The relationship between housing and children’s literacy achievement: Implications for supporting vulnerable children

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This article examines the relationship between housing, a critical aspect of socio-economic conditions, and literacy achievement of children from a school in a high density suburb in South Africa. Data was collected through a quantitative survey that was administered to learners (N = 160) from four Grade Five classes. The survey included five literacy tests that were standardised by two education consultancies, namely Do-IT-Solutions (United Kingdom-based) and Shape the Learner (South African-based). The findings indicate that most learners who live in informal houses, that is, low-cost houses such as a shack, in overcrowded conditions, generally perform poorly in the literacy tests administered as compared to those learners who live in conventional (brick) houses that are not overcrowded. Also, learners who have more home duties appear to perform poorly in the literacy tests compared to those that have lesser responsibilities. As such, the findings indicate a relationship between housing conditions and literacy achievement. The author proposes a social justice framework for providing educational support for children made vulnerable due to their housing conditions.

Keywords: housing; literacy achievement; literacy tests; socio-economic conditions; social justice; survey; vulnerable children

Introduction

Research has indicated that poor socio-economic conditions have an adverse impact on educational achievement (Ansalone, 2003; Heath, 2000; Lacour & Tissington, 2011; Matějů & Straková, 2003; Schneider, 2004). While there are many factors that affect school outcomes for children from low socio-economic environments, including parental involvement and quality of schooling, one would assume that children’s housing needs are an essential part of academic success, since they need a safe and healthy environment that is conducive to learning (Cunningham & MacDonald, 2012). However, there seems to be a dearth of research on the effects of poor housing conditions on the educational achievement of learners (Lanús, 2009). One prominent study on the relationship between poor housing conditions and educational attainment was conducted by Lanús (2009) in Buenos Aires, Argentina. He found that children living in overcrowded houses had a lower probability of completing secondary education and had an increased tendency to be absent from school. As such, he argued that housing conditions should be included in any effort directed at improving human capital and poverty eradication. In a thematic review of the literature on the relationship between housing, neighbourhoods, and school outcomes conducted by the Scottish Government Communities Analytical Services (2010:3), certain important observations were noted. The first observation was that poor housing conditions could impact on children’s educational development and outcomes, which inevitably reinforces the cycle of disadvantage, since their opportunities of employability also impact on where they can live as adults. Similar findings were noted in other studies (Atkinson, 2008; Bramley & Karley, 2007; Johnstone & McWilliams, 2005; Lubell & Brennan, 2007; Lupton, 2003; Marsh, 2004; McCulloch, 2001). Secondly, overcrowding and homelessness have an adverse impact on children’s educational performance, including their physical and psychological health and life chances (Ambrose & Farrell, 2009; Citizens Housing and Planning Council, 2001; Conley, 2001; Evans, Saltzman & Cooperman, 2001; Shelter, 2010). Finally, boys are more negatively affected by poor housing conditions and overcrowding than girls (Citizens Housing and Planning Council, 2001). However, it should be noted that no reasons were given for this finding, and that the study did not control for school attendance. The above findings in Argentina and Scotland have been corroborated by various studies conducted in the United States of America (Brennan, 2011; Buckner, 2007; Buckner, Bassuk & Weinreb, 2001; Chapman, Laird & KewalRamani, 2010; Coulton, Theodos & Turner, 2009; Crowley, 2003; Dworsky, 2008; Galvez, 2010; Newman, 2008; Rog & Buckner, 2007). The researchers Cunningham and MacDonald (2012) point out that housing, in general, consists of four different but interrelated dimensions, which have an adverse impact on children’s school outcomes, namely housing quality, residential stability, affordable housing, and a safe and healthy neighbourhood location. All of these dimensions, both on their own and combined, affect the academic achievement of children. However, this study focused on housing quality since this in itself is a major concern in South Africa.

Taking the above into consideration, one would expect the housing situation to be more problematic in developing countries; South Africa is no exception. When South Africa became a democratic country in 1994, the provision of housing was identified as one of the biggest challenges facing the new government led by the African National Congress (Wilkinson, 2014). There has not been a significant change in the housing provisions since the 2011 census by Statistics South Africa, which showed that the number of shacks and informal
dwellings had escalated to about 1.9-million from 1.4 million in the 1996 national census (Wilkinson, 2014). It has been estimated that almost R800-billion will be needed for government to eradicate the housing backlog by 2020 (Wilkinson, 2014). These statistics are alarming, considering what has already been mentioned about the impact of poor or inadequate housing on the academic success of children.

There should be a greater concern about children’s academic achievement in South Africa in light of the findings that learners compare most unfavorably with other countries in literacy development (Heugh, 2001; Pretorius & Naudé, 2002; Viljoen, 1999). Generally, literacy is seen as the ability to read and write (Oxford English Dictionary, 2002), but more elaborate definitions include the capacity to think critically (Dubin & Kuhlman, 1992; Foley, 1994; Hiebert, 1991). In this study, Street’s (2003:77) view of “multiple literacies, varying according to time and space, but also contested in relations of power” is adopted. He views literacy as a social practice, changing from one context to another sensitive to what Langer (1991) calls the cultural dimension. Essentially, multiple literacies “refer to the way language is constructed and how meanings vary across different cultural or social contexts” through multimodal representations, which include “written forms combined with auditory, visual, spatial, oral and tactile representations to produce meaning” (Blake, 2016:1). As such, teaching and learning resources will be needed for the development of multiple literacies and this may be a problem in low socioeconomic schools.

The five different measures of literacy achievement used in this study represent a distinct perspective on multiple literacies. Literacy is a crucial aspect in the lives of children, but this may become problematic when they are exposed to low socio-economic circumstances (Fleisch, 2008; Spaull, 2013; Van der Berg, Burger, Burger, De Vos, Du Rand, Gustafsson, Moses, Shepherd, Spaull, Taylor, Van Broekhuizen & Von Fintel, 2011). One aspect of socio-economic conditions, inadequate housing, and its relationship to literacy achievement has not received much attention worldwide, and more specifically, in South Africa. As such, the focus of this study was to determine whether there is a relationship between housing provisions and literacy achievement of children in a school in a high density suburb. Undoubtedly such a study will be valuable to scholars globally, who are interested in improving the quality of education as a contribution to enhance the economic viability of countries. More importantly, the literacy and housing problems in South Africa provide a research minefield for education and economic scholars worldwide.

**Theoretical Framework**

The author contends that a social justice theoretical framework is imperative to understanding the impact of socio-economic factors on the academic achievement of children, especially those most vulnerable. The gist of this theory is to identify social injustices that exist in a society, with the intention of eradicating them so that all children would have equal opportunities to reach their full potential in life (Shribar, Wynne, Briggs, Bartucci & Lombardo, 2011). As such, the rights and dignity of all children should be maintained at all times (Leatham, 2005; Lethale, 2008; Pillay, 2014b; Pillay & Nesengani, 2006). From the earlier discussion, it is clearly evident that socio-economic factors, and in particular, poor housing provisions, have a negative impact on children’s academic success. There are no clear reasons as to why this relationship exists, but one may infer that poor housing and overcrowding are experienced by people who are poor. Not having a place to study and completing homework in noisy environments may not be conducive to learning. The social exclusion of the poor and the impact it has on their overall performance/achievements has been noted by Gordon, Levitas, Pantazis, Patsios, Payne, Townsend, Adelman, Ashworth, Middleton, Bradshaw and Williams (2000). Also, research has indicated that poor academic success reinforces the plight of vulnerable children, since they end up living in similar poor housing conditions when they are adults (Gubits, Khadduri & Turnham, 2009; Newman & Harkness, 2002). Undisputedly, social justice theorists would postulate that all learners ought to be provided with fair and equal opportunities to make certain that they succeed in life (Orfield & Lee, 2005; Pillay, 2014a). In the context of this study, this would mean that all children ought to be provided with decent and safe housing, so as to ensure that they have the right to a better life (Bartolo, 2010; Benedetto & Olisky, 2001; Smith, 2002; Stainton Rogers, 2004).

**Research Methodology**

**Research Design**

This study attempted to determine whether there is a relationship between children’s housing conditions and their literacy achievement through a quantitative survey method (Henderson & Mapp, 2002). The survey method was chosen since it was an appropriate tool to gather self-reported and factual information from the learners involved in this study. The survey was conducted by fifteen field workers over a period of two weeks, who interviewed each learner and recorded individual responses on a tablet. The field workers were identified and trained by the consultants employed in this study.
Sampling
Data was collected through a survey that was administered to \((N = 160)\) learners from four grade five classes in a low to middle-class socio-economic status (SES) school in a high density suburb. All 40 learners in each class \((n = 40)\) had an equal opportunity to be selected for the study. The total sample consisted of 94 boys \((n = 94)\) and 66 girls \((n = 66)\), most of whom were in the school since Grade One. The school and its Grade Five learners were chosen since they were already part of a larger study on numeracy achievement being conducted by the consultants used in this pilot study. The school consisted of approximately eight hundred learners and twenty-seven teachers, including management staff. The medium of instruction was English, even though most learners came from families that spoke Sesotho. All the teachers were bilingual, even though some of them did not speak English as a first language. Each classroom had an average of 35 learners of diverse socio-economic status and living conditions, where for example, there were learners living in informal settlements, while others lived in middle-class homes.

Survey
The Do-It-Profiler Survey was developed by the agencies mentioned earlier and standardised on almost 35,000 learners in South Africa, as part of a comprehensive study focusing on SES, exposure to school-based violence, study skills, and substance abuse in relation to literacy achievement. Section A focused on learner demographics and subsequent sections covered the aspects mentioned above. However, for this particular study, the focus was placed on one aspect of SES addressed by the survey, that is, housing conditions. There were two items that were indicators of housing such as the type of house the learners live in and the number of people living in the house. Also, a third item, on their home duties interfering with their studies was included. These items served as independent variables in the study. Only those independent groups where significant differences were found will be discussed.

The dependent variables were the five literacy tests written by the learners which comprised Sections B till F of the survey. The tests were:
1. Non-word spelling (30 B items)
2. Reading fluency (8 C items)
3. Spelling-type sounded word correctly (25 D items)
4. Click on the word spelt correctly (30 E items)
5. Click on most likely real word (24 F items)
Each of these tests was analysed separately by coding 1 as correct and 0 as incorrect.

The non-word spelling test presents non-words (invented words with no meaning) specifically for this test. The results highlight the current level of phonics development the child has reached (Do-IT Solutions Ltd, 2015). The reading fluency task provides four texts of around 200 words each, of increasing difficulty, designed to test reading skills. The spelling test provides 48 words chosen to show a diversity of capabilities, which reflect both spelling rules and words frequencies. The test captures spelling difficulties experienced by the individual (Do-IT Solutions Ltd, 2015). In the word “spelt”, two words with different spellings are presented which can be pronounced the same, but only one of them is a real word. The learner is required to indicate the actual spelling. The test shows reading level. Finally, in the second word choice test, the learner is given two words with different spellings and s/he has to indicate which is most likely to be a real word. The test indicates the level of development of the orthographic lexicon, which in turn is indicative of the reading level (Do-IT Solutions Ltd, 2015).

More details of the tests and their reliability and validity can be accessed from www.doitprofiler.net.

Statistics
Descriptive statistics were used to quantify the type of housing the learners lived in, the number of people living in the house, and how many learners believed that their home duties affected their studies. The five literacy tests briefly described above served as dependent variables in this study. These five tests formed one multivariate factor which was named “combined learner profiler literacy score.” Testing for significant differences between independent variables was done through the Kruskal-Wallis Test.

Ethical Measures
Ethical clearance for the study was granted by the Faculty Ethics Committee of the author’s university in Johannesburg, South Africa. Permission was obtained from the school principal and parents for learners’ participation in the study. The learners were well informed about the nature of the study and what their involvement would be; their assent was also obtained. All participants were informed that their participation was voluntary and that they could withdraw at any point without penalty (Denzin & Lincoln, 2005). To ensure confidentiality, no names of the participants or the school are mentioned in the study.

Results
Type of House
The first three categories of the type of house they stay in were recoded to two and the Kruskal-Wallis ranked data output from SPSS 22.0 is given in Table 1.
Table 1 The ranked data regarding the two types of houses stayed in with respect to the five literacy tests

<table>
<thead>
<tr>
<th>Dependent variables (Type of literacy test)</th>
<th>A3.Rec. Type of house do you stay in recoded</th>
<th>N</th>
<th>Mean Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentages of non-spelling words correct (B)</td>
<td>Brick house</td>
<td>133</td>
<td>77.55</td>
</tr>
<tr>
<td>Percentages of reading fluency correct (C)</td>
<td>Brick house</td>
<td>133</td>
<td>78.93</td>
</tr>
<tr>
<td>Percentages of sound texts correct (D)</td>
<td>Brick house</td>
<td>133</td>
<td>79.18</td>
</tr>
<tr>
<td>Percentages of the correct word (E)</td>
<td>Brick house</td>
<td>133</td>
<td>80.22</td>
</tr>
<tr>
<td>Percentages of most likely real word-Word choice 2 (F)</td>
<td>Brick house</td>
<td>133</td>
<td>79.14</td>
</tr>
</tbody>
</table>

Table 1 indicates that candidates staying in brick houses had a statistically significantly higher mean rank than candidates staying in informal housing regarding the words spelt correctly or E items. This independent variable is one that can be grouped under socio-economic status as persons staying in brick houses are likely to be ‘better off’ financially, and probably have more educational resources available than candidates staying in informal housing.

The Kruskal-Wallis test values, which SPSS refers to as Chi-square because of their distributions, is given in Table 2.

Table 2 The Kruskal-Wallis test for the two groups in type of house occupied with respect to the five literacy tests

<table>
<thead>
<tr>
<th></th>
<th>Percentages of non-spelling words correct (B)</th>
<th>Percentages of reading fluency correct (C)</th>
<th>Percentages of sound texts correct (D)</th>
<th>Percentages of the correct word (E)</th>
<th>Percentages of most likely real word-Word choice 2 (F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>.162</td>
<td>2.000</td>
<td>2.474</td>
<td>5.449</td>
<td>2.417</td>
</tr>
<tr>
<td>df</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Asymptotic Significance</td>
<td>.688</td>
<td>.157</td>
<td>.116</td>
<td>.020*</td>
<td>.120</td>
</tr>
</tbody>
</table>

Note. * = Statistically significant at the 5% level (p > 0.01 but p < 0.05).

Table 3 The Kruskal-Wallis test for the different number of rooms groups in the house on the five literacy tests

<table>
<thead>
<tr>
<th></th>
<th>Percentages of non-spelling words correct (B)</th>
<th>Percentages of reading fluency correct (C)</th>
<th>Percentages of sound texts correct (D)</th>
<th>Percentages of the correct word (E)</th>
<th>Percentages of most likely real word-Word choice 2 (F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>5.691</td>
<td>1.001</td>
<td>5.497</td>
<td>1.275</td>
<td>.525</td>
</tr>
<tr>
<td>df</td>
<td>1</td>
<td>.317</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Significance</td>
<td>.017*</td>
<td>.19*</td>
<td>.259</td>
<td>1</td>
<td>.469</td>
</tr>
</tbody>
</table>

Note. * = Statistically significant at the 5% level (p > 0.01 but p < 0.05).

The data in Table 2 indicate that the difference between the two type of houses lived in groups is present in the percentage of correct words test. The probability value is significant at the 5% level, and the z-score for test E was -2.138 and the effect size was small (r = 0.17).

The number of rooms in the house lived in
There were two categories which provided data, namely houses with one room only and houses with two or three rooms. The results of the Kruskal-Wallis test are given in Table 3.

The data in Table 3 indicate that the differences are confined to the percentages of non-spelling words correct (B) and the percentage of sound texts correct (C). In both instances, the respondents who indicated that their houses had two to three rooms scored statistically significantly higher percentages in these two tests than did respondents who indicated one room only. The appropriate values were:

\[ XB1Room = 7.70; \overline{XB2–3Rooms} = 11.07; p = 0.017; z = -2.386; r = 0.20 \]
\[ XB1Room = 30.58; \overline{XD2–3Rooms} = 39.75; p = 0.019; z = -2.345; r = 0.19 \]

It is likely that those respondents who indicated one room only are overcrowded and this could impact on the lower scores they obtained in tests B and D. Overcrowding in this study was determined by the number of rooms in each house and the number of people who lived in each room.
The extent that home duties interfere with studies

Upon testing three independent groups against one another, the Analysis of Variance (ANOVA) test can be used. As the five literacy tests combined had a symmetrical distribution of data parametric tests can be used. The non-parametric equivalent is the Kruskal-Wallis test. The results of the ANOVA for the three home duties groups versus the combined literacy test is given in Table 4.

The data in Table 4 indicates that candidates who believe their home duties interfere with their studies had the lowest mean score. They differed from those students who indicated that home duties did not interfere with their studies at all. The latter group achieved the highest mean score on the combined literacy test. This feat could be a socio-economic indicator, as those who indicated that their house duties interfered with their studies could be from poorer families who have to rely on their children to do the household chores. This is also often the case in overcrowded situations. However, the candidates who indicated that the housework did not interfere with their studies could also have accepted responsibility for their studies as well as for household chores, which certainly constitutes an area for further qualitative investigation. The results of the Kruskal-Wallis test as provided by SPSS 22.0 are given in Table 5.

The data in Table 5 shows that three of the null hypotheses should be rejected as the differences between the groups is statistically significant, and hence, not the result of chance factors. The difference is also likely to be between the lowest and highest scoring groups and hence between Group 1 (all the time/too much) and Group 3 (not at all). The differences are thus in reading fluency (C), sound texts correct (D) and the most likely real word (E). The appropriate values are shown in Table 6.

### Table 4 Significance of differences between the three housework groups with respect to the combined literacy tests

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>ANOVA (p-value)</th>
<th>Dunnett T3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined literacy test</td>
<td>All the time/Too much</td>
<td>49.52</td>
<td>0.001**</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>A little</td>
<td>55.20</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Not at all</td>
<td>59.80</td>
<td>3 **</td>
<td>3 **</td>
</tr>
</tbody>
</table>

*Note.* ** = Statistically significant at the 1% level (p < 0.01).

### Table 5 The hypotheses test summary for the five learner-profiler tests

<table>
<thead>
<tr>
<th>Null Hypothesis</th>
<th>Test</th>
<th>Sig.</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The distribution of percentages of non-spelling words correct (B) is the same across categories of A13.R_3 groups.</td>
<td>Independent-Samples Kruskal-Wallis Test</td>
<td>.064</td>
</tr>
<tr>
<td>2.</td>
<td>The distribution of percentages of reading fluency correct (C) is the same across categories of A13.R_3 groups.</td>
<td>Independent-Samples Kruskal-Wallis Test</td>
<td>.007**</td>
</tr>
<tr>
<td>3.</td>
<td>The distribution of percentages of sound texts correct (D) is the same across categories of A13.R_3 groups.</td>
<td>Independent-Samples Kruskal-Wallis Test</td>
<td>.011**</td>
</tr>
<tr>
<td>4.</td>
<td>The distribution of percentages of the correct word (E) is the same across categories of A13.R_3 groups.</td>
<td>Independent-Samples Kruskal-Wallis Test</td>
<td>.008**</td>
</tr>
<tr>
<td>5.</td>
<td>The distribution of percentages of most likely real word-Word choice 2 (F) is the same across categories of A13.R_3 groups.</td>
<td>Independent-Samples Kruskal-Wallis Test</td>
<td>.075</td>
</tr>
</tbody>
</table>

*Note.* Asymptotic significances are displayed. The significance level is p < 0.05 (**).

### Table 6 Non-parametric test values for test C, D and E

<table>
<thead>
<tr>
<th>Test</th>
<th>Percentages of reading fluency correct (C)</th>
<th>Percentages of sound texts correct (D)</th>
<th>Percentages of the correct word (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>689,000</td>
<td>717,000</td>
<td>697,000</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>1250,000</td>
<td>1278,000</td>
<td>1258,000</td>
</tr>
<tr>
<td>z</td>
<td>-3.115</td>
<td>-2.855</td>
<td>-3.012</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.002**</td>
<td>.004**</td>
<td>.003**</td>
</tr>
<tr>
<td>Effect size</td>
<td>0.31</td>
<td>0.29</td>
<td>0.30</td>
</tr>
</tbody>
</table>

*a.* Grouping Variable: A13.Rec_3 groups (N = 100)

*Note.* ** = Statistically significant at the 1% level (p < 0.01). Effect size – r = 0.10 - 0.29 small; r = 0.30 - 0.49; moderate; r = 0.5+ large.
The statistically significant differences between the groups are in each case between groups 1 and 3. These differences indicate that the respondents who believe that home duties interfered with their studies had the lowest mean scores in each case. This group differed in a statistically significant way from the group who believe that it did not influence their studies at all. This difference does not necessarily mean that they had no home duties, because it could also be that they were well organised with respect to home duties, and hence, that they felt it did not influence their studies in any way. As noted before, it could also be that these students had a high internal locus of control and accepted responsibility for their achievements, or lack thereof.

**Discussion**

This study examined the relationship between housing and literacy achievements of a sample of Grade Five learners in a school in a high density suburb in South Africa. In investigating the housing situation of learners, the following factors were taken into consideration: the type of housing (brick or informal), the number of rooms, and the number of people who lived in each room, and home duties. About the type of house, the results indicate that most of the learners (133) live in brick houses while a small number (20) live in informal dwellings; seven learners did not respond to the question. The findings indicate that the learners who lived in brick houses performed better than those who lived in informal dwellings in the literacy tests used in this study, especially in the words spelt correctly, or E items. Since a school with low to middle SES learners was employed in this study, it would be expected that most of them would live in brick houses, since their parents could afford to send them to such a school. Nevertheless, there was a small group of learners that were living in informal houses, which meant that their parents were making financial sacrifices to send them to such a school. This suggests attitudinal differences amongst parents about the importance of schooling. Parents who place emphasis on education may also lessen household chores allocated to their children, so as to help them do well in school. There is also the possibility that these learners could be the ones who received financial sponsorships from the school. Whatever may be the case, it is important to note that learners in this study from informal houses performed poorly in the literacy tests, as compared to those from brick houses. This finding has serious implications, since nearly forty percent (40%) of children live in extreme poverty in South Africa mostly residing in informal settlements (Wilkinson, 2014). This could mean that children living in informal houses may be more vulnerable in terms of literacy achievement, which would be a grave concern for educationists and economists worldwide, since the cycle of poverty and the lack of economic resources would most likely be perpetuated. However, it is imperative to note that many poor children living in high density suburbs in South Africa develop a number of other literacies that are crucial for their survival so it will be good practice to focus on the resilience and agencies of children, rather than limiting one’s focus to a deficit model in understanding their literacy development.

This study also found that learners who lived in a one-room house performed poorly in the literacy tests used in the study, more so in the tests showing incorrect spelling of words, and the incorrect identification of sound. A one-room house inevitably has implications for overcrowding, escalating the vulnerability of children. This finding corroborates the results of several researchers, who found that learner performance is negatively affected by overcrowded households (Aaronson, 2000; Haurin, Parcel & Haurin, 2002).

Another significant finding in this investigation was that learners who have more home duties performed more poorly in the literacy tests, as compared to those that did not have too many duties. This was noted, more especially in the reading fluency, sound, and most likely real word tests. As such, learners who have more home duties could probably be more vulnerable to poor literacy which could impact holistically on their school performance.

The findings of this study have implications for children made vulnerable as a result of poor housing provisions. The results do not in any way insinuate that poor housing arrangements cause poor literacy performance, but certainly note the probability of its negative impact on literacy development of vulnerable children. This is evident in the findings that some learners were acquiring good literacy skills, in spite of their impoverished home conditions. Nonetheless, the findings indicate that there are implications for government, which has a major responsibility to support children made vulnerable due to poor housing provisions. Firstly, it should do this by providing stable and affordable housing for families living in poverty-stricken circumstances (Mehana & Reynolds, 2004; Scanlon & Devine, 2001; Schaffit, 2003). The government should also provide housing subsidies for low-income families, since research has shown that housing subsidies improve the educational outcomes of vulnerable children (Jacob, 2004; Lubell & Brennan, 2007). Stable and affordable housing, housing subsidies, and the promotion of home ownership have all contributed to the reduction of overcrowded households and improved educational outcomes (Aaronson, 2000; Bramley & Karley, 2007; Haurin et al., 2002; Newman & Harkness, 2002). Furthermore, research
has revealed that housing provisions for homeless parents have contributed to better educational outcomes for children from such families (Joze-fowicz-Simbeni & Israel, 2006; Shelter, 2010). The findings of the current study confirm the results of the studies mentioned above, namely that housing is essential for meeting the basic needs of vulnerable children. More importantly, some of the studies cited earlier (Atkinson, 2008; Bramley & Karley, 2007; Marsh, 2004) indicate that housing improves the educational outcomes of children who otherwise would have been more vulnerable.

Secondly, the government should allocate financial, material and human resources to provide additional literacy support for children who live in poor housing conditions. Research has shown that in-class literacy and school-based teaching programmes improve the literacy levels of the learners (Elbaum, Vaughn, Tejero Hughes & Watson Moody, 2000; Mallett, 2012). Additionally, tutor support programmes could also be used to raise literacy levels of children who are vulnerable (Fashola, 2001; Mallett, 2012). Due to the problem of overcrowding in low-income households, the government should consider keeping schools open after official school times so that vulnerable children could have access to the library and a place to complete their homework. Also, community libraries and centres could be made available for the learners after school hours, during the weekends, and school holidays. Libraries are essential for literacy achievement so there should be easy access to them.

From a social justice perspective, it will be appropriate for the government to take the lead in designing and implementing what has been stated above. This would ensure that children who are made vulnerable to literacy achievement due to poor housing conditions would have a better chance of succeeding at school. Social justice theorists will argue that government should create equal access and opportunities for children affected by housing provisions. However, the government cannot do this on its own; there has to be a collaborative partnership with parents, families, communities, businesses, and local government agencies to improve the housing conditions of low-income households. Inevitably, one would hope better housing would contribute to improved literacy in children made vulnerable due to poor housing conditions.

**Conclusion**

This study reported on an investigation of the relationship between housing conditions and literacy achievement of Grade Five learners in a school in a high density suburb in South Africa. The findings indicate that there is a significant relationship between housing conditions and learners’ educational outcomes in literacy. More specifically, the type of housing, number of rooms, overcrowding and home duties all affect how children perform in literacy tasks. However, the results need to be interpreted with caution, due to the small sample size and the use of only one school in the study. As such, the results may not be representative of housing provisions of children in high density suburb schools in its entirety. Hence, the findings do not in any way allude to a causal relationship between housing conditions and literacy achievement of children. Nevertheless, the findings serve as a useful pilot study to warrant the need for further in-depth research on the impact of housing on literacy achievement of learners. While this study may have been limited to one school in a high density suburb, there are numerous such schools worldwide that could benefit from the findings. In the same manner, the implications raised in the study for supporting children made vulnerable to literacy achievement due to their housing conditions could be of global scholarly significance. Inevitably, the promotion of social justice would ensure that the parents of vulnerable children have equal access to safe, stable and affordable housing thus promoting their children’s literacy achievements.

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**Note**

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