

UNIVERSITY OF CAPE TOWN
THESIS

Name of Candidate : Kelly De Villiers
Student Number : DVLKEL002
Proposed Degree : BSociSci (Hons)
Department : Psychology
Supervisor : Johann Louw
Co Supervisor : Colin Tredoux

Word Count: 8 194 words

Acknowledgements

- I would like to thank my Supervisor Johann Louw for his valuable input into this project.
- I would also like to thank my Co-Supervisor Colin Tredoux for helping me with the statistical analyses.
- Finally, I would like to thank Fundza, in particular Mignon and Craig, for providing me with such rich and meaningful data for the study.

Abstract

A Chi-Square comparison of self-reported genre preferences and content visits on a reading website revealed that there were significant gender differences in reading content preferences. The visits were sufficiently consistent with the reported preferences to determine that gender differences, although significant, had small effect sizes for all genres except sport and romance. Inconsistent with the literature was the finding that males enjoyed certain 'female-appropriate' content. Much of the remaining findings were consistent with the literature.

The genre 'South African stories' was very popular among both genders, and the differences were not significant in the questionnaire and significant but very small in the visits. This indicates that perhaps context-relevant content is just as important as gender-relevant content when attempting to engage readers. More research is needed in this regard.

PLAGIARISM DECLARATION

1. I know that plagiarism is wrong. Plagiarism is using another's work and to pretend that it is one's own.
2. I have used the American Psychological Association (APA) as the convention for citation and referencing. Each significant contribution to, and quotation in, this essay from the work, or works of other people has been attributed and has been cited and referenced.
3. This essay is my own work.
4. I have not allowed, and will not allow, anyone to copy my work with the intention of passing it off as his or her own work.
5. I acknowledge that copying someone else's assignment or essay, or part of it, is wrong, and declare that this is my own work

Kelly De Villiers

DATE: 30/10/2014

1. INTRODUCTION

South African youth face many challenges when it comes to finding books to read which are easily available and enjoyable. With advances in technology, mobile phone reading intervention programs are effective in minimizing some of these challenges, yet the majority of readers are still female. The commonly held view that males read less than females seems to have some truth both internationally and in South Africa, with studies also illustrating that males show significantly lower mean reading achievement levels than females and that they perform worse on reading tasks, attributed to this trend in lower reading engagement. Reading motivation has been shown to increase reading engagement, and reading enjoyment is a major mediator in reading motivation. This means that if a boy finds enjoyable content to read, chances are he will be more motivated to read. He will then spend more time reading and this will result in him achieving higher on reading tasks and an improvement in his literacy. Thus, a study to investigate gender differences in reading addresses the larger goal of motivating teenagers to read more, resulting in increased reading engagement and thus reading achievement.

Reading Achievement in South African youth

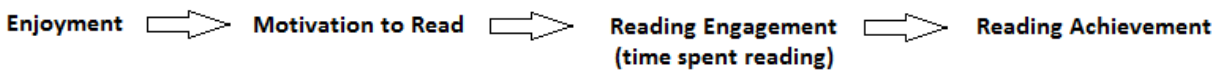
In South Africa, reading achievement is low. The Annual Report of 2011 undertaken by the Department of Basic Education is an illustration of South African literacy rates. South African schoolchildren were measured on both literacy and numeracy ability with four possible achievement levels. Level 1 “not achieved,” indicated a score below 35%, Level 2 “partially achieved,” a score between 35%-50%, Level 3 “achieved,” a score between 50%-70% and finally Level 4 “Outstanding,” a score of 70% and above (Department of Basic Education, 2010). The results for Grade 6 literacy indicate that only 30% of learners (nationally) were in the “partially achieved” level or higher i.e. achieved more than 35%. For Grade 3, the same statistic was 47% (Department of Basic Education, 2010). If one had to examine the percentage of learners nationally achieving either 50% or higher in literacy (Levels 3 and 4 only), the results are even lower. For Grade 3, this figure is 31%, and for Grade 6 it is 15% (Department of Basic Education, 2010).

Gender differences in reading achievement

Gender differences in particular can be seen in literacy rates, with reading achievement scores being significantly lower for males (Van der Berg, 2008; Machet, 2002). Van der Berg (2008) analysed the results of questionnaires administered to school children in 14 African countries, from a wide range of socio economic status groups on mathematics and reading ability. He found that although both genders performed similarly on mathematics tasks, males performed significantly worse than females on reading tasks, regardless of socio economic status (Van der Berg, 2008).

Reading Engagement, Motivation and Enjoyment

Guthrie and Wigfield (2000) found that one of the most important predictors of motivation to read was found to be enjoyment, and that the more motivated a reader was, the more time they spent reading. Time spent reading, in turn, was strongly correlated with reading achievement. (Guthrie, Hoa, Wigfield, Tonks, Humenick, & Littles, 2006).



Firstly, in regards to reading engagement, a strong link has been found between reading engagement and reading ability. Wigfield, Guthrie, Perencevich, Klauda, McRae & Barbosa (2008) illustrate that reading engagement increases reading comprehension which leads to higher reading achievement, and PISA (Program for International Student Assessment) evaluation in several countries found that engagement was a key factor in males' reading performance (Brozo, Shiel, & Topping, 2008). In fact, Krashen (2004) found that "the relationship between reported free voluntary reading and literacy development is not always large, but it is remarkably consistent. Nearly every study that has examined this relationship has found a correlation, and it is present even when different tests, different methods of probing reading habits, and different definitions of free reading are used" (p. 7).

Challenges to Reading Engagement in South Africa

In South Africa, the costs involved in purchasing books can be high and the majority of young South Africans cannot afford this. Secondly, despite public libraries being available with large quantities of books, transportation to these libraries poses additional difficulties. In fact, research has shown that South African middle class students show better reading ability in grade 6 than their more disadvantaged poorer counterparts, who form the majority of the South African youth, and in addition, these students have better access to reading material overall (Van Der Berg, 2008). Finally, reading is more difficult when children speak English as a second language (Birch, 2014), a common trend amongst South African youth (De Klerk, 2002) (See Figure A.1. Appendix A).

Some of the above-mentioned issues can be alleviated. Mobile phones can be used to access reading content cheaply and conveniently. Mobile phone technology is extensively used in South Africa (White, 2006; Aker & Mbiti, 2010; Nielsen Southern Africa, 2011), and it is possible that this can be utilized quite effectively as a tool for engagement with the youth. An example of successful implementation of this concept is Fundza, a program accessible online via the cell phone application Mxit. Mxit is especially popular amongst the youth. According to Nielsen Southern Africa (2011), 61 percent of mobile users report utilizing Mxit. Another advantage of Mxit is that it works on a wide range of mobile phones, including older models. Thus, users from poorer communities with basic mobile phones can easily access the program. Fundza stories are written in a South African context, aimed at engaging South African youth and encouraging them to read (Fundza, 2014). Another example is the m4Lit project, a project funded by the Shuttleworth foundation to find out whether 'm-novels' (novels accessed via a mobile phone) were either complementary or an alternative to printed literature (Vosloo, 2010). The study found that the stories attracted over 60 000 reads and over 30 000 comments suggesting that mobile phone based reading is becoming popular and offers potential for the future (Vosloo, 2010).

Gender Differences in Reading Engagement, Motivation and Enjoyment

The gender differences in reading engagement and motivation are large, as males have been shown to engage in reading to a much lesser degree than females. Studies, such as those by

Bunbury (1995); McKenna, Kear and Ellsworth (1995); Martino (2001); Millard (1997); as well as Smith and Wilhelm (2002) are illustrations of this trend. For example, a summary of how several males felt about reading can be found in Martino (2001): “These males reject reading and define it in opposition to practices that they find more enjoyable and worthwhile” (p. 61).

In South Africa, studies are limited but consistent with international findings. For example, a sample of approximately 2000 school children in Gauteng was taken from grade 5 to grade 10 and surveyed by means of a detailed questionnaire to determine what their reading behaviour and preferences consisted of (Machet, 2002). The study found that males read significantly less than females overall (Machet, 2002). Thus, as males spend less time reading than females, they also score predictably lower in reading ability.

Internationally, and in South Africa, reasons for gender differences in reading engagement, motivation and enjoyment have been investigated.

Challenges for Males in Reading Engagement, Motivation and Enjoyment

One challenge that males face in reading is lack of role models at home. According to Pottorff, Phelps-Zientarski and Skovera (1996), mothers read books as much as 10 times more than fathers, and thus males, in identifying with the father figure, are less likely to read books too. Furthermore, reading environments, such as school reading groups and recreational book clubs, are often uncomfortable to males, because of their more sedentary and self-reflective nature i.e. males are more responsive to physical activities and are less interested in analysing their feelings than females (Sullivan, 2004). In addition, it is not considered masculine behaviour to read in males’ peer groups (Martino, 2001).

The types of books that males prefer reading are also not commonly selected by librarians and teachers, who are mostly female and select more female appropriate content (Sullivan, 2004; Millard, 1997; Weih, 2008). For example, in a study by Millard (1997), males reported a preference for discussing certain types of reading content in classroom reading discussions, such as computer and hobby magazines, as well as comic books, and these were discouraged by the

teachers. Research in this regard is limited in the South African context, however studies suggest that classrooms also consist mostly of female teachers (Govender, 2012; Banda, 2010), and that literacy is mediated to a large extent by teachers (Banda, 2010).

Studies illustrate that males are also less likely to cross gender boundaries in reading content than females (Merusio-Storm, 2006; Dutro, 2002), which adds to the problem that the content males enjoy reading has been found to be less widely available. The extent to which males enjoy different content to females has been illustrated in studies such as: Gurian and Henley (2001); Sullivan (2004); Weih (2008); Clark & Foster (2005). Most studies find agreement in the types of content that males enjoy. Gurian and Henley (2001) found that males enjoy content which is multi-sensory and practically engaging, such as books with more pictures (e.g. comic books), adventure, horror, and those offering practical advice. Similarly, Sullivan (2004) found that males enjoy reading fantasy, science fiction, adventure and comic books, and this is supported by studies such as Weih (2008). Although females show certain similarities to males in their preferences, such as adventure, comedy, horror and crime/detective, females prefer content such as romance and poetry whereas males prefer content such as sport and war/spy-related (Clark & Foster, 2005). There is disagreement in the literature between whether males prefer fiction or non-fiction to females. Gurian and Henley (2001) found that males prefer nonfiction to females, but Clark and Foster (2005) illustrate that their male participants enjoyed certain types of fiction as much as females did (See Figure A.2. Appendix A)

A study by Chiu and McBride-Chang (2006) found that enjoyment accounted for 42% of the gender difference in achievement, i.e. enjoyment is almost half the reason males score lower than females in reading tasks, indicating that investigation into gender differences in reading enjoyment in the South African context is warranted.

Thus, the rationale for the study is as follows: Although mobile phone technology offers a way to eliminate many of the issues young South Africans face in regards to ease and availability of books, enjoyment mediates reading achievement to a large extent. Due to gender differences in both reading achievement and reading engagement, investigation into reading enjoyment, specifically, reading content is needed. The aim was thus to establish whether or not there are

gender differences in preference for certain reading content and what those preferences were for each gender. The study is aimed particularly at males, for whom reading achievement is the lowest. If the content males enjoy is more easily available, this should result in higher reading achievement.

2. METHOD

Design

The first part of the study examined the reported reading content preferences of male and female adolescents. A short online survey was sent out to determine what teenagers report as enjoyable reading content. The second part of the study set out to describe the reading behaviour of male and female adolescents, specifically what content they were reading on an online reading website. The aim was to determine whether there are gender differences in reading content preferences between genders, what those preferences are for both genders and whether teenagers read the same content they report as preferable to them. A further aim was to determine if the content preferences were consistent with the literature.

Participants

For the first part of the study, an online survey was sent to all male and female users of the Fundza reading program. This provided access to a large number of participants already engaged in the program. As the study focused on the reading preferences of adolescents, of the n=2775 (male n=661; female n=2113) that completed the questionnaire, n=1638 participants (male n=358; female n=1280) were retained as they were between the ages of 13-19 years old (born between the time period 1994-2003).

The second part focused on the reading activity of adolescent males (n=12 436) and females (n=28 450) that were between the ages of 13 and 19 years (i.e. born between 01/07/1994-21/04/2003) during a six month period (the period from the 1st July 2013 to the 1st January 2014) on Fundza.

Materials

A short and simple questionnaire was desired, as limitations exist in regards to completion of a questionnaire on a mobile phone. For example, the questions can take a long time to load, especially on older phones, and the user may also get bored if the questionnaire is too long.

Participants were asked to rate a range of genres on a five-point Likert scale: 1 (Really like), 2 (Like), 3 (It's okay), 4 (Don't like) and 5 (Really don't like). The genres were: nonfiction; fiction; South African stories; sports stories; love stories (romance); action or adventure; alien, zombies or fairy stories (science fiction/fantasy); friendship or family stories (drama); news stories and stories about famous people (biography). See Appendix B for the full questionnaire.

Ethical Considerations

The study was approved by the University Of Cape Town Department Of Psychology Research Ethics Committee.

Firstly, technological research involves some degree of risk, as invasion of privacy is a concern when working with online log files. The researcher was provided with two possible identifiers, namely date of birth and unique Mxit identity number. However, according to the Electronic Code of Federal Regulations in America, these fall under the category of Directory Information, which is not considered harmful to the user if disclosed. Directory information includes: "A student ID number, user ID, or other unique personal identifier used by a student for purposes of accessing or communicating in electronic systems, but only if the identifier cannot be used to gain access to education records, except when used in conjunction with one or more factors that authenticate the user's identity, such as a personal identification number (PIN), password or other factor known or possessed only by the authorized user," (Privacy Technical Assistance Center, 2014). The researcher did not have access to the participants' PINs. In addition, the URL data was post hoc. Thus it was determined that risk of harm was minimal.

The questionnaire did not pose any risk either as the questions did not involve sensitive issues, e.g. issues pertaining to race, gender, social class, age or disability. In addition, the questionnaire was administered online which provided users with comfort of completion in their own time and within their own environment and guaranteed anonymity.

There were no costs to the participants. The direct benefits to the participants would be convenient access to context relevant stories at no cost to the user, resulting in more motivation to read, more time spent reading and the long term benefits derived from reading.

Compensation was given in that participants were entered into a competition to win 1000 Moola if the questionnaire was completed. Moola is an online currency, roughly equivalent to R0.01 per 1Moola, and this online currency allows the user to buy books or special offers on the Mxit application.

Informed consent was not sought for the following reasons: Mxit has a privacy policy that states that the user's visits to the site may be used in research, but that their identities will be protected, and Mxit users agree to this when downloading the application. In addition, Mxit has an agreement with the applications (such as Fundza) that user statistics may be used for research on the condition that their users' identities are protected. In addition, implicit informed consent is assumed on online public platforms, for example on the comment pages, where users can reasonably expect to be observed by strangers. For the questionnaire, parental consent was not requested as the survey was conducted in accordance with Fundza's standard format and procedure guidelines and forms part of their general surveys. Fundza frequently sends these surveys out to its users for marketing and research purposes, in order to assess the efficacy of the program and to receive feedback from its users for the ultimate purpose of improving its reading program. This particular survey was no different to the usual Funza surveys in regards to format or procedure.

Confidentiality of participants was retained as the researcher did not receive the participants' personal or contact details. As above, the only piece of personal information received by the researcher was a unique Mxit identity number. However, this did not allow the researcher to access their accounts, as Mxit accounts are password protected. For the questionnaire, Fundza administered the questionnaire, and the information that the researcher received back from Fundza did not contain identifiable information.

There was no conflict of interest in the study.

Procedure

For the first part of the study, Fundza sent out the questionnaire in the last week of July 2014 on its website as a competition. After completion of the questionnaire, participants would be entered into a draw to win 1000 Moola. Fundza would randomly generate the winner from the Mxit identification numbers of the users that completed the questionnaire. The questionnaire was displayed on the website for two weeks, after which it was taken down.

For the second part of the study, the aim was to rank the stories on the website from those with the most visitors to those with the least for each gender group. The stories which received the most visitors were determined by the total number of people that visited each story. The organization keeps a record of user log files from the website. These are URLs (website links to a particular page) on the site. The organization sent the researcher two Microsoft Excel documents: one for the males and one for the females, each containing the URLs from the website for the requested time period. For each URL, the researcher received the following information: the visit date, the visit time, the Mxit id (the user's identity number on the site), the user's country, the user's city, the user's date of birth, the user's gender and the URL (or web page) visited. The males' document contained 554327 unsorted URLs, and the females' document contained 3 071 254 unsorted URLs. The researcher sorted the data and eliminated unnecessary information as follows:

Firstly, the URL, although in the same column, contained different pages of the website, which were delimited with "/" and ",". One example of such a URL is the following:

2013-07-01, 02:02:04, m38450098002,"", Cape Town, 1997-06-30, Male,"", /home/books/fiction-short-stories/finders-keepers/

The pages visited were therefore separated into separate columns by utilizing the "text-to-columns" function in Excel. This resulted in different pages in different columns. The aim was to analyze the story names, and this posed a problem, because the story names were not all in the same column. This occurred because a user could access the story via various pathways in the site. For example, one story's pathway could be home, big reads and finally "a-mozambican-

summer.” Another story’s pathway could be home, books, fiction-books, and finally “broken-promises.” For example:

2013-07-01, 05:05:54, m21904298002,"", Pietermaritzburg, 1995-08-16, Male,"", /home/big-reads/a-mozambican-summer/
 2013-07-26, 17:05:41, m44402928002,"", Durban, 1996-02-25, Male,"", /home/books/fiction-books/broken-promises/

When separated into columns, the data would look like as follows:

Visit Date	Visit Time	Mxit ID	City	Date of Birth	Gender	URL			
2013-07-01	05:05:54	m21904298002	Pietermaritzburg	1995-08-16	Male	home	big-reads	a-mozambican-summer	
2013-07-26	17:05:41	m44402928002	Durban	1996-02-25	Male	home	books	fiction-books	broken-promises

Thus, the story names ended up in different columns and the second step was to cut and paste the story names into the same column manually.

Once the stories were all in the same column, the third step was to delete all the URLs without story names. For example, visitors could access the home page or contact page without reading any stories and these URLs were also in the document. The URLs were sorted according to story name and those that had no story name were deleted (males n=279 869; females n=1 265 876). Error pages of the stories where users tried to gain access but had access errors were deleted (males n=10373; females n=83160), as well as comment pages (males n=2 227; females n=373 483). These were deleted because it was felt that they do not reflect interest in the story content itself, and with so many cases, a degree of liberal elimination of URLs which caused uncertainty could be afforded. The total remaining URLs for each group were as follows:

Females: n =1 348 735

Males: n= 261 858

3. DATA ANALYSIS

PART 1 – QUESTIONNAIRE

For the questionnaire, an initial analysis of the questionnaire items (independent variables) revealed skewness and multivariate normality could not be assumed. For example: in sport, the normal distribution skewness was 1.621 (See Figure C.2. Appendix C). They were also differentially skew between genders. Utilizing sport as an example once again, inspection of the distribution graphs revealed skewness in different directions, and the normal distribution skewness for females was -.236, whilst the same statistic for males was .544 (See Figure C.1. and Figure C.2. Appendix C). Many of the variables showed similar patterns (See Figure C.2. Appendix C). An inspection of the mean and median scores revealed inconsistencies as well (See Figure C.2. Appendix C). Although the original plan was to analyse the data via linear discriminant analysis, it seemed unsafe to assume multivariate normality so Chi-Square analyses were run on the individual variables instead, as normality is not required for this test. Due to the large sample size, however, the differences might not be large, despite being statistically significant, so a stricter alpha level was used (namely 0.001) to control for Type 1 error, and effect sizes and standardized residuals were inspected to judge whether statistical differences were substantive. Two-tailed significant tests were used.

Chi-Square Analyses

The analyses revealed the following (from strongest effect size to smallest):

TABLE1: Chi-Square statistics for Genre cross-tabulated with Gender

Genre	χ^2	df	P value	Cramer's V	Effect Size
Sport	181.496	4	p < .001	.333	Medium
Romance	60.748	4	p < .001	.193	Relatively small
Drama	43.465	4	p < .001	.163	Small

Science Fiction	18.394	4	p < .05	.106	Small
Nonfiction	13.397	4	p < .05	.090	Very small
News	12.086	4	p < .05	.086	Very small
Action/Adventure	11.027	4	p < .05	.082	Very small
Fiction	10.357	4	p < .05	.080	Very small
Biography	9.995	4	p < .05	.078	Very small
South African	6.070	4	p > .05	n/a	Very small

Sport:

60.3% of males rated sport favourably (really like: 37.4%; like 22.9%), as opposed to only 34.1% of females (really like: 11.2%; like: 22.9%). Standardized residuals indicate which cells had the largest contribution to the Chi-Square by providing counts comparable to what one would have expected for the cell. The convention is that anything above 2 or anything below -2 is a substantive effect. The standardized residuals were greater than 2 for males in regards to “really like” (9.4) and “like” (2.8) and less than two for females for “really like” (-5) and “like” (-1.5) indicating that overall males rated the genre more favourably. (See Table C.3. and Table C.4. Appendix C).

Conversely 39.3% of females rated the genre unfavourably (really don’t like: 12.0%; don’t like: 27.3%), as opposed to 15.1% of males (really don’t like: 3.1%; don’t like: 12%). Standardized residuals also support more negative ratings from females: “don’t like” (females: 2.4; males: -4.6); “really don’t like” (females: 2.2; males: -4.2) (See Table C.3. and Table C.4. Appendix C).

There were statistically significant differences between males and females in reported preference for sport: $\chi^2(4) = 181.496, p < .001$. Cramer’s V is .333, which is considered a medium effect size. See Table 1. According to Cohen, the convention with Cramer’s V is that anything less than .10 is a small effect size, anything more than .30 is a medium effect size and anything more than 0.5 is a strong effect size.

Romance:

Although 86.2% of females rated romance a genre they really like, 69.3% of males also strongly liked the genre and 19% liked the genre. The negative ratings were slightly higher for males (really don't like: 1.1%; don't like: 2.8%) than females (really don't like: 0.3%; don't like: 0.6%), but the overall negative ratings were generally low for both genres. The standardized residuals indicate that the biggest difference was in "like", with higher ratings for males (females: -2.5; males: 4.8), and "don't like," also with higher ratings for males (females: - 1.6; males: 3.1). This suggests that although the majority of males do like the genre, they are more likely to report this conservatively, i.e. "like" instead of "strongly like", and that more males don't like the genre than females (See Table C.3. and Table C.4. Appendix C).

There were statistically significant differences between males and females in reported preference for romance: $\chi^2(4) = 60.748$, $p < .001$. Cramer's V is .193, which is a relatively small effect size. See Table 1.

Drama:

Females rated drama more highly than males: 81% of females rated drama as 'really like,' in comparison to 66.2% of males. However, more males rated drama as 'like' and 'okay' than females did, i.e. 31.5% of males (like: 22.6%; okay: 8.9%) as opposed to 18% of females (like: 14.3%; okay: 3.7%). The standardized residuals also indicate that males are more likely to report conservatively on the genre: the highest residuals for males were for "okay" (3.5) and "like" (-1.2), whilst these were the lowest for females (okay: -1.9; like: - 1.6). There were no reports of strongly dislike for males. (See Table C.3. and Table C.4. Appendix C).

There were statistically significant differences between males and females in reported preference for drama: $\chi^2(4) = 43.465$, $p < .001$. Cramer's V is 0.163 which is a relatively small effect size. See Table 1.

Science fiction:

Males rated science fiction slightly more negatively, i.e. 42.4% (really don't like: 17%; don't like: 25.4%) as opposed to 32% of females (really don't like: 11.3%; don't like: 20.7%). Females rated science fiction slightly more positively, i.e. 42% (like: 18.2%; really like: 23.8%) as opposed to 29.4% of males (like: 15.4%; really like: 24%). The standardized residuals also indicate that males rated "really don't like" more than females for science fiction (females: - 1.3; males: 2.4) (See Table C.3. and Table C.4. Appendix C).

There were statistically significant differences between males and females in reported preference for science fiction: $\chi^2(4) = 18.394, p < .05$. Cramer's V is 0.106 which is considered a small effect size. See Table 1.

Nonfiction:

76% of females report really liking the genre, as opposed to 66.8% of males. More males answered 'like' (20.7%) and 'ok' (10.1%), i.e. 30.8% in total, than females did (like=14.1%; okay=7.8%), i.e. 21.9% in total. Standardized residuals indicate that males answered "okay" more readily than females (females: - 1.3; males: 2.5). The remaining residuals were all lower than 2 and higher than -2, indicating none were above or below the expected frequencies, thus the possibility that the two groups are not greatly different exists. (See Table C.3. and Table C.4. Appendix C).

There were statistically significant differences between males and females in reported preference for nonfiction: $\chi^2(4) = 13.397, p < .05$. Cramer's V is .090, which is also a small effect size. See Table 1.

News:

Females rated the genre slightly more negatively than males, i.e. 10.8% (really don't like: 2.9%; don't like: 7.9%) as opposed to 8.1% (really don't like: 2.8%; don't like: 5.3%), whereas males

rated news more positively than females, i.e. 76.3% for males (really like: 48.9%; like: 27.4%) as opposed to 67% for females (really like: 43.7%; like: 23.3%). However, as with nonfiction, standardized residuals indicate that the majority of the effect lies in “okay”, with slightly more positive ratings from females (1.1) than males (-2.1), and with no other standardized residuals above 2 or below -2 (See Table C.3. and Table C.4. Appendix C).

There were statistically significant differences between males and females in reported preference for news: $\chi^2(4) = 12.086$, $p < .05$. Cramer’s V is 0.086 which is a very small effect size. See Table 1.

Action/Adventure:

The biggest observable difference in percentage between genders is the fact that males report really liking action/adventure (53.6%) more than females do (46.3%). Conversely, there are also more ratings of ‘don’t like’ from males (6.4%) than females (5%). This suggests a wide variation amongst males. Standardized residuals suggest that the majority of the effect is once again in “okay,” (females: 1.1; males: -2.2) with no other residuals above 2 or below -2. There is once again the possibility that the two samples are not greatly different (See Table C.3. and Table C.4. Appendix C).

There were statistically significant differences between males and females in reported preference for action/adventure: $\chi^2(4) = 11.027$, $p < .05$. Cramer’s V is 0.082 which is also considered a small effect size. See Table 1.

Fiction:

It appears that 42.5% of females report really liking the genre, as opposed to 37.2% of males. More males rated the genre more negatively: males answered ‘really don’t like’ (2.5%) and ‘don’t like’ (4.2%), i.e. 6.7% in total more than females did (really don’t like=1.2%; don’t like=3%), i.e. 4.2% in total. Standardized residuals indicate that there were no counts above or

below expected frequencies, and once again it could suggest that the two samples are not substantively different. (See Table C.3. and Table C.4. Appendix C).

There were statistically significant differences between males and females in reported preference for fiction: $\chi^2(4) = 10.357$, $p < .05$. Cramer's V is .080, which is also a small effect size. See Table 1.

Biography:

Although most of the percentages were similar, males showed slightly more negative ratings i.e. 13.4% (really don't like: 5.3%; don't like: 8.1%) as opposed to females, i.e. 8.8% (really don't like: 2.5%; don't like 6.3%). Standardized residuals indicate that the biggest difference lies in "really don't like," with counts higher for males (2.4) than females (- 1.2). (See Table C.3. and Table C.4. Appendix C).

There were statistically significant differences between males and females in reported preference for biography: $\chi^2(4) = 9.995$, $p < .05$. Cramer's V is 0.078 which is a very small effect size. See Table 1.

South African:

There were no statistically significant differences between males and females in reported preference for South African: $\chi^2(4) = 6.070$, $p > .05$, with both rating the genre highly as 'really like' (68.3% of females; 69.3% of males) (See Table 1). Standardized residuals support non significance between genders, as there are no counts below or above expected (2 or -2) (See Table C.3. and Table C.4. Appendix C).

PART 2 – WEBPAGE VISITS

For the webpage visits, pivot tables in Microsoft Excel were used to count Mxit Ids (or unique visitors) to each story. I used count of Mxit Ids, as opposed to URLs for the following reason: Chapters in the story were also reflected in the URLs in a different column, and some stories had more chapters than others. So if a user visited multiple chapters of one story, it would seem that the story had more visits than stories without multiple chapters, or stories with fewer chapters. Therefore, to control for error, multiple visits were factored out by counting unique visitors instead. However, the pivot tables in Excel do not have a function to factor out duplicate items, so this had to be done manually. All columns except 'story name' and 'Mxit id' were eliminated and utilized with the 'remove duplicates' function in Excel, removing the multiple visits in each story. This was done for both the male data file and the female data file. In the female data file, the remaining rows were n=346 226. In the male data file, the remaining rows were n= 69 247. I then ran pivot tables to count the Mxit ids for each story. The two columns for each group were copied and pasted into a new workbook for comparison purposes and stories were sorted from most visitors to least visitors for each group via the 'sort Z to A' function. The top 25 stories were categorized according to: content type (book, short story, poetry or play); fiction/nonfiction; genre (sports, news/information, biography, science fiction/fantasy, comedy, religious, romance, drama and action/adventure); and South African (yes or no). The categorizations were based in large part on the questionnaire genres to see if the visits were consistent with the reported preferences (i.e. the questionnaire results).

Spearman's rank order correlation coefficient was used to determine to extent to which the top 25 stories were correlated for males and females. A comparison chart for males and females number of visits by story name was compiled. The incomplete frequencies for the stories reflected in one gender's list that was not in the others was obtained and stories were ranked according to frequencies to obtain the rank order. For example, for the story "among-the-stars" ranked no 22 for males and 23 for females. There were 28 stories in total (See Table C.5. and Table C.6. Appendix C).

The resulting coefficient was .7329, indicating a strong positive correlation between the two datasets: $t(26,) = 5.49, p < 0.01$

Chi Square Analyses were run for the subject visits to category, fiction/nonfiction, genre and South African:

TABLE 2: Chi-Square Statistics for Visit Type cross-tabulated with Gender

Visit Type	χ^2	df	P value	Cramer's V	Effect Size
Category	383.305	2	p < .001	.052	Very small
Genre	251.764	4	p < .001	.045	Very small
Fiction/Nonfiction	211.857	2	p < .001	.041	Very small
South African	9.703	1	p < .05	.009	Very small

Category

For females: Books: n =77 710; Short Stories/Articles: n =36 991; Poetry: n=2 374

For males: Books: n = 13 778; Short Stories/Articles: n= 7 632; Poetry: n=870

(See Figure C.11. Appendix C).

Overall, the most popular categories that were visited by both females and males are: firstly books (females: 66.4%; males: 61.8%), short stories or articles (females: 31.6%; males: 34.3%) and poetry (females: 2%; males: 3.9%). Percentages and standardized residuals indicate that the biggest differences were in poetry, with males (3.9%, Std. Res.: 17) visiting poetry more than females (2% -17). Males also visited articles and short stories (34.3%, Std. Res.: 7.8) more than females (31.6%, Std. Res: -7.8). Females (66.4%, Std. Res.: 13.1), however, visited more books than males (61.8%, Std. Res.: - 13.1) (See Table C.7. Appendix C).

There were statistically significant differences between males and females in visits to types of content or category: $\chi^2 (2) = 383.305$, p < .001. However, Cramer's V is 0.052 which is a very small effect size (See Table 2).

Genre:

For females: Drama: n= 65 224; Romance: n= 20 345; Biography: n= 9 275;

Action/Adventure: n= 6 176

For males: Drama: n= 13 504; Romance: n= 4 440; Biography: n = 1 640;

Action/Adventure: n= 1 273

(See Figure C.12. Appendix C).

Overall, the most popular genres for both males and females are: drama (females: 63.1%; males: 62.2%), followed by romance (females: 19.7%; males: 20.4%), biography (females: 9%; males: 15%) and action/adventure (females: 6%; males: 5.9%). (See Table C.8. Appendix C).

Percentages and standardized residuals indicate that the greatest variation was in visits to “other” in that males (Percentage: 4%, Std. Res.: 14.4) visited it more than females (Percentage: 2.3%, Std. Res.: -14.4). Biography was visited more by females (Percentage: 9%, Std. Res.: 6.8) than males (Percentage: 7.5%, Std. Res.: - 6.8), and drama was also visited more by females (Percentage: 63.1%, Std. Res.: 2.6) than males (Percentage: 62.2%, Std. Res.: -2.6). Romance, however, was visited more by males (Percentage: 20.4%, Std. Res: 2.5) than females (Percentage: 19.7%, Std. Res.: - 2.5). There were no great differences in visits to action/adventure for females (Percentage 6%, Std. Res: .6) and males (Percentage: 5.9%, Std. Res.: - .6) (See Table C.8. Appendix C).

There were statistically significant differences between males and females in visits to genre: $\chi^2(4) = 251.764$, $p < .001$. However, Cramer’s V is 0.045 which is a very small effect size (See Table 2).

Fiction/Nonfiction

For females: Fiction: n = 91 745; Nonfiction: n = 9 275, other: n = 2 374

For males: Fiction: n = 19 217; Nonfiction: n = 2 193; other: n = 870

(See Figure C.13. Appendix C).

Overall, fiction is visited the most by both females (88.7%) and males (86.3%), followed by nonfiction (females: 9%; males: 9.8%) and other (females: 2.3%; males: 3.9%). Percentages and standardized residuals indicate that the biggest difference between genders lies in “other”, which males (3.9%; Std. Res.: 12.3) visited more than females (2.3%; Std. Res.: - 5.7). Males visited nonfiction (9.8%, Std. Res.: 3.5) more than females (9%, Std. Res.: - 1.6), whilst females visited fiction (88.7%, Std. Res.:1.5) more than males (86.3%; Std. Res.: - 3.2). (See Table C.9. Appendix C).

There were statistically significant differences between males and females in visits to fiction or nonfiction: $\chi^2(2) = 211.857, p < .001$. However, Cramer’s V is 0.041 which is also very small effect size (See Table 2).

South-African

For females: Yes: n= 97 940; No: n= 5 455

For males: Yes: n= 20 989; No: n= 1 291

(See Figure C.14. Appendix C).

Overall, South African content (females: 94.7%; males: 94.2%) was overwhelmingly preferred to non-South African content (females: 5.3%; males: 5.8%) for both genders. Percentages and standardized residuals indicate that females read South African (94.7%, Std. Res.: 3.1) more than males did (94.2%; Std. Res.: - 3.1). (See Table C.10. Appendix C).

There were statistically significant differences between males and females in visits to South African content: $\chi^2(1) = 9.703, p < .05$. However, Cramer’s V is 0.009 which is a very small effect size (See Table 2).

4. DISCUSSION

The results from the study indicate that many more females (n=28 450) read content on the site than males (n=12 436). More females (n=1280) also completed the questionnaire than males (n=358). This is consistent with the literature regarding reading engagement being higher for females (Bunbury, 1995; McKenna, Kear & Ellsworth, 1995; Martino, 2001; Millard; 1997; Smith and Wilhelm, 2002)

The genres with the highest percentage of females answering 'Really Like' are: romance followed by drama, nonfiction, South African, action/adventure, news, fiction, biography, science fiction, and lastly, sport.

The genres with the highest percentage of males answering 'Really Like' are: romance, followed by South African, nonfiction, drama, action/adventure, news, biography, sport, fiction and lastly, science fiction.

The content most visited by both females and males are firstly, drama, followed by romance, biography, action/adventure and lastly, other.

It was found that males also seem to enjoy certain genres that are inconsistent with the literature. The two most notable examples of this are drama and romance.

In the questionnaire, 66.2% of males reported strongly liking drama, 22.6% reported liking drama and 8.9% said it was okay. The standardized residuals suggested that males reported the genre positively but more conservatively than females. Only 2.2% of males reported that they don't like drama, and not one male reported the genre as being strongly disliked. Similarly, in the visits, 62.2% of the top 25 story visits by the males were visits to drama, by far the most popular genre for males in the visits.

For romance, gender comparisons revealed that a slightly higher percentage of males (20.4%) visited romance in the top 25 most popular stories than females (19.7%), and the standardized residuals indicated that the cell count was more than expected for males (2.5) and less than expected for females (-2.5). Questionnaire results illustrated a different trend, in that females rated romance higher than males. However, 69.3% of males still reported strongly liking the genre in the

questionnaire. In fact, it was the genre receiving the highest percentage of ‘Really Like’ responses for the males, and the remaining males’ ratings of romance were mostly positive (19% rated it as ‘like’). As with drama, males rated romance positively, yet more conservatively than females. This could suggest that something is hindering males from rating “female-appropriate” genres as strongly positive as females, despite visiting these genres equally as much, sometimes more. A possibility is that certain reading content is not encouraged by males’ environment and peer group as illustrated by Martino (2001).

In regards to the fiction/nonfiction debate, results are mixed. The questionnaire found a significant difference in nonfiction, however, none of the standardized residuals were above or below the expected frequencies and the effect size was very small (the biggest difference was explained by “okay” ratings). For fiction, once again, none of the standardized residuals were above or below the expected frequencies and the effect size was also very small (the biggest difference was explained by “okay” ratings). Females rated both nonfiction and fiction more strongly than males (76% of females report really liking nonfiction, as opposed to 66.8% of males, and 42.5% of females report really liking fiction, as opposed to 37.2% of males).

In addition, males and females both visited fiction (Females: 88.7%; Males: 86.3%) more than nonfiction (Females: 9%; Males: 9.8%). Standardized residuals suggest that males visited nonfiction slightly more than females, and females visited fiction more than males, as suggested by Gurian and Henley (2001). However, the effect size for the analysis was very small.

Overall though, this study suggests that males enjoy fiction more than nonfiction: 66.8% of males report really liking fiction, and 37.2% of males report really liking nonfiction. In addition 86.3% of males visited fiction, whilst only 9.8% visited nonfiction in the top 25. This is consistent with the findings of Clark and Foster (2005).

The following was also consistent with the literature:

- Action/adventure is reported as being liked slightly more by males (53.6%) than females (46.3%), but not by much: the effect size is very small and there are no standardized residuals above or below expected counts. In addition, the visits to action/adventure in the top 25 show a

.1% difference (5.9% for males; 6% for females), indicating that both genders enjoyed it similarly.

- Sport was strongly preferred by males: 60.3% of males in contrast to 34.1% of females reported really liking the genre. In fact, this was the only Chi-Square test with a medium effect size, with a Cramer's V of .333, and individual cell counts (standardized residuals) showed support for an overwhelming male preference for sport over females. However, although males preferred sport over females, sport did not represent a high percentage of positive ratings overall within the gender. Only 37.4% of males rated sport as a genre they really like, as opposed to 69.3% for romance, and 66.2% for drama.
- News was more popular amongst males - 76.3% rated the genre favourably (really like: 48.9%; like: 27.4%) as opposed to 67% for females (really like: 43.7%; like: 23.3%). However, with a very small effect size and standardized residuals all between 2 and -2, except for the "okay" ratings, results are not fully substantive.

Of final interest was the South African genre. Both genders rated it similarly to the extent that there were no statistically significant differences between the groups in the questionnaire (68.3% of females and 69.3% of males reported really liking the genre). The visits were also consistent with the survey, as the majority of visits for both groups were to pages with South African based content (females: 94.7%; males: 94.2%). Although the differences were statistically significant, the effect size was really small (Cramer's $v = .009$). In regards to percentage of 'Really Like' responses within the gender, South African was the fourth most popular genre for females and the second most popular for males. This illustrates the need for context relevant content in South Africa.

One of the top 25 stories, "umonakalo" is a drama written in isiXhosa. It received 535 unique male visitors and 1340 unique female visitors for the period. The site has a variety of stories written in a range of languages and these are read by the users. For example: "u-dlamini-omhle," another drama written in isiXhosa, receiving 626 unique female visitors and 120 unique male visitors; "umgwaqo-obuyela-kimi," an isiZulu drama receiving 938 unique female visitors and 376 unique male visitors and "n-goue-ster-en-n-soentjie-vir-thoko," an Afrikaans children's story receiving 171 unique female visitors and 47 unique

male visitors. In the m4Lit program discussed above, an evaluation of an isiXhosa 'm-novel' (novel accessible via a mobile phone) provided evidence of the popularity of multi-lingual content in South African youths (Walton, 2010). Thus, further research is needed in regards to the popularity and potential of context-relevant and multi-lingual reading content, as opposed to simply gender based content.

Limitations

Firstly, the results should be interpreted with caution, as the effect sizes are small for many of the variables, despite being statistically significant. It is one of the problems with such a large sample size, i.e. the smallest differences will appear statistically significant. The alpha levels were adjusted to .001 in an attempt to control for this, but small effect sizes resulted from the analysis regardless.

Secondly, in the analysis of the URL visits to the site, the erroneous assumption is made that all types of content are available to an equal degree for users on the site, which is not the case.

Although there is a greater variety of content on the site than reflected in the top 25, the majority of the content seems to be fiction, drama and romance (female-appropriate content according to the literature), which could have, and probably did, play a role in the appearance of these types of content in the top 25 rankings. However, the assumption was that if males disliked certain types of content enough, and preferred other types, they would find those types on the site, regardless of them being represented less, and/or they would not read the content. There is also the possibility that perhaps males are so eager to read that they will engage with content that is not their first choice. If the questionnaire reflected a different preference to the visits in regards to this, perhaps these theories would be more likely. However, males also report romance, drama and fiction as their most liked genre in the questionnaire as well. One reason for the popularity of 'female-appropriate' content among males could be that vast exposure to romance, fiction and drama on the site has increased their liking for the content. Perhaps, however, the social context has changed over time, and trends in reading preferences could be changing. Although the findings of Martino (2001) suggest that it is not considered masculine behaviour to read in males' peer groups, this could have changed in the last decade. However, once again, the low proportion of males in the program make this assumption questionable. These reasons could be explored further.

Thirdly, the study was conducted on a sample of males who are already engaged in reading, and the problem lies with the males who are not reading. The issue of generalizability is one to be considered here, i.e. whether the findings reflect the preferences of the majority. Thus, future research could explore the content preferences of teenagers in a school setting.

Finally, the URLs simply illustrated visits to a story, i.e. interest in a story. How far into, or how much of a story was read, was not taken into account. The data analysis reflects the user visiting a story, and not the actual pages or chapters read, or even how many times the story, page or chapter was read. For example, perhaps males simply read the index page of the romance stories, but read further into the book for action/adventure stories. Although this data was available, and the intention was to create a dimension of sustained interest, measuring the average percentage of the book read by both genders, this was not completed due to time constraints.

5. CONCLUSION

A comparison of self-reported genre preferences in reading and content visits on a reading website revealed that there were gender differences in reading content preferences. The most popular self-reported genres for females included: romance, followed by drama, nonfiction, South African, action/adventure, news, fiction, biography, science fiction, and lastly, sport. The most popular genres for males included: romance, followed by South African, nonfiction, drama, action/adventure, news, biography, sport, fiction and lastly, science fiction. The most popular genres according to the visits were drama, romance, biography, action/adventure and other.

The visits were sufficiently consistent with the reported preferences to determine that gender differences, although significant, were small for all genres except sport. Inconsistent with the literature was the finding that males enjoyed romance, drama and fiction the most. Consistent with the literature is that males preferred sport and news to females, whilst both genders enjoyed action/adventure to a similar degree. Fiction and nonfiction were enjoyed more by females overall according to self-report, whilst the visits indicated that males visited nonfiction more than females, who visited fiction more than nonfiction. However, both females and males visited more fiction than nonfiction overall.

The genre 'South African stories' was very popular among both genders, and the differences were not significant in the questionnaire and significant but very small in the visits. This indicates that perhaps context-relevant content is just as important as gender-relevant content when attempting to engage readers. More research is needed in this regard.

References:

- Aker, J. C. & Mbiti, I. (2010). *Mobile Phones and Economic Development in Africa - Working Paper 211*. Retrieved from <http://www.cgdev.org/content/publications/detail/1424175>
- Banda, F. (2010). Defying monolingual education: alternative bilingual discourse practices in selected coloured schools in Cape Town. *Journal of Multilingual and Multicultural Development*, 31(3), 221-235.
- Birch, B. M. (2014). *English L2 reading: Getting to the bottom*. London: Routledge.
- Brozo, W. G., Shiel, G., & Topping, K. (2007). Engagement in reading: Lessons learned from three PISA countries. *Journal of Adolescent & Adult Literacy*, 51(4), 304-315.
- Bunbury, R. M. (Ed.). (1995). *Children's choice: Reading at home or at school*. Royal Victorian Institute for the Blind. Special Request Service.
- Chiu, M. M., & McBride-Chang, C. (2006). Gender, context, and reading: A comparison of students in 43 countries. *Scientific Studies of Reading*, 10, 331-362.
- Clark, C. & Foster, A. (2005). *Children's and young people's reading habits and preferences: The who, what, why, where and when*. London: National Literacy Trust.
- De Klerk, V. (2002). Language issues in our schools: Whose voice counts? Part 1: The parents speak: Many languages in education: issues of implementation. *Perspectives in Education: Many Languages in Education: Special Issue 1*, 20, p-1.
- Department of Basic Education. (2010). *Report on the Annual National Assessments of 2011*. Retrieved from <http://www.education.gov.za/LinkClick.aspx?fileticket=1U5igeVjiqg%3D&tabid=424&mid=183>
- Dutro, E. (2002). 'But that's a female's book!': Exploring gender boundaries in children's reading practices. *The Reading Teacher*, 55(4), 376-384.
- Fundza (2014). *The Fundza Literacy Trust*. Retrieved from: <http://www.Fundza.co.za>
- Govender, R. (2012). *A critical realist approach to literacy acquisition and development, with specific application to teacher training and support in primary education in KwaZulu-Natal* (Doctoral dissertation). Retrieved from <http://ir.dut.ac.za/handle/10321/765>
- Gurian, M., & Henley, P. (2001). *Males and females learn differently: a guide for teachers and parents*. San Francisco: Jossey-Bass.
- Wigfield, A., & Guthrie, J. T. (2000). Engagement and motivation in reading. *Handbook of*

- reading research*, 3, 403-422.
- Guthrie, J. T., Hoa, A. L. W., Wigfield, A., Tonks, S. M., Humenick, N. M., & Littles, E. (2006). Reading motivation and reading comprehension growth in the later elementary years. *Contemporary Educational Psychology*, 32, 282–313.
- Krashen, S. D. (2004). *The power of reading*. Westport, Conn.: Libraries Unlimited.
- Machet, M. (2002). Young people's reading interests in South Africa. *Mousaion*, 20(1), 44.
- Martino, W. (2001). Boys and reading: Investigating the impact of masculinities on boys' reading preferences and involvement in literacy. *The Australian Journal of Language and Literacy*, 24(1), 61.
- Mckenna, M., Kear, D. & Ellsworth, R. (1995). Children's attitude towards reading: a national survey. *Reading Research Quarterly*, 30, 934–956.
- Merusio-Storm, T. (2006). Girls and Boys Like to Read and Write Different Texts. *Scandinavian Journal of Educational Research*, 50, (2), 111–125
- Millard, E. (1997). Differently literate: Gender identity and the construction of the developing reader. *Gender and Education*, 9 (1), 31-48.
- Nielsen Southern Africa. (2011). *Mobile Phones Dominate in South Africa 2011*. Retrieved from <http://www.nielsen.com/us/en/newswire/2011.html?sortByScore=false&tag=Category%3AMobile>
- Pottorff, D. D., Phelps-Zientarski, D., & Skovera, M. E. (1996). Gender perceptions of elementary and middle school students about literacy at school and home. *Journal of Research and Development in Education*, 29(4), 203-211.
- Privacy Technical Assistance Center. (2014). *Protecting Student Privacy While Using Online Educational Services: Requirements and Best Practices*. Retrieved from <http://ptac.ed.gov/sites/default/files/Student%20Privacy%20and%20Online%20Educational%20Services%20%28February%202014%29.pdf>
- Smith, M. W. & Wilhelm, J. D. (2002). *Reading don't fix no Chevys*. Portsmouth, NH: Heinemann.
- Sullivan, M. (2004). Why Johnny Won't Read: Schools Often Dismiss What Males Like. No Wonder They're Not Wild about Reading. *School Library Journal*, 50(8), 36.
- Van der Berg, S. (2008). How effective are poor schools? Poverty and educational outcomes in South Africa. *Studies In Educational Evaluation*, 34(3), 145-154.

- Vosloo, S. (2010). *mLearning in Africa: Lessons from the m4Lit project* (By Steve Vosloo). Retrieved from <http://www.slideshare.net/uocunescochair/m4-lit-unesco-barcelona-oct2010-sprinkling>
- Walton, M. (2010). *Mobile literacies and South African teens: Leisure reading, writing, and MXit chatting for teens in Langa and Guguletu*. Shuttleworth Foundation.
- Weih, T. G. (2008). A Book Club Sheds Light on Males and Reading. *Middle School Journal* (J3), 40(1), 19-25.
- White, D. (2006). Telecommunications: A dynamic revolution. *The Financial Times*. Retrieved from: <http://www.ft.com/cms/s/1868125e-6e5f-11db-b5c4-0000779e2340>
- Wigfield, A., Guthrie, J. T., Perencevich, A. T., Klauda, S. L., McRae, A., & Barbosa, P. (2008). Role of reading engagement in mediating effects of reading comprehension instruction on reading outcomes. *Psychology in the Schools*, 45, 432–445.

APPENDIX A

Table A.1: Average Proportion of Non-English Children in South African Schools

		1997	1998
<i>State Schools:</i>	<i>S1</i>	28%	46%
	<i>S2</i>	39%	41%
	<i>S3</i>	65%	65%
<i>Private Schools:</i>	<i>P1</i>	22%	28%
	<i>P2</i>	27%	22%
	<i>P3</i>	20%	19%

(De Klerk, 2002)

Table A.2: Gender Differences in Fiction

Figure 3.8a: Preferred types of fiction - Boys

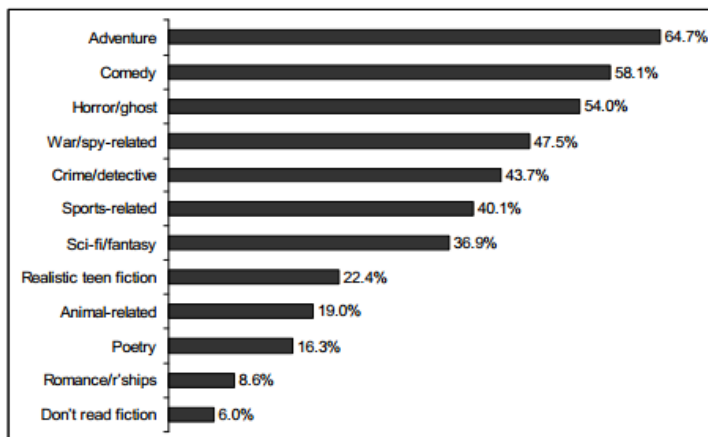
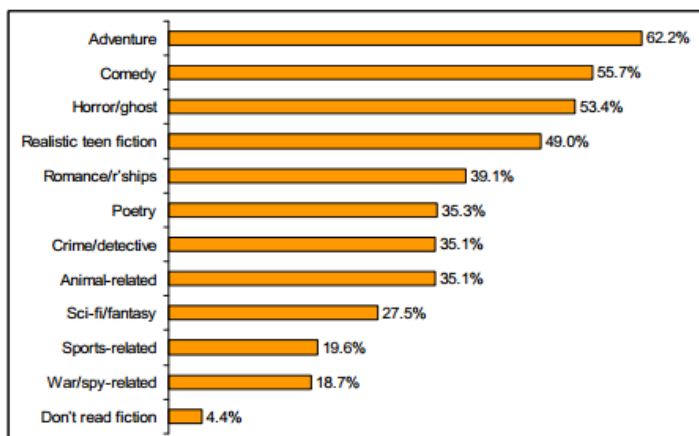


Figure 3.8b: Preferred types of fiction - Girls



(Clark & Foster, 2005)

APPENDIX B: Questionnaire

Please rate the following types of stories according to how much you like them:

1) True stories

Really Like Like Okay Don't Like Really Don't Like

2) Made up stories

Really Like Like Okay Don't Like Really Don't Like

3) South African stories

Really Like Like Okay Don't Like Really Don't Like

4) Stories about sporting teams

Really Like Like Okay Don't Like Really Don't Like

5) Stories about romantic relationships

Really Like Like Okay Don't Like Really Don't Like

6) Stories with lots of action

Really Like Like Okay Don't Like Really Don't Like

7) Stories about aliens and other worlds

Really Like Like Okay Don't Like Really Don't Like

8) Stories about friendship and family

Really Like Like Okay Don't Like Really Don't Like

9) The latest news

Really Like Like Okay Don't Like Really Don't Like

10) Life stories of famous people

Really Like Like Okay Don't Like Really Don't Like

APPENDIX C: Statistical Analyses

Figure C.1: Distribution Graphs for Sport

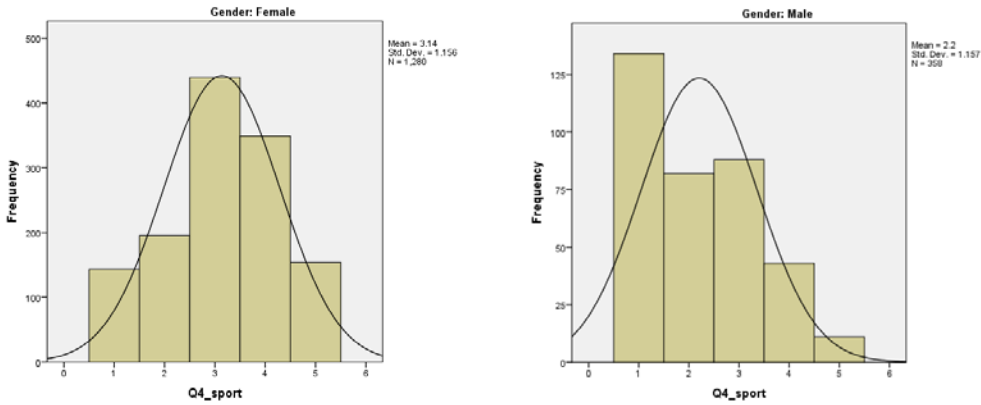


Figure C.2: Descriptive Statistics for Variables by Gender

		Statistics										
Gender		Q1_nonfiction	Q2_fiction	Q3_southafrican	Q4_sport	Q5_romance	Q6_action_adventure	Q7_scifi	Q8_drama	Q9_news	Q10_famous people	
Female	N	Valid	1280	1280	1280	1280	1280	1280	1280	1280	1280	
		Missing	0	0	0	0	0	0	0	0	0	
		Mean	1.37	1.85	1.47	3.14	1.21	1.89	2.78	1.25	2.03	2.05
		Median	1.00	2.00	1.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00
		Std. Deviation	.757	.901	.778	1.156	.574	1.006	1.321	.584	1.111	1.065
		Skewness	2.308	.922	1.687	-.236	3.203	.966	.093	2.797	.792	.718
		Std. Error of Skewness	.068	.068	.068	.068	.068	.068	.068	.068	.068	.068
		Minimum	1	1	1	1	1	1	1	1	1	1
	Maximum	5	5	5	5	5	5	5	5	5	5	
Male	N	Valid	358	358	358	358	358	358	358	358	358	
		Missing	0	0	0	0	0	0	0	0	0	
		Mean	1.49	2.02	1.49	2.20	1.47	1.77	2.96	1.47	1.86	2.14
		Median	1.00	2.00	1.00	2.00	1.00	1.00	3.00	1.00	2.00	2.00
		Std. Deviation	.809	1.000	.826	1.157	.842	.999	1.433	.751	1.045	1.186
		Skewness	1.753	.823	1.621	.544	1.974	1.213	-.075	1.534	1.162	.796
		Std. Error of Skewness	.129	.129	.129	.129	.129	.129	.129	.129	.129	.129
		Minimum	1	1	1	1	1	1	1	1	1	1
	Maximum	5	5	5	5	5	5	5	4	5	5	

Table C.3: Table Comparisons of Percentage and Standardized Residuals of Participants' Responses for Females (in order from highest 'Really Like' to lowest)

	Really Like		Like		Okay		Don't Like		Really Don't Like	
	%	Std. Res	%	Std. Res	%	Std. Res	%	Std. Res	%	Std. Res
Romance	86.2%	1.5	8.4%	- 2.5	4.5%	- 1.1	4.5%	- 1.6	0.3%	- .9
Drama	81%	1.3	14.3%	- 1.6	3.7%	- 1.9	3.7%	- 1.2	0.3%	.5
Nonfiction	76%	.8	14.1%	-1.3	7.8%	-.6	7.8%	-.3	0.9%	.1
South African	68.3%	-.1	19.1%	.5	10.8%	-.2	10.8%	-1	0.5%	.3
Action/ Adventure	46.3%	- .8	27.6%	.3	19.3%	1.1	19.3%	- .5	1.9%	.3
News	43.7%	- .6	23.3%	- .7	22.3%	1.1	22.3%	.7	2.9%	0
Fiction	42.5%	.7	35%	.3	18.4%	-.9	18.4%	-.5	1.2%	-.9
Biography	40.8%	.1	25.2%	.1	25.3%	.6	25.3%	- .6	2.5%	- 1.2
Science Fiction	23.8%	0	18.2%	.5	25.9%	1.2	25.9%	- .8	11.3%	- 1.3
Sport	11.2%	-5	15.2%	-1.5	34.3%	1.3	34.3%	2.4	12%	2.2

Table C.4: Table Comparisons of Percentage and Standardized Residuals of Participants' Responses for Males (in order from highest 'Really Like' to lowest)

	Really Like		Like		Okay		Don't Like		Really Don't Like	
	%	Std. Res	%	Std. Res	%	Std. Res	%	Std. Res	%	Std. Res
Romance	69.3%	- 2.8	19%	4.8	7.8%	2.1	2.8%	3.1	1.1%	1.7
South African	69.3%	.2	16.2%	-1	11.5%	.3	2.8%	1.8	0.3%	-.6
Nonfiction	66.8%	-1.6	20.7%	2.5	10.1%	1.2	1.7%	.7	0.8%	-.2
Drama	66.2%	- 2.5	22.6%	3.1	8.9%	3.5	2.2%	2.2	0%	-.9
Action/	53.6%	1.6	25.4%	- .6	13.1%	- 2.2	6.4%	.9	1.4%	- .5

Adventure										
News	48.9%	1.2	27.4%	1.2	15.6%	- 2.1	5.3%	- 1.4	2.8%	- .1
Biography	40.2%	- .1	24.6%	- .2	21.8%	- 1.1	8.1%	1.1	5.3%	2.4
Sport	37.4%	9.4	22.9%	2.8	24.6%	- 2.5	12%	- 4.6	3.1%	- 4.2
Fiction	37.2%	-1.2	33%	-.5	23.2%	1.6	4.2%	1	2.5%	1.6
Science Fiction	24%	.1	15.4%	- 1	18.2%	- 2.3	25.4%	1.5	17%	2.4

Table C.5: Top 25 Stories Visited by Females:

Rank	Category	SubCategory	Fiction/ Nonfiction	Genre	South African	Story_Name	Mxit_Ids
1	Stories	Books	Fiction	Drama	Yes	the-love-book	6022
2	Stories	Books	Fiction	Romance	Yes	truth-or-dare	5837
3	Stories	Books	Fiction	Drama	Yes	being-special	5618
4	Stories	Short Stories/ Articles	Fiction	Drama	Yes	sister-song	5186
5	Stories	Books	Fiction	Romance	Yes	the-sorry-tale-of-the-misguided-boy	4894
6	Stories	Short Stories/ Articles	Fiction	Drama	Yes	sister-trouble	4877
7	Stories	Books	Fiction	Drama	Yes	my-friend-kylie	4337
8	Stories	Short Stories/ Articles	Non-Fiction	Biography	Yes	madiba-memorial	4090
9	Stories	Books	Fiction	Drama	Yes	a-road-back-to-me	3989
10	Stories	Short Stories/ Articles	Fiction	Romance	Yes	second-time-lucky	3989
11	Stories	Books	Non-Fiction	Biography	Yes	the-girl-who-couldnt-say-no	3986
12	Stories	Books	Fiction	Drama	Yes	beach-bash	3893
13	Stories	Books	Fiction	Drama	Yes	climbing-ladders-falling-friends	3857
14	Stories	Short Stories/ Articles	Fiction	Drama	Yes	the-red-necklace	3776
15	Stories	Books	Fiction	Drama	Yes	damage	3704
16	Stories	Books	Fiction	Romance	Yes	mysterious-ways	3510
17	Stories	Short Stories/ Articles	Fiction	Drama	Yes	torn-apart	3393
18	Stories	Short Stories/ Articles	Fiction	Action/ Adventure	Yes	the-killing-house	3287
19	Stories	Short Stories/ Articles	Fiction	Drama	Yes	what-the-water-gave-us	3255

20	Stories	Books	Fiction	Drama	Yes	free-at-last	3124
21	Stories	Books	Fiction	Drama	No	dancing-on-the-edge	3080
22	Stories	Books	Non-Fiction	Biography	Yes	letters-my-mother-never-read	3025
23	Stories	Short Stories/ Articles	Fiction	Drama	Yes	the-hole-in-the-sack	2994
24	Stories	Books	Fiction	Action/ Adventure	Yes	among-the-stars	2889
25	Stories	Short Stories/ Articles	Fiction	Drama	Yes	pumped	2779

Table C.6: Top 25 Stories Visited by Males:

Rank	Category	SubCategory	Fiction/ Nonfiction	Genre	South_ African	Story_Name	Mxit_ Ids
1	Stories	Books	Fiction	Drama	Yes	the-love-book	2090
2	Stories	Books	Fiction	Romance	Yes	truth-or-dare	1409
3	Stories	Short Stories/ Articles	Fiction	Drama	Yes	sister-song	961
4	Stories	Books	Fiction	Drama	Yes	damage	952
5	Stories	Short Stories/ Articles	Fiction	Romance	Yes	second-time-lucky	931
6	Stories	Books	Fiction	Drama	Yes	being-special	927
7	Stories	Books	Fiction	Drama	Yes	a-road-back-to-me	899
8	Stories	Books	Fiction	Romance	Yes	the-sorry-tale-of-the-misguided-boyfriend	879
9	Stories	Books	Non-Fiction	Biography	Yes	the-girl-who-couldnt-say-no	872
10	Poetry	Poetry	Other	Romance	No	in-love	870
11	Stories	Short Stories/ Articles	Fiction	Drama	Yes	torn-apart	857
12	Stories	Short Stories/ Articles	Fiction	Drama	Yes	sister-trouble	775
13	Stories	Books	Non-Fiction	Biography	Yes	nobody-will-ever-kill-me	768
14	Stories	Books	Fiction	Drama	Yes	my-friend-kylie	755
15	Stories	Books	Fiction	Drama	Yes	free-at-last	744
16	Stories	Short Stories/ Articles	Fiction	Action/ Adventure	Yes	the-killing-house	694
17	Stories	Short Stories/ Articles	Fiction	Drama	Yes	what-the-water-gave-us	679
18	Stories	Books	Fiction	Drama	Yes	beach-bash	657
19	Stories	Books	Fiction	Romance	Yes	mysterious-ways	647
20	Stories	Books	Fiction	Drama	Yes	climbing-ladders-falling-friends	626
21	Stories	Short Stories/ Articles	Fiction	Drama	Yes	the-red-necklace	614
22	Stories	Books	Fiction	Action/ Adventure	Yes	among-the-stars	579

23	Stories	Short Stories/ Articles	Fiction	Romance	Yes	the-playa	574
24	Stories	Books	Non-Fiction	Biography	Yes	letters-my-mother-never-read	553
25	Stories	Short Stories/ Articles	Fiction	Drama	Yes	umonakalo	535

Table C.7: Percentages and Standardized Residuals for Category

	Books		Short Stories/ Articles		Poetry	
	%	<i>Std. Res</i>	%	<i>Std. Res</i>	%	<i>Std. Res</i>
Females	66.4%	13.1	31.6%	-7.8	2%	-17
Males	61.8%	-13.1	34.3%	7.8	3.9%	17

Table C.8: Percentages and Standardized Residuals for Genre

	Action/Adventure		Biography		Drama		Romance		Other	
	%	<i>Std. Res</i>	%	<i>Std. Res</i>	%	<i>Std. Res</i>	%	<i>Std. Res</i>	%	<i>Std. Res</i>
Females	6%	.6	9%	6.8	63.1%	2.6	19.7%	-2.5	2.3%	-14.4
Males	5.9%	- 6	7.5%	- 6.8	62.2%	- 2.6	20.4%	2.5	4%	14.4

Table C.9: Percentages and Standardized Residuals for Fiction/Nonfiction

	Fiction		Nonfiction		Other	
	%	<i>Std. Res</i>	%	<i>Std. Res</i>	%	<i>Std. Res</i>
Females	88.7%	1.5	9%	- 1.6	2.3%	- 5.7
Males	86.3%	- 3.2	9.8%	3.5	3.9%	12.3

Table C.10: Percentages and Standardized Residuals for South African

	South African		Non South African	
	%	<i>Std. Res</i>	%	<i>Std. Res</i>
Females	94.7%	3.1	5.3%	-3.1
Males	94.2%	-3.1	5.8%	3.1

Figure C.11: Bar Graph to illustrate Content Type Means by Gender

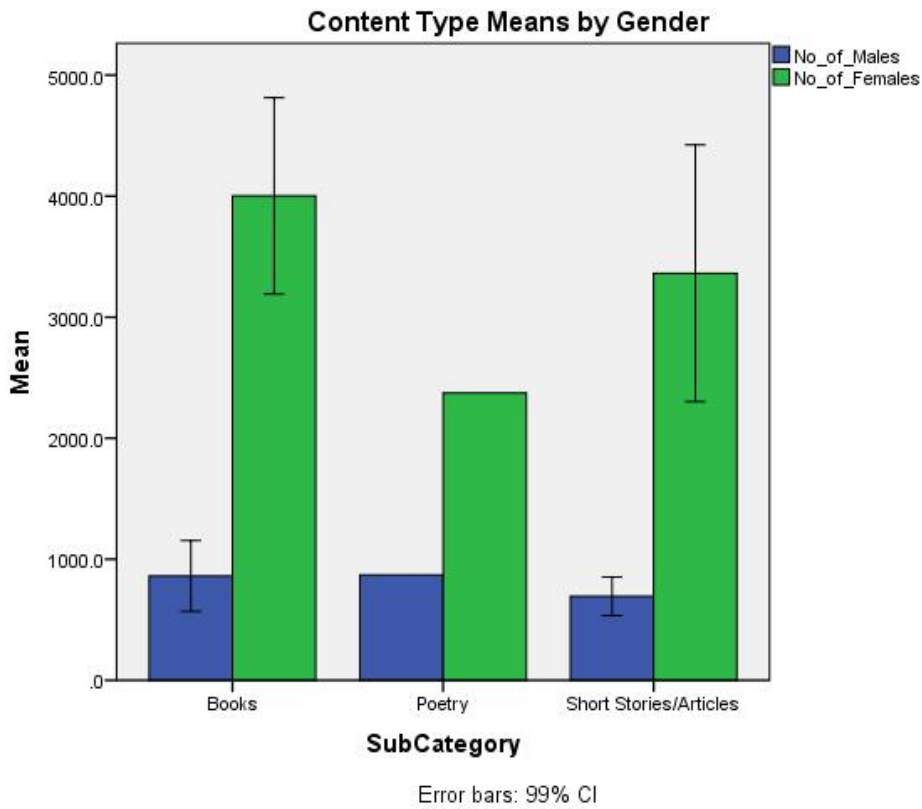


Figure C.12: Bar Graph to illustrate Genre Means by Gender

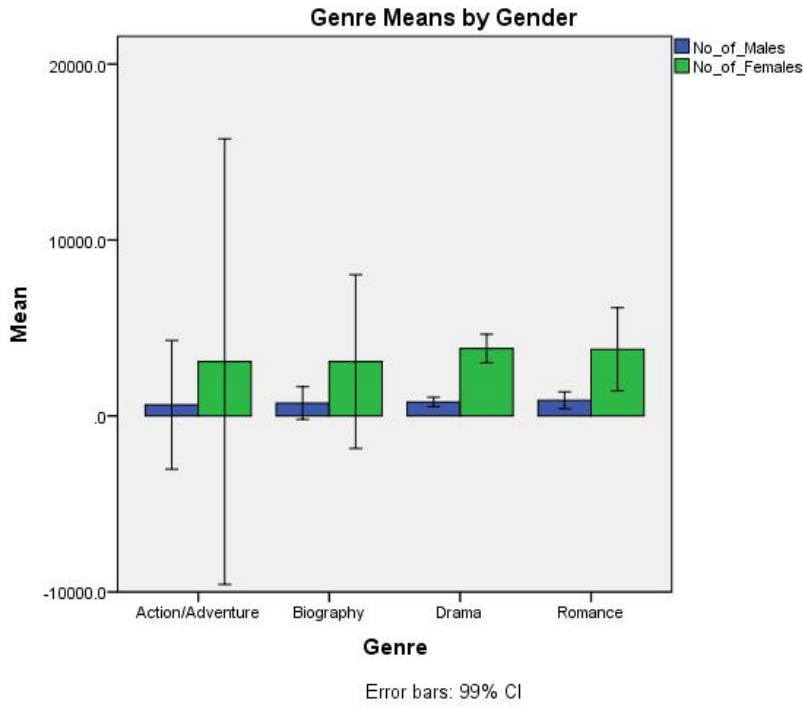


Figure C.13: Bar Graph to illustrate Fiction and Nonfiction Means by Gender

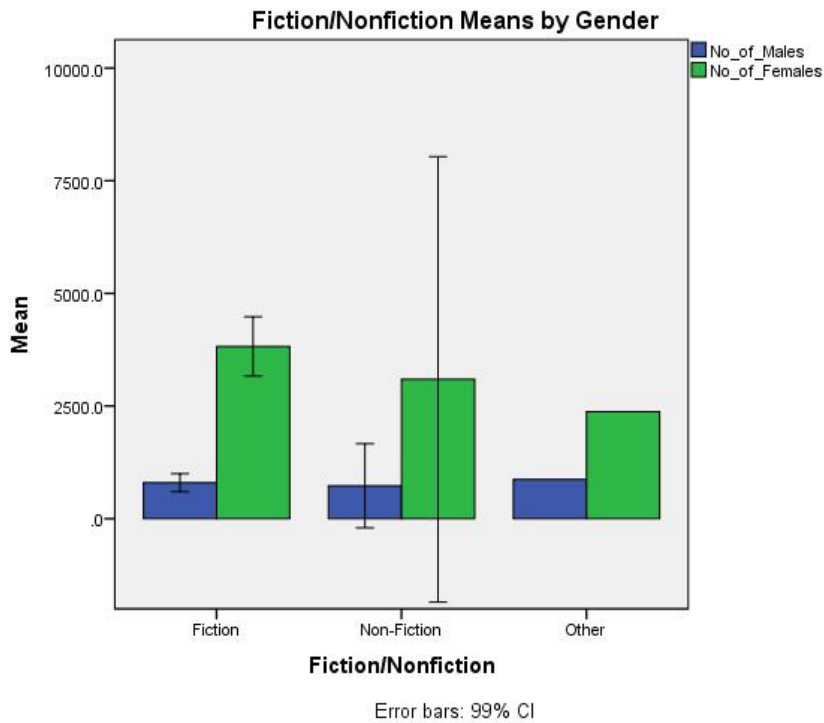


Figure C.14: Bar Graph to illustrate South African Means by Gender

