

Perceptions of Zimbabwean School Girls and their Teachers on the Extent to Which the School Curriculum for Girls Correlates with their Career Choices

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KEYWORDS Parental Influence. Teacher Attitudes and Expectations. School Subjects. School Type. Socio-economic Background. Career Trajectories

ABSTRACT The study explored teachers' perceptions of the degree of association between the curriculum followed by Zimbabwean secondary school girls and their career aspirations or choices. A sample size of 40 participants comprising 20 secondary school teachers and an equal number of Sixth Form girls participated in the study. The sample was conveniently and purposively selected from eight schools in the Central Masvingo District of Zimbabwe. The study adopted a quantitative research design and utilized a questionnaire as the instrument for collecting data from the participants. The study found that the girls' curriculum as determined by the school subjects studied at school have a great impact on their resultant career preferences. Other aspects of the hidden culture curriculum that were found to impinge upon the girls' career aspirations include their teachers' attitudes and expectations towards them, their socio-economic backgrounds and parental or siblings' influences. The study concluded that the girls' self concepts and academic achievement are influenced to a very large extent by a whole range of factors embodied in the school curriculum in both its explicit and implicit or hidden forms.

INTRODUCTION

The subject of sexual equality of educational opportunity has lately been receiving some attention in Zimbabwe. Emphasis has particularly been placed on equality of access to schooling for girls (Gordon 1995). Very little attention has however been devoted to what happens to girls in the school walls, that is to the treatment they encounter within their schools and classrooms. Equality of educational opportunity entails not only equal access to schooling but also to the equal treatment of girls and boys within the school itself (McGee Banks and Banks 2005). This study was therefore concerned with the experiences of Secondary school girls as seen by their teachers.

Background

Great concern has been voiced about the lower levels of academic achievement and career aspirations of Secondary school girls as evidenced by their performance in public examinations. According to the Zimbabwe Government Annual Reports for the Secretary for Education (herein after abbreviated ZGARSE 1990-2000), since 1980 girls have consistently performed more

poorly than boys in the Grade 7, Grade 9 (Form 2), General certificate of education examinations at the Ordinary and Advanced levels. In the Ordinary level examinations fewer girls manage to achieve the 5 or more subjects necessary to gain a full certificate. As a result, fewer girls than boys proceed to Sixth Form school level and to tertiary level educational institutions. Very little information relating to the experiences of girls at school and to their teacher attitudes and expectations as some of the means by which gender is structured and gender relations are reproduced in schools in Zimbabwe has been made available to date.

Theoretical Perspective Used as the Lens in the Study

Folk wisdom and commonly accepted explanations have it that the causes of girls' poor performance lie outside the school (Gordon 1995). Causes are often cited as the inferior academic aptitude and intelligence of girls or the girls' primary socialization within the context of traditional patriarchal Zimbabwean cultures. In Zimbabwe, as in many other parts of the world, the formal education acquired in schools has frequently been perceived as a mechanism by which ine-

qualities, including sexual inequalities, can be alleviated. While the primary gender role socialization within the dominant patriarchal culture of which the belief in the genetic inferiority of girls is part, is a major factor in influencing girls' academic achievement and career aspirations, the school itself has now been recognized as playing a considerable role in the structuring and reproduction of gender (Arnot 2008; Delamont 2000). The role of the teacher in this process has also been noted. The labelling by teachers of girls and boys as certain kinds of people with particular and different personalities, characteristics and academic and social abilities leads them to have different expectations of girls and boys as pupils and to treat them differently in the classroom (Keddie 1973; Becker 1975). These differential expectations and attitudes are communicated to pupils during classroom interaction and serve as one of the mechanisms by which pupils acquire their self-perceptions and motivation or lack of it (Arnot 2008; Gordon 1995).

Goals of the Study

This study seeks to establish the degree to which teachers conceptualize the link between the school curriculum and the girls' career aspirations. It also seeks to aspects of the hidden culture curriculum that impinge upon the Secondary School girls' ambitions.

Hypotheses

- a) H_0 : There is no association between the girls' school subjects (curriculum) and their career ambitions.
 H_1 : There is an association between the girls' school subjects (curriculum) and their career ambitions.
- b) H_0 : Teachers do not perceive themselves and the school as contributing to the gender polarization of pupils' career aspirations.
 H_1 : Teachers perceive themselves and the school as contributing to the gender polarization of pupils' career aspirations.
- c) H_0 : Teacher attitudes and expectations do not have an influence on the girls' career ambitions
 H_1 : Teacher attitudes and expectations have an influence on the girls' career ambitions

METHODOLOGY

Design

The study adopted a quantitative case study design on account of its ontological strengths in generating objective reality (Ary et al. 1997). Peterson and Maree (2010) add that while the qualitative approach is capable of capturing the richness of the context and the personal perspectives of the subject(s), the quantitative approach is particularly appropriate for describing the numerical relationships of the subjects (Gay and Airasian 2000). This epistemological strength is what makes the quantitative approach ideal for this research since its focus is on the association of the school curriculum for girls and their career aspirations.

Sample of Study

A sample of 40 participants was recruited to participate in this study. The demographic details of the sample is as shown in the Table 1.

Table 1: Teachers' demographic data

<i>Particulars</i>	<i>Frequency</i>	<i>% age</i>
<i>Qualification</i>		
BA	2	10
BA(Education)	8	40
B.Ed (Hons)	5	25
B.Sc	5	25
<i>Experience in Years</i>		
5-10	4	20
11-15	6	30
16-20	6	30
21+	4	20
<i>Gender</i>		
Males	10	50
Females	10	50
<i>Positions</i>		
Teacher	6	30
Senior teacher	8	40
Head of Department	6	30

Instrumentation

Two sets of questionnaires were used, one for sixth form girls and the other one for the teachers (Table 2). These were developed through the use of corpuses of existing literature on gender issues in Zimbabwe, such as the contentions, arguments and assertions of Dorsey (1996), Gordon (1995) and Gaidzanwa (1997) that girls and women in Zimbabwe are educated for domestic-

Table 2: Sixth form school girls

<i>Particulars</i>	<i>Freq</i>	<i>% age</i>
<i>Subjects Studied</i>		
Arts	5	25
Commercials	5	25
Sciences	5	25
Technical	5	25
Total	20	100

ity. For purposes of ratification and protocol the questionnaires were evaluated by Statistical consultants (STATCON) from the University of Johannesburg, as well as officials from the Ministry of Education responsible for administration and standards control in the Masvingo region. They comprised a combination of closed- and open-ended questions. Closed-ended questions were used owing to their strength in ensuring the gathering of robust information in a quicker and easier manner for swift feedback to the researcher (Peterson and Maree 2010; Weiner 2004). Consistent with Petersen and Maree's (2010) cautioning that closed-ended questions need to be supplemented with other forms of questioning, the open-ended questions used were complemented with open-ended questions soliciting respondents' elaboration on their answers to closed-ended questions, which helped to give further substance to their responses (Ivankova et al. 2006). With open-ended questions, respondents were free to express their feelings, to evaluate, judge, assess or comment on the subject of curriculum factors they view as manifesting the link of the curriculum and their career aspirations. Pre-set questions with provisional space for students to supply responses in written form were administered (Dooley 2005; Ivankova et al. 2010). The researcher personally administered the questionnaires so as to ensure a high response rate in the responses. The instrument was also quite convenient as it facilitated the collection of data within a short space of time (Leedy and Ormrod 2009; Teddlie and Tashakkori 2009).

Ethical Considerations in Data Collection

The researcher sought and obtained permission to conduct the study from the Ministry of Education Sport and Culture (MOESC) as well as from the principals of the eight schools where participants were drawn from. Prior to the admin-

istration of the questionnaire surveys, the researcher explained to participants the purpose of the study and the modus operandi it was to take. The rationale for this process was to enable the participants to make informed consent to participate in the research. They were also fully assured that the data generated their participation in the study would be treated with strict confidentiality and that they had rights to withdraw from the study at any time without any penalty. However, none of the participants withdrew from the study. They were also guaranteed protection from harm and their right to privacy should they decide not to answer certain questions. Fortunately no such situation emerged during the course of their involvement in the research.

Data Analysis

The data were analyzed descriptively. Descriptive statistics were adopted for summarizing the data (Macmillan and Schumacher 2006). The data from the questionnaire surveys were analyzed using Statistical Package for Social Sciences (SPSS). Tables were used to summarize participants' responses to the questions posed to them. The analysis of data was conducted in order to establish the extent to which the girls' curriculum as measured by the subjects they study at school and their treatment and or interaction with school personnel channel then towards certain career trajectories. It is in this context that the questionnaire data for this study were analyzed and presented through statistical descriptions, tables and co- relational scrutiny of curricular factors and the girls' career aspirations and trajectories upon leaving school. The presentation and analysis of the results of this study thus begins with the girls' responses to the questions posed to them. The presentation and analysis of teachers' responses to the questionnaire administered to them would also follow:

Girls' Responses on the Link Between Gender Roles and Career Prospects

Variables

The following hypotheses were tested in this section of the study:

Ho: The gender role does not have an impact on the career aspiration of girls.

H1: The gender role does have an impact on the career aspiration of girls.

The level of significance $\alpha = 0,05$

ANOVA: Single Factor

The hypotheses tested in this section were:

Ho: There is no significant correlation between gender roles and girls' career aspirations

Hi: Gender role socialization influences the girls' career aspirations

For the column 1, 7 and 11, in Table 3, the responses of the girls on the link between the gender roles and their career aspirations were more heterogeneous as compared to other columns. Based on the results of the analysis of students' responses, table 4 shows that the calculated value 7.43 is greater than the critical value 1.89. The null hypothesis is thus rejected. This means that the girls' perception of gender roles does have an impact on their career aspirations and choices. A synthesis of the results also shows that gender is an important factor in determining the girls' career choices. Generally, their families, educators, school curricular or society in general tend to channel them into occupations traditionally perceived as feminine. A significant interaction was also found between gender and career aspirations as the results in Table 4 reveals. The analysis also indicated that while many girls who opted for traditional career paths held a more traditional attitude towards occupations, there were some who tended to defy this notion

as they indicated a preference in non-traditional gender roles (engineering, architecture and actuary).

The Correlation between School Subjects Studied and Girls' Career Aspirations

To determine whether a significant association exists in the school subjects pursued by the girls and their career aspirations the scores of all 20 girls in the sample were compared using an analysis table. As expected, a main effect for school subjects followed (curriculum) was found on the participants' desired careers indicating that girls held significantly more traditional attitudes towards careers. The table for subjects-career comparison scores revealed that a significant positive link between genders, school subjects studied and career aspirations. The results also showed that while subjects studied by the girls generally determined their career aspirations, not all of them subscribed to the notion of pursuing the so-called traditional career paths. Some of them indicated a preference for non-traditional careers choices such as in the field of architecture (20%), navigation/town planning (35%), accounting (25%) and engineering (20%). This information is shown in the Table 5.

The investigator examined whether the major subjects followed by the girls in their advanced level courses would not hold a significantly positive correlation with their career pref-

Table 3: Summary of responses

Groups	Count	Sum	Average	Variance
Column 1	19	190	10	31.66667
Column 2	0	0	#DIV/0!	#DIV/0!
Column 3	19	9	0.473684	0.263158
Column 4	19	52	2.736842	1.871345
Column 5	0	0	#DIV/0!	#DIV/0!
Column 6	19	37	1.947368	1.163743
Column 7	18	45	2.5	2.147059
Column 8	19	63	3.315789	1.894737
Column 9	19	0	0	0
Column 10	19	9	0.473684	0.263158
Column 11	19	56	2.947368	2.608187

Table 4: ANOVA

Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	1359.219	10	135.9219	28.75188	7.43E-31	1.890684
Within Groups	751.6579	159	4.727408			
Total	2110.876	169				

ferences because of the current trends and attitudes toward women's social roles in society. Based upon the results observed and reported, a significant link existed between school subjects and the girls' career aspirations. To further validate the results participants' scores were correlated to their sex variable and again it was revealed that that the girls' sex did interact with their attitude towards women's role in society leading them to opt for traditional gender based careers or roles. This study also lent further validation to original findings that there is significant correlation between students' career paths and their attitudes towards women's roles in society. When sex and career interacted together as variables there was a significant effect on participants' attitudes. This implies that while career paths alone were not a significant variable, when viewed in terms of a participant's sex it played an important role. Among the scores of the girls' attitude towards the so-called traditional feminine careers, women's scores clustered into a smaller range of attitudes indicating more of a consensus on the roles that girls believe they should play in their culture.

As illustrated in Table 5, their scores indicated that there exists greater variation within the

female population, including both very traditional and very non-traditional attitudes towards certain careers. The findings clearly imply that girls or women are on a much less united front in terms of their beliefs concerning their roles in society. A small difference noted in the variation may also be indicative of continuing change in cultural beliefs regarding women's roles in today's world. An unexpected finding of this study was that some women opted for careers in non-traditional spheres or paths indicating a more modern attitude. This finding might represent a response to society's pressure for girls and women to be less traditionally oriented than they have been. Perhaps in response to pressure, girls and women of traditional career orientations may over-emphasize their belief in the non traditional role expectations of women. An unanticipated lack of significance in the effect of career orientation on attitude towards women's roles in society might be explained by the studied sample size. Based upon a power analysis (Kraemer and Thiemann 2007), there was a large chance of detecting a moderate effect size but a smaller effect size may not have been detected. It may be that the variation in the sample size was not enough to detect the effect of career orientation on attitude to-

Table 5: Participants' views on the link of school subjects and girls careers

<i>School subjects studied</i>	<i>No.</i>	<i>Preferred careers</i>	<i>Responses %</i>	<i>Reason for choice of career</i>
Accounting	5	Accountant/bookkeeper	25	Well paid, requires my knowledge and skills
Art	4	Artist/sculptor	20	Like it/interested, suits my education
Biology	3	Doctor/nurse	15	prestige /suits my education ability
Chemistry	3	Pharmacist/cosmetologist	15	Help fellow people
Divinity	12	Teacher/lawyer	60	Long holidays/white collar
English lit.	14	Lawyer/teacher	70	like it, interested, security, holidays
Economics	7	Economist/entrepreneur	35	Requires my knowledge, suits education ability
Geography	7	Navigator/town planner	35	Travel, prestige, well paid
History	13	Teacher/lawyer	65	Security, requires knowledge, interest, opportunity for further studies
Mathematics	4	Architect/actuary	20	Employment possibility, prestige and well paid
MOB	6	Hotelier/entrepreneur	30	Serving people, easy interest and pleasant
Music	9	Musician	45	Entertaining, travel
Physics	4	Engineer/technician	20	Prestige, well paid, suits education ability
Sociology	8	Social worker/counselor	40	Help fellow people
Shona	11	School teacher, writer	55	White collar, security, and opportunity for further studies

wards girls. Because of this it will be important for future studies to have a larger sample in case the population has more variation than the researcher was able to obtain.

The Association between Parental Occupation and Girls' Career Choices

Table 6 summarizes the results of the participants' responses to the question of the association of mothers' occupations and their daughters' aspirations. As evident in the data shown in Table 6, twenty five percent (25%) of the participants' mothers were housewives, 30% were in the vending industry, and 25% were in gainful professional employment while 20% were in self-employment according to the information from participants. Clearly the results summarized in the table below refute the null hypothesis that there is no significant relationship between girls' career choices and their mothers' occupational levels. The results do confirm that mothers' occupational statuses have an impact on the career aspirations of their girl children. This was evident in that of the 5 participants from homes where mothers were house wives, 2 of them (10%) reported a desire for low occupational aspirations, while the other 2 (10%) reported a desire for middle level occupational status and one (5%) expressed a burning desire for a high status career. Of the 6 participants whose parents were vendors only 2 (10%) had low career status occupations, while 3 (15%) aspired to have middle level occupational statuses with one participant (5%) expressing a desire for a high status occupation. Six of the participants from professional family backgrounds had the following career aspirations; two (10%) and three (15%) participants desired middle and high status careers respectively while only one participant (5%) unwittingly claimed she preferred a low status career. Two of the three (10%) participants from homes where

their mothers were self-employed reported a desire high status career while one (5%) pointed to a desire for a middle level career choice. The above results corroborate findings by Murphree et al. (1975) that professional occupational statuses of mothers have a significant influence on their girl children's chances of continuing their school and ultimately achieving their career aspiration.

The hypotheses tested in this part were as follows:

H₀: There is no significant association between maternal occupations and girls' aspirations

H₁: Mothers' occupational levels have an impact on resultant career choices for girls

At $\alpha = 0.20$, with 6 degrees of freedom, the critical value $\chi^2 = 8.56$ is smaller than the calculated value of 9.56. Then the null hypothesis is rejected. This means that there is significant association between mother's occupation and the girl's career aspiration.

The Association between Fathers' Occupation and Girls' Career Aspiration

The occupational status of parents and especially of fathers is often used as the index of socio-economic status and is hypothesized in this section of the study as being one of the most significant predictors of pupils' career aspirations and achievement. Girls were asked to describe the kind of work their fathers were engaged in so that their statuses could be ascertained more accurately. They did not always do this in sufficient detail, therefore in coding their fathers' amount or level of education was also taken into consideration. This was particularly important when the fathers' occupations were

Table 6: The association of the mothers' occupations and their daughters' career aspirations

<i>Mothers' occupation</i>	<i>Pupils' career aspirations</i>			<i>Total</i>
	<i>Low</i>	<i>Moderate</i>	<i>High</i>	
House wife	10 (7.5)	10 (8.75)	5 (8.75)	25
Vendor	10 (9)	15 (10.5)	5 (10.5)	30
Professional	5 (7.5)	10 (7.5)	10 (8.75)	25
Self employed	5 (6)	5 (7)	10 (7)	20
Total	30	35	35	100

trichotomized into high, middle and low status categories to facilitate statistical analysis. Occupations were initially coded according to the International Standards Classification of Occupations (ILO 1958; Murphree 1978) which has nine categories of occupations and then re-coded according to status. Table 7 summarizes the correlation of fathers' occupations and their girl children levels of career choices or preferences as generated through questionnaire data.

The hypotheses tested in this section were:

H₀: There is no significant correlation between fathers' careers and girls' aspirations

H₁: Fathers' careers have an influence on their daughter's career choices

At $\alpha = 0.10$, with 4 degrees of freedom, the critical value $\chi^2 = 7.78$ is less than the calculated value of 9.40. Then the null hypothesis is rejected. This means that Fathers' careers have an influence on their daughter's career choices.

Table 7 illustrates the link between fathers' occupations and their daughters' career aspirations.

As summarized in Table 7 participants (25%) indicated their fathers were in the lower occupational hierarchies, Seven (35%) indicated that their fathers were in middle level occupational hierarchies while 8 (40%) of the participants fathers occupied higher occupational hierarchies in the work places. As observed with the influence of their mothers' occupational statuses, participants tended to derive a great deal of inspiration from their fathers in terms of levels of career aspirations. Of the 5 participants (25%) whose fathers were in low occupational statuses, 2 (10%) opted for lower career levels while a similar number (10%) expressed a desire for middle level careers. Only one of the 5 participants (5%) cited a desire for a higher occupational status. Of the 7 participants (35%) whose fathers were in middle level careers, 3 (15%) reported

aspirations in high level occupations, while a similar number of respondents (15%) cited a desire for middle level occupations or careers. Only one participant (5%) claimed to prefer a lower career choice for the reason that it would not interfere with her desire to uphold her traditional gender role of looking after the home and children. Asked to motivate their choices of levels of careers participants gave a range of responses, from a desire for prestige, financial reward, security, pleasant, challenging, to be like their fathers, interest in management and a desire for professions. Again as with the comparison of mothers' occupations to girls' career aspirations the results led to a rejection of the null hypothesis that there is no significant relationship between fathers' occupations and their daughters career aspirations or choices. In fact, the results tend to confirm the alternate hypothesis that fathers' occupations have a bearing on their daughters' career aspirations because the evidence from the analysis of data above clearly shows that generally, the higher the level of fathers' occupations, the higher are the chances of aspirations held by their daughters.

The results of this study also revealed that parents' occupational status and educational levels have had a significant impact on the girls' career aspirations. These findings are also consistent with those by Wahl and Blackhurst (2000) that children's career aspirations were more closely related to parental occupations. According to these authors career choices among adolescent females are strongly influenced by their mother's occupations. In this study, the mothers' occupations were credited with impacting girls' career aspirations. The reasons discernible from the data elicited by the girls was because some of them often attended work with their mothers and were therefore likely to know what their mothers do for a living. A similar line of argument was deduced by Burlin (1976) when he noted that

Table 7: The link between fathers' occupations and their daughters' career aspirations

<i>Fathers' occupation</i>	<i>Pupils' career aspirations</i>			<i>Total</i>
	<i>Low</i>	<i>Middle</i>	<i>High</i>	
Low	10 (5)	10 (10)	5 (10)	25
Middle	5 (7)	15 (14)	15 (14)	35
High	5 (8)	15 (16)	20 (16)	40
Total	20	40	40	100

career choices and aspirations in females were significantly predisposed by the mother's type of work. In an early study of college women, Burlin observed that daughters of working mothers chose a life pattern comparable to their mothers more often than life patterns comparable to their fathers. Burlin's findings reiterated the importance of mothers as role models in the development of their daughters' career goals and aspirations. Similarly, Signer and Saldana's (2001) and Dex (2005) studies found the social status of mothers' occupations, as opposed to the social status of fathers' occupations, had a stronger correlation with the social status of female students' career aspirations. This study attributes the above findings to the fact that mothers tend to exhibit a greater presence in many homes.

The Association between Socio-economic Backgrounds and Girls' Career Aspirations

For this section of the study it was hypothesized that there is a significant relationship between the girls' socio-economic backgrounds and their career aspirations. The data summarized in table 8 shows that in deed there is a positive association between these variables.

The hypotheses tested in this section were:

H_o : There is no significant association between socio-economic background and girls' career aspirations.

H_a : There is a significant association between socio-economic background and girls' career aspirations.

At $\alpha = 0.05$, with 4 degrees of freedom, the critical value $\chi^2 = 9.49$ is less than the calculated value of 10.83. Then the null hypothesis is rejected. This means that socio-economic background impacts on the girl's career aspiration. Table 7 shows that 35% percent of the sample size of sixth form girls was from a high socio-economic background. An equal number of re-

spondents (35%) were from the middle level socio-economic background while (30%) came from a lower socio-economic background. An analysis of their career preferences revealed that 60 percent of the respondents from high socio-economic backgrounds had high career aspirations, 30% aimed at middle level careers while only 10% had aspirations in low careers. Of the 6 participants from the middle socio-economic background 50% aspired for high careers, while 40% preferred middle level careers and only 10% had aspirations in lower career levels. In the category of 7 respondents (35%) from the low socio-economic status 40% opted for high career statuses, while a similar percentage (40%) also aspired for middle career status. The remaining 20% preferred careers in the lower socio-economic level of society on the grounds that this would allow them to have time to look after the home, their husbands and children. Although there are few studies on the effects of parental socio-economic status on career choice (Ali et al. 2005; Herr and Cramer 1996), the results of this study confirmed that people's socio-economic status influence their choice of careers. The results of testing the above hypothesis have also lent credence to Mau and Biko's (2000) findings in which they claimed to have revealed a positive association between a family's socioeconomic status and children's educational and occupational aspirations. In their study they concluded that youth from higher socio-economic statuses were more likely to be knowledgeable of and choose professional occupations.

In one way or another, the above findings on the influence of girls' socio-economic background on their career aspirations also seem to buttress those of Brown and Barbosa (2001) who found out that the career aspirations of young females from low-income families were confined to experiences of their relatives and friends. Asked to motivate their choice of careers the responses from the participants of this particu-

Table 8: The link between girls' socio-economic background and their career aspirations

<i>Pupil's socio-economic background</i>	<i>Career aspiration</i>			
	<i>High</i>	<i>Middle</i>	<i>Low</i>	<i>Total</i>
High	60 (50)	30 (36.7)	10 (13.3)	100
Middle	50 (50)	40 (36.7)	10 (13.3)	100
Low	40 (50)	40 (36.7)	20 (13.3)	100
Total	150	110	40	300

lar study revealed that in their families influential siblings seem to play a key role in influencing the career aspirations of these adolescents from the higher, middle and lower socio-economic backgrounds. For example, in one of their motivation for desiring a higher status career, 40% of the respondents from high socio-economic backgrounds proved that their family's socio-economic status affects information about work, work experience, and occupational stereotypes, which ultimately influence vocational or career interests.

This study has thus far shown that there exists a positive association between high school girls' career aspirations and their family's socio-economic status, which is frequently related to parental education levels. The fact that some of the girls (10%) from the lower socio-economic background aspired for low status careers also proved that a low socio-economic status often results in reduced and unrealized aspirations. Additionally, this study has also proved that the girls' socio-economic backgrounds have a direct effect on their unequal career aspirations. Asked to further motivate their unequal career aspirational levels with their counterparts from the middle and higher social classes the respondents from the lower social class revealed that compared with middle and upper class individuals, they faced many obstacles that limited their career aspiration levels. Among the cited obstacles were the following factors; perceptions of gender roles, ethnicity, parents' occupation and education level, parental expectations, childhood socialization, the calibre of role models and the influence of the media in engendering patriarchy in society.

These girls argued that the above obstacles restricted their career aspirations leading them to opt for a narrow range of career choice categories. Additionally, it was also reported that more often than not families often tended to encourage the educational and career aspirations of male children but not those of female children. Thus, not only did sex differences in career aspirations develop early in childhood; girls appeared to learn quickly that certain adult statuses were available to them, reflecting societal sex-role expectations. Also confirmed through the results of this study was the view that Nhundu's (2007) assertion that adolescent females were more conflicted between their future careers and commitment to marriage and family and this interfered

with their ambitions in terms of career aspirations.

The Link Between School Type and Girls' Career Aspirations

In the Zimbabwean context a boarding school seems to provide the best atmosphere for motivating pupils to higher academic achievement and career aspirations. Boarding schools tend to be related to a rural atmosphere while day schools are located in the towns, peri-urban centres and informal settlements where poverty, overcrowding and prevailing urban contemporary life styles preclude good study habits. Urban parents are aware of this and those who can afford to do so prefer to send their children to rural boarding schools. The difference between mission and government boarding schools was not significant for the criteria of career aspirations. However, it was important for girls' educational aspirations. A higher percentage of girls in government boarding schools, 60 percent from government co-educational and 80 percent from single sex schools aspired to have high careers after university. A similar percentage (60%) from mission schools was also found to aspire for high level careers upon leaving school. These figures were both higher than those for girls in urban and rural day schools where the ratio of low to high career aspirations was proportional (50:50) or one to one as shown in Table 9.

Table 9: The link between school type and girls' career aspirations

<i>Type of school</i>	<i>Low</i>	<i>High</i>	<i>Total</i>
Governmental co-educational boarding	40 (37.5)	60 (62.5)	100
Private/mission co-educational boarding	40 (37.5)	60 (62.5)	100
Governmental single sex school	20 (37.5)	80 (62.5)	100
Large general day	50 (37.5)	50 (62.5)	100
Total	150	250	400

The hypothesis tested in this case was whether or not there exists a significant relationship between the kind of school attended and the girls' career aspirations.

The hypotheses tested in this section were:
 H_0 : There is no significant association between school type and girls' career aspirations.

H_i : There is a significant association between school type and girls' career aspirations.

At $\alpha = 0.05$, with 4 degrees of freedom, the critical value $\chi^2 = 9.49$ is less than the calculated value of 20.27. Then the null hypothesis is rejected. This means that there is a link between school type and the girl's career aspiration.

Whether a girl attended a single-sex or co-educational school was shown to be an important variable. A significant relationship was found between the kind of school attended and the career aspirations and academic achievement of sixth form girls. The association was significant because it also revealed the influence of educational achievement on girls' career aspirations thereby epitomizing that the high academic achievers tended to have higher career or occupational aspirations than their lower academic achieving counterparts. What these findings reveal is that there is an overall tendency for pupils to adjust their aspirations realistically in relation to their ability although at times at the lower end of the academic achievement scale this aspiration realism may diminish. Tables 10 and 11 illustrate the teachers' perceptions of the relation between curriculum and career choices as revealed through the ANOVA procedure

The hypotheses tested in this section were:

H_o : Girls' teachers do not consider gender as having an impact on their career aspirations.

H_f : Girls' teachers consider gender as having an impact on their career aspirations.

DISCUSSION

Based on the results of the analysis of teachers' responses to the questionnaire the null hypothesis is rejected since the critical value 1.89 is less than the calculated value 7.43. This means that the girls' teachers consider gender as having an enormous impact on the career choices of Zimbabwean girls. A close analysis and synthesis of these results reveals that gender biases found in the school curriculum and in the occupational world are embedded in society at large. Schools and the world of work thus serve as agents of reproduction of this gender-based division of labour whose effects tend to advantage males while disadvantaging females. Furthermore, the revelation of the existence of an aspiration-attainment gap for some girls suggests that, alone, raising aspirations may not be sufficient to improve their educational and career aspirations. The complexities involved indicate that a holistic approach to supporting girls' aspirations is needed which acknowledges both the attitudinal and the practical obstacles to their aspirations and achievement. The approach also needs to be developmental, recognizing that the formation of aspirations begins early, changing throughout childhood in response to children's

Table 10: Teachers' perceptions of the relation between curriculum and career choices

Groups	Count	Sum	Average	Variance
Column 1	19	190	10	31.66667
Column 2	0	0	#DIV/0!	#DIV/0!
Column 3	19	9	0.473684	0.263158
Column 4	19	52	2.736842	1.871345
Column 5	0	0	#DIV/0!	#DIV/0!
Column 6	19	37	1.947368	1.163743
Column 7	18	45	2.5	2.147059
Column 8	19	63	3.315789	1.894737
Column 9	19	0	0	0
Column 10	19	9	0.473684	0.263158
Column 11	19	56	2.947368	2.608187

Table 11: ANOVA

Source of variation	SS	Df	MS	F	P-value	F crit
Between groups	1359.219	10	135.9219	28.75188	7.43E-31	1.890684
Within groups	751.6579	159	4.727408			
Total	2110.876	169				

increasing understanding of their own abilities and the opportunities open to them. For vulnerable and disadvantaged groups, ongoing support is especially important to help protect against the later development of further barriers, such as leaving school with low qualifications, or becoming a parent at a young age. The research suggests that the later teenage years may also be a crucial time, in which interventions to help young women and men realize their aspirations may be particularly effective.

There are a number of key players in supporting aspirations, particularly parents, whose early influence can be crucial. Those working with parents, especially in disadvantaged areas, need to be aware that they can play a role in helping them develop these early aspirations and attitudes not only for their children but also for themselves. This will give them a sense of confidence and empowerment that they can help their children and persevere to overcome obstacles when things are not going well. Schools may have a key role to play, expanding children's own horizons and supporting their parents, for instance through extended schools and the SEAL (Social and Emotional Aspects of Learning) programmes, as well as through partnerships with businesses. School staff also needs to be aware of the role they play in cultivating children's aspirations through assessment and messages about academic performance and that these may be more significant for children whose family backgrounds may not be offering the necessary support for their abilities and aspirations. As children mature, they need easy access to appropriate information, advice and guidance services, but for some disadvantaged young people, accessible services alone may not be enough: support needs to come from a tutor, youth worker or mentor who knows the young person well, in order to help them see beyond their situation to what they can become, and motivate them to take the steps necessary to reach their goals. Involvement in extracurricular activities may enhance the educational and occupational aspirations of both boys and girls. Such activities can help to improve communication skills and offer opportunities and mentorship that may raise aspirations. Staff working alongside young people taking part in positive activities, including those organized as part of extended school initiatives, can make a difference to young people, especially girls' aspirations and choices of work.

CONCLUSION

The findings in this study have revealed that Zimbabwean girls' career choices are influenced by numerous factors including school subjects or course followed, general societal expectations of gender roles, parental occupations and level of education, the girls' socio-economic background status, type of schools attended, outcome expectancies and individual variants: gender, social class, personal interests and learning experiences. Among the highlights of the findings were that family members were more influential in girls' career aspirations and choices as compared to other persons. As students interact with their peers, their advice is less important as compared to their family members and teachers. From these observations, this paper concluded that a multitude of factors have an influence on girls' career choices. The inference drawn is therefore that there is a strong correlation between curriculum and career aspirations and choices made by Zimbabwean girls.

RECOMMENDATIONS

Based upon the findings of this study the following recommendations are presented: Now that the initial barrier for girls or females aspiring to high level careers is starting to be realized, it is important to sustain and consolidate these gains in education and girls' aspiration levels. Programmes could continue to be developed in schools which would encourage girls to continue their coursework in academic areas such as mathematics, science and technology. Such programmes might include inviting women who are successful in these career areas to visit and speak with the pupils. These visiting women could be used as role-models or mentors for the female students. For instance, their experiences in business and industry could motivate girls toward job opportunities in those careers. School counselling is an important factor in helping to modify attitudes and change concepts, and could be organized to help young women increase their self-esteem by changing poor self-concepts and breaking the traditional stereotypical patterns (for example, eating disorders, food and fitness, mathematics phobia, among other things). Programmes that help improve girls' self-esteem are also important prerequisites because this factor was directly correlated with aspirations in cer-

tain school subjects (Maths and Sciences). Efforts could be made to establish peer support systems or specific projects within the academic area in order to encourage girls to work in teams. The projects could include the science fair, debating club, maths teams or technology contests. More guidance and counselling programmes could be established to provide career information, with special emphasis on career options and possibilities for females. Programmes that have demonstrated success in raising academic achievement and career aspirations could be expanded. Such programmes have the potential to entrench girls' expectations and aspirations by steering more of them into pursuing school subjects and courses in the so-called male domains. The "Think Purple" gender equity campaign piloted in two Fairfax County Public schools in the USA could be launched in schools to raise girls' awareness with regard to gender equity and equality. The theme could be "do not think blue, traditional male occupations, or pink, traditional female occupations. 'Think purple' with the realization that all genders can aspire for all occupations. Successful and inspirational women from the local community, counsellors, teachers and parent liaisons could be invited to the schools to act as role models and to problem-solve specific gender inequality concerns, especially during career days.

Schools need to take advantage of the highly educated parents in their communities and encourage teachers to invite such pupils' mothers and fathers to speak about gender equity and equality in the educational and occupational spheres of their life. Gender equity awareness programmes need to be established well before the pupils are in high schools or already on a track for success or failure if they are to meet their goals. Parents meetings (for example, PSAT, SAT, financial aid and college information) could be held during the evening and daytime so that more working parents could attend. Pupils learn about some of the lower status professions by working during high school (for example, sales work, fast food cashiers and personal care). It is important for the pupils to also be educated in other professions with a higher level of status (for example, Medical-dental, Maths-science). Lunchtime chats could be established with a focus on a particular career or an exploration fair with a maths/science/medical profession focus organized. The "Take your daughter and son to

work" programme could be encouraged for all pupils every year. Other general recommendations suggested through this study include the following: On the basis of the general findings of this study, government should give active and urgent attention to the enactment of new legislation to inhibit discrimination in education and employment, which continues to haunt girls under current non-racial labour legislation. Such action needs to involve legislation along the lines of gender and learning equity in the school curriculum, including prohibiting the gender-typing of school subjects and careers as either masculine or feminine, and the tightening of laws against sexual harassment of girls. This could make teachers refrain from exerting their beliefs, attitudes and expectations of pupils' gender roles as well as influencing the girls' eventual career choices. It would imply that teachers and parents will have to provide their children with gender sensitive or neutral teaching and learning material both at school and in their homes. This could also help militate against and deconstruct the patriarchal ideologies embedded in the curricular material used in the schools, or in the unmasking of the 'stay-at-home-mom' mindset often inculcated in girls by their parents during gender role socialization.

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