

## Gender Differences in Academic/Main Subjects Study: A Case of Madziwa Teachers' College Students

Kasiyabvumba Wallace<sup>1</sup>, Rwodzi Manuel<sup>2</sup>

<sup>1</sup>Madziwa Teachers College, <sup>2</sup>University of Zimbabwe,  
ZIMBABWE.

<sup>2</sup>[rwodzimanuel@gmail.com](mailto:rwodzimanuel@gmail.com)

### ABSTRACT

*The study investigated gender differences in academic /main subjects study at Madziwa, a primary school teachers' college in Zimbabwe. The study focused on, inter-alia, trainee teachers' choices of academic/main subjects, participation and performance in those subjects. The sample consisted of 77 student teachers and 17 lecturers. A mixed methods approach with triangulation was used to gather quantitative and qualitative data using questionnaires, semi-structured interviews, focus group discussion and document analysis. Findings indicated that: in performance there was no extreme qualitative difference between male and female trainees, but quantitatively males were distinctive in sciences and females in languages. Differential treatment of male and female trainee teachers by lecturers, trainees' efforts and attitudes towards academic subjects also influenced the trainees' performance. The study recommended increasing: the pool of main subjects from which trainees could choose, balancing gender when recruiting lecturers in order to have enough role models for the trainees and enrolling students and sensitising college stakeholders on policies of fair gender practices, in remedying the gender differences.*

**Keywords:** Gender differences, academic/main subjects, mixed methods research, triangulation

### INTRODUCTION

The Constitution of Zimbabwe Act (2013) Amendment number 20, section 17, subsection (a) states that The State must take all measures including legislative, needed to ensure that both genders are equally represented in all institutions and agencies of government at every level. Chauraya cited in Chabaya and Gudhlanga (2013: 124) states that gender policies are developed out of recognition that there are gender deficiencies in operations of institutions, educational included. Thus, teachers' colleges should give an impetus for all students, irrespective of gender, to pursue further studies in those academic/main subjects that have been traditionally associated with a particular gender, a situation which according to the present researchers' experiences did not obtain at Madziwa Teachers' College. The Zimbabwe 2012 population census results by Zimbabwe National Statistics Agency (ZimStat) (2013: B7), states that the population of males was 6 280 539 (48%) compared to 6 780 700 (52%) for females. Similarly, but in a more negative extreme, of the 305 student teachers in residence at Madziwa Teachers College, and not out on teaching practice, 213 were females compared to 92 males. This disparity in numbers should have placed women at an advantage over their male counterparts in various aspects of learning, but from our experience this was not the case at Madziwa Teachers College. The United Nations Educational, Scientific, and Cultural Organisation (UNESCO) cited by Chabaya and Gudhlanga (2013: 144) states that it is not a matter of debate that women constitute more than 50% of the world's population but there is a key concern about their education which can be described as of less than equal to that of their male counterparts. This issue could also have

wider impact in Zimbabwe for instance Rwodzi (2006:433) found form 3 female learners to lag behind their male counterparts in attitudes towards mathematics.

However, there were generally more male than female lecturers at Madziwa Teachers' College. Of the 41 lecturers, 27 (66%) were male and 14 (34%) were female. Also, 11 (65%) male lecturers out of 17 lecturers taught academic/main subjects against 6 (35%) female lecturers. Furthermore, 16 (67%) male lecturers did not teach academic/main subjects when compared with their 8(33%) female counterparts. Further, the college policy stated that the student had to list three possible academic/main subjects in order of preference basing on "O" and "A" Level passes plus interest which the placement team was to consider when placing the students in academic/main subjects. However, from the present researchers' experiences, the students' interests were in reality not given the priority.

Having been exposed to those ranging variables above, the researchers wished to find out about gender differences, if any, in the study of academic/main subjects among Madziwa Teachers' College student teachers.

### **STATEMENT OF THE PROBLEM**

From the researchers' observations (one being a lecturer and the other an external assessor) at Madziwa Teachers' College, gender differences in the learning of academic/main subjects were present amongst the student teachers. This study then sought to investigate the gender differences as these could influence learning of and lecturing in academic/main subjects at Madziwa Teachers' College.

### **PURPOSE OF THE STUDY**

The main purpose of the study was to explore gender differences in the learning of academic/main subjects among Madziwa Teachers' College student teachers. The study sought to bring out any gender differences in, inter alia, student teachers' choices of, and their participation and performance in academic/main subjects. The study also examined the student teachers' and lecturers' views about gender issues in the academic subjects study. The findings were expected to be informative to stakeholders who included policy makers, college administrators, lecturers and student teachers in a bid to improve service delivery in teacher training.

### **LITERATURE REVIEW**

Issues of gender have been found by many researchers to be topical in influencing learning at various levels of human development. Gender inequality is universal as it cuts across race, religion, colour, or creed - a clear distinction that seems to have existed since the origins of the human species(Ncube, 2013:2).This influence of gender has been so despite gender policies and other initiatives, in Zimbabwe like elsewhere worldwide, which advocate for the equal treatment of males and females in various institutions.The Constitution of Zimbabwe is in tandem with The Millennium Development Goal Number 3 which seeks to promote gender equality and empower women by eliminating gender disparity in primary and secondary education, preferably by 2005, and all levels of education, no later than 2015 (United Nations as cited in Sweetman, 2005: 19). However,in Zimbabwe despite the finding by Zivengwa, Hazvina and Maphosa (2011) that the participation of female students in higher education has been steadily increasing over the years and that the country is hoping to achieve the Millennium Development Goal of gender parity in education by 2015, the authors of the present research still observed gender differences in issues to do with learning/training in teachers' colleges. Thus, gender differences still abound in Zimbabwe, like in other countries.

In Europe Fosthuber, Horvarth and Motiejimaite (2010: 97) found out that gender differences emerged in primary and secondary education partly because traditional gender roles and stereotypes tended to be reproduced in schools which were then reflected and further strengthened by the choices made and opportunities open to women and men at the higher levels of education and vocational training. Further, female and male students chose different fields of study in higher education with females being under represented in engineering and science and female graduates outnumbered male graduates in higher education while they were slightly under represented at doctoral level and academic staff in universities in countries such as Belgium, The Czech Republic, German, Greece, Spain, France, and The United Kingdom (Forsthuber et al, 2010: 97).

Further, although diminishing in some countries, Pekkarinen (2012: 9) points out that despite the fact that women were now in the majority among students at tertiary level in the United States, Switzerland and the Nordic Countries, women still chose different major subjects from men. Further, Pekkarinen (2012: 1) avers that females were hugely overrepresented in the teaching profession in most industrialised countries so much that many commentators speculated that the male gender was discriminated against in assessment of students at tertiary level. In a related way Camarata and Woodcock cited in Papalia, Olds and Feldman (2009: 310), revealed that Baltimore boys did significantly better than girls on science and mathematics tests and that in the lower levels of education girls tended to do better than boys.

Similarly, according to Larsen and Buss (2008:544), girls have advantage in writing and boys in science. In contrast to girls, boys are more likely to credit their successes to high ability but attribute their failures to bad luck, lack of interest and low effort (Eccles, and Millen cited in Good and Brophy, 2008:265). Fosthuber, Horvarth and Motiejimaite (2010: 97) state that the most pronounced gender difference in educational achievement is the advantage of girls enjoying reading more than boys which is constant across countries and among different age groups. Thus, from a summative point of view, Good and Brophy (2008: 263) revealed that most studies have revealed that boys value and enjoy mathematics and science more than language and the arts, whilst the girls value the languages more than the sciences.

However, recent studies in the United States indicate that sex differences in academic achievement are relatively small to nonexistent, (Ornstein, Levine, Gutekand Voeke, 2011: 309). According to Forsthuber et al (2010: 97) in subjects like mathematics, boys and girls have similar results in their early school years and the boys' advantage only emerges later on and is noticeable among students who attend the same educational programmes. Further, gender differences in science achievement were found to be smallest although in most countries female students tend to have a weaker-self-concept in science than males on average (Forsthuber et al, 2010: 73).

In addition to this, Nelson et al (2010: 101) point out that Americans have outlawed gender discrimination in their colleges' admission policies, scholarships, and financial aid such that women have made remarkable progress in completing their studies. Then from a Germany study, Pekkarinen (2012:12) reveals that female educational attainment has surpassed, or is about to surpass, male educational attainment in most industrialised countries. According to Bartlett and Burton (2007:165) in such countries males see no need to work hard at school and leave earlier than women for industry. Similarly, from the present researchers own observations of the Zimbabwean education and employment situation, it seems males, on average are no longer pursuing the teaching profession as they used to. Service based employment like teaching is being seen more as traditionally female in Zimbabwe as in some parts of Africa.

In Africa for instance, Zivengwa, Hazvina, and Maphosa (2011:209) state that for a long time, African culture has been biased against the girl child with girls often treated as second class citizens, useful only for domestication and marriage and are given less priority to education in an economic crisis. Isirim, Bose and Kim (2009:14) also state that structural adjustments programs in African countries such as Zimbabwe and Kenya have led to an increase in school fees and consequently made young women to be removed from schools before young men.

According to Chirimu cited in Zivengwa et al (2011: 209), the Zimbabwean economic crisis (we are still experiencing now since as early as the late 1990s) made female students to suffer more than the male students whereby for instance boys are allowed to experiment and if they fail they are still encouraged and given support whereas girls are generally not supposed to fail. Thus, females become afraid to try out new things including getting access to knowledge and skills. In addition to this, Huggins and Randell (2007:1), contend that in Africa, although countries like Rwanda have made enormous strides in promoting gender equality, its female students continue to lag behind in educational achievement and access particularly at the secondary and tertiary levels due to a number of social and institutional barriers. Similarly, in some countries such as the Caribbean, quota systems have been introduced to persuade girls to take more technical subjects, but Ellis cited in Sweetman, (2004:15), points out that peer pressure, ridicule, harassment and abuse from the male students and teachers have largely deterred female students from entering non-traditional skill areas. Zimbabwe, being in Africa, could be under the influence of these factors, thus necessitating the present research.

Further, Ncube (2013:10) reveals that subject allocation in Zimbabwean schools shows bias towards boys who are given wider choices than girls. The unlimited choices for boys include subjects such as mathematics, science, humanities, languages, physics, technical graphics, wood work, metal work and building studies, whilst on the other hand; choices for girls encompass languages, humanities and economics only (Ncube, 2013: 10). Further, Ncube (2013:9) has noted that some institutional factors such as security in the school, composition of the staff and subject allocation have been found to exert a strong bias on the participation of girls in education. To add to this, Watkins (as cited in Ncube, 2013:9) argues that the presence of female teachers also exercises positive influence on the enrolment rates of girls by acting as role models and also points out that countries such as Sri Lanka have made narrower the gender gaps in their schools by having a higher engagement of female teachers than male teachers.

The potential of these various gender variables at influencing student teachers when dealing with issues of academic/ main subjects study at Madziwa teachers college warrants the present investigation into them.

## **PROCEDURE**

A mixed methods approach was used during the investigation. The quantitative part of the research was done through use of questionnaires for student teachers whilst that of the qualitative was executed through interviews for lecturers. Focus group discussions and document analysis were then done to complement the data generated by the questionnaire and interview schedules.

## **Sampling**

The study source population consisted of 687 student teachers from the then current 5 intakes and 41 lecturers at Madziwa Teachers College. The researchers used proportional stratified random sampling to choose the student participants and two non random sampling strategies,

that is, convenience sampling to select two intakes and purposive sampling to select the lecturers. Convenience sampling was used to come up with the two intakes (7 and 11), which made up a target population of 305 [92(30%) male and 213(70%) female], which were readily available at the college during the data collection period. Random proportional stratified sampling was used to come up with 77 (25%) of the student teacher population (24 male and 53 female) in terms of academic/main subjects studied by the student teachers and gender. Purposive sampling was used to select all the 17 lecturers [11(65%) male and 6(35%) female] who taught academic/main subjects at Madziwa Teachers' College mainly because they had first hand information concerning academic/main subjects they taught, as shown in table 1. Weiten cited in Rwodzi (2006:423) suggests that for psychological research, 25% to 40% is a good representative sample and the greater the better.

**Table 1. Academic/Main subjects lecturing staff sample by subject and gender.**

S.No.	Subject	Male Sample	Female Sample	Total Sample
1	Mathematics	3	1	4
2	Environmental Science	3	0	3
3	English	2	1	3
4	Chishona	1	2	3
5	Social Studies	2	0	2
6	R.M.E	0	2	2
	Total	11	6	17

KEY: R.M.E = Religious and Moral Education  
Chishona = A local vernacular language

### Instruments

The questionnaire, interview, focus group discussion and document analysis were the instruments used in the present research bringing about triangulation which enhanced the validity of results. The instruments' items were based on issues of gender differences in academic/main subjects' study which include: subject choice, performance and so on. Triangulation implies data collection using different instruments in order to view the same phenomenon from different angles (Willing, 2007:30).

Further, Creswell and Plano Clark (2007:62) are of the notion that the purpose of triangulation is to obtain different but complementary data on the same topic in order to best understand the research problem. Credibility of the research was also enhanced through the use of mixed methods. Creswell (2007:6) states that mixed methods research involves both collecting and analysing quantitative and qualitative data in a single study. The questionnaire was administered to the 77 student teachers, and it collected numerical data which enabled quantitative analysis. The interview schedule was used on the 17 lecturers and this generated the base of the qualitative data of the research. Then the focus group discussion schedule for the student teachers and the document analysis schedule for analysing student teachers recruitment and performance records produced data which complemented and reflected on that generated by the questionnaires and interview schedules.

## DATA ANALYSIS

This section analyses the research data in terms of the outcomes of the research.

### Student Teachers Enrolment

**Table 2: 2014 Intakes 7 and 11 resident students' enrolments by intake and gender**

<i>Intake</i>	<i>Year</i>	<i>Male</i>		<i>Female</i>		<i>Total</i>
		<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	
7	2011	46	31	104	69	150
11	2013	46	30	109	70	155
Total		92	30	213	70	305

Table 2 shows that there were more female than male students enrolled at Madziwa Teachers' College in intakes 7 and 11 in 2011 and 2013 respectively. A similar enrolment pattern also emerged from the analysis of the college enrolment documents for all the eleven (11) intakes from 2005 to 2013.

The most common reason given for the gender imbalance was that females were the ones who wanted the teaching profession more than males did and males tended to look down upon the teaching profession, labelling it a women's job. A female lecturer A said, "The females are more than the males and being a primary school teachers' college, females would be more interested in dealing with young children than males." Thus, such a negative perception by male students towards the teaching profession, may consequently affect the way they perform during the training process more so if they belong to academic/main subjects that are often regarded as female domain.

One student, Participant 1, stated that, "Until recently the teaching service was dominated by men and I think this is a move (enrolling more women than men) to redress this situation." Participant Male Lecturer B explained: "Also, it is a realization that the girl child was disadvantaged, so now is the time to pay back by recruiting more female than male student teachers."

According to Chabaya and Gudhlanga (2013:142), the policy of proportional representation of women and men should ensure that enrolments at all levels in the education system have 52% of the students being female versus 48% male, in order to be in tandem with the Zimbabwean population composition, its constitution and the Millennium Development Goal of gender parity in education by 2015. In addition to this, most (75%) male student teachers participants claimed that female students were more because most of them had strong financial support to sustain them throughout the three year course and that males sacrificed to send their wives for training before themselves in the tough dollarized Zimbabwean economy.

### Student Teachers Advanced Level (A-Level) Passes

Since it was a basic requirement that prospective student teachers entered a teachers' college having passed ordinary ('O' – level), it was interesting to see which gender had gone further in terms of academic qualifications.

**Table 3. Respondents’ ‘A’- Level subjects passes by academic/main subject and gender**

<i>No. in Academic/Main Subject</i>		<i>A’ Level Subjects Passed in Related Subjects</i>	Male					Female					
<i>M</i>	<i>F</i>		<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	
Chishona	0	1	Chishona	0	0	0	0	0	0	0	0	1	0
English	0	1	English	0	0	0	0	0	0	0	0	1	0
E.S	1	1	Literature	0	0	0	1	0	0	0	0	1	0
RME	0	2	Geography Divinity	0	0	0	0	0	0	1	0	1	0
Total	1	5		0	0	0	1	0	0	1	1	3	0

Keys: ES=Environmental Science; RME= Religious and Moral Education;  
Chishona = A local vernacular language.

From the table above, (although not many), female student teachers significantly surpassed their male counterparts in the number of those with ‘A’ – level subjects passes. Five (5) females against one (1) male did ‘A’ level in four of the subjects that were related to their academic/main subjects. This may imply that students with better passes at ‘A’ level had opted for other courses, especially men since they consider teaching as a women’s job (Pekkarinen, 2012: 1) so that most of those who got into the teacher training college met the advanced subject content for the first time and as a result they relatively might have struggled to cope.

**Academic/Main Subjects’ Lecturers Compliment**

**Table 4. 2014 Academic/main subjects lecturers by subject and gender**

<i>S.No.</i>	<i>Academic/Main Subject</i>	<i>Male Lecturers</i>		<i>Female Lecturers</i>		<i>Total</i>	
		<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>
1	Mathematics	3	75	1	25	4	24
2	Environmental Science	3	100	0	0	3	18
3	English	2	67	1	33	3	18
4	Chishona	1	33	2	67	3	18
5	Social Studies	2	100	0	0	2	11
6	R.M.E	0	0	2	100	2	11
	Total	11	65	6	35	17	100

KEY: R.M.E = Religious and Moral Education; Chishona = A local vernacular language

Out of the 17 lecturers who taught academic/main subjects, 11 (65%) were male compared to 6 (35%) female. Thus due to this disparity, there was no representation of the female role models among the lecturing staff in the academic/main subjects study in Social Studies and

Environmental Science and poor representation in Mathematics while the male students in Religious and Moral Education (RME) did not have a male role model. This is contrary to Bandura's social learning theory that states that male and female students learn by observing the models of their own sex (Larsen and Buss, 2008: 545). However, 9(52.94%) of the interviewees comprising of 6 males and 3 females had an opinion that there was no link between the lecturers' gender and the students' performance in academic/main subjects whilst 4 (23.53% (three males and one female) indicated that there was, and 4 (23.53%) were undecided.

Further, in support of male lecturers, Female Lecturer Interviewee C said: "Male lecturers seem to stimulate confidence in the students and usually they are better qualified in the subjects they teach." Then about the female lecturers Female Lecturer Interviewee H said, "Female lecturers tend to be confrontational in their interactions with and dislike lady students, an attitude that affects the students themselves." Further, female students revealed that they were in the main unable to seek help freely from male lecturers since some male lecturers solicited sexual favours from the female students.

### **Students' Performance in Academic/Main Subjects**

12 (50%) of the male students respondents to this issue compared to 23 (43.40%) of the females believed that there were gender differences in the performance of student teachers in their academic/main subjects. The relatively little difference in these two percentages may be indicative of differences in how the student teachers handled issues to do with their academic/main subjects. Beliefs, like attitudes, have been found to influence learners' performance (Mahmud, 2009 and Wadesango and Dhliwayo, 2012). However, some significant percentages of both, 9 (37.50%) males and 23 (43.40%) females, did not believe that there were gender differences in the performance of student teachers in academic/main subjects. This is similar to a finding by Rwodzi (2006:428) that whilst the percentage of form 3 males with positive attitudes towards mathematics was more than that for their female counterparts, the gap was small and decreasing. Also worth taking note of are the percentages of student teachers, 3 (12.50%) males and 7 (13.20%) females who were not sure whether there were gender differences in their performance in academic/main subjects. These two percentages of both the males and females who were 'not sure', although not high, could be an indicator of the complexity of deciding which gender performs better than the other.

On the part of lecturers, 9 (52.94%) chose Chishona, and 7 (41.18%) identified English as well as Religious and Moral Education as female dominated subjects. 11 (64.71%) lecturers stated that males performed better in Mathematics and 9 (52.94%) selected Environmental Science. On Social Studies, 5 (29.41%) lecturers indicated that females performed better while 4 (23.53%) lecturers stated that males did better.

Further, it was interesting to note that a common trend of associating better performances in Mathematics and Environmental Science with the male students whilst English and Chishona (vernacular language) with the females emerged from both the lecturers and students' responses. This was similar to findings by Camarata and Woodcock cited in Papalia, Olds, and Feldman (2009: 310) that Baltimore boys did significantly better than girls on science and mathematics tests that were not closely related to materials taught at school and that in the lower levels of education girls tended to do better than boys.

### **Influence of Gender on the Choice of an Academic/Main Subject**

Despite the revelation above that there were male and female dominated subjects, 63 (81.81%) student teacher respondents and 11 (64.71%) lecturers across the main subjects argued that gender had no influence in a student's choice of an academic/main subject. An



Environmental Science (main subject) female student teacher respondent claimed that all being well female trainees could perform in Science even better than their male counterparts.

Only 2 (11.76%) lecturers (one female and one male) and 10 (12.99%) student teacher respondents indicated that gender had a bearing on a trainee’s choice of an academic/main subject. The two lecturers shared a similar view that male students preferred challenging subjects like sciences as opposed to females who chose less challenging subjects like Chishona mainly because they were not wide readers. Thus, some lecturers and student teachers, although few, believed that gender influences a student’s choice of an academic/main subject at college. Therefore, the influence of gender on the student teachers’ performance in academic/main subjects could not be written off.

**Subjects Often Associated With Male and Female Students at College**

**Table 5. Student teachers’ responses to subjects often associated with male and female students at college. (N=24 males, N=53 females)**

	Male Subjects			Female Subjects		
	Subject	No	%	Subject	No	%
Male Respondents	Mathematics	19	79.17	Chishona	16	66.67
	Environmental Science	13	54.17	English	13	54.17
	Social Studies	8	33.33	R.M.E	10	41.67
	English	5	20.83	Social Studies	9	37.50
Female Respondents	Mathematics	28	52.83	Chishona	30	56.60
	Environmental Science	27	50.94	English	28	52.83
	R.M.E	7	13.21	R.M.E	9	16.98

Key: R.M.E = Religious and Moral Education; Chishona = A local vernacular language

Despite that 81.81% student teachers had indicated in the previous research item that gender had no effect on a student teacher’s choice of academic/main subjects, (see above), overall, Chishona and English emerged as female subjects whereas Mathematics and Environmental Science were labelled male disciplines by both male and female student teachers, but more so by the former, at Madziwa Teachers’ College.

Similar research findings by Ncube (2013:14), indicated that in subjects such as Science and Mathematics female students distinguish themselves well at lower levels but tend to falter at ‘O’ and ‘A’- levels and beyond when male students take over. However, in The United Kingdom in 2001/2 female students had outperformed male students in language subjects and caught up with males in Mathematics and Science (Bartlett and Burton, 2007:163). In the present research, the not very low percentages of women (52.83% and 50.94%) versus those of males (79.17% and 54.17%) who respectively indicated that Mathematics and Environmental Science were ‘male subjects’ might signify their interest in those subjects as well. Therefore, basing on such findings, the choice and learning of (main) subjects cannot continue to be genderised.

### **The Most Challenging Academic/Main Subjects According To the Lecturers**

10(58.83%) lecturer participants indicated that Mathematics was one of the most challenging academic/main subjects especially for females for several reasons, the most common one being the natural fear of Mathematics. Male Interviewee D said, “Mathematics is the most challenging academic/main subject for females as it seems fear was instilled into the students at lower levels.” In the same vein, Female Interviewee C also, said, “This is probably because they were not exposed to teaching methods that should have developed mathematical thinking in them. They lack conceptual understanding of mathematical concepts.” Thus, regardless of gender any student can perform well in mathematics as long as they were given a sound basic education of essential mathematics concepts as also highlighted by Ornstein, Levine, Gutek and Vocke (2011: 310) that the relatively poor performance of certain women in mathematics stems from socialization practices that make them anxious and fearful of mathematics.

Further, 4 (23.53%) lecturers regarded English as the most challenging subject due to the fact that most students had limited vocabulary and hence they failed to express their points clearly and logically in academic essays and during lectures. Two more main subjects identified as challenging by lecturers were Environmental Science and Religious and Moral Education. Environmental Science was regarded as a subject that demanded more practical skills, reasoning and better passes in a related science subject at ‘A’ level for a student to perform well at college. It also emerged that Religious and Moral Education required one to stick to reality and a lot of reasoning which should be explicitly expressed despite one’s language barrier. Lastly, only one interviewee (5.88%) felt that Chishona was a challenging subject due to that some students took it for granted that it was easy to pass and hence they did not put enough effort and that coupled with the few books written in Chishona for use in that main subject caused some trainees to fail.

Thus most lecturers, just like the students, viewed Mathematics, English and Environmental Science as challenging subjects. Further, from the bridging courses statistics at Madziwa Teachers College, Mathematics was heavily supplemented mostly by females, making it the most challenging subject for them. Further, it also emerged that most female trainee teachers looked down upon themselves, even if they performed well in subjects like Mathematics, they still depended on the males. Male Participant Lecturer G said, “Female student teachers over- rely on male student teachers when it comes to research, especially in sciences. This in turn, adversely affects their level of knowledge.” Thus the female student teachers undermined their potential and chances to pass in the genderised subjects such as Mathematics because of their failure to believe in themselves and hence they could end up having low self-esteem in the subject. Low self- esteem, according to Harter cited in Santrock (2010: 353) is related to depression which leads to one’s failure to live up to one’s standards. However, most male student teachers felt that they were at a disadvantage since female student teachers had their own laptops to use for research and that they got a cold shoulder from some male lecturers when they wanted to get connected to the college internet and other services they had a right to. Thus assistance from lecturers as well as access to resources was not readily available particularly for male student teachers.

### **FINDINGS AND DISCUSSION**

There was a gender imbalance in the college’s student teachers’ enrolments which favoured females (by 70% versus 30%) and maybe this reflected the country’s population, which according to Zimbabwe National Statistics Agency, (2013: B7) has more females (52%) than males (48%).It was also seen as a policy drive of affirmative action meant to emancipate

women as stipulated in the Constitution of Zimbabwe Amendment 2013: Number 20 in order to achieve the Millennium Development Goal of gender parity in education by 2015. However, the lecturing staff compliment's gender was in favour of the male lecturers. This gender imbalance left: female students without sufficient female lecturer role models in especially Mathematics and Environmental Studies and males lacking male role models in Religious and Moral Education, English and Chishona. According to Bandura's social learning theory, same sex role models are essential for learners of both sexes (Larsen and Buss, 2008: 545). Placement of student teachers into academic/main subjects, where a student's choice was supposed to play a big part but did not, had females favouring languages and males sciences, but with narrow differences in the latter, e.g in subjects like Mathematics and Environmental Studies. Rwozi (2006:435) found the attitudes of Zimbabwean form three female learners towards mathematics to be less but catching up with those of their male counterparts in terms of positivity, similar to that in European countries. In Europe girls enjoyed reading more than boys while boys enjoyed being associated with sciences and it was constant across countries and among different age groups (Fosthuber, Horvarth and Motiejimaite, 2010: 97). The majority of the respondents (both student teachers and lecturers) were of the opinion that gender had no effect on the students' performance, as it is effort that is needed for a student to perform better. 31% of the lecturers, who said gender influenced a student's performance in academic/main subjects, also cited other factors such as differential treatment of students based on their gender as a tensional force widening the gender gap. This is similar to Arends (2007: 74) who states that, "Even though women predominate in the teaching profession, gender bias and differential treatment of girls have been problems in American classrooms." The present researchers also found mean marks of assignments and tests, especially in sciences, to be slightly skewed in favour of male students especially in the higher percentages. On students' participation in lectures: both students and lecturers concurred on that gender was not an influencing factor, female lecturers were impatient and confrontational with female students, and male lecturers favoured interacting with female students. Thus, connotatively the lecturer's gender affected the participation and possibly the performance of a student in academic/main subjects. The research also found that some female students tended to feel inferior and challenged when allocated subjects like Mathematics and Environmental Science as an academic/main subject just like findings by Barnholt, Gillmond, Ruassel and Nosek in Good and Brophy (2008: 263) that girls believe themselves to possess less domain specific ability than boys and hence they are more likely to attribute their successes to luck and their failures to lack of ability.

Further, the lecturers pointed out that female students did not research extensively before writing an assignment, a test or an examination whilst male students were said to be lazy and to procrastinate. In addition, lack of material and financial resources was found to be a major contributing factor to gender differences in academic/main subjects' study, at Madziwa Teachers College, with the male students being the most affected. Some male students claimed that most female students were well supported with financial and material resources such as computers by their families, spouses, boyfriends and relatives whilst most of the male students were funding themselves, apart from being breadwinners.

## **CONCLUSIONS**

There was a gender bias in favour of females in the enrolment of student teachers at Madziwa Teachers' College; however, the lecturers' gender was quite skewed in favour of males. The gender imbalance left students lacking enough role models especially female students in Mathematics and Environmental Studies, Social Studies and even English and males in Religious and Moral Education and Chishona. On choosing main subjects, females favoured

English and Chishona (languages) and males Environmental Studies and Mathematics (sciences). Whilst the majority of both student teachers and lecturers indicated that gender had no effect on a student's performance, differential treatment of female and male students by lecturers was found to be influential. Mathematics and Environmental Science topped the list of challenging subjects, especially for female student teachers. Mean marks of assignments and tests were slightly skewed in favour of male students especially in the higher percentages of particularly science subjects. On students' participation in lectures: both students and lecturers concurred on that: gender was not an influencing factor, female lecturers were impatient and confrontational against female students, and male lecturers favoured interacting with female students. Thus, by implication the lecturer's gender affected the participation and possibly the performance of a student in academic/main subjects. Also, some female students tended to feel inferior and overly challenged when allocated subjects like Mathematics and Environmental Science as an academic/main subject. Further, lecturers pointed out that female students did not research extensively before writing an assignment, a test or an examination whilst male students were said to be lazy and to procrastinate. Lack of material and financial resources for buying e.g. computers was found to be a major contributing factor to gender differences in academic/main subjects learning with the male student teachers being the most affected as it was indicated that most female student teachers were better supported by their families, spouses and relatives whilst most of the male student teachers were funding themselves, apart from being breadwinners.

## **RECOMMENDATIONS**

The following recommendations emanated from the study:

1. The college needed to have a policy of placing student teachers in academic/main subjects which was guided by their interest, 'O' or 'A' level passes in related subjects, and affirmative action e.g. more women for sciences and not force them to take up certain subjects.
2. The college should offer career guidance and counselling to newly recruited male and female student teachers to help them break more into genderised fields, for instance in order to have more females for sciences which many of them fear at the moment.
3. The college should offer more subjects, e.g. practical subjects like Home Economics, Music, Art and Physical Education as academic/main subjects so as to cater for the students' unique interests and capabilities.
4. The college has to recruit lecturers in a manner which accords each academic/main subject enough lecturers of both genders for the students (both male and female) to have sufficient role models.
5. Academic/main subjects' lecturers should become more gender sensitive as they interact with students of either gender during lectures and when students approach them for help.

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