

https://dspace.org/

Mobile Phone Technology and Reading Behaviour: Commentary on the FunDza Programme

Louw, Johann; Louw-Potgieter, Joha

2015-12-15

LINK Centre, University of the Witwatersrand (Wits), Johannesburg

http://hdl.handle.net/10539/20336

Louw, J., & Louw-Potgieter, J. (2015). Mobile phone technology and reading behaviour: Commentary on the FunDza programme. The African Journal of Information and Communication (AJIC), 15, 120-122. https://doi.org/10.23962/10539/20336

Downloaded from a DSpace repository. https://dspace.org/

MOBILE PHONE TECHNOLOGY AND READING BEHAVIOUR: COMMENTARY ON THE FunDza PROGRAMME

Johann Louw
Department of Psychology, University of Cape Town, South Africa

Joha Louw-Potgieter
School of Management Studies, University of Cape Town, South Africa

KEYWORDS
mobile phones, self-initiated reading, enjoyment, gender, reading literacy, reading preferences, motivation

South African learners generally perform badly on external tests of reading literacy. In the 2011 international Progress in International Reading Literacy Study (PIRLS), South African Grade 4 learners performed poorly in comparison with their international counterparts, especially on higher order comprehension (Howie, van Staden, Tshele, Dowse, & Zimmerman, 2012). The 2013 Annual National Assessments reported a national average percentage of 43% for Grade 9 learners in their home language and 35% in a first additional language, which often is English (Department of Basic Education, 2013). The Department's report recommended that learners be encouraged to read additional books, and more widely, to improve their scholastic attainment. There is much evidence to support the argument that reading for pleasure has a positive effect on both personal and educational development (e.g. Clark, 2011). Encouraging learners to engage in self-initiated reading as a leisure activity therefore may be positively related to reading literacy. Unfortunately, many South African learners attend schools with no libraries, and come from households without resources, including books, to promote reading (Howie et al., 2012).

The question then is how to fill this gap, to provide reading content to young people who are interested in reading, but who find it difficult to access reading material that would interest them. For a number of years now, mobile phone technology has been seen increasingly as a promising platform to deliver educational services, including literacy development (Lee & Wu, 2012). UNESCO, for example, organises mobile learning weeks. At the second such week, it specifically addressed the question of mobile technology and literacy development for young people and adults (UNESCO, 2013).

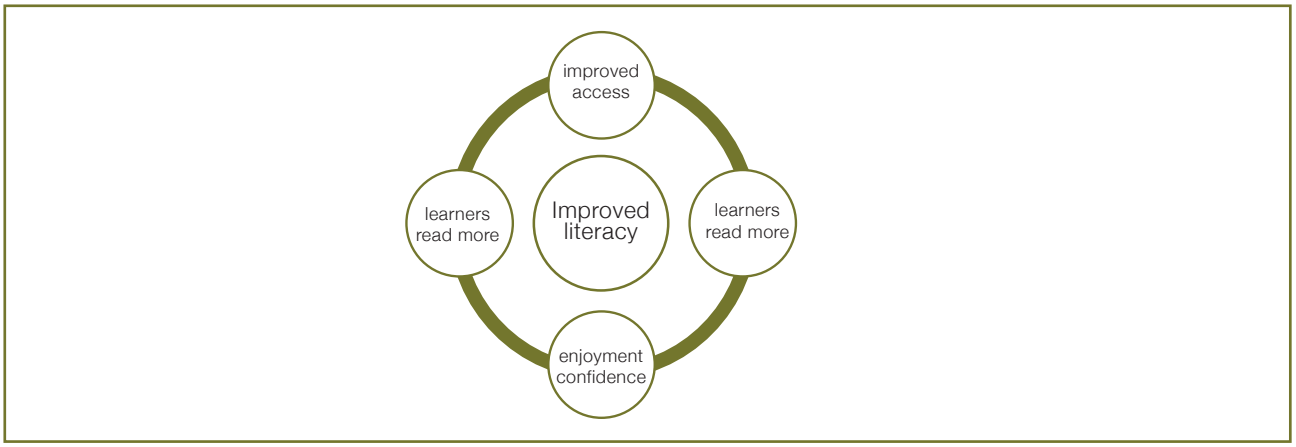
In South Africa at least two non-profit organisations have developed projects to deliver reading materials to young people via this medium. One is the m4Lit project, funded by the Shuttleworth Foundation, which gives young readers access to novels via the mobile phone. Vosloo (2010) found that these novels attracted over 60,000 reads, suggesting that mobile phone-based reading is a viable strategy to encourage reading.

Our researchers have been working with the second organisation, the FunDza Literacy Trust, to provide an assessment of the viability of mobile phones to attract readers. The Trust has been in existence since 2011 and provides readers with locally-written material in a number of South African languages through the mobile social application Mxit or FunDza's website, http://www.FunDza.co.za This research note offers an overview of work on FunDza reported in three, separate, scholarly publications.

The goal of the programme is to improve reading literacy among teen-aged and young adults in low-resource communities. It regards a major cause of low literacy rates in these communities as being insufficient access to appropriate reading material. Thus FunDza, in its programme named the Growing Communities of Readers Programme (GCRP), makes reading material available through their mobi site and Mxit portal.

The expectation is that reading the books supplied via this channel would increase interest in reading, enjoyment of reading and confidence in own reading ability. An increase in these variables, in turn, ought to reinforce and strengthen reading: young people will read more (in terms of numbers of books, length of time, and frequency), and differently (what they read). This virtuous cycle is presented in Figure 1.

FIGURE 1: LINKS BETWEEN ACCESS TO READING MATERIAL, ENJOYMENT, AND READING LITERACY



The ultimate question is whether interventions like these will result in increased reading literacy levels, though to answer it would require a complex, large-scale study. Mobile technology has a feature that would enable us to examine specific aspects in this improved literacy cycle: it automatically captures a huge amount of data on reading behaviour in the form of computer log files. We used this database, coupled with brief surveys distributed to readers, to conduct three studies in partnership with FunDza to address such questions (De Villiers, Louw, & Tredoux, 2015; Horley, 2014; Tredoux, Louw, & Louw-Potgieter, 2015). The results are summarised below.

DOES THE PROGRAMME ATTRACT SIGNIFICANT LEVELS OF PARTICIPATION?

To be regarded as successful, a programme such as FunDza's GCRP must at least attract readers and get them to read the material provided. A large number of readers (65,533) used the site over a nine-month period in 2013, where 59% belonged to the programme for at least three months and 43% belonged for more than six months (Tredoux et al., 2015). In the De Villiers et al. study (2015), 40,886 readers between the ages of 13 and 19 years visited the FunDza reading site within a six-month period in 2014.

HOW MUCH DO THEY READ?

Tredoux et al. (2015) found that FunDza users read at least 65 characters during the visit. More than half of them read quite a lot more: about 33,000 readers clicked on the equivalent of 75 A4 pages of reading material. The log files showed that 50% of users visited the site seven times or more. The top 25% of readers, in terms of accessing the site, visited FunDza 39 times or more.

WHO ARE THE READERS?

The majority (2,857 out of 3,521) of respondents in the Tredoux et al. study (2015) had a mean age of 19.7 years. Thus the programme seems to attract mostly young people, as intended. Their answers to the questions in the brief survey indicated that they already enjoyed reading, but did not have access to physical books to read (i.e., they are "book-poor"). Thus one could say that the programme gives young people who want to read, access to reading material that they don't have, which is an important objective of FunDza. It is, however, not possible from this data to say whether the programme attracts new readers and turns them into enthusiastic readers.

Males accessed the material less frequently than females. Hardie (personal communication, 29 April 2014) estimated that approximately 75% of the database are female. Our studies support this observation: in Horley's (2014) study, 76.9% (n=908) of the sample were female, and De Villiers et al. (2015) found that 28,450 of their 40,886 users were female.

WHAT IS THEIR MOTIVATION FOR READING?

Motivation for reading is important in areas of learning and literacy, although local research on this topic is hard to find. Horley (2014) took a cautious first step in this regard. She distributed a brief questionnaire via young readers' mobile phones, based on Wigfield and Guthrie's (1996) Motivations for Reading Questionnaire. Data from 1,014 respondents revealed that girls were much more motivated to read than boys, and read for different reasons. They also read almost three times more material than boys, which fits the general pattern that males to read less than females (Logan & Johnston, 2009). Similarly, Machet (2002) surveyed school children in Gauteng and established that, overall, boys read significantly less than girls. Furthermore, in Horley's study, boys tended to read for extrinsic reasons: they wanted to compete with their peers; to receive a reward in acknowledgment of reading achievement; or to get good grades in school. Girls read more if they had positive perceptions of their own reading ability, or ability to progress in their studies – what is referred to as self-efficacy beliefs in the literature.

De Villiers et al. (2015) investigated gender differences in reading preferences by distributing a questionnaire to a sample of readers, as well as examining the actual stories read on the site (via the log files). The responses to the questionnaire did not differ much from the picture that emerged from the visits to the website. In both male and female data sets, romance was the genre that got the highest percentage of "really like" ratings, followed by drama, non-fiction, and stories with a specific South African content. A higher percentage of males also preferred stories involving sport. These preferences are somewhat unexpected in terms of the existing literature that males would like the genres of drama and romance to this extent, both in terms of their self-reports and their actual reading behaviour.

DOES PARTICIPATING IN THE FunDza GCRP CHANGE READING BEHAVIOUR?

This is the most difficult question to answer, and one that we could address only in an indirect way. An approach to a question like this is to look for "dosage-response" relationships; i.e., the more of a programme a participant receives, the stronger the effect would be. Tredoux et al. (2015) took as a dosage measure the number of pages that participants read, and related a number of key variables to this metric. They generally found that the more participants read, the more likely they were to indicate that they enjoyed reading outside of school, that they considered themselves good readers, that they read for longer, and that they read more outside of school in the most recent month. More importantly, hierarchical linear multiple regression analyses showed that a higher dosage (i.e., more pages read) was associated with increased enjoyment of reading, proficiency in reading, amount of reading and book reading (all based on self-ratings).

CONCLUSION

A particular strength of the present analysis is that it relies to a large extent on actual reading behaviour, and not just on self-reports. Based on an analysis of the log files on the FunDza database, and brief questionnaires distributed to readers, the following conclusions from the three studies are justified:

- The delivery of reading material via the FunDza mobi site and mobile phones appeals to sufficiently large numbers of young people, the majority of whom actually read an impressive amount of the material provided to them. Thus it is fair to conclude that the programme is improving access to reading material to young people in "book-poor" environments.
- There is a distinct gender bias in participation in the programme and in reading behaviour; in each case, females tend to outdo males. There were some interesting differences between males and females in motivation to read and in reading preferences.
- We are reasonably confident that participating in the GCRP has a positive influence on a number of reading behaviours, as reported by readers.

These conclusions support the virtuous cycle in Figure 1, where access to reading material is linked to enjoyment of reading and confidence in reading performance and in turn linked to reading literacy. This virtuous cycle depicts what happens to girls when they have access to reading material via mobile phones. The challenge remains to draw more boys into this cycle.

REFERENCES

Clark, C. (2011). *Setting the baseline. The National Literacy Trust's first annual survey into young people's reading – 2010*. London: National Literacy Trust.

Department of Basic Education. (2013). *Report on the Annual National Assessment of 2013*. Pretoria: Department of Basic Education. Retrieved from http://www.education.gov.za/Curriculum/AnnualNationalAssessment/tabid/424/Default.aspx

De Villiers, K., Louw, J., & Tredoux, C. (2015). Gender differences in reading preference. Manuscript submitted for publication.

Horley, J. (2014). *Why high-school aged South Africans read: Investigating differences in motivation and reading behaviour*. Unpublished Honours dissertation, Department of Psychology, University of Cape Town.

Howie, S., Van Staden, S., Tshele, M., Dowse, C., & Zimmerman, L. (2012). PIRLS 2011: *South African children's reading literacy achievement report*. Pretoria: Centre for Evaluation and Assessment, University of Pretoria. Retrieved from http://web.up.ac.za/sitefiles/File/publications/2013/PIRLS_2011_Report_12_Dec.pdf

Lee, Y. & Wu, J. (2012). The effect of individual differences in the inner and outer states of ICT on engagement in online reading activities and PISA 2009 reading literacy: Exploring the relationship between the old and new reading literacy. *Learning and Individual Differences, 22*, pp. 336-342.

Logan, S., & Johnston, R. (2009). Gender differences in reading ability and attitudes: Examining where these differences lie. *Journal of Research in Reading, 32*(2), pp. 199-214. doi:10.1111/j.1467-9817.2008.01389.x.

Machet, M. (2002). Young people's reading interests in South Africa. *Mousaion*, *20*(1), pp. 44-72.

Tredoux, C., Louw, J., & Louw-Potgieter, J. (2015). Mobile phones and reading for enjoyment: Evidence of use and behaviour change. Manuscript submitted for publication.

UNESCO. (2013). UNESCO mobile learning week. Retrieved from http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/ED/pdf/MLW_2013_Program-withlinks.pdf

Vosloo, S. (2010). *mLearning in Africa: Lessons from the m4Lit project*. Retrieved from http://www.slideshare.net/uocunescochair/m4-lit-unescobarcelonaoct2010sprinkling

Wigfield, A. & Guthrie, J. T. (1996). *A questionnaire measure of children's motivations for reading* (Report No. 22). Retrieved from National Reading Research Center: http://files.eric.ed.gov/fulltext/ED394137.pdf