reported *beating up* their children about once a month; 30% of the parents reported beating their children about once a week; and 5% of the parents reported beating their children almost on a daily basis (*Figure 8* below).

When assessing perceived cultural normativeness on the use of '*beat up*' as a disciplinary strategy by others, there was no parent that was perceived not to *beat up* her child. 10% of the parents thought that other parents only *beat up* their children less than once a month, 10% perceived that other parents *beat up* their children on a daily basis. 80% of the parents thought that other parents *beat up* their children about once a month; and 40% perceived that other parents beat up their children about once a week (*Figure 9* below).

Figure 8: The frequency that parents use *beat up* as a disciplinary strategy

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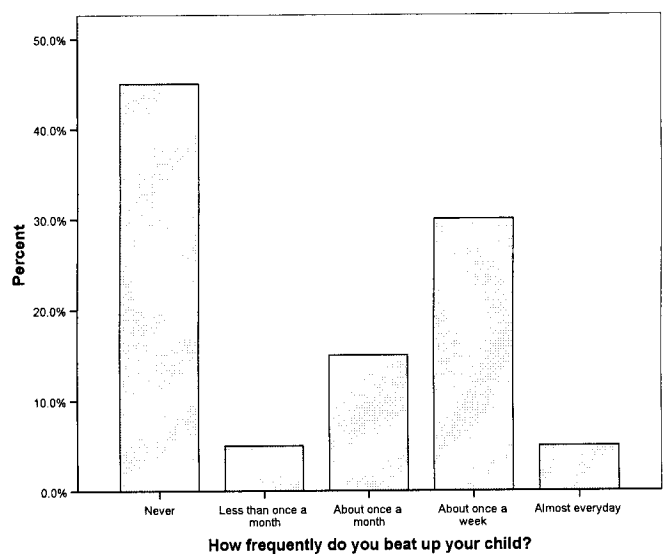
Figure 9: Parents' perception of the normativeness of *beat up* as a disciplinary strategy
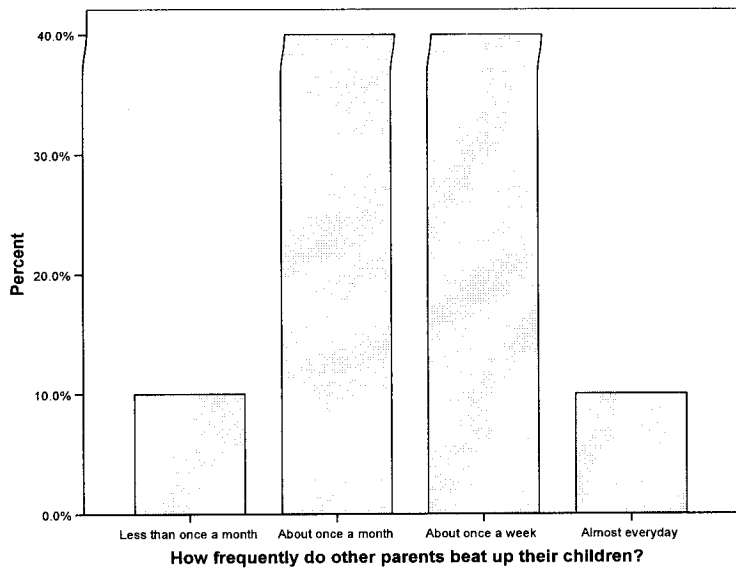
4.6.2 *Association between the use of the secure-base and physical discipline*

Analyses of Variance on scores on the three scales of the Physical disciplinary measure (*spank/slap/hit*; *grab/shake*; and *beat up*) and scores derived from the *AQS* were computed to assess the effect of punishment on children's use of their mothers as secure-bases and havens of safety.

To do this, parents were either classified as *disciplining their children* or *not disciplining their children*. Parents who were classified as disciplining their children were labeled as 'frequently' punishing their children and those who were classified as not disciplining were labeled as 'rarely' punishing their children.

Results showed that there was a statistically insignificant effect on the child's use of the mother as a secure-base by the use of *spank, slap or hit* as a disciplinary measure $(F(3,16) = .936, p > .05)$; by the use of *grab/shake* $(F(3,16) = .081, p > .05)$; and by the use of *beat up* $(F(3,16) = .457, p > .05)$.

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Table 4: Association between secure-base behaviour and the three measures of physical discipline (ANOVA)

		Df	F	p
Spank/Slap/Hit	Between groups	3	.936	.446
	Within groups	16		
Grab/Shake	Between groups	3	.081	.969
	Within groups	16		
Beat up	Between groups	3	.457	.716
	Within groups	16		

(Df = Degrees of freedom; F = F ratio; p = Significance value)

CHAPTER FIVE

5.0   DISCUSSION

This chapter discusses the findings presented in Chapter Four under the five

hypotheses, endeavouring to discuss them under three main themes, namely; infant

attachment in Zambia; the secure-base and the sensitivity-security link; and physical

discipline and secure-base behaviours.

5.1   INFANT ATTACHMENT IN ZAMBIA

In the pursuit to examine infant attachment patterns among the Zambian sample, it

was hypothesised that the majority of the children in the sample would be classified

as securely attached. An analysis of the SSP revealed that 60% of the children were

classified as securely attached, 25% were classified as avoidantly attached and 15%

of the children in the sample showed patterns of resistant attachment to their

caregivers. Theses findings, as hypothesised, revealed that the majority of the

children in the sample were classified as securely attached to their mothers.

It suffices to speculate that the most plausible explanation for these findings may be

embedded in the *universality* and *normativity* hypotheses of attachment. If the

behavioural system of a secure-base relationship/attachment process was an

adaptation fixed in place through the process of natural selection, then indeed

evidence of the secure-base relationship should be observable in any human socio-

cultural setting (Bowlby, 1982). And it was seen in this study that children became

attached to a caregiver. All the children that participated in this study showed attachment to a specific figure, in this case, the mother.

Although the *universality* hypothesis of attachment predicts only that attachment bonds will be established in any culture (van IJzendoorn & Sagi, 1999), the findings in this study also supported the *normativity* hypothesis of attachment theory which postulates that the majority of children are securely attached and the rest are insecurely attached, though numbers may very much vary across samples. Most attachment research thus far, has revealed, at least in the West, that the majority of children are securely attached (van IJzendoorn, Sagi & Lamdermon, 1992) with a significant number of children being classified as insecurely attached. It appears therefore that the findings from this study have followed the existing trends in attachment research.

These findings are in line with the findings by Marvin et. al. (1977), who carried out a descriptive study of the Hausa people in Nigeria with a focus on investigating the occurrence of attachment. They found that all the Hausa children appeared to use adult caregivers as safe-bases from which to explore. Furthermore, all the infants displayed attachment behaviour and seemed to be attached to at least one attachment figure, in the array of caregivers at their disposal, to whom they addressed their attachment behaviours most frequently (Marvin et. al., 1977), supporting the *universality* hypothesis of attachment theory.

Another study, conducted by True, Pisani & Oumar (2001), in Dogon, Mali, to investigate the hypothesis that secure and insecure dyads among the Dogon people of

Mali would be characterized by different communication patterns in attachment-related circumstances, revealed findings that supported the *universality* hypothesis of attachment. The study revealed that the Strange Situation Procedure was still classifiable with the A-B-C-D (A-Avoidant; B-Secure; C-Resistant; and D-Disorganised) coding system in Dogon-a coding system prior ustilised in Western countries, supporting the universality hypothesis. The researchers in this study also found that the majority of the participants were classified as securely attached, providing further cross-cultural evidence for the normativity hypothesis.

What was interesting in the assessment of attachment among the Zambian sample was that there were no children that were classified as showing patterns of disorganized attachment, an attachment pattern mostly observed in the context of parental psychopathology (Goldberg & Simmons, 1995; van IJzendoorn, Schuengel & Bakermans-Kranenburg, 1999). The most plausible explanation for this finding may be that the sample was drawn from a non-clinical population and therefore child-mother interactions were more consistent. Another less plausible reason, in the researcher's reasoning could have been the small sample size. A sample of 20 participants may not have been enough to facilitate the emergence of all the attachment styles in the children and therefore it would be interesting to test this hypothesis on a much larger sample in Zambia to see if all the attachment styles could be found.

5.2 THE SECURE-BASE AND THE SENSITIVITY SECURITY-LINK

In a quest to investigate the cross-cultural generality of the sensitivity-security link, it was hypothesised, based on theoretical considerations, that maternal sensitivity would be related to a 'secure' organisation of attachment. A one-way Analysis of Variance indicated that maternal sensitivity accounted for an effect in the child's attachment classification and a statistically significant effect was found for this association ($F(2,17) = 6.577, p < .05$). In this case different attachment classifications were explained by a variation in the levels of sensitivity displayed by the mother to the child, assessed with the EAS.

In addition, maternal sensitivity, assessed on the EAS, and the child's use of the caregiver as a secure-base, assessed using the Q-Sort, were significantly and positively associated, $r (18) = .726, p < .01$, and the correlation was a strong one! It is perhaps important at this point to mention that secure-base behaviours are sometimes referred to as attachment behaviours (Waters & Cummings, 2000). Moreover, the sensitivity-security association was more strongly found between the scales of *parental sensitivity* and *child's response to parent*, although parental sensitivity was the variable with the highest correlation with attachment behaviours in the child.

Indeed it makes a lot of sense to recognize that parents that display higher levels of sensitive responsiveness to their children elicit optimal levels of secure-base behaviours from the children. A child that senses that a parent sensitively reads and accurately responds to him/her is most likely to use that parent as a secure-base and haven of safety. The child is aware that should s/he need help, the parent will quickly

come to their rescue and this also assures the child that the world is a safe place and encourages the child to explore and learn more about the world around them, without the fear of not finding the parent should they need him/her. Thus the child runs to the parent when in need and can move around whenever the parent is perceived to be *within reach.*

Further in our view it also makes a lot of logic that children who feel the most comfortable to interact with parents are the ones that used their parents more as secure-bases. Children scoring high on responsiveness to parents tended to display higher levels of secure-base behaviours. What is also interesting to note here is that the two scales of the *EAS*, i.e. *parental sensitivity* and *child responsiveness to* parent were significantly and strongly correlated, $r(18) = .738$, $p < .01$. In fact, they were the most strongly related between the parents and child's scales. Therefore, parents scoring high on sensitivity had children scoring highly on responsiveness to the parents. It also seems plausible that it was the same families, practicing smooth interactive exchanges, that both had sensitive parents and children that responded sensitively to their parents and therefore exhibiting secure-base or attachment behaviours.

As hypothesized, the findings of this study confirmed the existence of the secure base phenomenon and indeed supported the cross-cultural validity of the sensitivity hypothesis- that attachment security is dependent on child rearing antecedents and particularly that sensitivity leads to security. As hypothesized, the two constructs of maternal sensitivity and attachment security were significantly and positively related and thus it was found that maternal sensitivity and attachment security are associated.

The results of these studies may support the notion that maternal sensitivity and infant attachment and use of the caregiver as a secure-base is not just a construct exclusively relevant to middle-class samples from the Western countries, but is applicable to infant-mother dyads in other populations, like Zambia (Posada et. al. 2004).

These finding are in line with previous research done in this area and continue to confirm and buttress the cross-cultural generality of the sensitivity-security link. Posada et. al. (2004), conducting a similar study among a group of middle to middle-low class infant-mother dyads in Bogota, Colombia of a healthy non-clinical sample with mothers as the primary caregivers also found that the constructs of maternal care giving/sensitivity and the security score for the infants were positively and significantly related ($r= .61, p< .001$). Results interestingly showed that the higher the overall quality of care a mother exhibited, the higher her infant's security score. In addition, maternal sensitivity, measured using the Maternal Behaviour Q-Sort (MBQS) and child security were found to be significantly associated ($r= .42, p= .01$). In their quest to investigate the cross-cultural generality of the sensitivity-security link, the evidence supported the notion that maternal sensitivity and infants' use of the caregiver as a secure-base is not just a construct exclusively relevant to middle-class samples from the Western countries, but is applicable to infant-mother dyads in other populations as well.

In another study, Posada, Jacobs & Richmond (2002), investigated whether the sensitivity-security link holds in two different cultural contexts and found that, as hypothesised, the results indicated that the two constructs of maternal sensitivity and

infant security were significantly and positively associated. The point biserial correlation index was $r = .33, p = .05$. A Pearson correlation index indicated that the global scores on maternal sensitivity and attachment security were significantly and positively associated ($r = .46, p = .01$). Thus, it was found, once again that maternal sensitivity and attachment security are associated, cross-culturally.

5.3 PHYSICAL DISCIPLINE AND SECURE-BASE BEHAVIOURS

To assess the relationship between infant use of the secure base and parents' use of physical discipline, Analyses of Variance were computed on the scores from the Physical Punishment measure and scores from the Attachment Q-Sort. The results indicated, as hypothesized based on Rohner's (1986) parental acceptance-rejection theory, that punishment of the child by parents did not have an effect on the child's use of the mother as a secure-base for exploration and haven of safety on all the three disciplinary measures used (Spank/Slap/Hit - $F(3,16) = .936, p > .05$; Grab/Shake - $F(3,16) = .081, p > .05$; and Beat up - $F(3,16) = .457, p > .05$). The results showed that parents' use of punishment did not determine whether the child would use that parent as a secure-base or not.

The Physical Punishment measures showed that the most frequently used disciplinary strategy among Zambian mothers is *spanking, slapping or hitting*, followed by *grabbing/shaking* and then *beating up*. Nevertheless, the disciplinary strategy that parents perceived as the most used by other parents in their communities was *beating up*. It is interesting to note that while almost half the number of parents in the study reported that they never *beat up* their children, all of the parents in the

55

study thought that other parents in the community *beat up* the children. One explanation for this finding may have been the fact that the participants were drawn from church. It appears in this context that this class of society tries to uphold high moral values. Therefore, it may seem that reporting that one beats their child may reflect ones inability to show love and thereby not upholding Christian norms and values. It appears sensible then that, while one may not openly admit beating their child, it is easier for them to think that other parents in their neighbourhood beat up their children.

Despite half the parents reporting that they did not consider beating as a form of abuse, there were variations in opinions, mainly moderated by the age of the child and the severity of the punishment. Some parents claimed that they were not comfortable beating a child less than 3 years and would consider that as abuse. Some parents also stated that abuse was also determined by the severity of the punishment. Punishing a child to an extent of physically injuring him/her or exerting severe pain and discomfort would be considered as abuse. These findings seem to support those of Kingsley (1977) who carried out a study to examine preferred methods of training and disciplining children in a Bemba-speaking village in Zambia. He found that though a minority of participants expressed unquestioned approval of beating as a disciplinary strategy, many felt that it should only be used selectively. Our findings in Physical discipline also support the findings of Lansford et. al. (2005) who found that the association between mothers' use of physical discipline and child adjustment was moderated by the normativeness of physical discipline

CHAPTER SIX

6.0   <u>CONCLUSIONS</u>

6.1   CONCLUSIONS

Overall, the findings of this study seem to support all our hypotheses. Indeed the study revealed that the majority of the children in the sample were classified as securely attached, providing support for some of attachment's core hypotheses. The findings supported assertions that attachment security was associated with maternal sensitivity – that maternal sensitivity was strongly and positively correlated to attachment security and the child's use of the mother as a secure-base of exploration and haven of safety in time of stress.

The study further revealed the existence of the secure-base phenomenon among Zambian children, showing that the children do use their mothers as secure-bases and havens of safety. Moreover, the use of physical disciplinary among Zambian families was also found, showing that the discipline strategy mostly used by Zambian families is *spank, slap or hit* and the least preferred strategy is *beat(*ing) *up* their children. Nevertheless, the majority of the parents were of the view that the disciplinary strategy mostly used by other parents was to *beat up* their children. Despite the use of physical discipline by parents on their children, there was found to be no association between the use of parents by children as secure-bases and parents' use

of these disciplinary strategies. Simply put, even parents who hit their children were still responded to positively by their children.

Lastly, what this study may have tried to show is the cross-cultural validity of the core attachment hypotheses. These hypotheses have, for the most part, been studied in Western cultures and attachment scholars have hypothesized that they also hold true in non-Western cultures. Indeed a number of studies have been conducted and although the number is still small, these scholars have been convinced that these findings should hold true even in non-Western societies. It is also true that even though the findings in this study alone cannot be considered representative of the whole Zambia, let alone the African continent, it has nevertheless provided some cumulative evidence supporting the core hypotheses of attachment theory.

6.2   LIMITATIONS

Although most of the questions in this study were answered, it would be prudent to note the limitations of the study.

1.   It is difficult to assume that the sample used in this study was representative of the Zambian population especially that this was a descriptive study and therefore required a larger sample than the one used.

2.   Socio-economic status was not directly considered in the sampling of the study participants although sampling was done by residential area of the participants. Unfortunately it may have happened that two participants from what could be termed as two different socio-economic classes my have been

living within the same residential area and it was not possible to control for this.

3.   The researcher did not get the required expert training to compute inter-coder reliability on the Strange Situation Procedure (SSP) and the Emotional Availability Scales (EAS).

4.   The sample characteristics (church going parents) may also have possibly influenced the findings of the study. Perhaps if the sample had been recruited from schools the results might have taken a different turn. Nevertheless, this was necessitated by the non-response from schools.

6.3   RECOMMENDATIONS FOR FUTURE RESEARCH

1.   It is recommended that for future studies, the researcher should have the necessary coding expertise by undergoing the required training.

2.   It is recommended that future research considers comparative studies between urban and rural samples, to get a general overview of attachment patterns among the two "sub-cultures". Using only an urban sample may risk the presence of confounds because of interference, from Western cultures.

3.   It is further recommended that future research should consider looking at attachment in the context of multiple caregivers in Zambia. It would be interesting to investigate whether there are differences in attachment to different caregivers, and especially the father figure, considering that many Zambian fathers spend little time with their children.

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APPENDICES

Appendix A

CONSENT FORM
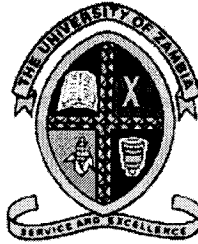
UNIVERSITY OF ZAMBIA, Department of Psychology
P.O. Box 32379, Lusaka, Zambia

Dear Parent(s)

Re: <u>Child-mother interaction and the secure-base phenomenon in Zambia</u>

We are kindly asking you to participate in a research study looking at the way children interact with their mothers. You are required to answer 2 questionnaires, for 15 minutes at your home and then come to UNZA for a video recording of you playing with your child for 20 minutes, at a day and time that is convenient for you. At the end, we will ask you to sort out some cards, describing your child's behaviour towards you.

Your participation will help us understand the way children interact with their mothers which will help towards the formation of good government policies and bridge the gap in knowledge in this field.

At the end of the study, a token will be given to you. All the information gathered in this study will be treated confidentially. If you have any questions about this research study, please contact my supervisor:

Dr. S.O.C Mwaba (Lecturer-Psychology Department, UNZA)
Mobile: +260 979 168 293
Email: sidneymawaba@yahoo.com

If you consent to take part in this study, please sign this form below.

Name:…………………………………………….. Signature:……………………………………….

Date…………………………………………… Phone #:………………………………………..

Yours faithfully

Haatembo Mooya (Principal investigator) - Department of Psychology
Mobile: +260 977 415 671
Email: haatembomooya@yahoo.com
         haatembomooya@gmail.com

CENTRAL INSTRUMENTS

2 Attachment Q-Set

1. Child readily shares with mother or lets her hold things if she asks to.

   Low: Refuses.

2. When child returns to mother after playing, he is sometimes fussy for no clear reason.

   Low: Child is happy or affectionate when he returns to mother between or after play times.

3. When he is upset or injured, child will accept comforting from adults other than mother.

   Low: Mother is the only one he allows to comfort him.

4. Child is careful and gentle with toys and pets.

5. Child is more interested in people than in things.

   Low: More interested in things than people.

6. When child is near mother and sees something he wants to play with, he fusses or tries to drag mother over to it.

   Low: Goes to what he wants without fussing or dragging mother along.

7. Child laughs and smiles easily with a lot of different people.

   Low: Mother can get him to smile or laugh more

8. When child cries, he cries hard.

   Low: Weeps, sobs, doesn't cry hard, or hard crying never lasts very long.

9. Child is lighthearted and playful most of the time.

   Low: Child tends to be serious, sad, or annoyed a good deal of the time.

10. Child often cries or resists when mother takes him to bed for naps or at night.

11. Child often hugs or cuddles against mother, without her asking or inviting him to do so.

    Low: Child doesn't hug or cuddle much, unless mother hugs him first or asks him to give her a hug.

12. Child quickly gets used to people or things that initially made him shy or frightened him.

    Middle: if never shy or afraid.

13. When the child is upset by mother's leaving, he continues to cry or even gets angry after she is gone.

    Middle: if not upset by mom leaving.

    Low: Cry stops right after mom leaves.

14. When child finds something new to play with, he carries it to mother or shows it to her from across the room.

    Low: Plays with the new object quietly or goes where he won't be interrupted.

15. Child is willing to talk to new people, show them toys, or show them what he can do, if mother asks him to.

16. Child prefers toys that are modeled after living things (e.g. dolls, stuffed animals).

    Low: Prefers balls, blocks, pots and pans, etc.

17. Child quickly loses interest in new adults if they do anything that annoys him.

18. Child follows mother's suggestions readily, even when they are clearly suggestions rather than orders.

    Low: Ignores or refuses unless ordered.

19. When mother tells child to bring or give her something, he obeys. (Do not count refusals that are playful or part of a game unless they are clearly disobedient .)

    Low: Mother has to take the object or raise her voice to get it away from him.

20. Child ignores most bumps, falls, or startles.

   Low: Cries after minor bumps, falls, or startles.

21. Child keeps track of mother's location when he plays around the house.

   Calls to her now and then Notices her go from room to room
   Notices if she changes activities

   Middle if child isn't allowed or doesn't have room , to play away from mom.

   Low: Doesn't keep track.

22. Child acts like an affectionate parent toward dolls, pets, or infants.

   Middle: if child doesn't play with or have access to dolls, pets, or infants.

   Low: Plays with them in other ways.

23. When mother sits with other family members, or is affectionate with them, child tries to get mom's affection for himself.

   Low: Lets her be affectionate with others. May join in but not in a jealous way.

24. When mother speaks firmly or raises her voice at him, child becomes upset, sorry, or ashamed about displeasing her. (Do not score high if child is simply upset by the raised voice or afraid of getting punished .)

25. Child is easy for mother to lose track of when he is playing out of her sight.

   Middle if never plays out of sight.

   Low: Talks and calls when out of sight. Easy to find; easy to keep track of what he is doing

26. Child cries when mother leaves him at home with baby-sitter, father, or grandparent.

   Low: Doesn't cry with any of these.

27. Child laughs when mother teases him.

   Middle If mother never teases child during play or conversations.

   Low: Annoyed when mother teases him.

28. Child enjoys relaxing in mother's lap.

Middle: If child never sits still.

Low: Prefers to relax on the floor or on furniture.

29. At times, child attends so deeply to something that he doesn't seem to hear when people speak to him.

    Low: Even when deeply Involved in play, child notices when people speak to him.

30. Child easily becomes angry with toys.

31. Child wants to be the center of mother's attention If mom is busy or talking to someone, he interrupts.

    Low: Doesn't notice or doesn't mind not being the center of mother's attention.

32. When mother says "No" or punishes him, child stops misbehaving (at least at that time) Doesn't have to be told twice.

33. Child sometimes signals mother (or gives the impression) that he wants to be put down, and then fusses or wants to be picked right back up.

    Low: Always ready to go play by the time he signals mother to put him down.

34. When child is upset about mother leaving him, he sits right where he is and cries Doesn't go after her.

    Middle: If never upset by her leaving

    Low: Actively goes after her if he is upset or crying.

35. Child is independent with mother. Prefers to play on his own; leaves mother easily when he wants to play.

    Middle: Not allowed or not enough room to play away from mother.

    Low: Prefers playing with or near mother

36. Child clearly shows a pattern of using mother as a base from which to explore. Moves out to play; Returns or plays near her; Moves out to play again, etc.

    Low: Always away unless retrieved, or always stays near.

37. Child is very active. Always moving around. Prefers active games to quiet ones.

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38. Child is demanding and impatient with mother. Fusses and persists unless she does what he wants right away.

39. Child is often serious and businesslike when playing away from mother or alone with his toys.

    Low: Often silly or laughing when playing away from mother or alone with his toys.

40. Child examines new objects or toys in great detail. Tries to use them in different ways or to take them apart.

    Low: First look at new objects or toys is usually brief (May return to them later however.)

41. When mother says to follow her, child does so. (Do not count refusals or delays that are playful or part of a game unless they clearly become disobedient.)

42. Child recognizes when mother is upset. Becomes quiet or upset himself. Tries to comfort her Asks what is wrong, etc.

    Low: Doesn't recognize; continues play; behaves toward her as if she were OK.

43. Child stays closer to mother or returns to her more often than the simple task of keeping track of her requires.

    Low: Doesn't keep close track of mother's location or activities.

44. Child asks for and enjoys having mother hold, hug, and cuddle him.

    Low: Not especially eager for this. Tolerates It but doesn't seek it; or wiggles to be put down.

45. Child enjoys dancing or singing along with music.

    Low: Neither likes nor dislikes music.

46. Child walks and runs around without bumping, dropping, or stumbling.

    Low: Bumps, drops, or stumbles happen throughout the day (even If no Injuries result).

47. Child will accept and enjoy loud sounds or being bounced around in play, if mother smiles and shows that it is supposed to be fun.

    Low: Child gets upset, even if mother indicates the sound or activity is safe or fun.

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48. Child readily lets new adults hold or share things he has, if they ask to.

49. Runs to mother with a shy smile when new people visit the home.

Middle If child doesn't run to mother at all when visitors arrive.

Low: Even if he eventually warms up to visitors, child initially runs to mother with a fret or a cry.

50. Child's initial reaction when people visit the home is to ignore or avoid them, even if he eventually warms up to them.

51. Child enjoys climbing all over visitors when he plays with them.

Middle it he won't play with visitors.

Low: Doesn't seek close contact with visitors when he plays with them.

52. Child has trouble handling small objects or putting small things together.

Low: Very skillful with small objects, pencils, etc.

53. Child puts his arms around mother or puts his hand on her shoulder when she picks him up.

Low: Accepts being picked up but doesn't especially help or hold on.

54. Child acts like he expects mother to interfere with his activities when she is simply trying to help him with something.

Low: Accepts mother's help readily, unless she Is In fact Interfering

55. Child copies a number of behaviors or way of doing things from watching mother's behavior.

Low: Doesn't noticeably copy mother's behavior.

56. Child becomes shy or loses interest when an activity looks like it might be difficult.

Low: Thinks he can do difficult tasks.

57. Child is fearless.

Low: Child is cautious or fearful.

58. Child largely ignores adults who visit the home Finds his own activities more interesting.

    Low: Finds visitors quite interesting, even if he is a bit shy at first.

59. When child finishes with an activity or toy, he generally finds something else to do without returning to mother between activities. Low: When finished with an activity or toy, he returns to mother for play, affection or help finding more to do.

60. If mother reassures him by saying "It's OK' or "It won't hurt you", child will approach or play with things that initially made him cautious or afraid.

    Middle if never cautious or afraid
61. Plays roughly with mother. Bumps, scratches, or bites during active play. (Does not necessarily mean to hurt mom)

    Middle if play is never very active

    Low: Plays active games without injuring mother.

62. When child is in a happy mood, he is likely to stay that way all day.

    Low : Happy moods are very changeable.

63. Even before trying things himself, child tries to get someone to help him.

64. Child enjoys climbing all over mother when they play.

    Low: Doesn't especially want a lot of close contact when they play.

65. Child is easily upset when mother makes him change from one activity to another. (Even if the new activity is something child often enjoys.)

66. Child easily grows fond of adults who visit his home and are friendly to him.

    Low: Doesn't grow fond of new people very easily.

67. When the family has visitors, child wants them to pay a lot of attention to him.

68. On the average, child is a more active type person than mother

    Low: On the average, child is less active type person than mother.

69. Rarely asks mother for help. Middle if child is too young to ask.

Low: Often asks mother for help.

70. Child quickly greets his mother with a big smile when she enters the room. (Shows her a toy, gestures, or says "Hi, Mommy")

    Low: Doesn't greet mother unless she greets him first.

71. If held in mother's arms, child stops crying and quickly recovers after being frightened or upset.

    Low: Not easily comforted

72. If visitors laugh at or approve of something the child does, he repeats it again and again.

    Low: Visitors' reactions don't influence child this way

73. Child has a cuddly toy or security blanket that he carries around, takes to bed, or holds when upset. (Do not include bottle or pacifier if child is under two years old.)

    Low: Can take such things or leave them, or has none at all.

74. When mother doesn't do what child wants right away, he behaves as if mom were not going to do it at all. (Fusses, gets angry, walks off to other activities, etc.)

    Low: Waits a reasonable time, as if he expects mother will shortly do what he asked.

75. At home, child gets upset or cries when mother walks out of the room. (May or may not follow her.)

    Low: Notices her leaving; may follow but doesn't get, upset.

76. When given a choice, child would rather play with toys than with adults.

    Low: Would rather play with adults than toys.

77. When mother asks child to do something, he readily understands what she wants (May or may not obey.)

    Middle if too young to understand.

    Low: Sometimes puzzled or slow to understand what mother wants.

78. Child enjoys being hugged or held by people other than his parents and/or grandparents.

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79. Child easily becomes angry at mother.

Low. Doesn't become angry at mother unless she is very intrusive or he is very tired.

80. Child uses mother's facial expressions as good source of information when something looks risky or threatening.

Low: Makes up his own mind without checking mother's expressions first.

81. Child cries as a way of getting mother to what he wants.

Low: Mainly cries because of genuine discomfort (tired, sad, afraid, etc.,).
82. Child spends most of his play time with just a few favorite toys or activities.

83. When child is bored, he goes to mother looking for something to do.

Low: Wanders around or just does nothing for a while, until something comes up.

84. Child makes at least some effort to be clean and tidy around the house.

Low: Spills and smears things on himself and on floors all the time.

85. Child is strongly attracted to new activities and new toys.

Low: New things do not attract him away from familiar toys or activities.

86. Child tries to get mother to imitate him, or quickly notices and enjoys it when mom imitates him on her own.

87. If mother laughs at or approves of something the child has done, he repeats again and again.

Low: Child is not particularly influenced this way.

88. When something upsets the child, he stays where he is and cries.

Low: Goes to mother when he cries. Doesn't wait for mom to come to him.

89. Child's facial expressions are strong and clear when he is playing with something.

90. If mother moves very far, child follows along and continues his play in the area she has moved to. (Doesn't have to be called or carried along; doesn't stop play or get upset.)

Middle if child isn't allowed or doesn't have room to move very far away.

3   ***The Emotional Availability Scales (EAS)***: The *Emotional Availability Scales*, created in the late 1980's by Zeynep Biringen and colleagues, is a rating system designed to examine and measure the quality of the emotional interaction between parent and child. It consists of six dimensions of the emotional availability of the parent (including caregiver) towards the child and of the child towards the parent. Parental dimensions include *sensitivity, structuring, nonintrusiveness* and *nonhostility* and the child dimensions include *child's responsiveness to the parent* and the *child's involvement of the parent* (Biringen, et al., 2000). It is the first system based on attachment theory and research that provides a comprehensive and scientific understanding of not only parental behavior toward a child, but also the child's side of the experience. It can be used in research studies, in clinical work with parents and children, and in child custody evaluations. The scales include: parental sensitivity, parental structuring, parental nonintrusiveness, parental nonhostility, child responsiveness and child involvement.

4. *The Strange Situation Procedure*

The Strange Situation Procedure

<u>Episode 1</u>:

Walk with mother and child to the playroom. Point to the chair where she can take a seat, give the card (0). Let her hear the knock when she has read the card, so that she will recognize the sound.

"The knock sounds like this: (**knock**)"

Ask her whether she understands everything up to this point.

Camera man:
! Start the video recorder just before mother and child enter the play room.
! Push the timekeeper at the right moment: as soon as the experimenter has left the playroom, you turn on the timekeeper by pushing button S6 down.

<u>Episode 2</u>: *Mother and child are together in the playroom*

Experimenter:
Keep track of the time on the monitor, because that is the most accurate for this episode (each time 3 minutes per episode).

→ **After 3 minutes (on the timekeeper; 2.50 on your stopwatch)** you let the stranger go into the room, with a magazine. Now, keep track of the time on your stopwatch.

<u>Episode 3</u>: *Mother, child and stranger are together in the playroom.*

Turn on the stopwatch:
→ **After 1 minute** you knock for the stranger (*talking*)
→ **After 2 minutes** you knock for the stranger (*playing*)
→ **After 3 minutes** you knock for the mother (*leaving the room*).
It is important that at the moment of mother's leaving, the focus of the child

is not on the mother. In other words, the child may sit close to the mother, as long as

he/she does not have his/her attention focused on the mother (by looking, holding,

talking).

Then go stand in the corridor to take care of the mother. It is ok when the mother says bye to the child.

Try to see whether you can already make a judgment of how the child may be going to react to the separation and how soon you need to start with your explanation to the mother.

<u>When the mother is not able to leave the room,</u> do not intervene at first. It is important to record the possible discussion that emerges between mother and child. The experimenter has to judge himself/herself when it really takes too much time. Than you can give a knock for the stranger to intervene. But do not do that too soon!

When mother asks for help from the stranger, the stranger can react by saying for example: 'maybe you can do it like you are used to do at home'.
When the child walks along with mother out of the playroom, the experimenter asks mother whether she wants to let the child go in.
Depending on how the child reacts after the departure of mother, you start immediately with the explanation to be able to send the mother back in.

- reset stopwatch -

Episode 4: *The child is in the playroom together with the stranger*

After episode 3 you stand in the corridor to take care of the mother, and you take her with you to the observation room. Watch with her and now and then say something positive about what is happening inside. Keep your tone and the atmosphere relaxed. Make sure it is not silent the whole time; that gives the mother a feeling of insecurity. Avoid subjects concerning the development of the child and/or feelings of mother and child. For example, you can explain that the toys have been cleaned for the whole morning/afternoon, because we know that children sometimes put it in their mouth and that that is therefore ok. Or you can ask which toys the child already knows.

If the separations are really difficult, you can add that this is the only task where mother leaves the room (once more) and that they will be together during the rest of the visit.

➔ **After 1.50 minutes** you start with the following instruction:

When the child is upset or is starting to get upset, you start your explanation sooner.

"When you go in again shortly, would you please call (name child)'s name first in the corridor, before you go in, then knock on the door, then open the door and when you go in call his/her name again. I would like to ask you then to stay there for a moment and then you can go further into the room. (If the child cries: If so desired you can comfort (name child)) You can then take a seat again and start reading. (Name child) can then go playing again. Then I give another knock on the window, then I would like to ask you to leave again. You can say bye to (name child). You will be waited for over here again and then I will explain the next part to you. Please do not say that you will go to the toilet, because experience tells us that there is a big chance then that the child wants that too.
So call his/her name in the corridor, knock, open the door and say his/her name again, stay there for a moment and then go on. And when you hear the knock, leave the room again. "

If the first separation was really difficult, say that when leaving the second time is not possible, we will skip it (however, you will try to do the second separation). Say that you then give a knock on the window, so that mother knows she does no longer need to try it and can go sit down and read again.

If the child cries: Emphasize that the mother is allowed to comfort the child, but that she needs to sit down again after comforting and should not play (too) long with the child.

➔ **After 2.40 minutes** you knock for the stranger, who if necessary makes space to walk and takes a seat. You can explain this shortly to mother if desired.

Camera man:
Put the cameras ready for the reunion: Camera no. 1 (corridor camera) zoomed out on the face of the child and Camera no. 2 (window camera) zoomed out on the door (try to include the child)

- The facial expressions of the child are important. It is important that the facial expressions of the child are well visible during the first greeting
- Make sure that also the hands of the child are in the picture
- Be prepared that the mother might lift the child (camera zoomed out).
- During the remainder of the reunion, the camera needs to film the mother as well as the child, as long as they are close enough to have a clear picture of the facial expressions of the child. Otherwise, the camera needs to be focused on the child while every now and then shortly zooming out so that the mother will also be in the picture.
- So the child needs to be in the picture the whole period from the front or from the side.

➜ **After 3 minutes (2.55)** let mother go back in.

➜ If necessary, you give an "emergency knock" for the stranger, as a sign that the mother is arriving at that moment and that the stranger needs to withdraw to the chair.

- reset stopwatch -

Episode 5: *Mother is now alone with the child in the playroom*

➜ **After 3 minutes** you knock again.

After the knock you go to the corridor again to take care of the mother.

If the child is very upset because of the first separation and you expect that the separation will be more difficult because of this, you prolong episode 5 a bit (about one minute), before you give the knock for mother.

If mother is really not able to leave the room, you knock on the window, so that mother knows she can go and have a seat and read again (if you gave this explanation behind the window, otherwise you come in to say it). You skip this and the following episode and come in after 3 minutes for the break.

- reset stopwatch -

Episode 6: *The child is now alone in the playroom.*

Let mother watch with you and every now and then make a positive comment. Keep the tone and atmosphere relaxed. Make sure it is not silent during this whole period; that gives mother a feeling of insecurity. Avoid subjects concerning the development of the child and/or feelings of mother and child. For example, you can talk about the toys the child likes, whether he/she has them at home too, what a nice clothes/shoes he/she is wearing, et cetera.

Let the stranger go stand before the door and tell the mother that the stranger is standing there, so that the child does not look into an empty corridor, but sees a familiar face when he/she opens the door.

➜ **After 3 minutes (2.55)** the stranger goes back in (or sooner if necessary).
      Give the stranger a sign for this purpose and give explanation to the mother.

- reset stopwatch –
Episode 7: *The child is in the playroom together with the stranger.*

Still make a positive comment every now and then. Make sure it is not silent during this whole period; that gives the mother a feeling of insecurity.

➔ Start **after about 1.50 minutes** with the following instruction.
*"When you go in later, you can immediately knock, then open the door and when you go in, call (**name child**)'s name. First you need to stand there for a moment and then you can go in the room further. (**If the child cries**: If desired, you can comfort (**name child**)) Then you can take a seat and read again, and (**name child**) can then play again. Next, I will come in again for the break.*
So first knock, open the door, call name, stand there for a moment and then go further."

If the child cries, emphasize again that the mother is allowed to comfort, but after comforting she needs to go take a seat again and not to play (too) long with the child.

➔ **After 2.40 minutes** you knock again for the stranger, who if necessary makes space to walk and takes a seat. You may explain this shortly to mother.

Camera man:
Put the cameras ready for the reunion: Camera no. 1 (corridor camera) zoomed out on the face of the child and Camera no. 2 (window camera) zoomed out on the door (try to include the child)
- The facial expressions of the child are important. It is important that the facial expressions of the child are well visible during the first greeting
- Make sure that also the hands of the child are in the picture
- Be prepared that the mother might lift the child (zooming out the camera).
- During the remainder of the reunion, the camera needs to film the mother as well as the child, as long as they are close enough to keep a clear picture of the facial expressions of the child. Otherwise, the camera needs to be focused on the child while now and then shortly zooming out so that the mother will also be in the picture.
- So the child needs to be in the picture the whole period from the front or from the side.

➔ **After 3 minutes (2.55)** you let the mother go back in.

➔ When necessary, you give an "emergency knock" for the stranger, as a sign that the mother is arriving at that moment and that the stranger needs to withdraw to the chair.

- reset stopwatch -

Episode **8**: *Mother and child together in playroom.*

Mother goes in.

Ask the stranger immediately to get coffee or tea for the mother

➔ After **3 minutes (2.55)** the experimenter goes in.

NB. If the child has cried and it took some time before he/she was quiet again, prolong the situation a bit; a few minutes after the child has become quiet you can stop the episode.

*Episode **9**: Strange Situation is finished.*

NB.

Never let the child cry for more than **15 sec**. after separation; Then send stranger (or mother) back in. If the child prepares to leave with mother during separation, immediately send back in the stranger.

Checklist Strange Situation Procedure

Name child:	
Respondent no.:	

Date:	
Experimenter:	
Stranger:	

Comments regarding the procedure:

....

....

....

Was the child *ill, did he/she had a cold, were his/her teeth bothering him/her*?

....

....

Did he/she has a *dirty diaper*?

....

....

Did *father or grandparents* come along, were they standing in the corridor?

....

....

Did the child recently *stayed the night over*?

....

....

Did the child *sleep* well last night?

....

....

Did the *trip by bus/car* go well, was it a special experience for the child?

....

....

Has the child been _ill_ recently? Or did the child get _vaccinations_? Or was the child _hospitalized_?

....
....

Does the child have a _new babysitter_?

....
....

Did the child get recently a _new brother or sister_?

....
....

Has the mother been recently on a _(business)trip_?

....
....

Has the mother been recently _hospitalized_?

....
....

Has there been _noise pollution_?

....
....

Other comments:

....
....
....

Explanation card Strange Situation

In a moment you can go read the newspaper/magazine.
Your child can go play with the toys on the ground

After a while someone comes in and takes a sit in the other chair and starts reading

- After the **first** knock, she will start making conversation with you.

- After the second **knock** she will start playing with your child.

- After the **third** knock you may leave the room. You may say bye shortly.

I will be standing in the corridor and take you with me to the film room. I will give you further explanation over there.

5   *Physical Punishment Questionnaire (parent-report version):* The parent report version of the *Physical Punishment Questionnaire,* used in this study, is an open-ended interview administered to a parent to find out the frequency (1= *never,* 2= *less than once a month,* 3= *about once a month,* 4= *about once a week,* 5= *almost every day*) with which mothers use 17 particular discipline strategies, adapted from other instruments that assess parents' discipline strategies. Questions regarding how frequently other parents use each discipline strategy (rated on the same 5-point scale from *never* to *almost everyday*) were also be used to assess perceived cultural normativeness of the behaviours.

Parent-Report Version of the Discipline Interview

All children misbehave sometimes. One of the things we need to learn about is what parents do to deal with their children's misbehavior. Think about when your child has misbehaved in the last year.

1.	How frequently do you teach your child about good & bad behavior? Like it's not nice to hit, or it's polite to say thank you.	Never 1	Less than once a month 2	About once a month 3	About once a week 4	Almost every day 5
1a)	How frequently do other parents in your community teach their children about good & bad behavior?	Never 1	Less than once a month 2	About once a month 3	About once a week 4	Almost every day 5
1b)	How do you / would you feel about doing this with your child?	very bad 1	bad 2	neutral 3	good 4	very good 5
1c)	Do you think this is a good or bad way for you to discipline your child?	very bad 1	bad 2	neutral 3	good 4	very good 5
1d)	Would you say this is abuse?	Yes			No	
2.	How frequently do you get your child to apologize or make amends?	Never 1	Less than once a month 2	About once a month 3	About once a week 4	Almost every day 5
2a)	How frequently do other parents in your community get their children to apologize or make amends?	Never 1	Less than once a month 2	About once a month 3	About once a week 4	Almost every day 5
2b)	How do you / would you feel about doing this with your child?	very bad 1	bad 2	neutral 3	good 4	very good 5
2c)	Do you think this is a good or bad way for you to discipline your child?	very bad 1	bad 2	neutral 3	good 4	very good 5
2d)	Would you say this is abuse?	Yes			No	
3.	How frequently do you give your child a time out or send him/her to his/her room?	Never 1	Less than once a month 2	About once a month 3	About once a week 4	Almost every day 5
3	How frequently do other parents in your community give their children a time out or send them to their rooms?	Never 1	Less than once a month 2	About once a month 3	About once a week 4	Almost every day 5

3 How do you / would you feel about doing this with your child?

very bad	bad	neutral	good	very good
1	2	3	4	5

3 Do you think this is a good or bad way for you to discipline your child?

very bad	bad	neutral	good	very good
1	2	3	4	5

3 Would you say this is abuse?

Yes	No

4. How frequently do you take away privileges? (e.g., no TV after dinner because of misbehavior)

Never	Less than once a month	About once a month	About once a week	Almost every day
1	2	3	4	5

4a) How frequently do other parents in your community take away privileges? (e.g., no TV after dinner because of misbehavior)

Never	Less than once a month	About once a month	About once a week	Almost every day
1	2	3	4	5

4b) How do you / would you feel about doing this with your child?

very bad	bad	neutral	good	very good
1	2	3	4	5

4c) Do you think this is a good or bad way for you to discipline your child?

very bad	bad	neutral	good	very good
1	2	3	4	5

4d) Would you say this is abuse?

Yes	No

5. How frequently do you spank, slap, or hit your child?

Never	Less than once a month	About once a month	About once a week	Almost every day
1	2	3	4	5

5a) How frequently do other parents in your community spank, slap, or hit their children?

Never	Less than once a month	About once a month	About once a week	Almost every day
1	2	3	4	5

5b) How do you / would you feel about doing this with your child?

very bad	bad	neutral	good	very good
1	2	3	4	5

5c) Do you think this is a good or bad way for you to discipline your child?

very bad	bad	neutral	good	very good
1	2	3	4	5

5d) Would you say this is abuse?

Yes	No

6. How frequently do you give your child extra chores?

Never	Less than once a month	About once a month	About once a week	Almost every day
1	2	3	4	5

6a) How frequently do other parents in your community give their children extra chores?

Never	Less than once a month	About once a month	About once a week	Almost every day
1	2	3	4	5

6b) How do you / would you feel about doing this with your child?

very bad	bad	neutral	good	very good

No.	Question	1	2	3	4	5
6c)	Do you think this is a good or bad way for you to discipline your child?	very bad 1	bad 2	neutral 3	good 4	very good 5
6d)	Would you say this is abuse?		Yes		No	
7.	How frequently do you grab or shake your child?	Never 1	Less than once a month 2	About once a month 3	About once a week 4	Almost every day 5
7a)	How frequently do other parents in your community grab or shake their children?	Never 1	Less than once a month 2	About once a month 3	About once a week 4	Almost every day 5
7b)	How do you / would you feel about doing this with your child?	very bad 1	bad 2	neutral 3	good 4	very good 5
7c)	Do you think this is a good or bad way for you to discipline your child?	very bad 1	bad 2	neutral 3	good 4	very good 5
7d)	Would you say this is abuse?		Yes		No	
8.	How frequently do you argue or quarrel with your child?	Never 1	Less than once a month 2	About once a month 3	About once a week 4	Almost every day 5
8a)	How frequently do other parents in your community argue or quarrel with their children?	Never 1	Less than once a month 2	About once a month 3	About once a week 4	Almost every day 5
8b)	How do you / would you feel about doing this with your child?	very bad 1	bad 2	neutral 3	good 4	very good 5
8c)	Do you think this is a good or bad way for you to discipline your child?	very bad 1	bad 2	neutral 3	good 4	very good 5
8d)	Would you say this is abuse?		Yes		No	
9.	How frequently do you say you are disappointed with your child, or say that his/her misbehavior hurt your feelings?	Never 1	Less than once a month 2	About once a month 3	About once a week 4	Almost every day 5
9a)	How frequently do other parents in your community tell their children that they are disappointed with them, or say that their misbehavior hurt their feelings?	Never 1	Less than once a month 2	About once a month 3	About once a week 4	Almost every day 5
9b)	How do you / would you feel about doing this with your child?	very bad 1	bad 2	neutral 3	good 4	very good 5
9c)	Do you think this is a good or bad way for you to discipline your child?	very bad 1	bad 2	neutral 3	good 4	very good 5

9d) Would you say this is abuse?	Yes			No	
10. How frequently do you tell your child s/he should be ashamed of her/himself?					
10a How frequently do other parents in your community tell their children they should be ashamed of themselves?	Never 1	Less than once a month 2	About once a month 3	About once a week 4	Almost every day 5
10b How do you / would you feel about doing this with your child?	very bad 1	bad 2	neutral 3	good 4	very good 5
10c Do you think this is a good or bad way for you to discipline your child?	very bad 1	bad 2	neutral 3	good 4	very good 5
10d Would you say this is abuse?	Yes			No	
11. How frequently do you ignore your child?	Never 1	Less than once a month 2	About once a month 3	About once a week 4	Almost every day 5
11a How frequently do other parents in your community ignore their children?	Never 1	Less than once a month 2	About once a month 3	About once a week 4	Almost every day 5
11b How do you / would you feel about doing this with your child?	very bad 1	bad 2	neutral 3	good 4	very good 5
11c Do you think this is a good or bad way for you to discipline your child?	very bad 1	bad 2	neutral 3	good 4	very good 5
11d Would you say this is abuse?	Yes			No	
12. How frequently do you throw something at your child?	Never 1	Less than once a month 2	About once a month 3	About once a week 4	Almost every day 5
12a How frequently do other parents in your community throw things at their children?	Never 1	Less than once a month 2	About once a month 3	About once a week 4	Almost every day 5
12b How do you / would you feel about doing this with your child?	very bad 1	bad 2	neutral 3	good 4	very good 5
12c Do you think this is a good or bad way for you to discipline your child?	very bad 1	bad 2	neutral 3	good 4	very good 5
12d Would you say this is abuse?	Yes			No	

#	Question					
13.	How frequently do you raise your voice, yell, or scold your child?	Never	Less than once a month	About once a month	About once a week	Almost every day
		1	2	3	4	5
13a	How frequently do other parents in your community raise their voice, yell, or scold their children?	Never	Less than once a month	About once a month	About once a week	Almost every day
		1	2	3	4	5
13b	How do you / would you feel about doing this with your child?	very bad	bad	neutral	good	very good
		1	2	3	4	5
13c	Do you think this is a good or bad way for you to discipline your child?	very bad	bad	neutral	good	very good
		1	2	3	4	5
13d	Would you say this is abuse?		Yes		No	
14.	How frequently do you tell your child you won't love him/her if s/he acts that way again?	Never	Less than once a month	About once a month	About once a week	Almost every day
		1	2	3	4	5
14a	How frequently do other parents in your community tell their children that they won't love them if they act that way again?	Never	Less than once a month	About once a month	About once a week	Almost every day
		1	2	3	4	5
14b	How do you / would you feel about doing this with your child?	very bad	bad	neutral	good	very good
		1	2	3	4	5
14c	Do you think this is a good or bad way for you to discipline your child?	very bad	bad	neutral	good	very good
		1	2	3	4	5
14d	Would you say this is abuse?		Yes		No	
15.	How frequently do you threaten your child with some punishment?	Never	Less than once a month	About once a month	About once a week	Almost every day
		1	2	3	4	5
15a	How frequently do other parents in your community threaten their children with some punishment?	Never	Less than once a month	About once a month	About once a week	Almost every day
		1	2	3	4	5
15b	How do you / would you feel about doing this with your child?	very bad	bad	neutral	good	very good
		1	2	3	4	5
15c	Do you think this is a good or bad way for you to discipline your child?	very bad	bad	neutral	good	very good
		1	2	3	4	5
15d	Would you say this is abuse?		Yes		No	
16.	How frequently do you promise a treat or privilege to your child for	Never	Less than once a month	About once a month	About once a week	Almost every day

	1	2	3	4	5
16a	How frequently do other parents in your community promise treats or privileges to their children for good behavior?	Never	Less than once a month	About once a month	About once a week	Almost every day
		1	2	3	4	5
16b	How do you / would you feel about doing this with your child?	very bad	bad	neutral	good	very good
		1	2	3	4	5
16c	Do you think this is a good or bad way for you to discipline your child?	very bad	bad	neutral	good	very good
		1	2	3	4	5
16d	Would you say this is abuse?		Yes		No	
17.	How frequently do you beat up your child?	Never	Less than once a month	About once a month	About once a week	Almost every day
		1	2	3	4	5
17a	How frequently do other parents in your community beat up their children?	Never	Less than once a month	About once a month	About once a week	Almost every day
		1	2	3	4	5
17b	How do you / would you feel about doing this with your child?	very bad	bad	neutral	good	very good
		1	2	3	4	5
17c	Do you think this is a good or bad way for you to discipline your child?	very bad	bad	neutral	good	very good
		1	2	3	4	5
17d	Would you say this is abuse?		Yes		No	