CHAPTER 3
RESEARCH METHODOLOGY

3.1 Introduction

The focus of this study was to identify the opportunities for learning within the family context. This chapter discusses the research methodology used. Firstly the aims and sub-aims are outlined; this is followed by a discussion of the research design, research phases, the pilot study and finally, the main study.

3.2 Aims

The aim of this study was to identify the family activity settings that typically developing 3-to-5-year-old children participate in, in a low-income African context.

These activity settings are described in terms of the following:
a) the frequency of participation in these activities;
b) differences in activity settings based on the age and gender of children;
c) the partners who are primarily involved in these activities;
d) establishing caregivers' beliefs about the underlying purpose of an activity;
e) establishing caregivers' perceptions of activities that are important for learning.

3.3 Research design

A descriptive survey design using structured face-to-face interviews was used. This approach is the design of choice when studying people's values, beliefs and experiences (Creswell, 2003; McMillan & Schumacher, 2001). An interview schedule consisting of a list of closed and open-ended questions was constructed and piloted. This approach was chosen as it holds no bias against respondents who have varied literacy levels and may have difficulty with written questionnaires (Kumar 2005; McMillan & Schumacher, 2001).

3.4 Preparatory Phase

There were two main research phases: the preparatory phase which included various stages that focused on the development and validation of the research instrument, and secondly the main study. Table 3.1 provides an overview of the processes followed to establish content validity during the preparatory phase of the study, which is discussed in detail after the table.

Table 3.1 Development of interview schedule

	Stage	Process	Validity
Preparatory Phase	**Content development**	a. Literature review b. Expert panel	Content validity
	Focus groups	a. First Focus group	
		b. Second Focus group	
		c. Third Focus group	
	Pilot study	a. Pre-pilot	Content validity Internal validity
		b. Expert Panel	
		c. Pilot study	

Validity raises the question of whether the measuring tool is adequately representative of the theoretical process or constructs it is intended to capture (Kelly et al., 2003; Aldridge & Levine, 2001). As the interview schedule utilised in this study was developed by the researcher, it was important to gather evidence for validity before the actual data were collected (McMillan & Schumacher, 2001).

Content validity, which is a subjective measure of the appropriacy of the items included, was established in a two-stage process which included a developmental and a judgment stage (Lynn, 1986). The developmental stage consisted of domain identification, which was achieved by reviewing the literature to identify the components of activity settings. Consultations with speech therapy assistants from the same community as the target

population, and focus group discussions with representatives of the target population, assisted in confirming the activities to be included in the interview. The judgment stage in the establishment of content validity included an evaluation of the instrument by an expert panel that assessed the entire instrument according to specific criteria. Finally, the pre-pilot and pilot phases assisted in improving the internal validity of the questionnaire.

3.4.1. Content development

3.4.1.1 Literature review

The content of the interview schedule needed to be carefully planned and to relate clearly to the research question in order to ensure the content validity of questions included in the tool (Kelly, Clark, Brown, and Sitzia, 2003). The components of activity settings were identified by reviewing the literature (Trivette, Dunst & Hamby, 2004; Greenfield et al., 2003; Berry, 2003; Weisner, 2002a, 2002b; Farver, 1999; Dunst & Hamby, 1999; Gallimore et al., 1993). Five variables were identified: the person present to engage with the child during activities; the tasks or activities being performed; the purpose of the activities or tasks; the scripts (which are determined by cultural norms and beliefs); and the salient values, goals and beliefs that adults have as they organise the child's environment and experiences based on what they believe are important developmental outcomes (Farver, 1999; Gallimore et al., 1993).

In the planning phase it was also crucial to establish if an appropriate, reliable and valid instrument already existed (Kelly et al., 2003). The Parent Survey of Home and Family Experiences (Dunst & Bruder, 1999a) which was based on two national surveys in the United States of America was identified. This instrument was used to identify activities within the family context that were a source of children's learning opportunities. This list was used as a basis, to compile a list of activities for validation within the South African context.

3.4.1.2 Expert Panel

The list of activities from the Parent Survey of Home and Family Experiences was used by the researcher in a discussion with three speech therapy assistants employed at a hospital in Soweto. The speech therapy assistants have over 20 years experience each in working with families from the Soweto community and also live within the same community, as the target population. They were requested to comment on the appropriateness of the activities for children living in Soweto. As a result of this discussion, 19 items remained unchanged, 20 items were added, 21 items were deleted, seven items were adapted and two items were sub-divided into four items (Appendix A). Consensus was reached on a list of 50 activities which were then included in the interview schedule.

3.4.2 Focus groups

In order to obtain further consensus on the activities to be included in the interview, scheduled focus groups were used during the planning phase of this study (Krueger & Casey, 2000). Focus groups allow the researcher insight into people's shared understanding of everyday life within their specific community, thereby increasing the credibility of information received (Heary & Hennessy, 2002). This process also permitted the researcher to validate information to be included in the interview schedule, as it encouraged interaction between participants which enhanced the quality and richness of information received (Wilkinson, 2004; McMillan & Schumacher, 2001). Three focus groups were organised in the preparatory phase of the study. Each focus group is discussed in terms of its aim, participants, procedures and outcomes.

3.4.2.1 First focus group

Aim

The aim of the first focus group discussion was to obtain consensus on the list of agreed activities and to assess the understanding of questions intended for inclusion in the interview schedule (Appendix B).

Participants

The participants of the focus groups were parents or caregivers of typically developing children aged 3-to-5-years, who attend an African Self Help Association (ASHA) preschool in Soweto. Three sessions were held as part of the first focus group, with four, six and five participants in each group.

Procedure

A comfortable, permissive environment, which is integral to the success of a focus group, was set up in a quiet room at the preschool (Krueger & Casey, 2000). The chairs were arranged in a circle so that participants could easily see and respond to each other. The researcher was assisted by a parent who is a volunteer at one of the schools. Her role included setting up the room, assisting with translation, if required, and preparing refreshments. The researcher explained the purpose of the focus group to participants; thereafter the activity settings were presented visually on a chart for discussion. A set format of questions as well as probe questions was used to obtain further information from participants. The procedure remained consistent for each session. All participants were able to communicate in English and therefore did not require the assistance of the translator. The discussion took an average of 1 hour and 15 minutes.

Outcomes

The information which was agreed on by participants in all three groups was summarised and is presented in Table 3.2.

Table 3.2 First focus group results

Aim	Procedure	Outcomes	Recommendation
To develop a list of activities as well as information on the partner who engages in the activity with the child.	Activities were presented one at a time verbally by the researcher and written out on chart paper.	Participants included 33 of the 50 activities (Appendix B) without any change; two activities: cooking meals and cleaning the house were adapted; 15 activities were excluded; and six new activities were added.	A list of 45 activities was developed based on the input from participants.
To obtain a description of activities.	Participants were requested to describe each activity.	Participants were able to provide detailed descriptions as requested.	Due to the difficulty in analysing and coding descriptions, it was suggested that descriptions of activities be omitted from the main study.
To establish the frequency and duration of activities.	Participants were asked to state how often the child participates in an activity; the options included daily, weekly and monthly. The duration of activities was established by asking how long the child participates in the activity; the options included 0–15 minutes, to over an hour.	Participants were able to state the frequency and duration using terms like sometimes, often and rarely to describe frequency. When this was clarified with the group : often = once a week, sometimes = once a month and rarely or hardly ever = once a year. The participants were unable to provide specific information on how long a child engages in an activity as this was not monitored by them.	The response options for frequency were changed based on input from the groups. The question on duration was omitted.
To establish the perceptions on what children learn from an activity.	Participants were asked to describe what the child learns from the activity.	They were able to describe specific and general learning outcomes.	This question was maintained unchanged.
To establish the perceptions of the purpose of the activity.	Participants were asked to state the purpose of the activity.	Participants did not understand the term 'purpose'. When it was explained the responses were very similar to the description of what children learn from an activity.	This question was adapted to include response options.

To establish what participants perceive as their role in the activity.	Participants were asked to describe what they saw as their role in a particular activity.	Participants experienced difficulty responding to this question.	The question was therefore changed to include a rating scale (of 1 to 4) on how parents perceive the importance of an activity for learning.
To establish if participants understood the open-ended questions.	A set of questions was presented and participants were asked which question they thought was easier to understand and answer.	Questions were included or excluded based on the responses from participants.	Four open-ended questions were maintained.

In conclusion, the results of this focus group gave the researcher insight into the activities to be included in the interview schedule. Saturation was reached by the third session, as no new information or ideas were added. The third session therefore validated the information received during the two previous sessions (Krueger & Casey, 2000).

3.4.2.2 Second focus group

Aim

The second focus group was held to engage in a process of member checking, to ensure that information was correctly interpreted by the researcher (McMillan & Schumacher, 2001). This also enhanced credibility as the researcher was able to clarify that the information was interpreted correctly (Heary & Hennessy, 2002). This is important because in order to get reliable responses in the main study, respondents must have a clear understanding of questions and possess sufficient knowledge to answer them (Kumar, 2005). This focus group was also utilised to obtain the opinion of participants on the appropriateness and sensitivity of biographical questions to be included in the interview (Iarossi, 2006).

Participants

A follow-up discussion was held with a representative group of six participants, consisting of two members selected from each group hosted in the first focus group sessions.

Procedure

A list of activities developed in the first focus group was presented to participants for validation. The same procedure that was described for the first focus group was used. The participants were requested to state whether they agreed with the list of activities presented. This focus group was also requested to state whether they understood and would be able to answer the biographical questions that were developed for inclusion in the interview schedule.

Outcomes

The participants added five activities to the list and agreed that they would be comfortable answering the biographical questions. The second focus group assisted in validating the list of activities to be used in the interview schedule and in achieving consensus on the biographical questions to be included. Obtaining consensus on the biographical information was important as respondents may avoid answering or give incorrect information if questions are considered to be insensitive (Iarossi, 2006).

3.4.2.3 Third focus group

Aim

In discussion with Dunst, Trivette, Alant and Uys (2006) it was recommended that the researcher should host a third focus group to obtain information on culturally specific games and activities. This was suggested as it was thought that predetermined items used with previous focus groups may have limited the information received thus far. Therefore the aim of the third focus group was to generate a culturally appropriate list of activities.

Participants

Two focus group sessions of five participants from two ASHA preschools were hosted.

Procedure

Participants were requested to describe the activities that their child engages in at different times of the day, on weekends, and the activities which are carried out as a family. In order to gain an improved understanding of culturally specific information,

participants were asked to describe their religious routines and traditions, family traditions, celebrations, holidays, special occasions and games that they play which are not usually played in other cultures.

Outcomes

Table 3.3 describes the outcomes of the third focus group.

Table 3.3 Third focus group results

Category	Activities added which were previously excluded
Educational	Homework Playing with water Building blocks Board games
Chore activities	Setting the table Washing hands Washing/rinsing plate Cleaning the toilet Cleaning the 'stoep' (front porch) Picking up papers in the yard Sweeping the yard Washing socks and underwear Cleaning shoes Packing clothing Washing dishes
Traditional games and other play activities	Traditional games included: -bathi -(monkey in the middle) -mogusha (jumping on an elastic) -mokuku (hide-and-seek) -masikathlane (climbing trees) -diale (marbles) -dibeke (knocking tins down with a ball or stones) Flying kite Playing top Hopscotch Making cars from plastic/steel Cell phone games
Family activities	Visiting family/traditional home Visiting ancestral graves Attending ancestral ceremonies Visiting a traditional healer/sangoma
Additional activities	Haircut/hairstyle Visiting shopping malls Playing arcade games Going to a spaza shop

The third focus group assisted the researcher in developing a more comprehensive and holistic understanding of activity settings, in which children are involved in. These activities were therefore added to develop a more comprehensive interview schedule.

3.4.3. Pilot study

3.4.3.1 Pre-pilot

Aim

The aim of the pre-pilot was to establish if participants understood the questions being asked, if response categories were sufficient, the average duration of the interview, and to determine if any added procedures would be required for the main study (Bowden et al., 2002).

Participants

Ten participants participated in two sessions.

Procedure

The school principal selected participants based on the criteria provided to her i.e. parents or caregivers of 3 to 5-year-old typically developing children. A letter was sent to parents containing details of the study. Face-to face interviews were conducted individually with participants. The interviews were conducted in English and transcribed by the researcher. All participants were able to communicate in English and did not require an interpreter. Coded responses were presented in writing on chart paper to assist participants with recall of responses.

Outcomes

A summary of recommended changes as a result of these interviews is presented in Table 3.4.

Table 3.4 Pre-pilot: Recommended changes to interview schedule

Aim	Procedure	Results	Recommendation
To obtain biographical information.	Participants were asked to respond to closed questions with pre-coded responses available for each question.	All instructions were understood and pre-coded responses which were inadequate were identified.	The pre-coded responses for people living in the house were extended to include great-grandparents as this was a response given by participants.
To obtain a list of activity settings.	Participants were asked if their child participates in an activity and they were also requested to state the frequency of participation.	Participants understood the instructions and responded to all pre-coded responses provided.	Activities were operationalised based on whether at least 50% of participants engaged in them. Based on this, a final list of 50 activities was drawn up.
To understand parents' perceptions as to why some activities were excluded from the child's experiences.	The following pre-coded responses were stated: money, time, transport, space and safety.	Participants responded to all categories but also included the child's age as a reason for non-participation.	The child's age was included as a pre-coded response.
To ascertain who the child participates with, in the activity.	Pre-coded responses included six categories: mother, father, siblings, friends, grandparents, and other.	The instruction was understood but pre-coded response categories were inadequate.	Parents and family were included as these were indicated frequently in the 'other' category.
To determine participants' perceptions as to the main purpose of the activity.	The following pre-coded responses were stated: play, work, socialising, care and other.	Pre-coded responses were inadequate as many participants responded in the 'other' category.	Categories were extended to include: exercise, educational, independence and spiritual.
To establish participants' perceptions on activities as learning opportunities.	A five-point rating scale was utilised to rate the importance of an activity for learning.	Participants did not respond in extreme categories of strongly agree and strongly disagree.	All ratings to be stated from negative to positive, to maintain consistency. Three response categories: not important, important and very important replaced the four categories which were initially included.
To determine the caregiver's role in activities.	An open-ended question was asked.	Participants did not understand this question.	A set of statements was developed to obtain information on the caregiver's role. This was easily understood but the response option was changed from a five-point scale to a three-point scale which was better understood by participants.

Aim	Procedure	Results	Recommendation
The next three questions were adapted from the interview schedule utilised by Dunst and Bruder (1999a).			
To determine home activities that are considered as important learning activities.	Participants were asked to list the things that they considered as most important for the child to learn from home.	Participants were able to answer this question without requesting clarification.	No changes.
To enquire about activities that the child enjoys.	Participants were requested to list at least three activities that the child enjoys the most at home.	Participants were able to answer this question without requesting clarification; however, there was consensus that the question should be changed to: activities that make the child laugh or smile.	Question changed to "What are the activities that make your child laugh or smile at home?"
Sentence completion activity to determine parents' beliefs about how children learn.	Participants were requested to complete the sentence "I think that children learn best by…." Or "I think my child learns best by…"	Both questions were understood but participants preferred the latter.	The second question "I think my child learns best by…" was included in the final questionnaire as this was recommended and understood by participants.

The process of pre-testing instructions gave the researcher specific information on which questions needed to be adapted or omitted from the interview schedule, which contributed to improved validity (Czaja, 2005). Participants from the focus groups also suggested that a workshop be held for respondents after participating in the study, as a way of increasing their understanding of how to use opportunities for learning within their family context. This suggestion was therefore used as an incentive for participation in the main study. Workshop content was based on the Parent-Child programme that is conducted at Chris Hani Baragwanath Hospital (Balton, 2004).

3.4.3.2 Expert Panel

Aim

As referred to in Table 3.1, further validation of the interview schedule was achieved by developing and administering a brief questionnaire on the structure of questions to five colleagues in the PhD group (2007) at the Centre for Augmentative and Alternate Communication, University of Pretoria. Criteria in terms of question wording (Appendix

C) were formulated into a questionnaire in which respondents were requested to provide a rating from 1 (highest) to 3 (lowest) (Iarossi, 2006). There was consensus amongst the five respondents that the questions were brief enough, not leading or loaded, that the words used were simple and easily understood. Concern was expressed about the ambiguity of Question 12 in the interview schedule. Question 12 was therefore omitted as similar information was obtained in other sections of the questionnaire.

3.4.3.3 Pilot study

Aim

As various changes were made to the interview schedule during the preparatory phase of the study, it was important to conduct a pilot study before entering into the main study. The purpose of the pilot study was to determine if respondents were able to answer all the questions; if the wording of instructions was clear and easily read by the researcher; if response categories were adequate; and to estimate the time taken to complete an interview (Iarossi, 2006; Kumar, 2005).

Participants

Six caregivers of three boys and three girls aged three, four and five years attending an ASHA preschool, were interviewed.

Procedure

Six face-to-face interviews were conducted in the principal's office at the school. The interviews were conducted and transcribed by the researcher. The questions (Appendix D) were read out and supplemented with show cards which displayed the response options for the closed questions. Response options were visually presented to aid participants with recall (Aldridge & Levine, 2001).

Results

All respondents understood the questions asked and did not request any clarification or repetition of questions. Respondents also had sufficient knowledge to answer the

questions posed. It was decided to omit Question 11.4 which was an open-ended question about what caregivers expected the child to learn from an activity, as the responses were very similar to those in Question 11.5 which focused on the purpose of the activity. Response categories were adequate for all questions asked. The interviews took an average of 35 minutes each. The researcher took five minutes between interviews to set up for the next respondent. A comfort break was required after three interviews. The interview was easy to transcribe and the format of the interview schedule was straightforward. This process indicated that the interview schedule was adequately developed for use in the main study. Table 3.5 represents the areas which were included in the interview schedule after the preparatory phase of the study.

Table 3.5 Interview schedule: outcome of preparatory phase

Category	Question area	Motivation
Part 1: Biographical Information		
Child: -Two closed questions	Age	The child's age and gender were included as these are part of the selection criteria for the study. Results were analysed according to the age and gender groups.
	Gender	
Participant/ caregiver: -Three closed and one open-ended question	Respondent's relationship to the child	To obtain biographical information about respondent.
	Age of respondent	
	Educational level	
	Employment status	
Family demographics: -One closed and three open-ended questions	Family's monthly income	This section was included as it relates to the family's context in terms of finance, structure and living space. This information is important as the context for this study is in a poor urban setting. The type of activities that children are afforded could be related to the *partners* with whom children are able to engage, and the available space.
	Family members living in the house	
	Total number of people living in the house	
	Total number of rooms in the house	

Part 2: Activity Settings		
Activities: 50 closed questions covering all sections in Part 2	A representative list of activities that young children in the community are involved in.	Fifty activities were included in the interview schedule after a vigorous process of consultation through focus groups and expert panels. These identified activities provide a way for 'mapping' children's learning opportunities. By knowing the sources of learning opportunities, interventionists are able to increase the number of experiences promoting learning within home and family life (Dunst & Bruder, 1999a).
Frequency of participation	Five options: never, hardly ever, sometimes, often and daily were provided.	To identify how often activities take place, as those activities which occur on a regular basis and over an extended period of time, contribute to learning and development (Bronfenbrenner, 1992; Bronfenbrenner 1999).
Reason for non-participation	To obtain reasons for non-participation. Response options included money, transport, space, time, safety, the child's age and an 'other' category.	Understanding why children do not participate in an activity provides insight into the family's context and the respondent's perceptions.
Partners involved in the activity with the child	Nine response options were provided to gain information on who participates with the child, namely mother, father, parents, siblings, family, grandparents, friends, no one and an 'other' category.	The people present are determined by broad ecocultural factors. It is therefore important to develop an understanding of who is available and participates with the child, and who provides insight into the variation of family experiences.
Main purpose of the activity	The following response options were included to understand the main reason that a child participates in an activity: fun, work, socialising, care, educational, exercise, spiritual and 'other'.	Developing an understanding of parents' perceptions of the purpose of activities assists in developing insight into the cultural definition of activities.
Importance of the activity for learning.	Each activity was rated on a three-point rating scale: not important, important and very important to determine respondents' perceptions about its importance for learning.	Developing an understanding of parents' perceptions of activities that present opportunities for learning assists in planning sustainable intervention. Research has indicated that if intervention goals do not match with family goals, intervention may be compromised.

Part 3: Perceptions on learning		
Open-ended questions provide important insights into respondent's perceptions (Aldrige & Levine, 2001).	-Perception on additional activities that the child participates in within the family context that may present an opportunity for learning.	This question allowed respondents to add any activities which were not included on the activity list.
	-Most important lessons (values) to be learnt at home -Close sentence activity about the respondent's perception of how a child learns.	These questions were included as adults organise the child's environment based on the goals which they perceive as important for development and for children to become productive members of their community.
	-Listing three to five home activities that the child finds enjoyable and interesting.	This question was included to identify those activities that children are interested in as an asset-based approach to learning. It uses children's assets, especially their interests, as a condition for engaging them in activity settings that build on their competence (Dunst, Trivette, Humphries, Raab & Roper, 2001).

The preparatory phase of the study contributed to the development and validation of the interview schedule that was used in the main study. The rigorous validation process ensured that the process and content dimensions of the interview schedule related to the specified objectives of the study.

3.5 Main Study

3.5.1 Description of setting

The study was conducted at the Early Resource Centre which is the training centre for teachers from ASHA preschools in Soweto. ASHA is a community-based service organisation whose vision is to improve the quality of life of preschool children and their families (ASHA, 2005). The organisation is registered with the Gauteng Department of Social Development as well as with the Gauteng Department of Health. ASHA has 40 registered preschools under its umbrella in the Soweto community, with at least 5 100 children enrolled in their preschools. Parents pay a fee of R246 a month; however, school fees are often waived or reduced if parents are unable to afford them. Children with developmental delays or difficulties are identified by the school teacher and referred to the ASHA inclusion coordinator, who facilitates an assessment clinic conducted weekly

by an occupational and speech therapist from the Region A Health Services. Children who require intervention are referred to a local clinic where they receive speech therapy, occupational therapy and/or physiotherapy.

3.5.2 Participants

3.5.2.1 Criteria for selection of participants

Participants were caregivers of typically developing children aged 3-to-5-years-11-months who attend an ASHA registered preschool selected for this study. The ages of the children were determined from their date of birth on the school records. Typically developing children were identified by the ASHA inclusion coordinator who is responsible for the ASHA assessment clinic. All children who were receiving intervention were excluded from class lists submitted for sampling. The parents or caregivers were not excluded on the basis of their age, gender or educational level. Three preschools were initially selected for the study; however, a fourth preschool had to be added due to the varied attendance rates.

3.5.2.2 Sample size

Ninety interviews were conducted; participants were selected by utilising a stratified sampling procedure which accounted for the age, gender and development of the children. The caregivers of 45 girls and 45 boys were selected. Table 3.6 provides a description of the distribution of participants from each school. The attendance rate from School C was low which could be due to unreliable telephone numbers provided to the researcher. School records were being in the process of being updated. School D was therefore included in the study.

Table 3.6 Participant distribution

School	Number of participants per preschool
School A	31
School B	20
School C	10
School D	29

3.5.2.3 Description of respondents

The background information obtained in the main study assisted in understanding the context in which children engage in activities. Various caregiver and family variables are presented and discussed.

3.5.2.3.1 Caregiver variables

Table 3.7 provides a description of the frequency and percentage of caregiver variables: relationship to the child, age of the caregiver, educational level and employment status.

Table 3.7 Caregiver variables

Variable	Frequency	%
Relationship to the child		
Mother	50	56
Grandmother	18	20
Father	9	10
Other	9	10
Aunt	4	4
Total	**90**	**100**
Age of caregiver		
16-25	19	21
26-35	28	31
36-45	20	22
46-59	15	17
60+	8	9
Total	**90**	**100**
Educational level		
No formal schooling	0	0
Junior Primary	1	1
Senior Primary	9	10
High School	34	38
Matric	28	31
Higher Education	18	20
Total	**90**	**100**
Employment Status		
Full time	31	35
Part time	6	7
Casual	4	4
Not formally employed	47	52
Other	2	2
Total	**90**	**100**

From Table 3.7 it is evident that the majority of participants (56%) were mothers, followed by grandmothers (20%). Fathers, aunts and siblings (included in the 'other' category) comprised 24% of respondents. The mean age of respondents ranged from 16

to 72 years, with 52% of respondents being under 35 years of age. Most respondents had a high school or post school qualification; however 52% of respondents were not formally employed and only 35% were employed full time.

3.5.2.3.2 Family variables

An understanding of family composition and structure is essential in gaining insight into the varied partners that are available to participate in activities with the child. Figure 3.1 gives the percentages of family members living with the child.

a) Family structure
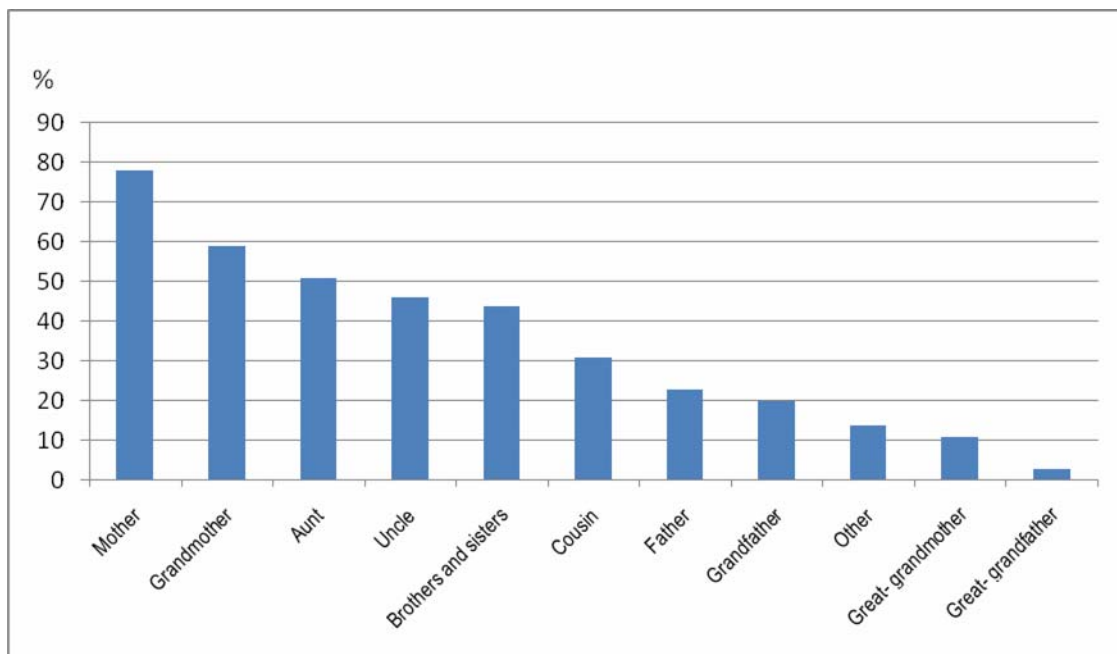
**Figure 3.1 The percentage of respective family members living in the households**

The main family composition consists of the child's mother (78%), grandmother (59%) and aunt (51%); this result indicates that most caregivers interviewed in this study are from female-headed families. Noumbissi and Zuberi (2001) confirm that in South Africa, the elderly, especially in African families, still head the household where they reside.

This finding also supports a predominant three-generation household with an extended family structure. The overall family structure implies that varied partners are available to participate in activities with the child. Only 23% of households have the child's father living in the house, which has implications for the father's availability for participation in activities with the child.

b) Family income

Respondents were requested to give the combined monthly income of the family in order to gain insight into the financial resources available to the family. Combined monthly income is displayed in Table 3.8.

Table 3.8 Combined monthly income

Income in Rand	Frequency	%
500-1000	12	13
1050-2000	31	34
2050-3000	16	18
3050-4500	9	10
>4500	22	25
Total	90	100%

The combined monthly income of the majority (75%) of families is below the individual taxable income of R4 500 per month (SARS, 2008). The General Household Survey (Statistics South Africa, 2007) found that family income in South Africa is derived from a variety of sources. The vast majority of household members that are not employed rely on financial assistance from persons within their household (77.5%) and an additional 14-17%, rely on assistance from outside their household. There is also a significant reliance on the income received by old age pensioners. The survey also concluded that female-headed families are more likely to have a lower income than male-headed families (Statistics South Africa, 2007). Restricted financial resources in families may impact on the type of activities that children are afforded.

c) Housing

Respondents provided the number of people living in the house with the child as well as the number of rooms in the house. This information provides an improved understanding of the household, especially in terms of space available for participation in activities, as well as the number of people who may be available to participate in activities with the child. Table 3.9 indicates the mean and standard deviation for the number of people and rooms.

Table 3.9 Mean number of people and rooms in a household

	People	Rooms
Mean	5.62	4.21
Standard Deviation	2.37	1.7
Minimum	2	1
Maximum	15	9

The number of people living in the house with the child ranges from two to fifteen with a mean of 5.62. There is also a wide range in terms of the number of rooms, with a mean of 4.21 and a standard deviation of 1.7. This finding correlates with the statistics presented by Gilbert and Soskolne (2000) who state that the majority of the population in Soweto lives in four-roomed council houses built by the Johannesburg City Council in 1902 to accomodate African people. A significant proportion of families in Soweto live in shacks or rooms in the backyard of these households (Crankshaw et al., 2000). This study only asked about the rooms in the main house and excluded outbuildings and shacks. These results suggest that indoor and outdoor space for activities may be limited.

In conclusion, it is evident from the above that most respondents were unemployed, live in four-roomed houses and do not earn a taxable income.

3.6 Equipment and Materials

3.6.1 Equipment

A digital voice recorder – Olympus VN-1100PC was utilised to record participant responses.

3.6.2 Materials

The materials used in this study included:

- Interview schedule (Appendix E)
- Show cards: A4 laminated sheets with response options (Appendix F)

3.7 Data Collection

3.7.1 General procedures

Ethical clearance for this study was obtained from the Ethics Committee in the Faculty of Humanities at the University of Pretoria. Written consent (Appendix G) to conduct all phases of the study was obtained from the director of ASHA. The director allocated the inclusion coordinator to assist in logistical arrangements for the study. The principals of the selected schools were contacted telephonically to inform them about the study and to make arrangements to obtain school lists. A site visit was conducted during which a verbal presentation was made on the study to allow principals an opportunity to ask questions. Prospective participants who were selected through the sampling procedure were contacted in writing. The letter included ethical issues such as anonymity and confidentiality and a statement on the purpose of the study (Mathers, Fox & Hunn, 2002). Once the consent letters (Appendix H) were returned, participants received a second letter confirming the date, time and venue of the interview. In this letter participants were informed about a workshop that would be hosted after the study on "Opportunities for learning within the family context". A further incentive was provided in the form of a

raffle draw that would take place after the study. Participants were also contacted telephonically at least three days prior to the interview to confirm biographical details and to confirm the interview time. Respondents were also reminded via short messaging services the day before the interview. Six interviews were scheduled per day, therefore allowing for 30 interviews per week. The data collection took three weeks to complete.

3.7.2 The interviews

Interviews were conducted at the Early Learning Centre which is the ASHA resource centre known to all parents. The interviews were held in a quiet room where the researcher arranged two chairs across from each other with a small desk between the respondent and the interviewer. Face-to-face interviews utilising the interview schedule were completed individually by the researcher with each respondent. Refreshments were available to participants while they waited to be interviewed. The researcher commenced the interview by stating the purpose of the interview and providing the respondents time for questions (McMillan & Schumacher, 2001). This was done in a relaxed informal manner so that the interview appeared more like a conversation or discussion (Mathers et al., 2002).

3.7.3 Description of procedure followed

Instructions were read out exactly as they appeared on the interview schedule, following the sequential order of questions and using the same materials for all interviews (Mathers et al., 2002). Responses were recorded immediately on the response form and they were also audio-recorded to check the reliability of coding after the interview. Thirty percent of audio-recorded interviews were checked by two qualified speech therapists to establish agreement reliability, which is the type of reliability established by determining whether two or more persons agree with what they have rated (McMillan & Schumacher, 2001). Table 3.10 outlines the interview routine followed in the main study.

Table 3.10 Interview routine

Area	Procedure	Instruction/Question
Introduction	Participants were made to feel comfortable and relaxed with a greeting and a brief explanation as to the purpose of the interview.	"My name is Sadna, I am very grateful that you were able to attend this interview. As I explained in the letter I sent to you, I am conducting a study to understand the type of activities that young children are involved in with their families. This information will assist in improving the understanding of how children in your community learn. The interview will be done in English and it will take about 30 minutes to complete".
Biographical information	Each question in this section was read out to the respondent and the response was immediately transcribed.	"I am going to ask you a few questions about your child, yourself and your family. Please let me know if you need me to repeat or explain any of the questions".
Activity settings	There are five questions related to each of the 50 activities listed. All five questions related to one activity were sequentially asked. Pre-coded responses to each question were visually represented on an A4 laminated sheet, with bold size 16 font.	"Please listen carefully to the following questions; if you need me to explain or repeat anything, please ask. I am going to ask you questions about activities that your child may be involved in. There are five questions related to each activity. I will ask the questions, one at a time. I will show you the possible responses on a sheet to help you remember the different options for answering".
Perceptions on learning	Open-ended questions were read out and the responses were transcribed verbatim.	"We have come to the last part of the interview. I am going to ask you four more questions, please try to answer all. If you need me to explain anything, please ask."
Conclusion	Respondents were thanked for their participation and were asked to fill in a form which was entered into a lucky draw. They were also informed about a workshop on "Facilitating learning in the home environment".	"Thank you for your participation; can you please fill your details in on this form. After I complete the study all respondents will be entered into a lucky draw. The winner will be contacted telephonically to collect her/his prize. Please also accept an invitation to a workshop where I will share some of the results of my study and more information with you on how you can facilitate or help your child's learning at home."

3.8. Data analysis and statistical procedures

3.8.1 Analysis of transcriptions

The data were transcribed by the researcher during the interview. The researcher listened to all the audio recordings on the same day to check that data was transcribed and coded correctly. After information was corrected on the forms it was further verified by two speech therapists that checked that a standard procedure was followed when conducting interviews and that the responses were correctly recorded and coded. The speech therapists listened to the audio recordings independently and rated the interviews on the forms provided (Appendix I).

A content analysis procedure was conducted on the responses to open-ended questions in order to identify common categories that were then utilised to establish codes (McMillan & Schumacher, 2001). The codes were presented to a speech therapist who rated her agreement with the researcher's codes (Appendix J). The codes were also presented to a group of PhD (2008) students for comment. A final list of codes was developed and used to analyse the data obtained from the open-ended questions (Appendix K).

3.8.2 Reliability

3.8.2.1 Inter-rater reliability

3.8.2.1.1. Closed questions

Reliability refers to the degree of consistency of measurement; the reliability established in this study was "agreement reliability" which refers to two or more people agreeing on what has been heard or observed (Macmillan & Schumacher, 2001). Two independent raters listened to 30% of the audio recordings of the interviews, to rate the procedural consistency with which interviews were conducted. The results showed 100% inter-rater agreement on all areas assessed, which was to be expected as the interviews were tightly

scripted. Please refer to Table 3.11 for the criteria used and the presentation of the individual ratings.

Table 3.11 Inter-rater reliability

Areas evaluated	% agreement	
	Rater 1	Rater 2
An explanation was provided about the type of questions to be asked.	100%	100%
Instructions were clearly read out.	100%	100%
All options for answering closed questions were clearly read out.	100%	100%
A sequential order of questioning was followed.	100%	100%
Sufficient time was allowed for the respondent to respond.	100%	100%
Appropriate probing was utilised.	100%	100%
The respondent was given an opportunity to ask questions.	100%	100%
Questions were appropriately answered by the interviewer.	100%	100%
Clarification and explanations were provided.	100%	100%
Information was correctly recorded.	100%	100%
Overall rating	100%	100%

3.8.2.1.2 Open-ended questions

The data was organised to establish categories for the coding of open-ended questions (Macmillan & Schumacher, 2001). The categories were then checked for agreement by an independent rater. Table 3.12 represents the categories initially developed and the changes that were recommended and agreed upon. The changes made to categories in Question 12 included omitting 'sport' and including sport activities under 'play'; changing 'electronic entertainment' to 'entertainment and socialising' and adding 'play'. One category, 'communication' was added in Question 13. Singing and dancing were combined as one in Question 14. 'Play' was omitted as a category in Question 15 and 'family time' was added. Responses were then coded and checked by an independent rater and through a process of discussion, the researcher and independent rater reached consensus on the categories (Appendix K).

Table 3.12 Categories for open-ended questions

Question	Category	Agreement	Changes
12 *Are there any other activities that your child does at home that you think he/she can learn from?*	No	Yes	
	Sport	No	Omitted
	Household Chores	Yes	
	Electronic entertainment	No	Entertainment and Socialising
	Educational/Literacy	Yes	
	Other	Yes	
			Category created: Play
13 *What do you (think) consider as the most important things for your child to learn at home?*	Household chores	Yes	
	Self care/hygiene	Yes	
	Educational/Literacy	Yes	
	Morals/Values	Yes	
	Culture/Family/Tradition	Yes	
	Religion	Yes	
	Play	Yes	
			Category created : Communication
14 *List in order of importance, three to five home activities that makes your child laugh or smile (interesting and enjoyable)*	Dancing	No	Combined as one category: Singing and dancing
	Singing		
	Play	Yes	
	Entertainment/Social	Yes	
	Household Chores	Yes	
	Communication	No	Communication activities included as 'Social'
	Education/Literacy	Yes	
	Self-care	Yes	
	other	Yes	
15 *Please complete the following sentence: I think that my child learns best by...*	School/Crèche/ASHA	Yes	
	Play	No	Omitted. Play activities included under 'Participation'
	Participation	Yes	
	Observation	Yes	
	Communication	No	Included under 'Family time'
	Other	Yes	
			Category created: Family time

Descriptive statistical procedures, in particular frequency tables, were used to organise the data collected. The results were quantified in terms of means, standard deviation, frequencies and relationships between variables. The variables represented in frequency tables to show their percentage distribution included the frequency of participation, the partners involved in activities, and the purpose attributed to activities. The importance of activities was established by studying the means and standard deviation. Significance for difference in participation levels according to age and gender was established using

Fisher's exact test, which is more accurate than the chi-squared test when the expected numbers are small (MacDonald, 2008).

3.9 Summary

This chapter presented the methodology used in this study. The aims and sub-aims were presented. The research design was outlined; the research phases followed were explained, highlighting the processes followed in the development and validation of the interview schedule. The main study was discussed in terms of the participants, procedures, equipment, materials, and data collection procedures and analysis.

CHAPTER 4
RESULTS AND DISCUSSION

4.1. Introduction

The results are described and discussed in relation to the main aim of the study, which is to identify the activity settings of typically developing 3 to 5-year-old children within the family context. First, the context is described; thereafter activity settings are discussed in different categories. Each category is discussed according to the components of activity settings outlined in Figure 4.1. Finally information obtained from the open-ended questions is presented.
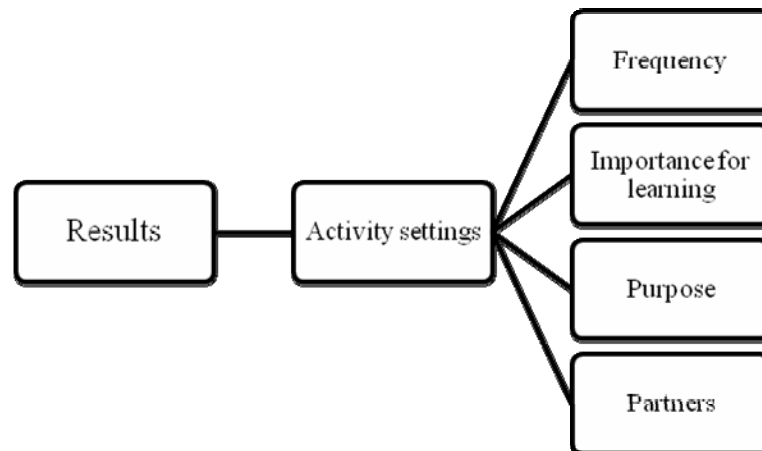
Figure 4.1 Schematic representation of results

4.2 Description of context

In order to understand the subsystems surrounding the child, as explained in the discussion of the developmental niche concept in Chapter 2, it is important to consider the physical and social settings that surround the child. Soweto is a large black residential area where a diverse group of indigenous African ethnic and cultural groups reside. This city of contrast has seen rapid development and transformation over the past few years, with basic infrastructure being improved and economic investment materialising through the large number of shopping malls being built (Soweto's Facelift, 2006).

Notwithstanding the changes that are taking place, a large proportion of Soweto's residents remain unemployed (Morris, 1999) and accommodation is mostly limited to small 'matchbox' housing with limited space (Seekings, 2000). Criminal violence and unemployment remain a primary concern to residents who are unable to afford improved security measures in and around their homes (Morris, 2004; Seekings, 2000). The extended family system is still the prevalent structural form (Moeno, 2006), with results in this study showing an average of 5.6 family members sharing a four-roomed house. Families are mainly composed of multigenerational, female-headed households with only 23% of fathers living with the family. The legacy of apartheid education is evident in the finding that only 51% of caregivers have completed matric or further studies. It is against this context that the results of this study are discussed. Figure 4.1 is a schematic representation of how results are presented and discussed in relation to the main aim of this study, which was to identify the activity settings of typically developing 3-to-5-year-old children within the family context.

4.3 Activity settings

Activity settings that children engage in as part of their daily lives have a "profound impact on the cognitive and communicative functions they develop" (Gallimore et al., 1993, p. 539). These routines of daily living offer the family an opportunity to foster skills development that encourages autonomy and connection with others (Spagnola & Fiese, 2007). Activities cannot be understood in isolation of the environmental context in which they occur and should therefore be studied within their ecocultural niche (Summers, Larkin & Dewey, 2008). This understanding is achieved by looking at the participation rates in activities, the partners involved, the purpose attributed to activities and the importance of activities for learning (Farver, 1999).

Table 4.1 outlines the categories that results have been grouped into for the purpose of discussion. These categories were adapted primarily from categories used by Dunst and Bruder (1999a) in their organisation of family activity settings derived from their study using the Parent Survey of Home and Family Experiences.

Table 4.1   Categories for activities

Category	Category used by Dunst and Bruder (1999a)	Explanation	Activities
Child routines	Dunst and Bruder separated child from parenting routines (e.g. bath time, bed time). Due to the limited number of activities classified as parenting routines, child and parenting routines were categorised as one in this study.	-routine activities related to care and hygiene	Mealtimes, bathing, dressing and undressing, toileting, washing hands, brushing teeth, haircut/style, local clinic and carried on the back.
Play activities	Dunst and Bruder had a separate category for physical play.	-physical, exploratory, constructive and pretend activities that children engage in for fun	Running, jumping and chasing, playing with toys, pretend games, lap games, playing with water, playing with sand, hand/finger games, mokuku, building blocks, arcade games and cell phone games.
Early literacy activities	Dunst and Bruder referred to this category as literacy activities.	-activities related to reading, writing, speaking, and listening	Having a conversation, telling stories, listening to stories, reading/looking at books, colouring, drawing, painting, cutting and pasting.
Entertainment activities	This category was used unchanged.	-activities primarily associated with media and the arts	Watching television, singing, listening to music and dancing.
Chores	Chore activities were not included in Dunst and Bruder's categories. This category was therefore created to accommodate activities included in the questionnaire.	- assisting or participating in chores in and around the house	Cleaning the yard, washing socks and underwear, setting the table, assisting with preparing meals and gardening.
Spiritual activities	This category was created to accommodate spiritual activities.	-activities relating to religious or cultural expression	Attending church, praying, attending an ancestral ceremony and attending funerals.
Family activities	Dunst and Bruder have three categories to accommodate family activities: family celebrations, family rituals and socialisation activities. For the purposes of this study only one category: family activities were used to accommodate all family related activities.	-social activities that children engage in	Family gatherings, visiting family/friends in the neighbourhood and visiting the family/traditional home.
Community activities	Community activities were not included in the categories for family activity settings but were categorised separately.	-activities that children engage in outside the home context	Visiting shopping malls, eating out, going to the spaza shop, attending parties, attending weddings, taxi rides and visiting a park.

The findings for each of the eight categories of activity settings are now discussed in detail.

4.3.1. Child Routine activities

Child routine activities refer to those activities that children engage in as part of care and hygiene routines. Activities included in this section are outlined in Table 4.2. The main reason for non-participation in an activity is presented in italics in the frequency column. The last two columns in the table represent the mean and ranking of the importance of activities for learning.

Table 4.2 Child routine activities

Activity	Frequency		Partner		Purpose		*Importance for learning		Ranking
Washing hands	Daily	100%	Child	90%	Educational	49%	Mean	2.68	1
			Mother	6%	Care	33%			
			Family	3%	Fun	9%			
			Other	1%	Exercise	8%	SD	0.46	
			Total	100%	Other	1%			
					Total	100%			
Mealtimes	Daily	100%	Family	78%	Care	31%	Mean	2.66	2
					Socialising	25%			
			Child	10%	Educational	21%			
			Mother	6%	Fun	18%			
			Other	4%	Exercise	2%	SD	0.47	
			Siblings	1%	Other	2%			
			Parents	1%	Chores	1%			
			Total	100%	Total	100%			
Local clinic	Sometimes	52%	Mother	62%	Care	83%	Mean	2.64	3
	Often	1%	Grandparents	25%	Educational	11%			
	Hardly ever	38%	Other	6%	Other	3%			
	Never	9%	Father	5%	Fun	1%	SD	0.48	
	Total	100%	Family	1%	Exercise	1%			
			Parents	1%	Spiritual	1%			
			Total	100%	Total	100%			
Toileting	Daily	100%	Child	84%	Educational	49%	Mean	2.61	4
					Care	35%			
			Mother	11%	Exercise	12%			
			Grandparents	4%	Fun	2%			
			Other	1%	Chores	1%	SD	0.49	
			Total	100%	Other	1%			
					Total	100%			
Dressing and undressing	Daily	100%	Child	41%	Educational	56%	Mean	2.56	5
					Care	29%			
			Mother	37%	Fun	15%			
			Grandparents	14%	Exercise	8%			
			Other	7%	Socialising	3%	SD	0.49	
			Parents	1%	Chores	3%			
			Total	100%	Total	100%			
Brushing teeth	Daily	99%	Child	74%	Educational	46%	Mean	2.56	6
			Mother	23%	Care	33%			
			Grandparents	1%	Fun	10%			
			Other	1%	Exercise	7%	SD	0.49	
			Father	1%	Chores	4%			
			Total	100%	Total	100%			

Activity	Frequency		Partner		Purpose		*Importance for learning		Ranking
Bathing	Daily	100%	Mother	49%	Care	42%	Mean	2.55	7
			Grandparents	19%	Educational	29%			
			Child	18%	Fun	15%			
			Other	9%	Exercise	8%			
			Father	2%	Socialising	3%	SD	0.54	
			Siblings	2%	Chores	3%			
			Parents	1%					
			Total	100%	Total	100%			
Haircut/style	Daily	7%	Mother	53%	Care	73%	Mean	2.31	8
			Father	19%	Fun	11%			
	Often	30%	Grandparents	13%	Socialising	7%			
	Sometimes	61%	Other	13%	Educational	6%			
	Hardly ever	1%	Parents	1%	Other	2%	SD	0.53	
	Never	1%	Friends	1%	Chores	1%			
	Total	100%	Total	100%	Total	100%			
Carried on the back	Daily	31%	Mother	54%	Care	45%	Mean	2.02	9
	Often	21%	Other	17%	Fun	33%			
	Sometimes	21%	Father	12%	Exercise	12%			
	Hardly ever	1%	Grandparents	9%	Socialising	4%	SD	0.69	
	Never -Age:83%	26%	Siblings	5%	Educational	3%			
			Parents	3%	Other	3%			
	Total	100%	Total	100%	Total	100%			

*Importance for learning: a rating of <2 implies that an activity was rated as not important for learning; a rating between 2 and 2.5 indicates that an activity was rated as important; and a rating of >2.5 shows an activity rated as very important.

It is evident from Table 4.2 that, as can be expected, children participate fully (99-100%) in most child routine activities, including mealtimes, bathing, dressing, toileting, washing hands and brushing teeth. The majority of children engage in these activities without assistance; however, as the ages of children ranged between 3 and 5 years, it is realistic to assume that they would still require some assistance in daily care activities (Summers, Larkin and Dewey, 2008). The child's mother was identified as the main partner in child routine activities, which correlates with the mother being the most consistent person in the household, as indicated in Table 3.7 in Chapter 3. This finding is supported by Evans (1994) who concluded that in Sub-Saharan Africa the mother is generally the primary caregiver but has support from others. Similar findings of care roles in the Masiphumele community, a poor community on the outskirts of Cape Town, were reported by Bray and Brandt (2007). Their results indicated that care roles are usually shared by two or more

caregivers at a time; they also highlighted that care giving roles are affected by housing arrangements. This could hold true for results in this study due to the number of people sharing a small living space.

To illustrate the importance of considering child routines in context, activities are discussed in further detail. Mealtime is seen as a vehicle of culture because "through meal time activities and conversation, family members often enact and reaffirm cultural meanings, as well as create new meaning" (Larson, Branscomb & Wiley, 2006, p. 3). More specifically, Fiese and Marjinsky (1999) reported that the repetitive nature of this routine provides meaning and coherence in the family. Mealtimes are also rich in language as families often discuss events of the day, share stories and "ensure that members are well fed and well mannered" (Spagnola & Fiese, 2007). Furthermore, with the rationale that children learn novel words within a social and cultural setting, Beals (1997) showed that mealtimes also provide an opportunity for children to learn rare words. Mealtimes therefore provide an ideal opportunity for communication, socialisation and cultural exchange (Larson et al., 2006). These benefits are highlighted by the multiple purposes that respondents attributed to 'mealtimes' with 21% of respondents viewing it as 'care', 25% as 'socialisation' and 21% as 'educational'.

Participants in earlier focus group discussions held during the preparatory stage of the study, stated that mealtimes are important as they allow time to teach children how to eat, to behave and to learn respect. The importance of this activity for learning was affirmed by its rating, with a mean of 2.66 and standard deviation of 0.47. Mealtime, which was indicated as a family activity by 78% of respondents, is an activity where the whole family comes together. While this may be due to the nature of family composition and limited space, similar findings were reported by a National Survey of Children's Health in the United States where it was found that in families of children six to eleven years of age, 80% reported a shared meal on four or more days per week and 55% reported a shared meal on six or seven days a week (Child Trends, 2005). Mealtimes can be seen as one of the activities that allow for thematic elaboration because they provide an

opportunity for core symbols and systems of meaning to be shared during family interaction.

Bath time was described by focus group participants as taking place in a plastic tub in the kitchen or bedroom, as most homes do not have a bathroom. In view of these constraints, this activity was classified primarily as care by 42% of the respondents and as educational by 29% of them. Bath time was specified as a time to teach the child about cleanliness and not to waste water. Focus group participants stated that water is an expensive resource which should be appreciated and not wasted. This belief could be explained by the fact that water in South Africa is free up to the amount of 6 000 litres per household; usage in Soweto is monitored by pre-payment water meters (Ruiters, 2007). This resource, which is shared by large families and sometimes by more than one family, is therefore not likely to be used in play activities. Bath time therefore also highlights the impact of physical settings on activities.

The purpose of toileting draws further attention to the importance of understanding the context in which an activity is done. Information gathered from focus groups highlighted the fact that most homes do not have an indoor toilet and that toilets are shared by more than one family. Forty-nine percent of respondents stated the purpose of toileting as educational; this was explained by participants in the focus groups as 'children need to learn to be clean and independent'.

Activities which occur less frequently, include being carried on the back (sometimes and daily – 52%) which is the traditional way that most African children are carried by their caregivers. However due to the age of the children under study, respondents stated age as the reason for 26% of children not participating in this activity. Having a haircut (sometimes – 61%) and visiting the local clinic (sometimes – 52%) by their nature occur less frequently.

To summarise this section, Table 4.3 provides the overall percentages obtained for child routine activities. These activities mostly occur daily (80%), and while some children are

independent, 33% of children depend on their mother to assist with child routine activities. These activities are primarily defined as care (45%), and educational (30%). Most activities in this category, as displayed in Table 4.2, were considered as very important for learning, with a mean greater than 2.5. The impact of physical and social contexts (Super & Harkness, 1999) is evident in most child routine activities.

4.3 Summary of child routine activities

Frequency	%
Daily	**80**
Sometimes	17
Hardly ever	5
Never	5
Often	3
Total	**100**
Partner	**%**
Child	35
Mother	33
Grandparents	9
Family	9
Other	6
Father	4
Parents	**1**
Siblings	**1**
Total	**100**
Purpose	**%**
Care	45
Educational	30
Fun	11
Exercise	7
Socialising	4
Chores	1
Other	1
Spiritual	1
Total	**100**

4.3.2. Play activities

Play is a universal activity amongst young children but its nature varies across cultures, depending on how the community is structured, how play is defined and the kind of significance attributed to play within the community (Göncü, Tuermer, Jain and Johnson, 1999). This was illustrated by Parmar, Harkness and Super (2004) in their study on the

developmental niches of Asian and Euro-American preschool children. They found that differences in the way parents of the two cultural groups facilitated their children's play were linked to their underlying beliefs about the purpose of play. Results of the current study are displayed in Table 4.4.

Table 4.4 Play activities

Activity	Frequency		Partner		Purpose		*Importance for learning		Ranking
Playing with toys	Daily	77%	Friends	50%	Fun	34%	Mean	2.44	1
			Child	17%	Educational	26%			
	Often	15%	Other	13%	Socialisation	18%			
	Never	1%	Siblings	12%	Exercise	17%			
			Mother	5%	Care	3%	SD	0.62	
	Sometimes	7%	Family	2%	Chores	1%			
			Grandparent	1%	Spiritual	1%			
	Total	100%	Total	100%	Total	100%			
Playing with blocks	Often	40%	Friends	41%	Educational	55%	Mean	2.39	2
			Child	16%	Exercise	18%			
	Never *-Money 46 % -Not important for learning:42 %*	32%	Mother	15%	Fun	14%			
	Daily	14%	Other	15%	Socialisation	6%	SD	0.49	
	Sometimes	14%	Siblings	8%	Chores	5%			
	Total	100%	Family	3%	Care	2%			
			Total	100%	Total	100%			

Activity	Frequency		Partner		Purpose		*Importance for learning		Ranking
Running, jumping and chasing	Daily	86%	Friends	39%	Exercise	51%	Mean	2.33	3
			Other	20%					
	Often	9%	Siblings	11%	Fun	30%			
	Never	1%	Mother	8%	Educational	10%	SD	0.58	
			Family	7%	Care	6%			
	Sometimes	4%	Child	6%	Socialisation	2%			
			Grandparent	6%	Chores	1%			
	Total	100%	Father	3%	Total	100%			
			Total	100%					
Pretend games	Daily	52%	Friends	46%	Educational	43%	Mean	2.26	4
			Child	15%	Fun	36%			
	Often	26%	Siblings	12%	Exercise	12%			
			Mother	11%	Care	5%			
	Never -Age: 75%	9%	Family	4%	Socialisation	2%	SD	0.58	
			Grandparent	1%	Chores	1%			
	Sometimes	13%	Father	1%	Spiritual	1%			
	Total	100%	Total	100%	Total	100%			
Arcade games	Sometimes	55%	Mother	24%	Fun	56%	Mean	2.22	5
			Child	17%					
	Never -Money: 40% -Age: 35%	22%	Other	15%	Socialisation	16%			
			Friends	13%					
	Often	20%	Siblings	12%	Exercise	14%			
	Hardly ever	3%	Father	7%			SD	0.51	
	Total	100%	Family	4%	Educational	13%			
			Grandparent	4%					
			Parents	4%	Care	1%			
			Total	100%	Total	100%			

Activity	Frequency		Partner		Purpose		*Importance for learning		Ranking
Cell phone games	Never -Age: 70%	51%	Child	61%	Educational	46%	Mean	2.22	6
			Mother	13%					
	Daily	20%	Other	9%	Fun	39%			
	Often	17%	Siblings	8%	Exercise	11%			
	Sometimes	11%	Family	5%	Socialisation	2%	SD	0.64	
	Hardly ever	1%	Friends	2%	Care	2%			
	Total	100%	Father	2%	Total	100%			
			Total	100%					
Lap games	Daily	51%	Mother	45%	Care	39%	Mean	2.20	7
			Grandparent	18%	Fun	23%			
			Other	13%	Exercise	20%			
	Often	19%	Father	13%	Socialisation	11%			
	Never -Age: 66%	17%	Family	4%	Educational	4%	SD	0.59	
	Sometimes	13%	Siblings	3%	Spiritual	2%			
	Total	100%	Parents	3%	Other	1%			
Hand and finger games	Often	34%	Friends	30%	Fun	40%	Mean	2.19	8
			Mother	21%					
	Daily	26%	Siblings	21%	Exercise	30%			
	Never -Not interested: 21%	21%	Other	20%	Educational	20%			
	Sometimes	18%	Family	4%	Care	6%	SD	0.49	
	Hardly ever	1%	Grandparent	3%	Socialisation	4%			
	Total	100%	Child	1%	Total	100%			
			Total	100%					

Activity	Frequency		Partner		Purpose		*Importance for learning		Ranking
Riding a bike or scooter	Never *-Money: 39%*	34%	Friends	46%	Fun	48%	Mean	2.16	9
	Daily	32%	Child	27%	Exercise	39%			
	Often	26%	Siblings	15%	Educational	8%			
	Sometimes	8%	Other	7%	Socialisation	5%	SD	0.56	
	Total	100%	Mother	5%	Total	100%			
			Total	100%					
Mokuku	Never *-Age:35%* *-Space:25%*	36%	Friends	58%	Fun	55%	Mean	2.05	10
			Siblings	21%	Exercise	17%			
	Often	22%	Other	12%	Educational	14%			
	Daily	21%	Mother	5%	Socialisation	12%	SD	0.57	
	Sometimes	21%	Family	2%	Care	2%			
	Total	100%	Grandparent	2%	Total	100%			
			Total	100%					
Playing with sand	Never *Availability: 64 %*	34%	Friends	63%	Fun	58%	Mean	1.88	11
	Daily	28%	Child	13%	Educational	14%			
	Often	24%	Siblings	8%	Exercise	14%			
	Sometimes	13%	Other	7%	Socialisation	6%	SD	0.67	
	Hardly ever	2%	Mother	7%	Chores	6%			
	Total	100%	Father	2%	Care	2%			
			Total	100%	Total	100%			

Activity	Frequency		Partner		Purpose		*Importance for learning		Ranking
Playing with water	Daily	50%	Friends	42%	Fun	75%	Mean	1.66	12
			Child	32%	Exercise	12%			
	Often	19%	Siblings	11%	Educational	6%			
	Never -*Safety: 66%*	17%	Other	8%	Care	4%			
	Sometimes	14%	Mother	5%	Socialisation	1%	SD	0.72	
	Total	100%	Grandparent	1%	Chores	1%			
			Total	100%	Other	1%			
					Total	100%			

* *Importance for learning: a rating of <2 implies that an activity was rated as not important for learning; a rating between 2 and 2.5 indicates that an activity was rated as important; and a rating of >2.5 shows an activity rated as very important.*

Motor skills are an essential part of the developmental process especially during the preschool years (Giagazaglou, Kyporos, Fotiadou and Angelopoulou, 2007). These skills are facilitated through children's participation in motor activities like running, jumping and chasing, which has a participation level of 100%. Fifty-one percent of respondents defined the purpose of this activity as exercise. The category running, jumping and chasing was rated as important for learning with a mean of 2.33 and standard deviation of 0.58, which is significant as physical activity is reported to be important for the overall well-being of children (Veitch, Bagley, Ball & Salmon, 2006). Participation in this activity was higher than for riding a bike or scooter, where 34% of respondents indicated that the child does not participate in this activity due to lack of money. In addition, significant gender differences in participation levels for riding a bike or scooter were detected using Fisher's exact test.

Table 4.5 Participation differences: gender

Activity	Gender	Never	Hardly ever	Sometimes	Often	Daily	p-value
Riding a bike or scooter	Boys	20%		6%	27%	47%	
	Girls	49%		9%	24%	18%	0.007
Hand and finger games	Boys	33%	2%	18%	36%	11%	0.002
	Girls	9%		18%	33%	40%	

Twenty-nine percent more boys ride a bike or scooter in comparison to girls and 47% of boys participate in this activity on a daily basis, in comparison to only 18% of girls. This finding could be explained by results of a study of play patterns of young preschool children conducted in India, which found that boys showed a preference for more physically demanding games compared to girls (Dhingra, Manhas & Raina, 2005). A study by Bois and colleagues supported this finding, in that boys were reported to have higher levels of physical activities than girls. They pointed out that this difference may be attributed to parents' gender-stereotyped perceptions (Bois et al., 2005). The literature therefore appears to support this finding in two ways, firstly that boys prefer more physically active play, and secondly that parents' stereotyped perceptions may also affect participation in physical activities.

Another activity showing gender differences was hand and finger games, as shown in Table 4.5; such games are played more often by girls than boys, with 33% of respondents indicating that boys do not play these games. In addition, 40% of girls play these games daily, in comparison to only 11% of boys. Hand and finger games, which are often accompanied by songs and rhymes, were perceived as fun (40%) and exercise (30%). A study conducted by Burnett and Hollander (2004) on South African indigenous games also found gender differences in rhythmic games being more popular with girls in comparison to boys. Fifty-four percent of respondents reported that children played with blocks at least once a week. The educational value of this activity was recognised by 55% of respondents and echoed by participants in focus group discussions, who stated that this activity helps children learn about colours, teaches them to build and create things, and also assists them to 'grab' the blocks. Money and the belief that playing with blocks is

not important for learning were cited as the main reasons for non-participation in this activity.

Seventy-seven percent of respondents reported that children play daily with toys. The value of this activity as an opportunity for learning was highlighted in a study conducted by Liddell and colleagues, which showed that the presence of a few toys positively influenced the play patterns and cognitive competencies of black South African children in day care (Liddell et al., 1989). Playing with toys was perceived as fun (34%) and educational (26%), with respondents rating it as important for learning. Focus group participants reported that children mostly play with cars, dolls and balls.

Pretend games provide further insight into the impact of context, as different cultural groups may engage in pretend play for different purposes, and themes may vary according to the children's setting (Göncü et al., 1999). Ninety-one percent of children partake in this activity with varied frequency, as indicated in Table 4.4. In comparison to playing with toys, more respondents perceived pretend play as being educational (43%). This is in contrast with the rating of these activities as important for learning, where playing with toys achieved a mean of 2.44 and pretend games a mean of 2.26.

Play themes are often linked to traditions, customs and history. Furth (1996) observed children in a township in Durban pretending to slaughter a cow which is a 'real-world' activity that is transferred into children's pretend world (Göncü et al., 1999). Participants in focus groups provided insight into the type of pretend games that children play; these included pretending to be a mother by tying a doll on their back, being a teacher or a taxi driver. Lap games, which are games that young children play while sitting on the caregiver's lap, were defined as care by 39% of respondents and fun by 23% of them. Some respondents explained that this activity allowed them the opportunity to bond with the child. These games are usually played with very young children to provide them with early turn-taking skills (Centre for Early Literacy, 2008).

A further finding relates to views expressed about playing with water – while this activity was perceived as the most fun activity by 75% of respondents, it was rated as not important for learning, with a mean of 1.66. Safety concerns were expressed as the main reason for non-participation in water play. Similar views were expressed about playing with sand, which was also viewed as a fun activity by 58% of respondents, but rated as not important for learning. The main reason relayed for 34% of children not playing with sand was its unavailability. Caregiver views on water and sand play may be due to a lack of exposure about their educational value, as both activities have been recommended in the literature for encouraging children's exploration and discovery, especially with regard to developing early mathematical concepts (McIntyre & Kelly, 1996).

Caregiver perceptions may also be the underlying reason for children's infrequent participation in 'mokuku' or hide-and-seek. While 43% of children participated in this activity at least once a week, 36% of respondents did not participate. Reasons for non-participation related to the child's age and lack of space. Concerns about child safety could also be a reason for non-participation, as research has shown that caregiver perceptions of neighbourhood safety can impact on children's play, with parents choosing for children to play in their homes or yard (Carver, Timperio & Crawford, 2008). Fifty-five percent of the respondents reported that mokuku is a fun activity. The popularity of this game has been attributed to children's enjoyment of chasing and the fact that it requires no added props (Burnett & Hollander, 2004).

Seventy-eight percent of respondents indicated that children play arcade games which are relatively expensive. It is postulated that high participation rates in this activity could be linked to arcade games being available in 'safe' play areas within shopping malls. The perceived safety of shopping malls could be attributed to them being in an enclosed space where children can be more closely supervised by adults. Within the last two decades there has been increased concern about the negative impact of arcade games (Verenika, Harris & Lysaght, 2003). The concerns include decreased socialising with other children, as children usually play alone or spend time watching others play (Bacigalupa, 2005).

Results indicate that cell phone games have the lowest participation levels (49%) in this category of activities. Most children have access to a cell phone within their household, since South Africa is the fastest growing cellular market in Africa (Odendaal, 2006; Reck & Wood, 2003). Respondents cited age as the primary reason for non-participation. The potential use of cell phones as an opportunity for learning should not be underestimated. A study conducted by Revelle and colleagues (Revelle et al., 2007) showed how a cell phone based intervention programme was instituted to improve early literacy skills. The intervention content included text messages for parents, audio messages for parents and children, and Sesame Street letter videos for children. Positive outcomes were reported by 75% of the respondents. While concern has been expressed about the negative impact of cell phones (Straker & Pollock, 2005), Kim, Miranda and Olaciregui (2008) highlighted the opportunity that mobile technology affords in terms of improving literacy in impoverished communities. They suggest that further research needs to investigate how this tool can effectively be utilised to assist with literacy education.

The result of play activities shows how various aspects in the child's context impact on play. This includes concerns about safety, caregiver beliefs and available resources. Table 4.6 provides a summary of the frequency, partners and purpose of all play activities.

Table 4.6 Summary of play activities

Frequency	%
Daily	38
Often	23
Never	22
Sometimes	16
Hardly Ever	1
Total	**100**
Partner	**%**
Friends	36
Child	17
Mother	14
Other	12
Siblings	12
Family	3
Grandparents	3
Father	2
Parents	1
Total	**100**
Purpose	**%**
Fun	42
Educational	22
Exercise	21
Socialisation	7
Care	6
Chores	1
Spiritual	0.5
Other	0.5
Total	**100**

Table 4.6 shows that only 38% of play activities are participated in daily. The frequency of play activities could be affected by financial constraints which affect access to certain play activities like riding a bicycle or motorbike, and playing with blocks. Results in Table 4.5 show that there appears to be a preference for play activities close to or in the home, where caregivers are better able to monitor children's safety. Studies conducted in Australia by Carver, Timperio and Crawford (2008), and Veitch, Bagley, Ball and Salmon (2006) concur with this statement. Their research concluded that parents' issues about the safety of their children playing in places other than their own yard were influenced by concerns surrounding strangers, gangs and road traffic.

The results on the partners involved in play activities are significant, as 60% of respondents indicated that the main partner in play activities was another child. This included friends (36%), siblings (12%), and cousins (12%, indicated as 'other'). This finding correlates with research conducted by Göncü and colleagues who found that parents from different cultural communities in Brazil and India did not engage in play with their toddlers, as this was delegated to other children (Göncü et al., 1999). Similarly, a study of free play amongst Zulu children in a township near Durban found that Zulu parents assumed that their children played 'naturally' by themselves, and that they did not need to get involved in their children's play (Furth,1996). Overall results in this study show that 42% of respondents classified play activities as fun. Table 4.5 shows that 'playing with toys' was rated as the most important play activity for learning, with a mean of 2.44 and 'playing with water' was rated the lowest with a mean of 1.66. Play activities were perceived as the most fun when compared to other categories of activities.

4.3.3 Early Literacy activities

Considerable literacy and language related development occurs during the first five or six years of life, before formal schooling begins (Missal, Mcconnell & Cadigan, 2006). Children encounter opportunities to develop oral language skills, gain knowledge of forms and functions of language, and practice their emerging literacy skills through their daily experiences (Weigel, Martin & Bennet, 2005). Literacy is therefore seen as a social practice which is mediated by language and other cultural tools and artefacts within an interactive context (Prinsloo & Stein, 2004). The home environment plays a pivotal role during this phase as it forms the primary setting in which literacy skills develop. Early literacy activities include reading, writing, speaking, viewing and listening (Lawhon & Cobb, 2002). Table 4.7 details the early literacy activities that were grouped together, including having a conversation, telling stories, listening to stories, reading or looking at books and prewriting activities; colouring, drawing and painting; and cutting and pasting.

Table 4.7 Early literacy activities

Activity	Frequency		Partner		Purpose		*Importance for learning		Ranking
Colouring, painting and drawing	Daily	52%	Mother	27%	Educational	74%	Mean	2.74	1
			Other	21%					
			Child	21%	Exercise	11%			
	Often	28%	Siblings	17%	Fun	6%			
	Sometimes	11%	Family	5%	Socialisation	5%			
	Never *-Age: 62.5%*	9%	Friends	5%	Chore	3%	SD	0.43	
	Total	100%	Grandparent	3%	Care	1%			
			Father	1%	Total	100%			
			Total	100%					
Having a conversation	Daily	95%	Family	64%	Educational	46%	Mean	2.68	2
			Mother	19%	Socialisation	36%			
	Often	2%	Grandparent	9%	Care	7%			
	Sometimes	2%	Other	3%	Fun	6%	SD	0.46	
	Never	1%	Parents	3%	Spiritual	3%			
	Total	100%	Siblings	2%	Chore	2%			
			Total	100%	Total	100%			
Reading or looking at books	Daily	50%	Mother	28%	Educational	77%	Mean	2.65	3
			Other	18%	Fun	10%			
	Often	32%	Child	18%	Exercise	8%			
			Siblings	15%					
	Sometimes	10%	Family	12%	Socialisation	2%			
			Father	4%			SD	0.47	
	Never *-Age:71%*	8%	Grandparent	2%	Chore	2%			
			Friends	2%					
	Total	100%	Parents	1%	Care	1%			
			Total	100%	Total	100%			
Listening to stories	Daily	36%	Grandparent	37%	Educational	65%	Mean	2.62	4
			Mother	31%	Fun	10%			
	Often	33%	Other	16%	Socialisation	9%			
	Sometimes	17%	Siblings	6%	Care	7%			
	Never *-Family does not tell stories: 54%*	14%	Father	6%	Exercise	5%	SD	0.51	
	Total	100%	Family	4%	Spiritual	4%			
			Total	100%	Total	100%			

Activities	Frequency		Partner		Purpose		*Importance for learning		Ranking
Cutting and pasting	Often	30%	Child	26%	Educational	71%	Mean	2.62	4
			Mother	21%					
			Siblings	21%	Exercise	11%			
	Daily	26%	Other	17%					
	Never -Age:47% -Safety: 24%	23%	Family	6%	Chore	9%	SD	0.51	
	Sometimes	21%	Grandparent	4%	Fun	6%			
	Total	100%	Friends	4%	Care	3%			
			Father	1%	Total	100%			
			Total	100%					
Telling stories	Daily	33%	Mother	37%	Educational	58%	Mean	2.55	5
			Family	34%	Fun	15%			
			Grandparent	13%	Socialisation	14%			
	Often	29%	Other	5%	Care	5%			
	Sometimes	26%	Father	4%	Exercise	4%			
	Never -Age:55%	12%	Friends	3%	Chore	3%			
	Total	100%	Siblings	2%	Spiritual	1%	SD	0.50	
			Parents	2%	Total	100%			
			Total	100%					

Importance for learning: a rating of <2 implies that an activity was rated as not important for learning; a rating between 2 and 2.5 indicates that an activity was rated as important; and a rating of >2.5 shows an activity rated as very important.

The majority of respondents (95%) indicated that the child engages in 'having a conversation' daily. Focus group discussions provided insight into the topics of these conversations. It was reported that children often described what they did at school, related details about their play with friends and spoke about what they watched on television, including describing movies and a local soap opera, "Generations". Children acquire vocabulary, language skills and knowledge about the world during interesting conversations with responsive adults (Cutspec, 2006) which also facilitate moral development (Hodges, 2007). Accordingly, 45% of respondents classified 'having a conversation' as educational and 36% classified it as socialisation. This result ties in with Kyratzis' (2005) observation that children become socialised members of their communities as a result of their participation in everyday language routines of their community.

Living within an extended family context exposes children to varied communication contexts and partners. Results indicate that 64% of children have a conversation with the whole family, 19% with the mother and 9% with grandparents. Telling stories has also been viewed as an expression of social unity; subtle messages about values and practices of the culture often emerge from these stories (Heath, 1989). Children's ability to retell and understand narratives has been linked to the development of literacy skills and later academic success (Cutspec, 2006; Wood, 2002; Alant, Tesner & Taljaardt, 1992). While 82% of children participate in this activity, only 33% tell stories daily and 29% at least once a week. The reason for this could be related to restricted opportunity within the family context due to the large number of family members. Children's story telling was perceived as educational by 58% of respondents. Participants in focus group discussions reported that children made up stories about '*tsotsies*' (gangsters or thugs), or they repeated stories they heard from their grandmother or at school. Table 4.8 shows significant differences in relation to children's age and participation in this activity.

Table 4.8 Age-related differences

Activity	Age	Never	Sometimes	Often	Daily	p -value
Telling stories	3-3.11years	27%	27%	30%	16%	
	4-4.11years	10%	20%	33%	37%	0.02
	5-5.11years		30%	23%	47%	

Twenty-seven percent, of 3-to-3.11-year-olds do not tell stories in comparison to 10% of 4 to 4.11-year-olds. All 5-to-5.11-year-olds tell stories more frequently as 47% of them and 37% of 4-to-4.11-year-olds tell stories daily, in comparison to only 16% of 3-to-3.11–year-olds. While this study did not engage in an analysis of children's stories, Ilgaz and Aksu-Koc (2005) found in their study of the narratives of 3-to-5-year-olds that the structural complexities of narratives increase with age. Telling stories was rated by respondents as being very important for learning.

Storytelling exposes children to more sophisticated linguistic features that go beyond the level of conversation (Cutspec, 2006). Listening to stories has also been identified as a means for family history to be shared with young children, thus providing an avenue for

values to be imparted (Sameroff & Fiese, 2000). It is therefore significant that grandparents, more specifically the grandmother, were indicated as the main partner in this activity by 37% of the respondents. This was validated by participants in focus group discussions who also identified the child's grandmother as the most significant partner in telling stories to the child. They added that these stories were often about the past so that children could learn about where they came from. This is important as Heath (1989) showed in her ethnographic study of two communities, Trackton and Roadville, that the form, content, and functions of stories differed because children in the two communities heard different kinds of stories. Evans (1994) reported on findings of a study on child-rearing practices in Zambia and found that the majority of storytellers were women. Findings in this study supported these results, as 84% of storytellers were women (grandmother, mother and aunt – indicated as 'other').

Respondents rated reading or looking at books as very important for learning with a mean of 2.65, but only 50% of respondents indicated that the child participates in this activity daily. The perception of the educational value of this activity was validated by 77% of the respondents who defined its purpose as educational. This can be understood in the context of information gained from the focus groups in which most participants stated that they do not read to their children because this is something that is done at school. This belief was shared by Puerto Rican mothers in a study conducted by Hammer, Rodriguez, Lawrence and Miccio (2007), in which it was acknowledged that reading was better dealt with at school.

Colouring, drawing and painting, and cutting and pasting are recognised as prewriting activities in the literature because of the influence that they have on improving fine motor skills and eye-hand coordination which are required for writing (Gill, Winters & Friedman, 2006; Ure & Raban, 2001). Eighty-one percent of respondents reported that children engage in colouring, drawing and painting, and 77% reported participation in cutting and pasting. Safety concerns were expressed as the reason for non-participation in the latter activity. Colouring, drawing and painting was rated as the most important activity for learning, and was perceived as educational by 74% of respondents.

Results show that activities in the category of early literacy indicate that caregiver beliefs influence the type and frequency of activities that children engage in, for example, cutting with scissors. The view that activities also transmit cultural values was evident in the information received from focus group participants on the types of stories told by grandmothers.

Table 4.9 is a summary of early literacy activities and shows that 65% of respondents classified these activities as educational. As indicated in Table 4.7 all activities in this category were also rated as very important for learning, with means > 2.5.

Table 4.9 Summary of early literacy activities

Frequency	%
Daily	49
Often	26
Sometimes	14
Never	11
Total	**100**
Partner	**%**
Mother	27
Family	21
Other	13
Siblings	11
Grandparents	11
Child	11
Friends	2
Father	3
Parents	1
Total	**100**
Purpose	**%**
Educational	65
Socialisation	11
Fun	9
Exercise	7
Care	4
Work	3
Spiritual	1
Total	**100**

Forty-nine percent of respondents indicated that children participate in early literacy activities daily and 26% of children participate at least once a week. The frequency of

experiences could be affected by the extended, multigenerational family system, which implies that multiple partners are available to engage with the child. The child's mother was indicated as the main partner by 27% of respondents, with varied partners involved including siblings, grandparents and friends. Once more, the family environment is recognised as a key context in which children's interactions occur during the preschool years (Burns & Radford, 2008).

4.3.4 Entertainment activities

Literacy should be viewed as the ability to shape and understand meanings available in any number of expressive systems, including language, media, the arts (dance and music) and popular culture (Dills, 2007; Eisner, 1998). The preschool years are especially critical for the development of the skills and behaviours associated with media and the arts.

Table 4.10 Entertainment activities

Activity	Frequency		Partner		Purpose		*Importance for learning		Ranking
Watching Television	Daily	92%	Family	55%	Educational	70%	Mean	2.47	1
			Other	13%					
			Mother	11%	Fun	18%			
	Often	7%	Child	7%					
			Siblings	6%	Exercise	2%			
			Grandparent	4%					
	Sometimes	1%	Parents	2%	Socialising	10%	SD	0.54	
			Friends	1%					
	Total	100%	Father	1%	Total	100%			
			Total	100%					
Singing	Daily	70%	Child	35%	Fun	35%	Mean	2.36	2
			Family	13%					
			Mother	13%	Educational	33%			
	Often	13%	Other	12%					
	Sometimes	11%	Siblings	12%	Exercise	12%			
			Friends	7%					
	Never *-Not interested: 100%*	6%	Grandparent	4%	Spiritual	16%	SD	0.59	
			Parents	2%					
	Total	100%	Father	2%	Total	100%			
			Total	100%					
Listening to music	Daily	58%	Family	26%	Fun	39%	Mean	2.14	3
			Other	21%					
			Mother	17%	Educational	33%			
	Often	17%	Siblings	12%					
			Child	7%	Socialising	11%			
	Hardly ever	16%	Grandparent	6%					
			Father	5%	Exercise	9%	SD	0.61	
	Never *-Not interested:87%*	9%	Friends	4%					
	Total	100%	Parents	2%	Spiritual	7%			
			Total	100%	Care	1%			
					Total	100%			
Dancing	Daily	57%	Other	24%	Educational	36%	Mean	2.14	3
			Child	19%					
			Siblings	17%	Fun	34%			
	Hardly ever	29%	Mother	14%	Exercise	14%			
			Family	12%	Socialising	9%	SD	0.58	
	Never *-Not interested: 57%*	14%	Friends	9%	Spiritual	6%			
			Grandparent	4%	Care	1%			
	Total	100%	Father	1%	Total	100%			
			Total	100%					

Importance for learning: a rating of <2 implies that an activity was rated as not important for learning; a rating between 2 and 2.5 indicates that an activity was rated as important; and a rating of >2.5 shows an activity rated as very important.

Results displayed in Table 4.10 show that 92% of the respondents in this study indicated that children watch television daily, which is higher than the finding by Rideout and Hamel (2006) that 66% of children aged six months to six years in the United States watch television daily. Most children (93%) watch television with someone in the family. This is in accordance with recommendations made by the American Academy of Paediatrics (1999) that parents join children's viewing to ensure that they are watching age-appropriate content and that they use this opportunity to discuss television content. This recommendation also stressed that children's viewing should be limited to two hours a day. It is significant that 70% of the respondents in this study viewed television as an 'educational' activity. In South Africa, one of the popular children's programmes which focus groups made reference to was 'Takalani Sesame'. This programme has been reported to lead to significant gains in literacy, numeracy and life skills (Lee, 2005). Watching television was rated as important for learning with a mean of 2.47; this implies that most respondents view watching television as more important for learning than all play activities, as the highest mean was 2.44 for playing with toys.

This view on watching television is better understood by studying information received from focus group discussions, in which it was stated that children are allowed to watch television as it improves their English and concentration, and it is much safer than playing outdoors. This sentiment on safety was echoed by Jordan (2005) who interviewed 42 families who live in high crime areas, where watching television was seen as a safe and relatively inexpensive way of keeping young children occupied. Burdette and Whitaker (2005) also found in a sample of 20 large cities in America that mothers' perceptions of neighbourhood safety impacted on children's viewing time. Children, who lived in neighbourhoods which were perceived as unsafe, watched more television.

The relationship between culture, music and dance also starts impacting on children during the preschool years, as children are most receptive to music in the first six years of life (Leu, 2008). For the majority of the South African population, music is "woven into the fabric of the entire community's daily life" (Woodward, 2007, p. 33). Woodward explains that music and music making is an inherent part of South African culture which

assists in the transmission of its cultural heritage. Historically, music has also been an integral part of social activities of families, communities and religion (O'Neill, 2005).

Results in Table 4.10 show that the majority of children (70%) are involved in singing daily, which is higher than Wood's (2002) study of British preschool children's activities in the home, where only 47.7% of children were involved in this activity daily. Fewer children (58%) were reported to listen to music daily, which is lower than Rideout and Hamel's (2006) findings in four American States where 70% of children were reported to listen to music daily. Children's exposure to music may be higher in South Africa as most children's television programmes include music. Respondents viewed singing and listening to music as fun and educational. The educational value of these activities relates to the development of general auditory perception abilities, verbal communication, emotional expression and social behaviour (Denac, 2008; Črneč, Wilson & Prior, 2006).

Dance has also been described as a cultural system of symbols and meanings (Lobo & Winsler, 2006). Eighty-six percent of respondents indicated that children participate in this activity which was classified as fun (43%), and as a form of exercise (33%). This correlates with the statement that dance is seen as an activity that young children enjoy and that has positive developmental implications (Lorenzo-Lasa, Ideishi & Ideishi, 2007). Dance also helps develop body awareness, personal identity (*ibid.* 2007) and improves overall gross motor skills (Sacha & Russ, 2006). Furthermore, teachers that use dance as part of their curriculum for young children have found that moving to the beat of a drum helps develop children's phonemic awareness, auditory discrimination and listening for the sequence of sounds (Whitfield, 2005).

Results display that entertainment activities are viewed as important for learning; these activities are also less threatening for caregivers in terms of literacy levels and therefore need to be closely investigated to ascertain how they can be used to facilitate learning and development. In concluding this category an overview of entertainment activities is provided in Table 4.11.

Table 4.11 Summary of entertainment activities

Frequency	%
Daily	69
Hardly ever	11
Often	9
Never	7
Sometimes	3
Total	100
Partner	**%**
Family	26
Other	18
Child	17
Mother	14
Siblings	12
Grandparents	5
Friends	5
Parents	2
Father	1
Total	100
Purpose	**%**
Educational	36
Fun	34
Exercise	14
Socialising	9
Spiritual	6
Care	1
Total	100

Researchers in the field of early literacy have realised that promoting literacy at home no longer means recreating an academic setting within the home environment, but rather taking advantage of the opportunities that arise in daily life to help children transition towards literacy (Cutspec, 2006). Most children (69%) participate in entertainment activities daily, which is higher than the participation rate for early literacy activities. This percentage is attributed mainly to the large percentage of children who watch television daily. The opportunity for learning is highlighted by the frequency of these activities as well as the possibility that family members may be less threatened by their own literacy levels. Children engage with varied partners in these activities which were classified mainly as educational (36%) and fun (34%). Understanding the variety of early experiences within the home context is essential and needs to be acknowledged and understood so that teachers can use them to 'supplement' rather than 'supplant' what the family is doing at home (Hammer, Rodriguez, Lawrence and Miccio, 2007).

4.3.5 Chore activities

Variation in expectations for children's participation in chores is dependent on their different circumstances and traditions (Rogoff, 2003). Children in parts of Africa have historically been expected to contribute to the completion of tasks within the home. In Ghana for instance, children may have household duties allocated to them from as early as two years of age (Nsamenang, 1992). Table 4.12 shows the results for this category but does not include the partners, purpose and importance for learning as low participation rates were reported for chore activities in this study.

Table 4.12 Chores

Activity	Frequency		Reason for non-participation
Cleaning the yard	Never	47%	Age: 64%
	Often	31%	
	Sometimes	18%	
	Daily	4%	
	Total	100%	
Washing socks and underwear	Never	51%	Age: 85%
	Daily	26%	
	Often	14%	
	Sometimes	9%	
	Total	100%	
Setting the table	Never	58%	Age: 46%
	Daily	18%	Do not eat at table: 33%
	Sometimes	15%	
	Often	7%	
	Hardly ever	2%	
	Total	100%	
Assisting with preparing meals	Never	59%	Age: 64%
	Sometimes	17%	Safety: 30%
	Often	12%	
	Daily	11%	
	Hardly ever	2%	
	Total	100%	
Gardening	Never	61%	No garden: 58%
	Often	22%	
	Sometimes	15%	
	Daily	2%	
	Total	100%	

Table 4.13 Gender differences for washing socks and underwear

Activity	Gender	Never	Sometimes	Often	Daily	p-value
Washing socks and underwear	Boys	69%	5%	13%	13%	
	Girls	33%	13%	16%	38%	0.004

Children's participation levels in chore activities was highest for cleaning the yard at 53%, while only 49% were involved in washing socks and underwear. Results in Table 4.13 show that while 69% of boys never wash their socks and underwear, only 33% of girls are not involved in these activities. Furthermore, respondents indicated that 38% of girls participate in this activity daily, in comparison to only 13% of boys. Evans (1994) reported that in Mali and Namibia, chores are allocated according to gender, with girls doing household chores and boys doing chores outside the home, like fetching water and chopping firewood. Evans's (1994) results are representative of children living in rural settings, whereas the findings of this study are representative of children in an urban setting. However, it could be hypothesised that boys may be involved in outdoor chores that were not included in the interview schedule.

Participation in setting the table and assisting with preparing meals was less than 50%, with the main reason for non-participation being attributed to the child's age. With regard to setting the table, 33% of the respondents indicated that they do not eat at a table. Children's involvement in preparing meals was also restricted as respondents expressed their concerns about safety. The impact of space restrictions was evident in the fact that 61% of respondents indicated that children are not involved in gardening, and 58% of respondents stated that they do not have a garden.

While research in other African countries (Evans, 1994) and in South Africa (Bray & Brandt, 2007) found that children frequently participate in chores, this study showed different results. These include the child's age, safety concerns and family structure, as more adults are available to complete chores within an extended family structure. The impact of urbanisation and the fact that these children attend preschool may be contributing factors.

4.3.6 Spiritual activities

Religion and spirituality play an important part in children's lives and are vital to family relationships (Bartkowski, Xu & Levin, 2008). Religious activity is also reported to increase children's resilience and provide a sense of coherence within the family (Bartkowski et al., 2008; Mercer, 2006; Werner, 2000).

Table 4.14 Spiritual activities

Activity	Frequency		Partner		Purpose		*Importance for learning		Ranking
Church	Often	72%	Mother	31%	Spiritual	73%	Mean	2.71	1
			Family	28%					
	Sometimes	13%	Grandparent	25%	Educational	18%			
	Never	9%	Other	7%	Socialising	4%			
	Daily	5%	Parents	5%	Chore	4%	SD	0.45	
	Hardly ever	1%	Father	2%	Fun	1%			
	Total	100%	Sibling	2%	Total	100%			
			Total	100%					
Praying	Daily	78%	Family	46%	Spiritual	58%	Mean	2.66	2
			Mother	19%					
	Often	8%	Child	13%	Educational	33%			
	Sometimes	7%	Grandparent	11%	Care	4%			
	Never	7%	Other	5%	Fun	4%	SD	0.47	
	Total	100%	Parents	4%	Exercise	1%			
			Siblings	2%	Total	100%			
			Total	100%					
Ancestral ceremony	Never -*Not practised:61%*	61%	Family	49%	Spiritual	46%	Mean	2.40	3
	Sometimes	17%	Grandparent	23%					
	Hardly ever	16%	Mother	11%	Educational	31%			
	Daily	3%	Other	9%	Socialising	14%			
	Often	3%	Parents	5%	Care	9%	SD	0.49	
	Total	100%	Father	3%	Total	100%			
			Total	100%					
Funerals	Never -*Age: 76%*	79%	Family	79%	Spiritual	63%	Mean	2.05	4
	Hardly ever	14%S	Mother	11%	Educational	16%			
	Sometimes	7%	Grandparent	5%	Care	11%			
	Total	100%	Father	5%	Socialising	5%	SD	0.40	
			Total	100%	Other	5%			
					Total	100%			

* Importance for learning: a rating of <2 implies that an activity was rated as not important for learning; a rating between 2 and 2.5 indicates that an activity was rated as important; and a rating of >2.5 shows an activity rated as very important.

The importance of religious activity is emphasised by the findings in Table 4.14 showing that 78% of the children pray daily and 72% attend church once a week. Furthermore, the involvement of the family is evident in that the child participates in both these activities with varied family members. While attending church and praying were viewed mainly as spiritual activities, 33% of the respondents classified praying as educational as well. Participants in the focus groups reported that children attend church to learn about their religion, to become good Christians, to learn how to pray, and to be thankful for what they have. Age differences for praying are displayed in Table 4.15.

Table 4.15 Age differences for praying

Activity	Age	Never	Sometimes	Often	Daily	p- value
Praying	3-3.11years	10%	13%	17%	60%	
	4-4.11years	7%	7%	0	86%	0.02
	5-5.11years	3%	0	7%	90%	

Fisher's exact test showed significant age differences for praying: 86% of children aged 4-to-4.11-years and 90% of children aged 5-to-5.11-years pray daily, in comparison to only 60% of 3-to-3.11-year-olds. The differences in praying may be explained by Fowler's Stages of Faith Profile, which identifies six stages of faith through which an individual develops. This model asserts that faith and identity evolve in conjunction with cognitive, psychosocial and moral development capacities (Mercer, 2006). The understanding of narratives and the ability to distinguish the self from others in order to develop a God representation may also be necessary in the development of religious understanding (Streib, 2001).

Evans et al. (2008) reported widespread accounts of families abandoning key traditional practices in place of modern ones. This is exemplified by results of this study which show that 85% of children were not involved in ancestral ceremonies, and 79% reported that children do not attend funerals. While the child's age was stated as the main reason for non-participation, it is also postulated that this practice has declined as families have become more modernised. Table 4.16 gives an overview of results in this category.

Table 4.16 Summary of spiritual activities

Frequency	%
Never	39
Daily	21
Often	21
Sometimes	11
Hardly ever	8
Total	100
Partner	**%**
Family	50.5
Mother	18
Grandparents	16
Other	5.25
Parents	3.5
Self	3.25
Father	2.5
Siblings	1
Total	100
Purpose	**%**
Spiritual	60
Educational	24.5
Care	6
Socialising	5.75
Fun	1.25
Work	1
Other	1.25
Exercise	0.25
Total	100

While the frequency of participation for this category as a whole indicates that 39% of children never participate in spiritual activity, results should be viewed in light of the very high participation levels for praying and going to church, as opposed to lower participation rates for attending ancestral ceremonies and funerals. Table 4.14 shows that the majority of children (over 90%) pray and attend church at least once a week. These activities, in which 50.5% of respondents indicated that whole family is involved, were rated as very important for learning in Table 4.14 The important role that spiritual activity plays in the family context highlights the need for 'spiritually competent care' which requires a basic knowledge about, and appreciation for those perspectives which differ from one's own (Mercer, 2006). She adds that clinicians need to develop the art of paying attention to children on many levels all at once. This focus may be particularly

challenging for practitioners who have not previously considered the impact of religious or spiritual activity on child development.

4.3.7 Family activities

Family activities are a critical family and child resource, as they transmit family beliefs and values and provide the family with a sense of stability, identity and a means for socialisation within a cultural context (Spagnola & Fiese, 2007; Schuck & Bucy, 1997). These activities may also serve as a coping mechanism during times of stress (Sameroff & Fiese, 2000). It is evident from results already discussed, that the whole family plays an important role in most activities in which the child is involved. Table 4.17 specifically highlights those activities where the child has an opportunity to interact and socialise with the family.

Table 4.17 Family activities

Activity	Frequency		Partner		Purpose		*Importance for learning		Ranking
Family gatherings	Sometimes	53%	Family	84%	Socialising	59%	Mean	2.46	1
	Hardly ever	27%	Mother	6%	Fun	13%			
	Often	16%	Grandparent	3%	Care	10%			
	Never	2%	Father	3%	Educational	9%	SD	0.54	
	Daily	2%	Parents	3%	Other	9%			
	Total	100%	Siblings	1%	Total	100 %			
			Total	100%					
Visiting family or traditional home	Hardly ever	48%	Mother	34%	Socialising	45%	Mean	2.34	2
			Family	29%	Care	15%			
	Never -Don't have:74%	25%	Grandparent	14%	Fun	13%			
			Parent	7%	Educational	13%			
	Sometimes	20%	Father	6%	Spiritual	10%			
			Other	4%	Exercise	2%	SD	0.56	
	Often	7%	Siblings	3%	Chore	2%			
	Total	100%	Total	100%	Total	100 %			

Activity	Frequency		Partner		Purpose		*Importance for learning		Ranking
Visiting family and friends	Often	37%	Mother	29%	Socialising	51%	Mean	2.15	3
			Child	14%	Fun	19%			
	Sometimes	27%	Family	12%	Care	13%			
	Daily	21%	Grandparent	9%	Educational	10%			
			Siblings	9%	Exercise	4%			
	Never -*Safety:66%*	13%	Friends	9%	Spiritual	3%			
	Hardly ever	2%	Other	8%	Total	100 %	SD	0.58	
	Total	100%	Parents	4%					
			Total	100%					

* *Importance for learning: a rating of <2 implies that an activity was rated as not important for learning; a rating between 2 and 2.5 indicates that an activity was rated as important; and a rating of >2.5 shows an activity rated as very important.*

Most children participate in visiting family and friends and attending family gatherings at least once a month. While the whole family participates in family gatherings, varied partners were indicated for visiting family and friends in the neighbourhood. Less frequent visits are conducted to the family or traditional home; with 75% of respondents reporting that children visit the traditional home at least once a year. Thirty-four percent of children visit with their mother only and 29% visit with the whole family. Family activities which were rated as important for learning were perceived mainly as socialising. Family activities, summarised in Table 4.18 have been reported to enhance both child and family outcomes (Schuck & Bucy, 1997).

Table 4.18 Summary of family activities

Frequency	%
Sometimes	33
Hardly ever	26
Often	20
Never	13
Daily	8
Total	100
Partner	**%**
Family	42
Mother	23
Grandparents	9
Child	6
Father	5
Parents	4
Siblings	4
Other	4
Friends	3
Total	100
Purpose	**%**
Socialising	51
Fun	15
Care	13
Educational	11
Spiritual	4
Other	3
Exercise	2
Work	1
Total	100

Due to the nature of these activities, participation is less frequent with 33% of respondents reporting that children participate at least once a month in family activities. Forty-two percent of respondents indicated that children participate mainly with the whole family. Family activities, which were classified as socialising by 51% of respondents, allow children an opportunity to be socialised within their culture.

4.3.8 Community-based activities

Community life provides children with a range of experiences in the context of family outings, neighbourhood, community celebrations and other community activities (Dunst, 2001). The type of activities afforded to children is dependent on the context in which

they live. The activities discussed here highlight those activities that most children participate in.

Table 4.19 Community activities

Activity	Frequency		Partner		Purpose		*Importance for learning		Ranking
Park	Never -*Time:33%* -*Safety: 23%*	34%	Family	35%	Fun	41%	Mean	2.47	1
			Mother	24%	Socialising	20%			
	Sometimes	30%	Parents	11%	Educational	19%			
			Father	8%	Care	10%			
	Hardly ever	18%	Friends	8%	Exercise	8%			
	Often	13%	Grandparent	5%			SD	0.67	
	Daily	5%	Other	5%	Spiritual	2%			
	Total	100%	Child	2%					
			Siblings	2%	Total	100%			
			Total	100%					
Spaza shop	Daily	38%	Child	33%	Educational	28%	Mean	2.14	2
			Other	21%					
	Never -*Age:48%* -*Safety:44%*	26%	Siblings	14%	Exercise	28%			
			Friends	11%	Fun	17%	SD	0.59	
	Often	22%	Mother	9%	Chore	9%			
			Family	4%	Socialising	9%			
	Sometimes	14%	Grandparent	4%	Care	9%			
	Total	100%	Father	4%	Total	100%			
			Total	100%					
Shopping malls	Often	56%	Mother	44%	Fun	39%	Mean	2.22	2
			Family	19%	Educational	21%			
	Sometimes	43%	Parents	13%	Socialising	20%			
			Grandparent	12%	Care	12%			
	Hardly ever	1%	Father	7%	Exercise	6%	SD	0.58	
			Other	4%	Spiritual	1%			
	Total	100%	Friends	1%	Other	1%			
			Total	100%	Total	100%			
Eating out	Sometimes	59%	Mother	38%	Fun	38%	Mean	2.22	2
			Family	22%	Socialising	29%			
	Often	38%	Parents	13%	Care	21%			
			Father	10%	Educational	8%			
	Never -*Money:33%* -*Time:33%*	3%	Grandparent	9%	Spiritual	2%	SD	0.56	
	Total	100%	Other	8%	Exercise	1%			
			Total	100%	Other	1%			
					Total	100%			

Activity	Frequency		Partner		Purpose		*Importance for learning		Ranking
Taxi ride	Often	44%	Mother	51%	Fun	26%	Mean	2.12	3
			Grandparent	16%	Educational	26%			
	Sometimes	36%	Parents	14%	Exercise	16%			
	Never -*Own transport:92%*	14%	Family	10%	Care	13%			
	Hardly ever	4%	Other	7%	Socialising	12%			
	Daily	2%	Father	1%	Other	5%			
	Total	100%	Siblings	1%	Chore	1%	SD	0.67	
			Total	100%	Spiritual	1%			
					Total	100%			
Weddings	Never -*Age:32%*	46%	Mother	41%	Socialising	45%	Mean	2.12	3
			Family	35%	Fun	29%			
	Hardly ever	30%	Grandparent	16%	Care	12%			
	Sometimes	24%	Parents	6%	Educational	10%	SD	0.59	
	Total	100%	Father	2%	Exercise	2%			
			Total	100%	Spiritual	2%			
					Total	100%			
Parties	Sometimes	67%	Mother	42%	Fun	51%	Mean	2.00	4
			Family	14%	Socialising	42%			
	Hardly ever	19%	Other	12%					
			Parents	10%	Care	4%	SD	0.59	
	Never -*Age:55%*	12%	Siblings	10%					
	Often	2%	Friends	6%	Educational	2%			
			Father	5%	Spiritual	1%			
	Total	100%	Grandparent	1%	Total	100%			
			Total	100%					

Importance for learning: a rating of <2 implies that an activity was rated as not important for learning; a rating between 2 and 2.5 indicates that an activity was rated as important; and a rating of >2.5 shows an activity rated as very important.

Visiting shopping malls has rapidly become an important and valuable 'cultural' form which is popularly seen as a mixture of convenience and leisure (Murray, 1997). The accessibility of shopping malls to residents of Soweto has increased over the past five years, with two major malls built in 2005 and another three in 2007 (Mazibuko, 2007). Results presented Table 4.19 show that 99% of respondents indicated that children visit shopping malls, with 44% going at least once week and 43% visiting at least once a month. The opening of shopping malls has also increased the availability of fast food outlets to families living in Soweto, and 59% of respondents stated that children eat out at least once a month and 38% of children eat out once a week. Participants in the focus

groups reported that they eat mainly at McDonald's, Kentucky Fried Chicken and Wimpy. Most children visit shopping malls and eat out with their mother. It is interesting that visiting shopping malls and eating out are the only two activities where 13% of respondents indicated that both parents are involved together. Thirty-nine percent of respondents perceived a visit to the shopping mall as fun while 21% saw it as educational. Eating out was also seen as having varied purposes which included fun (38%), socialising (29%) and care (21%). It is interesting to note that with 52% of caregivers not being formally employed; families still frequent shopping malls and eat out at least once a month.

'Spaza' shops, which are defined as home-based enterprises often within walking distance of children's homes, provide another shopping option to residents in Soweto (Ligthelm, 2005). The frequency of trips to the spaza shop is more varied with 38% going daily, 22% often and 14% sometimes. Thirty-three percent of respondents reported that children go to the spaza shop on their own which corresponds with Ligthelm's (2005) finding that 56% of customers at spaza shops in Mamelodi, near Pretoria, were children.

Going to the spaza shop was viewed as having different purposes: 28% of respondents saw it as educational, another 28% as exercise and 17% as fun. The educational value was identified by Brouwers, Mishra and van de Vijver (2006), who stated that purchasing items from small local shops provides children with the opportunity to understand causality and carry out simple arithmetical calculations. Ogunnaike (2002) found in a study in Nigeria that children who engaged in purchasing items scored significantly higher on the Yoruba Mental Subscale than children who did not engage in such errands. These errands were reported to provide the African child with opportunities to learn about the environment, the dynamics of interacting with others, and the opportunity to practice being helpful and responsible, which are important lessons in African culture (Nsamenang, 1992).

Large percentages (67%) of children attend parties at least once a month, mostly with a partner. As displayed in Table 4.20, children's attendance shows significant differences

in relation to their gender, with more boys attending in comparison to girls. Even though children always attend with someone else, this finding could be related to safety concerns for girls. Kruger and Chawla (2005) found that parents in four residential areas in South Africa were concerned about their daughters' safety and therefore restricted them from going outdoors. In addition, police reports indicate that nearly 20 000 girl children are raped each year (Jewkes, Penn-Kekana & Rose-Junius, 2005). These safety concerns for girl children could be an attributing factor as to why more boys are allowed to attend parties.

Table 4.20 Gender differences for attending parties

Activity	Gender	Never	Hardly ever	Sometimes	Often	p-value
Attending parties	Boys	2%	27%	67%	4%	0.003
	Girls	22%	11%	67%		

A large number of children (46%) never attend weddings due to their age. Those who do attend, do so at least once a year, mainly with their mother. Most children ride in a taxi at least once a month. A taxi ride was perceived as having different purposes, with 26% of respondents seeing it as fun and another 26% as educational.

The frequency of children's visits to the park were varied with 5% going daily, 43% at least once a week or sometimes, and 18% going at least once a year. Thirty-four percent of respondents indicated that children never visit a park, which could be due to parks often being unsafe with broken equipment (Kruger & Chawla, 2005). The concern about safety could once again explain why children's participation in this activity is limited. Forty-one percent of respondents classified visiting the park as fun.

The results in this category provide a diverse picture and it is evident that modernization, through the form of shopping malls, has created exposure that families in this context may previously not have experienced. The concern about safety plays a role in the type

and frequency of community activities that children participate in. Table 4.21 gives a summary of community activities.

Table 4.21 Summary of community activities

Frequency	%
Sometimes	39
Often	25
Never	19
Hardly ever	10
Daily	7
Total	100
Partner	**%**
Mother	36
Family	20
Parents	9
Grandparents	9
Other	8
Father	5
Child	5
Siblings	4
Friends	4
Total	100
Purpose	**%**
Fun	34
Socialising	25
Care	12
Educational	16
Exercise	9
Spiritual	1
Other	1
Chores	1
Total	**100**

Results show that most children participate in community activities at least once a month. The majority of children participate in these activities with an adult. This could be related to safety concerns as discussed earlier. Results also show that community activities are seen as the second most fun category, when compared to all other categories.

4.4 Caregiver Perceptions

Four open-ended questions were included in the interview to ascertain caregiver perceptions about opportunities for learning within the family context.

4.4.1 Additional activities

The first question aimed at determining if there are any other activities that children are involved in which were not included in the interview schedule. Table 4.22 shows that 49 respondents (54%) did not add any activities, which suggest that the procedures followed in the preparatory phase of the study, were comprehensive. Various play activities, which included soccer, wrestling and basketball, were added by 22 respondents. Only nine respondents added household chores, which included washing dishes, sweeping, cleaning shoes and preparing the bed. A further nine respondents included more educational activities, which comprised of building puzzles, counting, writing and recitations. Seven respondents added entertainment activities like watching DVDs, playing computer games and going to movies – this low number could explain why these activities were excluded by participants in the focus groups.

Table 4.22 Additional activities added by respondents (N=90)

Category	Frequency (N=90)	Percentage
None	49	54
Play	22	24
Household chores	9	10
Education/literacy	9	10
Entertainment	7	8

4.4.2 Important lessons learned at home

Children are exposed to different types of activities and experiences depending on the beliefs and values of the particular cultural group to which they belong (Tudge et al., 2006). In order to determine these beliefs, respondents were requested to list the things that they consider as most important for the child to learn at home.

Table 4.23 shows that 45 out of 90 respondents (50%) identified morals and values as the most important lesson at home. Respondents included respect, sharing, manners, kindness and community service amongst the values that they wanted children to gain from home. This finding relates to the fifth variable of activity settings: salient goals and beliefs,

which was discussed in Chapter 2. The morals and values aspired to, are closely linked to the philosophy of *ubuntu* which is concretised by components such as respect for persons and the importance of community, personhood and morality (Mnyaka & Motlhabi, 2005). The attainment of one's personhood is therefore closely linked to one's connectedness to others. Carrying out duties that contribute to the well-being of others gives an individual the full status of a human being (Hanks, 2008; Mnyaka & Motlhabi, 2005; Nussbaum, 2003). According to Hanks (2008) harmony, cooperation and interdependence are essential life skills every African child learns from a very early age. Activities which provide an opportunity to teach morals and values are likely to include mealtimes, having conversations, listening to and telling stories, praying, attending church and watching television. Results discussed earlier show that children participate in these activities with the whole family, which could be interpreted as the best times for these lessons to be shared.

Self-care and hygiene were identified as important by 43 of the 90 respondents (48%), while only 22% stated that educational and literacy activities were important to learn at home. Research has shown that many Mexican American families believe that schools are responsible for children's education and that parents should not interfere with this (Hammer et al., 2007). Home practices may therefore focus on teaching the things that families feel confident and competent to share with their children. Weigel et al. (2005) pointed out that programmes which aim at strengthening children's literacy environments should also focus on enriching parental literacy habits and reading beliefs. They proposed that programmes should include components on adult basic education and adult literacy. This focus may make caregivers more confident in facilitating literacy in the home environment. This finding may also explain caregiver perceptions of activities as care or educational. Activities in the child routine category were classified mainly as care, but explained as educational by participants in the focus groups who stated that it was their responsibility to teach children to become independent. Caregivers may have perceived tasks related to those carried out at school as educational, and those that teach responsibility as care.

Twenty four respondents (27%) identified culture and family as important lessons from home. Responses which fell under this category included getting to know one's family, speaking one's home language, knowing family traditions and principles, as well as understanding where the family originates from. Sameroff and Fiese refer to this practice as the 'family code' which is defined as "a cause and consequence of what families do on a regular basis and how values and beliefs are directly imparted to children" (2000, p.145). The family code is transferred through the activities that families share, like mealtimes and family gatherings where family stories are shared to help children make sense of the world and to impart values. This result relates to the fourth variable of activity settings, which are the scripts that guide children's participation; these scripts are determined by cultural norms and beliefs. In addition, this result provides further support for the perceived importance of family activities as displayed in Table 4.17. Storytelling is another activity which could meet this goal, which was discussed earlier. It was highlighted that grandmothers have the role of sharing stories about their past with children to ensure that they learn family traditions and principles. Eighteen respondents (20%) stated that communication is important. Communication behaviours that were considered as important included: communicating with family members, learning to speak English and talking 'properly'. This emphasis on learning English was discussed earlier, namely that children watch television to learn English.

In agreement with earlier findings, religion was identified as important by 18 respondents. According to Werner (2000), a number of studies on resilient children from a wide variety of socio-economic backgrounds noted that their families held religious beliefs that provided stability and meaning to their lives, especially in times of stress. Fourteen respondents listed household chores, which correlates with earlier results on children's limited participation in chore activities. Only six respondents mentioned play as an important activity to learn at home. This could be related to the belief shared earlier that children play 'naturally' by themselves, and that caregivers do not need get involved in children's play (Furth, 1996).

Table 4.23 Important lessons learnt at home

Catergory	Frequency (N=90)	Percentage
Morals and values	45	50
Self-care and hygiene	43	48
Educational/literacy	24	27
Culture/Family/Tradition	20	22
Communication	18	20
Religion	15	17
Household chores	14	15
Play	6	7

4.4.3 Activities that the child enjoys

Children's interests influence their participation in activities; when their interests are used as a basis for their involvement in everyday activities, they are more engaged and therefore more likely to practice existing capabilities and acquire new skills (Raab, 2005). Children's interests were identified by asking caregivers to list the activities that made the child laugh and smile, or that they enjoyed.

While play was not identified as an important lesson to learn at home, Table 4.24 shows that 72 respondents (80%) stated that children enjoy playing. This highlights that while caregiver involvement in play may be restricted and play may not be seen as an important lesson at home, caregivers still recognise that children enjoy play activities. This correlates with results displayed in Table 4.6, which show that play activities were classified mainly as fun. Entertainment and social activities were identified by 52 respondents (58%); these activities included watching television, socialising and communicating with family, as well as family outings. Singing and dancing were identified by 51 respondents (56%) as activities that the child enjoys. Most activities referred to in this section were discussed earlier under the entertainment and family categories. The high participation levels indicated in Table 4.10 and 4.17 are indicative of children's enjoyment of these activities.

Table 4.24 shows that educational/literacy, self-care, household chores and religious activities were identified by only a few respondents as activities that the child enjoys. This result correlates with earlier findings in which only 9% of respondents classified early literacy activities as fun. Similarly, as indicated in Table 4.2, less than 20% of respondents classified self-care activities (bathing, dressing and undressing, toileting, washing hands and brushing teeth), as fun. The low participation levels for chore activities outlined in Table 4.12 could be explained by this result. Finally, the results on spiritual activities displayed in Table 4.14 show that less than 5% of respondents classified spiritual activities as fun.

Table 4.24 Activities that the child enjoys

Category	Frequency (N=90)	Percentage
Playing	72	80
Entertainment/social	52	58
Singing and dancing	51	56
Education/literacy	15	17
Communication	14	16
Self-care	11	12
Household chores	9	10
Other	3	3

4.4.4. Perceptions on how children learn

Parents' beliefs on how children learn are influenced by their own cultural background and histories. Historically in Africa, children learned and were taught as they participated in the daily living activities at home through ceremonies, direct instructions, observations and apprenticeship (Aidoo, 2008). Caregiver beliefs impact on the types of experiences that children are afforded within their daily lives (Gaskins, 1999). In the discussion of the developmental niche concept in Chapter 2, it was noted that "caretaker beliefs and practices" impact on the activities afforded to children. In order to understand caregiver perceptions on children's learning, respondents were requested to complete a sentence which read: "My child learns best by...".

Results indicated in Table 4.25 show that 48 respondents (53%) reported that children learn best by participating in activities. Responses in this category (Appendix L) consisted mainly of statements relating to children doing things on their own, which again highlights the importance of learning responsibility. In comparison, only 11 respondents reported that children learn best through observation.

Family time was mentioned by 24 respondents (27%) as a time when children learn best; this included spending time with various family members, listening to stories and communicating. As stated previously, it is during these activities that children are most likely to learn the morals, values and family traditions that were identified by respondents as important lessons. Even though the introduction to this question clarified that it related to learning in the family context, 17 respondents identified school as the place where the child learns best. This could be related to the view shared by focus group participants that certain activities like reading are best left to teachers.

Table 4.25 Caregiver beliefs on how children learn

Category	Frequency (N=90)	Percentage
Participation	48	53
Family Time	24	27
School/crèche/ASHA	17	19
Observation	11	12
Other	2	2

4.5. Conclusion

Results on activity settings show that activities are affected by the context in which they occur. Children are involved in varied activities with varied participation levels and partners. Child routine activities, due to their nature, have the highest participation levels. These activities, with the exception of being carried on the caregiver's back and having a haircut, were rated as being very important for learning. Activities in this category were also acknowledged in the open-ended questions by 43 respondents as an important lesson

from home, which help children to learn to be independent and responsible. The impact of physical and social context was highlighted.

Children participate in a number of play activities with other children. Results show that caregiver participation is minimal. This resonates with findings in the literature that parents do not see a need to get involved in children's play. While play activities were rated as important for learning, only 7% of respondents identified play as an important lesson from home. Respondents acknowledged that children enjoy play activities the most; however, concerns regarding safety and space restrict children's play away from home. Respondents indicated that playing with water and sand are not important for learning; this view was also expressed by some respondents in explaining why children did not play with blocks.

Results on early literacy activities indicate that all activities in this category were rated as very important for learning, with colouring, painting and drawing achieving the highest mean. Only 27% of respondents identified early literacy activities as an important category of activities to learn from at home. This resonates with views expressed by focus group participants that activities like reading should be addressed at school and not at home. Results on entertainment activities highlight the need to investigate these more broadly in terms of the opportunity they present for learning. Most children spend time watching television, which respondents classified as an educational experience. Watching television was considered as a safer option to playing outdoors and the benefits of learning 'proper' English were also stressed. Connard and Novick (1996) noted that keeping children inside may be a coping mechanism in an unsafe neighbourhood, but this could also impede children's development.

Children's participation in chores was minimal, which could be related to their young age and that there are many adults available within the extended family structure to complete these chores. The importance of family emerged throughout the discussion as children participated in activities with various family members. Family activities were also seen as a time for children to socialise and learn family traditions and values. The importance of

morals and values was stressed, and 45 respondents indicated that it is important for children to learn these from home. There was a strong emphasis on culture, family and religion through praying and attending church, as well as the critical role that grandmothers play in relating stories about the past to children.

The impact of modernisation and urbanisation is seen through the high percentage of children who visit shopping malls, eat out and play arcade games. Children participate in these activities at least once a month; this is surprising considering that these activities are relatively expensive. Safety concerns were expressed to explain children's lack of participation in some community activities. It is very significant that most respondents recognised that children learn best by participating in activities. Research carried out by Dunst and colleagues show that using everyday activities as sources of children's learning opportunities has positive benefits on both child and parent outcomes (Dunst, Trivette, Hamby & Bruder, 2006).

4.6 Summary

This chapter presented a discussion of results of the study in relation to the aims; the main aim of the study was to determine the activity settings of typically developing 3-to-5-year-old children living in a poor urban context. The chapter commenced with a description of the context in which activities occur; thereafter results were presented and discussed within categories of activities. Activity settings were presented in terms of the level of participation, the partners involved, the purpose attributed to activities, and the perceived importance of activities for learning. Each section was concluded with a summary of that particular category. Finally, caregiver perceptions on learning were highlighted. These results have highlighted activity settings of typically developing children within the family context.

CHAPTER 5
CONCLUSION

5.1 Introduction

The aim of the study was to identify family activity settings that typically developing 3-to-5-year-old children participate in, in a low-income African context. This chapter provides a summary of the research findings, clinical implications, an evaluation of the strengths and limitations of the study, and finally, recommendations for further research.

5.2 Conclusions

This study focused on the identification and description of the activities that young children engage in within a family context as a basis for early childhood intervention. It emerged that most of the families who participated are multigenerational and headed by a grandmother, with the mother taking on the main responsibility for child routines.

The findings are summarised by referring to the three main components of the results i.e. the frequency of participation in activities, the partners involved in activities and the respondents' perceptions of the activities as an opportunity for learning.

Results showed that children are involved in a variety of activities. Children participate in most child-routine activities daily. The type of play activities that children were exposed to was dependent on their context in terms of safety, money, space and caregiver beliefs about the importance of activities for learning. The play activities that most children participate in daily include: running, jumping and chasing; playing with toys; pretend games; and lap games. The frequency of participation in early literacy activities was varied with most children participating daily in having a conversation, telling and listening to stories, and reading or looking at books. Focus group discussions revealed that caregivers believe that school-related activities like reading are best addressed at school.

Findings show minimal participation levels in chore activities which are related to family structure, as more family members are available in the extended family system to complete household chores. Safety concerns and the child's age were expressed as reasons for non-participation in household activities such as assisting with preparing a meal. The significance of spiritual activity, especially praying and attending church, was displayed by high participation levels in these activities. Family activities, which have an important role in learning about family traditions and history, occurred less frequently. The findings on community activities indicate that children visit shopping malls and eat out at least once a month.

The predominant family structure, as mentioned earlier, was an extended, multigenerational family system headed by a female. Only a small percentage of fathers live with their children. This emerged as a significant finding as fathers were not indicated as the main partner for any of the activities. While the child's mother was indicated as the main partner for most activities, results show that children are involved with multiple partners. The child's grandmother was involved in some child routine activities and was the main partner for "telling stories". This tied in with the identified role of elders relating to culture and tradition through oral storytelling.

The child's family was indicated as the main partner for entertainment, spiritual, as well as family activities. One of the most significant findings with regard to partners is that children mainly play with other children and that caregiver involvement in this activity is limited. The results on partners highlight the importance of investigating family structure and how it impacts on who the child participates with in activities. This result draws attention to the limitation of focusing only on the mother-child dyad.

Respondents mainly classified the purpose of child routine activities as care and education. The perceived educational value of these activities was demonstrated in the rating of most of the activities in this category as being very important for learning. The results of open-ended questions further demonstrate that respondents saw these activities as important to teach children responsibility and how to take care of themselves within the family context. Respondents displayed awareness that children do not regard self-care routine activities as fun. While play activities were not regarded as important lessons to gain from home, respondents acknowledged their importance for learning. Only two play activities, playing with water and sand, were rated as not important for learning, but respondents stated that children do enjoy these activities.

All early literacy activities were rated as very important for learning; however only 24 respondents rated these activities as important lessons to learn at home. This correlates with the statement made by focus group participants that school-related activities should be addressed by teachers. Entertainment activities were perceived as fun and educational, which was confirmed in the open-ended question, where 58% of respondents identified the child's enjoyment of these activities. Spiritual activities were seen as very important for learning, which ties in with the finding that identified learning morals and values as the most important lessons at home. Family activities were seen mainly as having a socialising purpose; these activities were also seen as a context where morals and values are taught. Community activities which were rated as important for learning were perceived as fun and socialising.

These findings draw attention to the importance of understanding how caregivers perceive activities, as this gives an indication of what they consider as important lessons from home. Intervention approaches that are more closely aligned to these views are less likely to disrupt family functioning and therefore increase the sustainability of programmes. This study has attempted to address the call to support the "development of a science of child development that is not narrowly constructed on the lives of a small minority of the world's children, but rather a science that opens up to other populations and other possibilities" (Pence and Marfo, 2008 , p. 85).

5.3 Evaluation of research

5.3.1 Strengths of the study

This study assists in building on the 'indigenous' knowledge-base of children and families in an African context, thus heeding the call being made to increase the knowledge-base "about Africa for Africa" (Pence et al., 2008). The use of activity settings as a means to understand the child in context is grounded in a theoretical basis which is aligned to the strengths-based perspective of family-centered practice. The findings have increased the knowledge-base about children within their natural environments which are rich with opportunities for learning.

5.3.1.1 The survey instrument

The development of the research instrument followed a comprehensive process to ensure that the tool was valid. The preparatory phase included various stages that focused on the development and validation of this instrument. Validation was achieved through focus group discussions as well as consultation with an expert panel.

5.3.1.2 Use of structured interviews

- Face-to-face structured interviews were used due to the varied literacy levels of respondents. The interviews proved to be effective, as all respondents were able to answer questions without assistance. Visual displays of response options aided in helping respondents to recall response options.

- The script followed by the researcher to ensure standardisation of the interviews was effective, as displayed by the 100% inter-rater reliability rating. The questionnaire layout was easy to use during the interview and the questions followed a logical sequence.

- As most respondents in the preparatory phase of the study did not require an interpreter, the researcher conducted all interviews in English. All respondents coped with English in the main study, indicating that the decision not to have an interpreter was appropriate.

5.3.2 Limitations of the study

Some specific changes to the questionnaire that are recommended for future research include:

- Specification of the ages of other children who live in the house, as aunts and uncles of the child may have also been children.
- Adding 'not interested' as an option in question 11.2 in the interview schedule for why a child does not participate in an activity;
- Distinguishing between grandmother and grandfather as an option in 11.3.

The scope of this study centered around gaining information on the frequency of activities, the partners involved, and the perceived importance of activities for learning. Although much was gained from the data, a more in-depth understanding of the motivation and processes for participation in these activities would be useful, for example:

- Where activities take place – this would enhance the understanding of how space and safety impact on activities. This would also provide further insight into the family context.
- Watching television – monitoring what children watch and for how many hours a day.
- Having conversations, listening to stories and telling stories – finding out about the content of these activities, and it would also be interesting to note if these differ according to age group.

5.4 Recommendations for further research

Due to the paucity of research in the area of early childhood intervention in South Africa, there are countless opportunities to build on and expand the current study. Suggestions for further research follow:

- Results of this study may be further validated by adding an observational component, where children could be observed for a period of time within the family context. In addition, further in-depth interviewing of caregivers may provide deeper insight into activities and how they could be utilised as opportunities for learning. An example would be finding out more about the type of pretend games that children play, as well as the toys that they have. In-depth interviewing can also assist in exploring the reasons for children's limited involvement in chore activities.

- A study of activity settings in varied contexts, namely rural and urban communities with different economic backgrounds, would be useful to compare patterns of participation in different settings. It is hypothesised that the varied physical and social settings within these contexts would influence the type of activities that children participate in. Differences may also be noted in children's participation in chore activities, as children in rural settings may be more involved in chores inside and outside the home. Rural communities are possibly also considered to be safer than urban communities which have less outdoor space for children to play. Caregiver perceptions may also differ within these contexts as learning may have different meanings attached to it within each setting. The impact of modernisation in urban settings, through shopping malls and the access to preschool education, may also impact on children's activities in this context.

- Further exploration of the role of children in multigenerational families may be important, considering that this is the predominant family structure in most of Africa. Such a study should focus on the quality and quantity of interactions. It

may be beneficial to investigate the conversational length and the number of conversational turns the child has in this setting.

- Replicating this study for children with disabilities will provide information on the type of activities that such children participate in within the family context. Meaningful insight may be obtained about inclusive practices within the family and community setting. Similarly, a profile of activity settings of children who are infected and affected by the HIV/AIDS pandemic could be developed, as this population of children has increased remarkably over the past decade in South Africa and the rest of Africa.

- Investigating community activity settings in further detail could assist in helping families identify resources within their communities. This information could be used to motivate for improved accessibility and safety of community activity settings.

5.5 Summary

This chapter summarised the main findings of the research that were described in Chapter 4. The clinical implications of results were pointed out. The study was critically evaluated with recommendations for changes. Finally, recommendations for future research were made. In summary, this research aimed at identifying family activity settings in which typically developing three-to-five-year-old children participate, in a low-income African context. This was achieved through conducting structured interviews with caregivers of children.