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The home environment and parental involvement of preschoolers in Philippi, a low-income area: Do they hinder or support early learning?

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Background: Successful interventions targeting families can only occur through informed research findings. It is important that policymakers understand the unique household dynamics that low-income households face and the kinds of assistance they need to foster early learning and development at home.

Aim: To investigate the extent of parental involvement in the early learning of preschoolers in Philippi and the role of the home environment in promoting or hindering early learning and development.

Setting: This study was conducted in Philippi, one of the biggest poor urban settlements in the city of Cape Town, South Africa.

Methods: The researcher visited 20 early childhood development (ECD) facilities and 40 caregivers in Philippi. Face-to-face interviews were conducted with the ECD principals, practitioners and caregivers.

Results: The analysis of the results of the study revealed that, for the most part, preschoolers in Philippi live in household environments that do not encourage or support early learning and development. Moreover, parental involvement in such preschoolers is limited by the parents' unwillingness or inability to take up opportunities for involvement in the facility and to regularly engage in stimulation activities at home.

Conclusion: Given their low-income, low-educational status and general lack, parents need a clearer framework on how to become involved and how to provide a conducive household learning environment to preschoolers.

Keywords: early childhood development; vulnerable children; poverty; home environment; parental involvement; early learning; Philippi.

Introduction

The National Integrated Early Childhood Development Policy in South Africa defines early childhood development (ECD) as a period of human development from birth until a child starts formal schooling (Republic of South Africa 2015). The policy advocates and encompasses many aspects of ECD, including child health, nutrition, protection and early learning, the latter being the focus of this research paper. The policy further recognises the critical role played by caregivers in early learning and development through active involvement, stimulation, support and care (Department of Social Development 2006; Republic of South Africa 2015). Nearly all the early learning-related policies of the South African government not only acknowledge the role of caregivers, but also place the responsibility of early learning on the shoulders of parents. Because they live in unequal home environments and experience different levels of parental or caregiver involvement, children can be expected to experience varying opportunities for early learning and development.

Thus, reasoning that a child's educational outcomes cannot be detached from parental efforts and the influence of the home environment, this study investigated the role of the home environment and parental involvement in hindering or supporting the early learning and development of preschoolers in Philippi, one of the biggest poor urban settlements in the city of Cape Town in the Western Cape. The following research objectives were pursued:

1. To investigate the extent of ECD facility-based parental involvement in Philippi.
2. To determine the factors that influence parental involvement in preschooling in Philippi.

3. To describe the home environments of Philippi preschoolers and extrapolate their probable influence on early learning.

Whilst there is no exact definition, there are key features associated with a conducive household learning environment, such as the availability of learning materials, interactions between children and parents or caregivers and learning activities that support early learning and development (Lehrl, Evangelou & Sammons 2020). Parental involvement also involves different dimensions, including school or facility-based parental involvement and home-based parental involvement (Dookie 2013; Mukuna & Indoshi 2012). This study partially measures ECD facility-based parental involvement through their attendance of school meetings aimed at monitoring the progress of the child.

Successful interventions targeting families can only occur through informed research findings that aid a clear understanding of the problem. Although the findings of this research paper cannot be generalised to the entire country, low-income urban townships that bear similar characteristics to Philippi proliferate in South Africa. It is therefore important to understand the unique household dynamics that low-income households face and the kind of assistance they need to foster early learning and development at home. Even with government initiatives such as home visiting programmes, there is still not enough information to shed light on what is happening inside South African households in terms of early learning and development (Azzi-Lessing & Schmidt 2019). Conducting this research contributed insights and data to the body of knowledge in the field of ECD that will inform future policy for intervention.

Literature review

A conducive learning home environment and parental involvement are imperative in the South African context. Scholars and educational experts have often expressed concern about the low quality of and limited access to ECD facilities in the country (Ashley-Cooper, Van Niekerk & Atmore 2019; Janse van Rensburg 2015; Kotzé 2015). These concerns mostly affect children in low socioeconomic status (SES) communities and households. Where low SES families manage to gain access to ECD facilities in or near their communities, these facilities are often under-resourced and offer poor quality services (Statistics South Africa 2018). Given the unimpressive quality of ECD facilities in the country, a home environment conducive to early learning with parental involvement would compensate for the educational and development inequalities caused by poor ECD facilities and help to ensure that all children begin formal schooling on a more equitable footing.

Whilst the above studies link households of low SES with poor quality ECD facilities and reduced educational outcomes, other researchers have also shown that children from low SES households and communities are also less likely to receive parental support in their learning (Cashman, Sabates & Alcott 2021) and less likely be exposed to home environments that support early learning (Vally et al. 2015). Should these findings generally apply, it follows that the development and early learning opportunities of children from low SES households and communities are twice compromised and would require urgent intervention in one or both of the home and ECD facilities environments to improve early learning.

Heckman (2000, 2006, 2011, amongst others) has persistently argued that interventions to reduce the skills gap should precede formal schooling and that they should target families. One of the strongest motivations for conducive home environments and parental involvement in early learning is their suggested positive association with better educational outcomes for the child. In the short term, better educational outcomes are measured through a child's better performance in numeracy and literacy skills tests (Anders et al. 2012; Gordon & Cui 2014; Hartas 2011). Visser, Juan and Hannan (2019) investigated the impact of parental involvement through engaging in activities with the child, from before Grade 1 to later mathematics achievement in Grade 5. The study established that parental involvement in activities before Grade 1 was positively associated with learner success in mathematics in Grade 5. The positive relationship between reported parental involvement before Grade 1 and learner success in Grade 5 remained positive, whatever the child's SES. Similarly, Son and Morrison (2010) found that improvement in the home environment measured by learning material, language stimulation and academic stimulation positively affect language development in preschoolers.

In addition to cognitive skills, the positive presence of the two factors (i.e., a conducive learning home environment and parental involvement) may cultivate non-cognitive skills. According to Heckman (2006), non-cognitive skills such as perseverance, motivation and tenacity are crucial to success as a learner and as an adult. Without these non-cognitive skills, even children of normal intelligence may still underperform if they are not motivated to succeed or cannot persevere. Melhuish et al. (2008) found that the home environment and parental involvement cultivate non-cognitive skills such as increased motivation, propelling the child to perform better at school and have a positive outlook on the value of education.

This strong association of parental involvement and the home environment with a child's educational outcomes has inspired and informed the design of many ECD interventions in the world. Early childhood development interventions such as Head Start (Henrich & Gadaire 2008), the High/Scope Perry PreSchool Project (Schweinhart 2003) and the Madrasa Early Childhood Development Programme (Malmberg, Mwaura & Sylva 2011) all place parental involvement at the centre of the intervention together with the practitioner and the child, working from the premise that any intervention without the involvement of families and caregivers will struggle to achieve the optimum intended outcomes.

The unprecedented lockdown of ECD facilities along with much of the rest of the economy in March 2020 to curb the spread of the coronavirus disease 2019 (COVID-19) pandemic intensified the need for conducive household environments and parental involvement to support early learning and development. Preschoolers had attended about 3 months of schooling when the South African government implemented the nationwide lockdown (Republic of South Africa 2020). Early childhood development programmes were closed for 4 months from 18 March 2020, and even after the partial reopening of schools in June, with many parents unemployed or working from home, the numbers of children attending ECD centres were severely reduced and had only recovered to near prelockdown levels (augmented by new learners now old enough to attend ECD) by the end of the year (Wills, Kotze & Kika-Mistry 2021:1). Alarmed at the number of school days lost by South African learners, including preschoolers, some educational experts, notably Spaull and Van der Berg (2020), urged the South African government to allow children to return to schools and ECD facilities, citing low global infection and mortality rates amongst young children and the fact that children had access to school-based nutrition programmes, amongst other reasons. The issue of whether children would be better off at schools and ECD facilities or at their own homes in the face of the pandemic is, however, complicated by many factors. These include the household risks that many South African children face, particularly those associated with poverty, including low stimulation, inadequate safe play areas and amenities, inadequate supervision, low education levels of caregivers and inadequate nutrition. Residents in informal settlements have the added problem of not being able to isolate infected persons. On the other hand, poorer children may face a greater risk of catching and transmitting the virus at school in ways that do not necessarily apply to their better-off peers, such as through large classes limiting the possibility of social distancing, inadequate safety controls in schools and public transport and limits on access to personal protective equipment.

Theoretical framework

In assessing the influence of the home environment and parental involvement on early learning in Philippi, this study is guided by Bronfenbrenner's ecological systems theory, which asserts that a child is not raised in isolation, but their development is influenced by the child's different environments and the relationships within those environments. Bronfenbrenner's ecological systems theory describes a child's environment in terms of five levels: the microsystem, mesosystem, exosystem, macrosystem and chronosystem (Tudge et al. 2009), of which the micro and mesosystems are most pertinent to this study. The microsystem comprises the pattern of stimulation activities, roles and interpersonal relations experienced by the developing child in a given setting with particular physical and material characteristics (Bronfenbrenner 1979). This is the most influential and closest environment of the child, holding power to either promote or hinder the child's development. Because the microsystem equates to the actual home environment (physical and material characteristics) and the child's primary relationships, it includes the expected impact of parental involvement and the child's household environment on their learning and development. Parent–child interactions, stimulation and availability of educational toys, for example, make a positive and ongoing impact on developing a child's cognitive and noncognitive abilities. In South Africa, the Trends In International Mathematics and Science Study (TIMMS) (Isdale et al. 2017) confirmed a clear correlation between achievement in Grade 5 mathematics and parental involvement in seven preschooling early learning stimulation activities:

> [*R*]ead books, write numbers, watch educational TV, sing songs, play with alphabets, play with number toys, play word games, tell stories, talk about things you had done, talk about what you had read, write letters or words, read aloud signs and labels, counting rhymes or songs, count things, play shape games, play with building blocks and play board or card games. (p. 37)

The mesosystem is also relevant to the study as it refers to the interrelations amongst the different parts of a child's microsystem (Bronfenbrenner 1979). For this study, most pertinent are the interrelations between caregivers and the ECD facility, which include parental involvement in the facility (Gordon & Cui 2014), since both the extent to which the ECD facilities encourage and involve caregivers in children's early learning and caregivers' willingness to be involved in their children's ECD facility activities have a bearing on the learning experiences and progress of the child.

Research methods and design

This paper is a component of a thesis research project that aimed to evaluate the impact of facility and household-level factors on early learning and development in Philippi. The sample comprised 20 ECD facilities from which 20 principals, 20 practitioners and 40 caregivers (taking 2 caregivers in each facility) were interviewed.

Study design

Johnson, Onwuegbuzie and Turner (2007) argue that there are three types of mixed method research, namely qualitative-dominant research, equal status research and quantitative-dominant research. This study followed a qualitative-dominant research methodology, which emphasises an approach that:

> [*R*]elies on a qualitative, constructivist-poststructuralist-critical view of the research process, while concurrently recognising that the addition of quantitative data and approaches are likely to benefit most research projects. (Johnson et al. 2007:124)

Setting

This research was undertaken in Philippi, a low-income community comprising a mix of formal township, informal and peri-urban farm settlements, situated in the city of Cape Town metropole in the Western Cape province. Philippi is amongst the largest settlements in the metropole in terms of population size (Anderson, Azari & Van Wyk

2009). To reflect the different types of prevailing settlements, the research was undertaken in the following parts of Philippi: Acacia, Brown's Farm, Lower Crossroads, Marcus Garvey, Marikana and Thabo Mbeki. Although these sub-areas span the range from the more sparsely populated Philippi Horticultural Area and Philippi Industrial Area to the densely populated, low-income formal housing and informal settlements stretching towards Cape Town International Airport, and have varying levels of deprivation, they are all characterised by poverty, high unemployment and crime, with the sprawling informal settlements often also subjected to runaway fires and seasonal flooding.

Study population and sampling strategy

The researcher established contact with ECD facilities in Philippi to reach the caregivers of preschoolers. To select the ECD facilities, the researcher used non-random, purposive sampling (Babbie & Mouton 2001). Purposive sampling allowed the researcher to deliberately select ECD facilities as sources of data likely to provide rich information relevant to answering the research questions (Babbie & Mouton 2001; Onwuegbuzie & Collins 2007). Reasoning that every operating ECD facility, registered or unregistered, would need to physically identify their location to their market (displaying the name of the facility, brightly painted murals and visible play areas are typical examples of this), the researcher located all visible ECD facilities by driving through the study area, making every effort to visit each street in Philippi. Fifty-nine ECD centres were identified that may be considered a close approximate of the number of ECD facilities that exist in the Philippi sub-areas, albeit with the caveat that the actual number of facilities in Philippi may be greater, as there may be unregistered informal centres that choose not to be visible. The researcher selected 20 of the 59 facilities as the sample for the study and attempted to ensure that the sample was representative of the whole area.

The researcher used convenience sampling to select the caregivers. Convenience sampling is a non-random sampling strategy in which the sample is chosen based on accessibility to the researcher. Convenience sampling was employed because the researcher could not establish access to all the caregivers. That was partly because of the difficulty of navigating informal areas; moreover, the majority of the caregivers do not drop off or fetch their children at the facility. The preschoolers are typically dropped off and fetched by their relatively older siblings. The researcher considered caregivers who could be accessed at the respective facility as the available caregivers for the study. The researcher approached the caregivers at the ECD facilities to obtain their consent regarding participation in the research and scheduled appointments to conduct the interviews at the caregivers' homes. Two caregivers were selected from each of the 20 facilities, giving a total of 40 caregivers participating in the study.

For each sampled facility, interviews were conducted with the principal and the practitioner responsible for the highest grade, which was either Grade R or pre-Grade R; thus, a total of 20 principals and 20 practitioners were interviewed.

Data collection

The data was collected by the researcher through semi-structured interviews with the caregivers and ECD personnel. The interviews were tape-recorded with the consent of the interviewees and later transcribed. Data collection began on 05 November 2018 and was completed in May 2020.

Semi-structured interviews

The researcher asked each caregiver questions relating to the child's profile, caregivers' socioeconomic indicators, stimulation activities, availability of learning toys at home and parental involvement. The questions were constructed based on the reviewed literature, and the researcher also drew on the 2018 General Household Survey administered by Statistics South Africa for a section on stimulation at home (Statistics South Africa 2019). The questions for the ECD facilities were developed to verify the reported parental involvement of the parents and to establish whether caregivers were encouraged to be involved.

Data analysis

The researcher followed the six phases for conducting thematic analysis put forth by Braun and Clarke (2006), namely, familiarising oneself with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes and producing the report.

Ethical considerations

This study, including the methodology, was approved by the Humanities and Social Science Research Ethics Committee of the University of the Western Cape. The ethical clearance was granted on the basis of informed consent, anonymity and confidentiality granted to the participant. To protect the identities of the caregivers, they were given coded identities corresponding to the codes for the facilities. Thus, Caregiver 1a and Caregiver 1b were parents of children attending ECD facility 1, Caregiver 2a and Caregiver 2b sourced from ECD facility 2, and so on until Caregiver 20a and Caregiver 20b, who were sourced from ECD facility 20.

Results

The study addressed two themes, namely, the role of the home environment on early learning and development and the extent of parental involvement amongst preschoolers in Philippi.

TABLE 1: Child characteristics.

Category	All children	*N*	%
N		40	100
Child gender	Female	21	52.5
	Male	19	47.5
Child race[1]	Black African	40	100
Child age	4 years old	25	62.5
	5 years old	13	32.5
	6 years old	2	5
Caregiver interviewed	Mother	35	87.5
	Father	1	2.5
	Grandmother	4	10
Home language[2]	Xhosa	37	92.5
	Other African language	3	7.5
Lives with both parents	Yes	19	47.5
	No	21	52.5

TABLE 2: Caregiver characteristics.

Category	Caregivers	
	N	%
N	40	100
Highest educational attainment		
No formal education	0	-
Primary education	-	1.5
Secondary education	-	77.5
Matric	-	7.5
Tertiary education	-	2.5
Caregiver has a job or business		
Yes	-	42.5
No	-	57.5
Poverty status by upper-bound poverty line		
Poor	-	45
Non-poor	-	55

The Philippi home environment

The role of the home environment in hindering or supporting the early learning and development of preschoolers in Philippi was examined through specific child and home characteristics, the SES of caregivers and the availability of educational toys at home.

Child and home characteristics

Caregivers were asked the age, population group and gender of their child to establish profiles of the children. Caregivers were also asked about their marital status to establish the possibility of dual parenting. The 'living with both parents' category includes married parents as well as unmarried parents who cohabit. A single-parent household does not mean that the nonresident parent performs no parenting duties. Table 1 depicts the profiles compiled of the 40 children who were included in the research.

In terms of gender, 52.5% of the children were female and the remaining 47.5% were male. The caregivers were asked to indicate the age of the child at the last birthday. About 62.5% of the children were 4 years old, 32.5% were 5-year-olds and 5% had already turned 6. About 92.5% of the children spoke Xhosa as their home language and the remaining 7.5% (three children) spoke another African language. Hence, all of the children were black African children, which accords with the general demographic profile of Philippi. The interviews were primarily held with the biological mothers of the children, as well as four grandmothers. Of the sampled children, 52.5% of the children did not live in the same household as their fathers, whilst 47.5% lived with both their parents, who were either married or living together. Regarding missing fathers and households with skipped generations (households headed by a grandparent in the absence of the biological mothers), Hall and Mokomane (2018) note that female-headed households are considered more susceptible to poverty because women are generally paid less than men. The absence of fathers represents an erosion of social capital and the micro-environment that is likely to have an unfavourable effect on children growing up without the primary male role model. Conversely, children with both mothers and fathers in the household gain greater social capital and more opportunities to learn and develop their full potential.

1.The caregiver questionnaire also included coloured, Indian, white and other as categories.

2.The caregiver questionnaire included all 11 South African languages as categories.

Socioeconomic status of caregivers

Low SES is generally understood to disadvantage the next generation, producing fewer opportunities in terms of development, schooling and labour outcomes. The literature substantially agrees that SES is a multidimensional concept. It has become a common practice to use indices that combine multiple variables into overarching themes (Webb et al. 2017). For this research, as indicated in Table 2, the SES of the caregiver is represented by the highest educational attainment, employment status and poverty status of caregivers which, by extension, is the poverty status of the preschooler.

The educational attainment of the caregiver has particular implications for child development. Much of the literature posits a positive correlation between the educational attainment of the caregiver and that of the child. Connelly and Zheng (2003) state that the educational attainment of the caregiver has intergenerational implications, such that caregivers who are educated receive their returns on education twice, once in the generation that undertook the investment and secondly in their offspring. Children raised by educated caregivers are more likely to receive better educational opportunities. This is partly because educated parents are more likely to initiate the education process during the preschool years and continue throughout schooling (Taylor & Yu 2009). Children raised by educated caregivers also have a higher probability of performing well academically. An overwhelming 90% of all caregivers in the sample had less than matric as their highest educational attainment. Only 7.5% of all the caregivers held a matric certificate as their highest educational attainment.

To ascertain the economic activity of the caregivers, they were asked whether they were involved in income-generating activity, either through a job or owning a business. Unsurprisingly, given the lack of formal education, about 42.5% of the caregivers in the sample were economically active, and the remaining 57.5% did not earn an income through an economic activity, suggesting the majority were dependent on social assistance and/or other family members.

To conclude the analysis of the SES of the sampled households, the researcher used the upper-bound poverty line (UBPL) of 2018 to determine the individual household poverty status by assessing monthly income per capita. In 2018, the UBPL per person, per month, was R1183. Hall and Budlender (2016) regard the UBPL as the most relevant poverty measure for child well-being, pointing out that the needs of a child far exceed what is captured under, for instance, the food poverty line, which only measures a minimum required diet. Forty-five per cent of the sample are classified as poor under the UBPL. The poor proportion would have been even higher if these households were not receiving social grant support. Overall, the study deduced that most of these children were being raised by less educated and unemployed caregivers, and most of the households in the sample were poor and lacking in SES.

Availability of educational toys at home

The caregivers were asked if their children had toys in their homes that teach colour or size, puzzles, toys that help to teach numbers, children's books, toys that help to teach the names of animals as well as a ball or bat. The caregivers' responses are presented in Table 3.

Overall, the sample suggests that there is an overwhelming lack of educational toys in the homes of preschoolers in Philippi, with only balls or bats being present in the majority of homes.

Parental involvement

Parental involvement was measured by the frequency of stimulation activities involving the child and household members and the involvement of parents or caregivers in the activities of the ECD facilities.

Frequency of stimulation activities at home

Stimulation is necessary for reaching developmental milestones in motor development, language and understanding. Hence, stimulation activities such as singing, reading, storytelling, talking and responsiveness are associated with positive developmental outcomes. Stimulation at home was measured through five questions:

Stimulation 1: How often is the child encouraged to do or imitate daily activities with older children or adults at home, for example, clean the house, prepare food?

TABLE 3: Educational toys at home for all children.

Educational toys	Have (%)	Do not have (%)
Colour or size toy	12.5	87.5
Puzzle	15	85
Number toy	10	90
Children's book	37.5	62.5
Animal toy	10	90
Ball or bat	52.5	47.5

Stimulation 2: If a child points to an object, how often is he or she told its name and given an explanation of what the object does or is used for?

Stimulation 3: How often does someone in the household read or tell stories to the child?

Stimulation 4: How often does someone in the household sing to, or with, the child?

Stimulation 5: How often does someone in the household have a conversation with, or talk to, the child?

The frequency of the above stimulation activities was measured using categorical scaling which enabled the responses of the caregivers to be rated as *Never*, *Sometimes*, *Often* and *Every day*.

As shown in Table 4, fewer than half of the caregivers frequently encouraged their children to imitate daily activities. A high proportion of the children were answered when they asked the names and functions of objects, and all the caregivers reported frequently engaging in conversation with the children. Engaging in singing was relatively frequent, which can be attributed to siblings, as some of the caregivers mentioned their child often sang with a sibling rather than the caregiver. However, the low frequency of reading and telling stories in households was most concerning. More than half the children were never told or read stories by their caregivers or someone else in the house. This lack may compromise the emergent literacy of the children. The low frequency of reading at home could be related to the low educational attainment of the caregivers. Other factors may also be at play. For example, one caregiver said she did not have the energy to read to her child because she comes home tired after work.

Facility-based parental involvement

Parental attendance of ECD facility meetings is one of the methods that ECD facilities may employ to involve parents in their children's early education. Although parental or caregiver attendance of meetings is largely the responsibility of the caregivers, this is influenced by how facilities go about calling meetings and ascertaining the availability of the caregivers and whether the practitioners actively encourage the caregivers to take an interest in their children's early learning and development.

The researcher attempted to determine the roles played by each party in the reciprocal relationships between caregivers and facilities, meeting attendance by parents and the initiatives taken by the facilities to encourage parental involvement.

TABLE 4: Frequency of stimulation at home.

Stimulation	Never (%)	Sometimes (%)	Often (%)	Every day (%)
Imitation	35	20	15	30
Explain objects	2.5	17.5	17.5	62.5
Reading	57.5	35	0	7.5
Singing	7.5	25	7.5	55
Talking	0	0	5	95

Parental attendance of meetings: Initially, the principals were asked how many meetings were called each year by their respective facility, and the same question was then asked of the caregivers. It was assumed that caregivers who were in their children's education would know the number of parent meetings the facilities had called. The responses received from the caregivers were matched with the responses initially provided by the principals.

About 75% of the facilities' principals mentioned holding quarterly parent meetings, whilst the remaining facilities held parent meetings twice or thrice a year. However, the responses of the caregivers were a far cry from the assertive responses of the principals. Only 15% of the caregivers matched the principals' stated frequency of parent meetings called by their facility. The remaining caregivers' responses did not match those of the principals. Some stated that they did not know, whilst some surprisingly could not recall the principal 'ever calling a meeting'.

Caregivers who mentioned their facilities calling parent meetings were also asked how many parent meetings they had attended since the beginning of that year. A majority of these caregivers did not attend any meetings for the year and offered reasons in their defence ranging from work commitments to clashes with church events:

> 'No, I have not attended any meetings. The meetings always clash with my church gatherings. They hold the meetings on Saturday and we cannot attend because we attend church choir competitions. But I always report that I won't be coming and I make sure to receive feedback from the principals on the resolutions of the meeting.' (4b, Caregiver, 12 April 2019)

Others cited administrative inefficiency by the facility or simply, 'I forgot there was a meeting'. Overall, many responses suggested a low appreciation of caregivers of early learning and development. Even when many facilities hosted meetings during weekends, hoping that many of the caregivers would be available, attendance was low.

Encouraged parental involvement: Facilities have some power to influence parental involvement at ECD facilities. Practitioners were asked whether they try to involve caregivers and parents in their children's early learning and development. Eighty-five per cent of the practitioners responded positively whilst 15% of the practitioners did not attempt to involve parents in their children's early learning. Two offered the following reasons:

> 'It is still early, I was planning to involve them as the year progresses. Like when I see a struggling child or child who is behind then I will involve a parent.' (17, ECD Practitioner, 7 February 2020)

> 'The preschool is just starting this year so as time goes on, I will involve parents.' (20, ECD Practitioner)

A follow-up question was put to the practitioners who involved parents, in order to clarify their methods. These included having a WhatsApp group, voluntary feedback when parents fetched their children, home activities and the parent meeting. Some practitioners were being frustrated in their attempts to involve parents in their children's education:

> 'For instance, we tell the children that before coming to school in the morning they should ask what day and date it is from their parents then give feedback in class. If they do that, tell the children the day and date, it becomes easier for us. Because the first thing we ask them in class is "what day is it, class?" When you ask the children to give feedback in class, you realise that the parents are not helping us to do our job. They divert all the teaching and learning responsibility to us.' (15, ECD Practitioner, 05 November 2018)

> 'We call the parents each quarter, sit down with them, show the child's portfolios to see the child's progress. You know there is that thing where you ask the parent to collaborate with you, to work together, but the parents do not do that. You will find that as the teacher, you write a letter to the parent asking them to help their children to collect bottle caps for counting in class. There will be few children coming with the lids; you will ask the child why they did not bring the bottle caps the child would respond my mother told me she is busy drinking, she is not going to do that.' (7, ECD Practitioner, 02 February 2020)

> 'I do not know, really do not, you know black people, they are really discouraging. Especially in the age group that I teach. They have that notion of preschools merely babysitting their children.' (11, ECD Practitioner, 20 November 2018)

The practitioners ascribed the caregivers' reluctance to an under-appreciation of early learning and development in the community, where caregivers regard preschools as mere babysitting facilities that meet their limited expectations when they return the child safely to the caregiver each day. Overall, the lack of parental involvement is attributed to social and cultural issues by the practitioners. In this view, caregivers see no need for further involvement in the facility or for seeking its assistance with home-based learning activities.

Caregivers were asked whether their respective facilities attempted to involve them. The majority felt that the facilities, specifically the practitioners, encouraged the involvement of family, with only 20% of the caregivers stating that their ECD facility did not encourage them to participate in their child's learning. Two caregivers vehemently stated that their facility never encouraged them to be involved:

> 'No, we come in, we drop off our children, then we fetch them, they don't say anything to us.' (3a, Caregiver, 11 April 2019)

> 'No, I don't want to lie to you, they don't encourage us. It is up to you as a parent to decide what you want to do with your child.' (10b, Caregiver, 5 March 2020)

Although the caregivers generally agreed that the practitioners encouraged them to participate, they were not certain how this should be done:

> 'I do not even know the teacher's name. Because they keep changing, today it is this teacher and tomorrow it is another teacher. So I do not know which teacher is responsible for my child's class. When I get there, I just say hi and drop off my child.

I have never seen the teacher during the meetings or been introduced to the teacher.' (15b, Caregiver, 13 May 2019)

'Yes, they encourage us. I do not know how. I have not spoken with the principal or the teacher.' (20a, Caregiver, 24 March 2020)

Discussion

It is apparent from the results of the study that both caregivers and the facilities are mutually responsible for parental involvement and that there are self-imposed limitations by both that restrict the extent to which caregivers in Philippi are involved in their children's early learning and development.

For the most part, preschoolers in Philippi live in household environments that do not encourage or support early learning and development. Parental involvement is limited, with caregivers largely unwilling or unable to be involved in ECD facilities or to consistently engage in stimulation activities at home.

Given this, how do an unconducive environment and low parental involvement impact on a preschooler's early learning and development?

Specific household and caregiver characteristics have consistently been identified as protective factors in low-income and otherwise vulnerable households. The primary role of protective factors is to mitigate the risks of delayed or compromised learning and development associated with specific environments and caregivers. Du Toit, Van der Linde and Swanepoel (2021) identified caregiver education, the presence of both parents in the home and parental marriage as protective factors against delays or threats to child development for vulnerable children. This sample of children significantly lacks such protective factors, increasing the likelihood that these children experience a compromised early learning and development experience that makes them lag behind the development of children raised in households with educated caregivers, frequent stimulation, access to toys and less exposure to poverty. The likely achievement gap between children of differing household characteristics therefore results from material advantages rather than differences in innate abilities.

Overall, all the children in the sample lacked educational toys at home that would assist in teaching and learning the basics of colours, sizes and numbers. Lacking educational toys at home does not mean that the children would not learn these concepts, but studies suggest that such a lack negatively affects their probabilities of success. Zadeh, Farnia and Ungerleider (2010) showed that children who access learning materials at home achieve higher scores in mathematical problem-solving and reading. Visser et al. (2019) established that children who played games and toys before Grade 1 were likely to perform better later in Grade 5 mathematics than those who had rarely been exposed to games and toys. Therefore, learning materials such as toys positively influence a child's numeracy and literacy skills. It follows that the lack of educational toys at home for children in this sample could negatively affect their later cognitive development.

Limited parental involvement is seen through the inconsistent frequency of stimulation with the child at home and the unwillingness of caregivers to get involved at the respective ECD facilities. The findings of this limited sample of black and low-income households are consistent with the trend revealed in the General Household Survey (GHS) of 2016 (Statistics South Africa 2018) and 2018 (Statistics South Africa 2019) of generally low stimulation in South African households and even lower stimulation in black and low-income households.

Children are born with innate skills, but these skills must be discovered and stimulated. The benefits of reading to a child of building vocabulary, comprehension and reading ability are well established in the literature. In addition, Williams et al. (2015) established a positive association between early shared home music activities and the later social skills, emotional regulation and numeracy of the child. The association was maintained when the authors included book sharing in the same regression. These findings support the argument that the under-stimulated preschoolers in this sample are in danger of not developing their full potential.

The caregivers in Philippi appear reluctant to be involved, whether in facility or home-based early learning. Their low parental involvement, in common with similar communities and households, is ascribed to their low SES, driven by low educational attainment and high rates of poverty. A study by Xu et al. (2010) found that parental involvement explains about 24% of the variance in children's reading achievement. In Kenya, Mukuna and Indoshi (2012) established that poor and uneducated parents were reluctant to be involved in their children's early education. The parents concluded that the teachers knew best. Illiteracy was established as a factor discouraging parent participation in Mdantsane, Eastern Cape (Shumba, Rembe & Pumla 2014) and Limpopo (Selolo 2018). Parents who are poor and uneducated are least likely to participate in their children's early learning.

Lack of parental involvement may also be associated with the absence of one or both parents. About 52.5% of the sampled children live without their father in the house. The absence of the father means that a great deal of the stimulation and parental attendance of facility meetings depends on the mother, the one parent that is constantly present in the house. Two-parent households tend to have higher parental involvement and better economic resources (Carlson & Berger 2013). When parents are less involved, practitioners may be overburdened with the responsibility of cultivating individual children's development. This was the sentiment expressed by one practitioner, stating: 'They [*parents*] divert all the teaching and learning responsibility to us'. Lack of parental involvement also means that caregivers may fail to identify in a timely manner any learning and development delays that their children might experience.

Finally, the extent to which the early learning and development of the preschoolers in Philippi are negatively

affected by unconducive households and limited parental involvement, may not be revealed until they are in primary school. It is through the current performance gap between children across SES households that one may begin to perceive the negative impact of unconducive households and limited parental involvement.

Conclusion

Children from low SES communities such as Philippi are often denied early learning opportunities through the shortcomings of their ECD facilities as well as unconducive household environments, including the lack of parental involvement.

In approaching potential solutions to improve the dismal performance of the education system, the strategy of the South African government has always been directed at what was happening in schools and has neither exhausted nor even sufficiently explored solutions involving parents and positive changes to the home environment. Current research begs for the integration of parents of low-income and vulnerable households into the sector's development strategy, especially because learner performance significantly differs by SES and early deficits start to show even before schooling and persist for many years after.

Informing or encouraging parents to be more involved in their children's learning, both at home and in the ECD facility, is only part of the dialogue required in the strategy of integrating parents. Beyond that, parents need a clearer framework on how to become involved and how to provide a conducive learning environment given their low income, educational status and general lack. The preceding view is consistent with that of Sang and Syomwene (2018) in Kenya, who identified the lack of a framework to guide parents and caregivers on how they can be involved in their children's early learning and development. It is important to note that caregivers who live in vulnerable circumstances may feel less competent in helping their children with early learning and development matters. Those parents and caregivers must be empowered to know how they can make a positive difference in their child's early learning. Furthermore, it is an inescapable reality that poor parents may lack the capital to acquire learning materials for the home, or they may rather prioritise the many other needs of the household. Given this, perhaps the state strategy should include some means of providing learning materials to parents. The greater involvement of caregivers in households does not replace but complements the work of facilities and educational institutions. Hence, facilities can be used to reach out to parents and empower them on how best to assist their children.

Finally, any simplistic notion that families only need a conducive environment and parental involvement to overcome the children's educational inequalities should be guarded against. For instance, Gordon and Cui (2014) found that the negative impact of poverty on educational outcomes cannot be overcome with only parental involvement. This study confirmed the enduring effect of SES on other important development factors. However, it is hoped that this paper has illuminated some of the community challenges facing vulnerable and poor preschoolers.

Limitations of the study

The first limitation of the study, communally shared in research, is inherently the self-reported data from participants. Secondly, the reported frequency of the stimulation activities did not distinguish the amount of time spent for doing these stimulation activities. Finally, with the collected data, it was impossible to quantify or pinpoint the exact impact of parental involvement and a conducive home environment on early learning or that of caregivers' involvement in ECD facilities. Hence, we could only infer from the data, guided by theory and past literature.

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Competing interests

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Authors' contributions

S.M. developed the research proposal and collected the data. A.B. and S.M. wrote the findings and developed the research article together.

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Data availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

Disclaimer

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