

Art. #2066, 12 pages, <https://doi.org/10.15700/saje.v42n1a2066>

School-based factors affecting Grade 12 accounting learners' performance in the General Certificate Secondary Examination (GCSE) in Eswatini

Msizi Vitalis Mkhize 

School of Accounting, Economics and Finance, College of Law and Management Studies, University of KwaZulu-Natal, Westville, South Africa
mkhizem4@ukzn.ac.za

Muntuwenkosi Abraham Mtshali  and **Khumbuzile Sithebe** 

School of Education, College of Humanities, University of KwaZulu-Natal, Pinetown, South Africa

In the sequential explanatory mixed methods study reported on here we examined school-based factors contributing to the poor performance of Grade 12 accounting learners' the GCSE in the Lubombo and Manzini regions of Eswatini. The random sample for the quantitative phase comprised 400 accounting learners and 80 accounting teachers from 10 schools performing well, achieving good results, and 10 schools performing poorly, achieving low quality results. Purposive sampling was used for the qualitative phase to select 6 learners and 4 teachers from schools that performed well, and 6 learners and 4 teachers from schools that performed poorly. The data collection instruments were questionnaires and semi-structured interviews. Quantitative data were analysed using the Statistical Package for Social Sciences (SPSS), while thematic analysis was used for the qualitative data. Incongruities existed between learners' and teachers' perceptions of the school-based factors affecting Grade 12 accounting learners' performance in the GCSE in Eswatini. The quantitative results indicate the variables contributing to poor learner performance in accounting as lower period allocation; checking of learners' work; setting a minimum on the number of tests per term; timely delivery of textbooks; provision of study time; discussion of results, and motivation of teachers and learners. Teachers, on the other hand, felt that the variables affecting learners' performance were setting a minimum on the number of tests per term; awarding pupils for good performance; placing emphasis on science subjects; the provision of reference material; motivation of teachers and learners; checking of learners' work; subject combinations; lower period allocation; discussion of results, and timely delivery of textbooks. The qualitative results reveal that learners identified common school variables contributing to their poor performance as not receiving textbooks on time, their work not being checked, and a lack of parental involvement. Teachers identified delivery of textbooks, emphasis on science subjects, and teachers' poor motivation and administration as school variables contributing to learners' poor performance in accounting. The relationships between school variables and demographic variables were found to be low. This study offers insight into what secondary school accounting teachers in emerging economies may experience as variables that affect learners' performance in accounting, and the need to pursue pedagogical practices that can respond to these variables.

Keywords: academic performance; accounting; Grade 12 accounting learners; poorly performing schools; well-performing schools

Introduction

In Eswatini, Grade 12 accounting learners are required to write two compulsory examination papers, each contributing 50% to the total mark, from which various grades ranging from A* to G describe learner performance in the subject according to the requirements of the Examination Council of Eswatini. The grading system for Eswatini GCSE is as follows: A* – Excellent, 90–100%; A – Very good, 80–90%; B – Good, 70–80%; C – Credit, 60–70%; D – Pass, 50–60%; E – Pass, 40–50%; F – Fail and G – Fail (Examination Council of Eswatini, 2015).

Performance in the external examination is important to measure individual students' progress, reflections for the improvement of teaching and learning, and sharing information with relevant stakeholders (Organisation for Economic Co-operation and Development [OECD], 2013). Failure to perform well disrupts learners' futures as they cannot enrol into any university, which is a measure of academic performance (Nyagosia, Waweru & Njuguna, 2013). Relevant stakeholders, including the Ministry of Education and Training, are concerned about learners' academic performance, as poor performance reduces the availability of accounting professionals in Eswatini. The analysis of results by subject reveal that learners have consistently performed poorly in accounting over the years (Examination Council of Eswatini, 2014). This problem of the poor standard of performance persists despite the inspectorate having arranged workshops for accounting teachers such as orientation, content-based and assessment workshops, and visited schools. Figure 1 indicates that only about 20% of candidates who wrote the accounting final examination passed the subject with a C symbol at Grade 12 level in Eswatini.

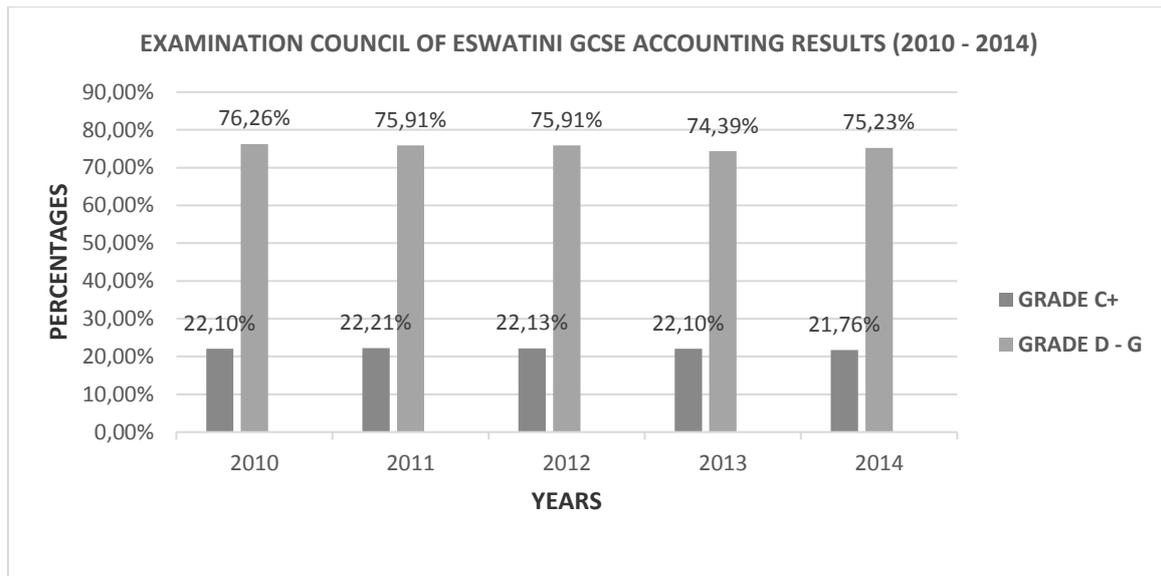


Figure 1 Examination Council of Eswatini (ECO, 2015) GCSE accounting results

Sibandze, Oloyede and Pereira (2020) assert that a comparison of learner performance across all subjects in the Eswatini General Certificate in Secondary Education (EGCSE) curriculum ranked accounting at number 18 out of 21 subjects according to the 2019 report of the Examination Council of Eswatini (ECES). The accounting percentage pass rate ranged between 21.07% in 2018 to 27.18% in 2019, suggesting that learner performance in accounting in 2019 was still poor as it was in 2015.

The purpose of the study was to identify school-based factors leading to poor learner performance in Grade 12 accounting GCSE in Eswatini to inform basic education practitioners of what may influence learners' performance, and what the implications for pedagogical practice are. Onyara (2013) defines school-based factors as those within the schools' control that can influence students' performance. In the study we addressed the following research question: What are the school-based factors influencing learners' poor performance in Grade 12 the accounting GCSE in Eswatini? What is the relationship between school-based variables and demographic variables? The accounting profession provides significant support such as career promotion, learner workshops, educator workshops, bursaries for tertiary studies and vacation jobs, to the development and growth of emerging economies, especially on the African continent where accounting education is in a growth phase (Lubbe & Coetzee, 2018). However, research into accounting education is largely dominated by developed Western economies and very little attention is given to Africa and her distinct problems (Marriot, Stoner, Forgarty & Sangster, 2014). Researchers in emerging economies, particularly those with

significant political and economic challenges, should conduct research that will assist the entire society (Verhoef & Samkin, 2017). This study is, therefore, in response to this call by Verhoef and Samkin (2017) for academics in emerging economies to conduct research that reports on challenges facing learning and performance in high school accounting.

Literature Review

School-based variables

School factors predominantly contribute towards the creation of instructionally effective schools. The variables may include solid governance, high levels of anticipation in learner's accomplishment, and a pleasant and logical school environment (conducive atmosphere) in which parents, staff and learners are encouraged to work as teams towards common goals (Kimu, 2012). Marshall (2004) states that school features like physical structures and teacher-learner relations affect and assist in defining the general perception of school atmosphere. An affirmative school ambiance is concomitant with fewer emotional and behavioural limitations for learners. Etsey (2005) found that school facilities were the most important factors in determining academic performance. Etsey (2005) also reports that school factors such as insufficient textbooks, inadequate teaching supplies, and a lack of highly proficient teachers were variables that negatively impacted learners' academic performance. Similarly, Igberadja (2015) highlights that school influences such as a scarcity of trained elementary technology teachers, learning resources, insufficient laboratories, unfavourable schoolrooms, vicinity of the school, and instruction approaches are variables impacting on the learners' achievement in elementary technology examinations. However, a

study by Awiti (2006) revealed that materials, equipment, school environment and facilities had no significant influence on learners' performance.

Availability of textbooks

Textbooks as the most effective teaching and learning tool are vital to learners' academic achievement (Read, 2015). Nyathi (2006) observes that failure by the Limpopo provincial education department (in South Africa) to deliver textbooks on time was the reason for a high failure rate in the Bushbuckridge district. Likewise, most schools that achieved poor matric results had not received prescribed textbooks. Textbooks provide structure and order in the teaching and learning process, and provide security and confidence to inexperienced teachers. However, Read (2015) suggests that textbooks should be used with other materials because no textbooks are ideal for every teacher and every group of learners for every given situation.

Availability of learning equipment and materials, facilities and infrastructure

The availability of learning equipment and materials influence learners' academic performance (Okongo, Ngao, Rop & Nyongesa, 2015). Most schools still lack appropriate learning materials, resources and assistive devices (Zwane & Malale, 2018). Even when classrooms are available, the lack of furniture for learners affects learning resulting in poor academic results (Ogunbanjo, 2001).

The goal of infrastructure development is to enhance school attendance and academic performance of learners (Beswick, 2007). Adequate facilities such as laboratories, toilets, water and electricity sustain learners' academic performance, and inadequate facilities translate to learners' poor academic performance (Fareo & Ojo, 2012). A close relationship exists between classroom conditions and learners' academic achievement; learners feel sleepy and lack concentration in an unfavourable learning milieu that is extremely cold or hot (Urquiola & Verhoogen, 2009). Beswick (2007) concludes that physical classroom conditions such as air circulation and the amount of daylight influence learners' performance, while facilities such as libraries provide services that enhance academic performance. Hlophe (2010) observes that schools with no libraries generally perform badly, while schools with adequately equipped libraries have consistently produced good results. This suggests that adequate facilities and infrastructure improve teachers' attitudes and enhance learners' motivation (Adesoji & Olatunbosun, 2008).

Classroom overcrowding

Too many learners in overcrowded classrooms allow the teacher only a small space to move around in front of the chalkboard. Maphuthoma (2005) established that high teacher-pupil ratios linked to classroom overcrowding caused poor academic

achievement, as the average number of learners per teacher was more than the teachers could manage. Teachers find it difficult to control extremely noisy, congested schoolrooms and learners cannot concentrate. An inadequate and noisy area for studying or doing coursework negatively affects learning. Learners like small class sizes, as their teachers are able to individually attend to each learner resulting in effective learning (Martins & Walker, 2006; Wolf & Frazer, 2008).

Administrative support

Administrative support brings about satisfaction among teachers and inspires them to work effectively. Improved performance develops and stimulates teachers' commitment levels. Marshall (2004) asserts that a reassuring, affirmative and ethnically cognisant school environment may determine the magnitude of academic accomplishment. Administrative support such as offering guidance regarding the use of resources, providing time for peer collaboration and assisting with capturing of learners' marks, among others, create a conducive school climate for teachers and may enhance learner performance.

Parental involvement

Parental involvement enriches learners' academic experience. Research on parental involvement by young Mexican American academics suggests that when parents are vigilant, learners are always present in class, and score good marks (Plunkett & Bámaca-Gómez, 2003). Ibañez, Kuperminc, Jurkovic and Perilla (2004) found that parent involvement relates to learners' performance. Moreover, Maziya (2009) adds that a lack of harmony between the school and parents results in a poor school climate which causes abysmal performance in those schools. However, in schools where parents were involved, collaboration that led to the betterment of education generated good performance. Ibañez et al. (2004) conclude that parent involvement is good and important for every learner.

Period allocation

For each subject, there is a specified period allocation per week or cycle. This allocation is done according to the amount of content per subject. Therefore, allocating fewer periods than those specified in the curriculum for a subject may restrict the teacher from finishing the syllabus, thereby affecting the learners' performance. Dlamini (2000) found that fewer periods allocated for the principles of accounting per week was among the factors negatively affecting performance in the subject.

Research Methodology

Research Design and Paradigm

A sequential explanatory mixed methods research design was adopted, as quantitative data were

collected before qualitative data to assist in explaining the quantitative outcomes. We followed the pragmatist paradigm as we focused on variables affecting Grade 12 (Form 5) accounting learners' performance in Eswatini.

Target Population and Sampling

McLeod (2014) defines a target population as the total group of individuals from which the sample might be drawn. The Manzini and Lubombo Regional Education Office statistics reveal that there are 136 schools in the Manzini region and 67 in the Lubombo region. Based on their performance, location, as well as representativity of the country, 20 teachers were purposefully selected from the total of 203 schools in the two regions mentioned. This is in line with stratified random sampling practice of dividing populations into smaller groups (strata) and using these to represent the population being studied (Shui, Hair, Bush & Ortinau, 2009); in this case 10 well-performing schools and 10 schools from those that did not perform well. Instead of stratifying in proportion to strata population sizes, we opted to implement disproportionate stratification (Hair, Black, Babin, Anderson & Tathan, 2006).

The schools in the two regions were stratified according to performance. The first stratum comprised of schools that have been consistently

performing well, obtaining good results for the last 5 years (2010–2014) and the second stratum comprised those that have been consistently performing poorly for the same period. Wiersma (2000) defines a stratum as a sub-population of the sample population in a research study. Each stratum consisted of participants with similar characteristics who were randomly selected from each stratum through stratified random sampling. The purpose was to afford representation of each of the sub-groups of the population in the research.

The sample population for this study was 80 accounting teachers and 400 accounting learners in 10 schools from each of the two regions (see Table 1). Academic performance (good and poor) was the criterion for choosing sites from which the sample was drawn. A simple random sampling technique allowed each school to have an equivalent probability of being selected. The simple random sampling used was the lottery method. Each school on the population list was assigned an inimitable number on a piece of paper (number tag) that was mixed with others in a container. Blindfolded, one researcher then selected numbered tags from the container and the individuals represented by the numbers selected became the participant in the study.

Table 1 Participants – Phase 1; quantitative sample (questionnaires)

Schools	Manzini region	Lubombo region	Total
Performing well	20 teachers	20 teachers	40 teachers
	100 learners (5 schools)	100 learners (5 schools)	200 learners (10 schools)
Performing poorly	20 teachers	20 teachers	40 teachers
	100 learners (5 schools)	100 learners (5 schools)	200 learners (10 schools)
Total	40 teachers	40 teachers	80 teachers
	200 learners (10 schools)	200 learners (10 schools)	400 learners (20 schools)

A purposive sampling method was used to draw a qualitative sample for the interviews. In purposeful random sampling, a random sample of a small group normally emerges from a considerable larger target population. This enhances trustworthiness in the evaluation by creating QUAL process-oriented outcomes to accompany the extensive QUAN-oriented fact-finding that also took place (Teddlie & Yu, 2007). Using purposive random sampling enabled recognising and enlarging the series of variation or dissimilarity, identical to the use of quantitative procedures to outline the variable(s) (Palinkas, Horwitz, Green, Wisdom, Duan & Hoagwood, 2015).

Creswell (2008) emphasises the importance of using the same participants in both phases of the

study for a sequential design, and that the qualitative sample is purposively selected from the quantitative sample and should consist of participants that can best provide the details needed to expand on the quantitative results. This includes recognising and choosing individuals or groups of those conversant with or proficient in the phenomenon of concern (Creswell & Plano Clark, 2011). Hence, 12 accounting learners and eight accounting teachers, being part of the first phase (see Table 2), were selected for the second phase, the interviews, to obtain rich qualitative descriptions to understand the phenomenon. Six accounting learners and four teachers were selected from schools that performed well and the other six learners and four teachers were from those schools that performed poorly.

Table 2 Participants – Phase 2; qualitative sample (interviews)

Schools	Manzini region	Lubombo region	Total
Performing well	2 teachers	2 teachers	4 teachers
	3 learners	3 learners	6 learners
	(2 schools)	(2 schools)	(4 schools)
Performing poorly	2 teachers	2 teachers	4 teachers
	3 learners	3 learners	6 learners
	(2 schools)	(2 schools)	(4 schools)
Total	4 teachers	4 teachers	8 teachers
	6 learners	6 learners	12 learners
	(4 schools)	(4 schools)	(8 schools)

Three hundred and seventy-eight out of 400 learners (94.5% of the target population) and 66 out of 80 teachers (82.5% of the target population) participated in the study.

Data Collection Procedures

The study used two data collection methods: questionnaires and semi-structured interviews.

Questionnaire

We used properly constructed questionnaires developed by Siphiso Saker of Osmoz Consulting to achieve a high measure of validity. Questionnaires were prepared for both learners and teachers because learners were the ones who experienced difficulties while learning, and teachers while teaching (Al-Amarat, 2011). Teachers were requested to distribute questionnaires to learners after piloting these with learners and teachers from non-participating schools, and assessed by the research supervisor.

The questionnaire was divided into two sections and structured to obtain the following information for each section:

- Section A: Biographical details such as gender, age, location of school, region, school type, mother tongue, and teaching experience/previous Grade.
- Section B: School-based variables affecting learners' performance.

Closed-ended, open-ended and Likert-type questions were included in the questionnaire. In the Likert scale, the respondents were requested to specify their level of agreement by circling one of five responses: strongly disagree, disagree, undecided, agree and strongly agree.

Questionnaires were hand-delivered to some schools but for faraway schools, they were distributed to teachers during workshops and meetings. Learners received questionnaires from their teachers during accounting lessons and had to complete and return these by the end of the lesson. Generally, the completion of the questionnaire took approximately 45 minutes. On completion of the questionnaires, accounting teachers collected these on behalf of the researcher and this enhanced the return rate. The questionnaires were collected on the same day and fellow subject advisers assisted in collecting the completed questionnaires. Respondents were not pre-tasked (participants were

not presented with what would be expected of them during the interview process) to avoid bias.

Semi-structured open-ended interviews

Generating qualitative data to elaborate on quantitative data involved face-to-face semi-structured interviews comprising characteristics of both unstructured and structured interviews. We formulated a series of questions for all interviewees; nonetheless, probing questions were asked to seek further clarity on participants' responses to the structured questions (Dudovskiy, 2016).

Teachers and learners were pre-tasked (participants were presented with what would be expected of them during the interview) to enable them to prepare for the interviews. Connaway and Powell (2010) suggest that researchers provide a short, composed introduction to the research, emphasise the significance of being part of the research, and reassure obscurity or secrecy where appropriate. Permission to use a tape recorder during the interviews to assist me to produce transcribed documents was solicited from the participants. Using a tape recorder ensures that the interview report is accurate, and is often more accurate than written notes. However, seven out of the 12 teachers and five out of the eight learners requested not to be tape-recorded, hence I noted their responses in a notebook.

The interview schedule was piloted with eight Grade 12 accounting learners and four accounting teachers that were not part of the sample. Member checking was used to assess these responses. The research supervisor, postgraduate students and professors at a research workshop presentation assessed the responses in order to correct errors and to check the response times. Pilot testing ensured the validity and trustworthiness of the instruments.

Data Analysis

Sequential explanatory mixed methods analysis was employed. Firstly, quantitative data were analysed and the outcomes used to construct the qualitative research questions. Secondly, the qualitative data were analysed and results were used to support the quantitative results. For quantitative data, questionnaires were checked and coded with reference numbers. Raw data were captured on

Microsoft Excel (MS Excel). The statistician produced descriptive (frequencies and percentages) and inferential statistics i.e. correlations using the SPSS version 20 for analysing data. SPSS is a data management and statistical analysis instrument with an extremely flexible data processing ability to import data from Excel (Russell & Booth, 2005). For qualitative data, I used thematic and content analysis interchangeably. I repeatedly listened to the recorded interviews for familiarity with the data before transcribing sound into text/manuscripts (Creswell, 2008). Multiple readings of interview transcripts enhanced my familiarity with the data. Open coding enabled the forming of initial data pertaining the subject under investigation by sectioning categories based on information collected (Creswell, 2008). Extracts from participants' responses to the interview questions are presented as evidence in support of qualitative findings.

Ethical Considerations

Ethical clearance was obtained from the Higher Education Ethics Committee, protocol reference number: HSS/1537/015M. Authorisation for carrying out the research was secured from the Eswatini Ministry of Education and Training. Respondents were asked not to provide their names or schools' names in order to obtain sincere and reliable responses. Fictitious names like Learner 1 or Teacher 1 were used. Responses were treated confidentially. Participation was voluntary and participants were informed of their right to withdraw from participating should they feel threatened by continued participation. Informed consent from teachers, learners and parents, was first obtained before participants started engaging with the research instruments.

Results

Quantitative Findings

School-based determinants affecting learners' performance in Eswatini GCSE accounting

Table 3 below indicates the variables contributing to poor performance in accounting as indicated by learner participants: lower period allocation ($f = 213, 56.3\%$); checking of learners' work ($f = 208, 55\%$); setting a minimum on the number of tests per term ($f = 208, 55\%$); delivery of learners' textbooks on time ($f = 205, 54.2\%$); provision of study time ($f = 202, 53.5\%$); discussion of results ($f = 201, 53.2\%$), and motivation of teachers and learners ($f = 193, 51.1\%$).

Teachers, on the other hand, felt that the school variables affecting learners' performance were the following: setting a minimum on the number of tests per term ($f = 56, 84.9\%$); awarding pupils for good performance ($f = 56, 84.8\%$); placing emphasis on science subjects ($f = 55, 83.3\%$); the provision of reference material ($f = 53, 80.3\%$); motivation of teachers and learners; checking of learners' work ($f = 54, 81.8\%$); subject combinations

($f = 52, 78.8\%$); lower period allocation ($f = 51, 77.3\%$); discussion of results ($f = 49, 74.3\%$) and timely delivery of textbooks ($f = 49, 74.3\%$).

Relationships between school determinants, and selected demographic characteristics

Correlations were used to describe the relationship between variables. Correlation is a statistical test to determine the tendency or pattern for two (or more) variables or two sets of data to vary consistently (Creswell, 2008). The Davis Scale was used in interpreting the strength of correlation within the criterion variable (Davis, 1971).

Table 4 presents the relationship between school variables and selected demographic characteristics. The relationships between school variables and demographic characteristics were as follows: Gender – learners ($R = .07$) and teachers ($R = .03$); age – learners ($R = .11$) and teachers ($R = .30$); location – learners ($R = .11$) and teachers ($R = .35$); type of school – learners ($R = .13$) and teachers ($R = .10$); region – learners ($R = -.09$) and teachers ($R = .01$); learners' previous grade ($R = .11$); teachers' academic qualifications ($R = .33$). It can be observed that the relationship between school variables and the selected demographic characteristics are low.

Table 4 Relationships between variables

Demographic variables	School variables	
	Learners	Teachers
Gender	.07	.03
Age	.11	.30
Location	.11	.35
Type of school	.13	.10
Region	-.09	.01
Previous grade	0.11	–
Academic qualification	–	.33

Qualitative Findings

School variables giving rise to the poor/bad learner academic achievement in Grade 12 Accounting

Learners identified common school variables contributing to their poor performance as not receiving textbooks on time, not checking learners' work, and non-parental involvement. Teachers cited late delivery of textbooks, emphasis on science subjects, teachers' motivation and lax administration as school variables that contributed to poor learner performance in accounting.

Late delivery and issuing of textbooks

Ninety-two percent of the learners ($f = 11$) stated that their performance was mostly affected by not receiving textbooks on time as the school only issued textbooks to learners once they paid their school fees.

I can say it's the issue of textbooks. At school we are not given textbooks if you have not paid a certain percentage of the school fees. We cannot study nor write assignments without a textbook, then how can we pass? (Learner 2)

Table 3 School-based determinants affecting learners' performance in Eswatini GCSE accounting

	SD		D		U		A		SA											
	Learners		Teachers		Learners		Teachers		Learners		Teachers									
	<i>f</i>	%																		
Setting minimum tests per term	44	11.6	6	9.1	80	21.2	0	0	46	12.2	4	6.1	150	39.7	33	50.1	58	15.3	23	34.8
Frequent visits by inspectors	54	14.3	0	0	92	24.3	21	31.8	90	23.8	17	25.8	101	26.7	20	30.3	41	10.8	8	12.1
Awarding learners for good performance	101	26.7	0	0	83	22.0	7	10.6	17	4.5	3	4.4	73	19.3	36	54.5	104	27.5	20	30.3
Provision of reference material	44	11.6	0	0	85	22.5	2	3.0	91	24.1	11	16.7	90	23.8	37	56.1	68	18.0	16	24.2
Lower period allocation	36	9.5	6	9.1	69	18.3	0	0	60	15.9	9	13.6	129	34.1	39	59.1	84	22.2	12	18.2
Subject combinations	30	7.9	0	0	79	20.9	6	9.1	85	22.5	8	12.1	98	25.9	27	40.9	86	22.8	25	37.9
Teachers' & learners' motivation	72	19.0	2	3.0	47	12.4	4	6.1	66	17.5	6	9.1	111	29.4	23	34.8	82	21.7	31	47.0
Checking of learners' work	35	9.3	0	0	78	20.6	11	16.7	57	15.1	1	1.5	108	28.6	22	33.3	100	26.5	32	48.5
Discussion of results	30	7.9	0	0	85	22.5	7	10.6	62	16.4	10	15.2	144	38.1	30	45.5	57	15.1	19	28.8
Provision of study time	50	13.2	7	10.6	93	24.6	6	9.1	33	8.7	6	9.1	111	29.4	19	28.8	91	24.1	28	42.4
Timely delivery of learners' textbooks	83	22.0	0	0	41	10.8	14	21.2	49	13.0	3	4.5	103	27.2	29	43.9	102	27.0	20	30.3
Parents' involvement	49	13.0	7	10.6	69	18.3	0	0	85	22.5	12	18.2	125	33.1	22	33.3	50	13.2	25	37.9
Emphasis on science subjects	34	9.0	0	0	64	16.9	2	3.0	107	28.3	9	13.6	92	24.3	39	59.1	81	21.4	16	24.2
Large accounting classes	66	17.5	0	0	99	26.2	19	28.8	68	18.0	24	36.4	83	22.0	13	19.7	62	16.4	10	15.2

Note. SD = Strongly disagree, D = Disagree, U = Undecided, A = Agree, SA = Strongly agree.

Seventy-five percent of teachers ($f = 6$) agreed that the textbook issue makes their teaching difficult as learners sometimes have to share textbooks. Teachers noted that learners' late submission of assignments derived from a shortage of textbooks.

The books most of the times arrive late, sometimes 3 weeks after the school's opening, and that time wasted affect[s] the syllabus completion. Even after their arrival they are only given to those who have paid which make[s] teaching a problem ... and at the end, the learners' performance is negatively affected. (Teacher 2)

Even if the textbooks are delivered on time in the school, they will not be issued on time to the learners as they are not given textbooks until they have paid. This really has a negative effect on their performance as they can't do homework or study. (Teacher 5)

Checking of learners' work

Fifty-eight percent of the learners ($f = 7$) indicated that checking of learners' work by the administration enhanced learner performance. Learners claimed that teachers either did not mark their work or took very long to do the marking as they knew that the principal would not check on them.

The fact that the School Principal does not check our exercise books, whether the teachers mark or not, or we write or not, affects our performance. My twin brother is doing very well in accounting in his school because he always says that the Principal checks their exercise books and if there is any piece of work not written, you will be in trouble. (Learner 12)

Parental involvement

Eighty-three percent of learners ($f = 10$) indicated that parental involvement had an effect on their performance. They cited a lack of parental involvement as cause for concern, blaming the school for not involving their parents on academic matters but only on those relating to misconduct or collecting reports. They observed that learner performance mattered and that parents should be involved. Conversely, some learners mentioned that the school involved their parents only when a need arose.

Personally, I think not involving my parent affects my performance negatively. She only comes to pick my report at the end of the term. We don't even hold an open day because that's where our parents can see our progress and get the reason/s for the poor performance from the teacher teaching that subject. (Learner 11)

Six teachers (75%) mentioned that not involving the learners' parents contributed to the learners' poor performance. The teachers felt that the school only involved parents for learners' misconduct rather than for learners' performance.

The administration rarely involves the parents if it pertains to a learner's performance unless he or she has misbehaved. No matter how many times you can take the learner to the office for not doing

schoolwork or disturbing lessons, they will try to discipline the learner without his or her parent involvement. This really contributes to the poor performance of the learners. (Teacher 1)

Emphasis on science subjects

Seventy-five percent of the teachers ($f = 6$) noted that most of the learners who performed well in the Junior Certificate (JC) were selected for sciences in Grade 11. Teachers claimed that science learners gained preference over accounting learners on reference material, and observed that the earlier slots on the timetable are prioritised for sciences and mathematics, with accounting regularly scheduled for later slots.

The performance is not good in accounting because the learners are mostly those that have been rejected from the sciences. The school encouraged those who have performed well in JC to do the science subjects. The learners in accounting end up not competing for good marks because most of them are average performers. (Teacher 7)

Over-emphasis on science subjects contributes to the poor performance. Even if we ask for reference material, we don't get it because the textbook we are using does not have everything on the syllabus but the science teachers are given everything they ask for. Accounting is usually after break or lunch even during exams when the learners' minds are tired. (Teacher 3)

Teachers' motivation

Eighty-eight percent of the teachers ($f = 7$) suggested that teacher motivation was key to learners' performance. Teachers indicated that motivated teachers tended to motivate learners and had a positive impact on learner performance. Teachers felt that they worked very hard, sometimes during weekends and school holidays, but they did not receive any incentives even if they had produced good results; instead only the negative is over-emphasised.

Lack of motivation makes one not to go an extra mile in helping the learners. We try our best to produce good results, we even come on Saturday and during school holidays but the school does not motivate us and only the negative is over-emphasised. (Teacher 1)

Nature of the administration

Three quarters of the teachers interviewed ($f = 6.75\%$) mentioned that the performance also depended on the nature of the administration. The teachers alluded that if the administration was too lax, the performance would be poor but a firm administration enhanced learners' performance.

The introduction of positive discipline and normal progressing has contributed to the decline in the performance of learners because the administrators are now lax. If a teacher brings a learner for not writing or misconduct, the administrators sometimes do not discipline the learners, citing that they have exhausted the positive discipline procedures. (Teacher 8)

Discussion

School-based Variables that Affect Learners' Performance in Grade 12 Accounting GCSE in Eswatini

Issuing of textbooks to learners

The findings of this study show that the arrival and the issuing of textbook to learners influence their academic performance. The research findings reveal that the late arrival of textbooks, the issuing of textbooks only to learners who have paid school fees, and learners losing their textbooks delayed the completion of the syllabus. This is because learners have to rely on photocopied hand-outs from their teachers or borrowing from others and they find it difficult to study or do assignments. The teachers also found it difficult to teach when the learners did not have textbooks resulting in the poor performance. The results show that the textbook issue was the variable that contributed most to the learners' poor performance in the subject. These findings are in line with the findings by Fehrler, Michaelowa and Wechtler (2009) and Gustafsson (2007) who concluded that when the textbooks were issued, the textbook-learner ratio, and the late delivery of textbooks all negatively impacted learners' academic achievement.

Checking of learners' work and monitoring of teachers

The findings of this study reveal that the checking of learners' work and the monitoring of teachers contributed significantly to the learners' performance. The study findings prove that the schools where learners' work was checked and the teachers were monitored by the administration performed better, while the schools where the administration did not check learners work or monitor teachers performed poorly in EGCSE accounting. This is substantiated by Ayeni (2012) who revealed that principals were accountable for monitoring and instructional supervision of teachers, which included classroom observation, as it helped teachers and learners to improve on their teaching and learning. In our study we found that the school management team must ensure that teachers prepare schemes of work for the entire week and attend lessons every day.

Parental involvement

The findings of this study reveal that in most cases learners' parents were not involved in the learner's progress at school unless the parents were to collect reports at the end of the term/year or attend parent meetings or due to severe misconduct by their children. A number of studies revealed that parental involvement contributed towards learners' performance. Nyathi (2006) found that parental non-involvement greatly contributed towards the poor academic achievement of Grade 12 learners in Bushbuckridge in the Mpumalanga province, South Africa.

Emphasis on science subjects

A majority of teachers pointed out that over-emphasis on science subjects resulted in the poor academic achievement of learners in EGCSE accounting. The findings reveal that most capable learners were chosen for science subjects rather than business subjects. These findings seemed to echo the findings of Dlamini (2000) who found that too much emphasis on science subjects tended to impact negatively on the learners' performance in principles of accounting.

Teachers' motivation

The findings of this study reveal that a lack of teachers' motivation contributed to the poor academic achievement of learners in EGCSE accounting. We found that teachers were not motivated to go the extra mile because the school administration and the inspectorate over-emphasises the negatives in spite of the teachers doing their utmost to improve teaching and learning. Odumbe, Enose and Ayodo (2015) also observe that when teachers are frustrated and poorly motivated they do not go the extra mile to ensure effective coverage of the syllabus or providing weaker learners with extra work, resulting in learners' poor academic performance at Day-Secondary Schools in Kenya.

School variables and demographic variables

The relationship between school variables and demographic variables revealed that there was a moderate positive relationship between teacher variables and the following variables: learners' gender ($R = .07$); teacher's age ($R = .30$); teacher's location ($R = .35$); teacher's academic qualifications ($R = .33$). There was a low or no association between the school variables and the remainder of the demographic variables. Klingele and Warrick (1990) found that demographic variables such as educators' academic qualifications and the relative wealth of the school districts had a positive relationship with non-instructional variables.

Limitations of the Study

The study was limited to only learners who were enrolled in Form 5 (Grade 12) in 2016. Learners enrolled for accounting before 2016 were not studied, yet they could have provided valuable information. Upgrading learners (learners who were awarded a second chance to redo failed Grade 12 subjects) were not studied, although they could have provided more concrete data on the variables that resulted in their poor academic achievement. The findings of the study are limited to only two of the four regions in Eswatini. If all regions had been included it could have resulted in a representative view of the entire secondary school population in the country. Nevertheless, the findings of this research can be used as a source for further educational research.

Conclusion and Recommendations

Incongruities exist between quantitative results from learners and teachers on the school-based factors affecting Grade 12 accounting learners' performance in GCSE in Eswatini. The quantitative results, from a learner perspective, that contribute to poor performance in accounting are lower period allocation; checking of learners' work; setting a minimum on the number of tests per term; timely delivery of textbooks; provision of study time; discussion of results, and motivation of teachers and learners. Teachers, on the other hand, felt that the school variables that affected learners' performance were setting a minimum on the number of tests per term; awarding pupils for good performance; placing emphasis on science subjects; the provision of reference material; motivation of teachers and learners; checking of learners' work; subject combinations; lower period allocation; discussion of results, and timely delivery of textbooks. Qualitatively, learners and teachers ranked the delivery of textbooks highest as the common variable contributing to learners' poor performance in Grade 12 accounting. The qualitative results reveal that learners identified common school variables contributing to their poor performance as not receiving textbooks on time, learners' work not being checked, and the lack of parental involvement. Teachers identified delivery of textbooks, emphasis on science subjects, teachers' motivation, and lax administration as the school variables contributing to learners' poor performance in accounting. The relationships between school variables and demographic variables were found to be low.

School management should consider the quantitative order of importance when considering the school-based factors affecting Grade 12 accounting results in Eswatini. The quantitative results established that learners and teachers ranked the importance of textbooks and the shortage of accounting textbooks as highest in inhibiting learners' efforts to achieve well in assignments and teachers' efforts to teach effectively. Schools should consider acknowledging good learner performance while recognising the teachers' efforts in producing good grades; there should be greater effort to allocate periods equally among different subjects and to monitor teaching and learning in accounting. The findings of this study relate to what may need to be considered in both local and international settings, as these findings offer views on how developing countries like Eswatini may tackle challenges shaping learners' performance in accounting. The findings of this study relate to what needs to be considered by emerging economies, as these findings offer views on how developing countries like Eswatini may confront challenges influencing learners' performance in accounting.

Recommendations for Future Research

- A study should be carried out to explore the possibilities of extending opportunities for learners

who wish to improve on their existing final examination results.

- A similar study involving the other two regions (Hhohho and Shiselweni) in Eswatini should be carried out.
- A study including the markers, subject inspectorate, ECOE subject officials, and school principals as participants should be conducted in future.

Authors' Contributions

KS conducted a Master of Education study. MVM was the main supervisor and MAM was the co-supervisor.

Notes

- Published under a Creative Commons Attribution Licence.
- DATES: Received: 29 May 2020; Revised: 17 November 2020; Accepted: 16 March 2021; Published: 28 February 2022.

References

- Adesoji FA & Olatunbosun SM 2008. Student, teacher and school environment factors as determinants of achievement in senior secondary school chemistry in Oyo State, Nigeria. *Journal of International Social Research*, 1(2):13–34. Available at <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.500.8343&rep=rep1&type=pdf>. Accessed 28 February 2022.
- Al-Amarat MS 2011. The classroom problems faced teachers at the public schools in Tafia Province, and proposed solutions. *International Journal of Educational Sciences*, 3(1):37–48.
- Awiti JO 2006. The effect of administration practices on Kenya Certificate of Primary Education performance in Maseno Division, Kisumu District. PhD thesis. Nairobi, Kenya: University of Nairobi.
- Ayeni AJ 2012. Assessment of principals' supervisory roles for quality assurance in secondary schools in Ondo state, Nigeria. *World Journal of Education*, 2(1):62–69. <https://doi.org/10.5430/wje.v2n1p62>
- Beswick K 2007. Teachers' beliefs that matter in secondary mathematics classrooms. *Educational Studies in Mathematics*, 65:95–120. <https://doi.org/10.1007/s10649-006-9035-3>
- Connaway LS & Powell RP 2010. *Basic research methods for librarians* (5th ed). Santa Barbara, CA: Libraries Unlimited.
- Creswell JW 2008. *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (3rd ed). Upper Saddle River, NJ: Prentice Hall.
- Creswell JW & Plano Clark VL (eds.) 2011. *Designing and conducting mixed methods research* (2nd ed). Thousand Oaks, CA: Sage.
- Davis JA 1971. *Elementary survey analysis*. Englewood Cliffs, NJ: Prentice-Hall.
- Dlamini T 2000. A survey of factors influencing the performance of students in principle of accounts at O Level in the Hhohho region: MEd dissertation. Matsapha, Swaziland: University of Eswatini.
- Dudovskiy J 2016. *The ultimate guide to writing a dissertation in Business Studies: A step-by-step assistance*.
- Etsey K 2005. *Causes of low academic performance of primary school pupils in the Shama sub-metro of Shama Ahanta East Metropolitan Assembly (SAEMA) in Ghana*. Paper presented at the

- Regional Conference on Education in West Africa, Dakar, Senegal, 1–2 November. Available at <http://www.saga.cornell.edu/saga/educconf/etsey.pdf>. Accessed 28 February 2022.
- Examination Council of Eswatini 2014. *EGCSE Accounting syllabus, 2014 handbook*. Lobamba, Eswatini: Ezulwini.
- Examination Council of Eswatini 2015. *EGCSE Accounting syllabus, 2015 handbook*. Lobamba, Eswatini: Ezulwini.
- Fareo DO & Ojo OO 2012. Impact of facilities on academic performance of students with special needs in mainstreamed public schools in Southwestern Nigeria. *Journal of Research in Special Educational Needs*, 13(2):159–167. <https://doi.org/10.1111/j.1471-3802.2011.01228.x>
- Fehrler S, Michaelowa K & Wechtler A 2009. The effectiveness of inputs in primary education: Insights from recent student surveys for sub-Saharan Africa. *The Journal of Development Studies*, 45(9):1545–1578. <https://doi.org/10.1080/00220380802663625>
- Gustafsson M 2007. Using the hierarchical linear model to understand school production in South Africa. *South African Journal of Economics*, 75(1):84–98. <https://doi.org/10.1111/j.1813-6982.2007.00107.x>
- Hair J, Black WC, Babin BJ, Anderson RE & Tathan RL 2006. *Multivariate data analysis* (6th ed). Upper Saddle River, NJ: Pearson Prentice Hall.
- Hlophle M 2010. A survey of effects of school infrastructure in academic performance in selected high schools. MEd dissertation. Luyengo, Eswatini: University of Eswatini.
- Ibañez GE, Kuperminc GP, Jurkovic G & Perilla J 2004. Cultural attributes and adaptations linked to achievement motivation among Latino adolescents. *Journal of Youth and Adolescence*, 33(6):559–568. <https://doi.org/10.1023/B:JOYO.0000048069.22681.2c>
- Igeradja S 2015. Factors influencing performance in basic technology among secondary school students of Delta South Senatorial District in Delta State, Nigeria. *Journal of Technical Education and Training*, 7(2):24–34. Available at <http://publisher.uthm.edu.my/ojs/index.php/JTET/article/view/1103>. Accessed 19 February 2020.
- Kimu AM 2012. Parent involvement in public primary schools in Kenya. PhD thesis. Pretoria, South Africa: University of South Africa. Available at <https://oarklibrary.com/file/2/d3fba67d-db45-40f1-999f-15f6f35c47bb/9bcabda00-091c-48a6-a708-98ebc04cd534.pdf>. Accessed 28 February 2022.
- Klinge WE & Warrick BK 1990. Influence of cost and demographic factors on reading achievement. *The Journal of Educational Research*, 83(5):279–282. <https://doi.org/10.1080/00220671.1990.10885970>
- Lubbe I & Coetsee S 2018. Accounting education in Africa. *Accounting Education*, 27(5):453–455. <https://doi.org/10.1080/09639284.2018.1514789>
- Maphuthoma N 2005. The causes of poor performance of the Grade 12 learners in the KwaMhlanga North-East Circuit. MEd dissertation. Pretoria, South Africa: Tshwane University of Technology.
- Marriott N, Stoner G, Fogarty T & Sangster A 2014. Publishing characteristics, geographic dispersion and research traditions of recent international accounting education research. *The British Accounting Review*, 46(3):264–280. <https://doi.org/10.1016/j.bar.2013.11.003>
- Marshall ML 2004. *Examining school climate: Defining factors and educational influences*. Available at https://schoolsafety.education.gsu.edu/wp-content/blogs.dir/277/files/2013/10/whitepaper_marshall.pdf. Accessed 12 January 2012.
- Martins P & Walker I 2006. *Student achievement and university classes: Effects of attendance, size, peers, and teachers* (Institute for the Study of Labor (IZA) Discussion Paper No. 2490). Bonn, Germany: IZA. Available at <https://docs.iza.org/dp2490.pdf>. Accessed 28 February 2022.
- Maziya GS 2009. Factors influencing urban high school students' academic performance in Agriculture: A case of three urban high schools. MEd dissertation. Luyengo, Eswatini: University of Eswatini.
- McLeod SA 2014. *Sampling methods*. Available at www.simplypsychology.org/sampling.html. Accessed 5 March 2016.
- Nyagosia PO, Waweru SN & Njuguna FW 2013. Factors influencing academic achievement in public secondary schools in Central Kenya: An effective schools' perspective. *Educational Research International*, 2(2):174–184. Available at [http://www.erint.savap.org.pk/PDF/Vol.2\(2\)/ERInt.2013\(2.2-21\).pdf](http://www.erint.savap.org.pk/PDF/Vol.2(2)/ERInt.2013(2.2-21).pdf). Accessed 28 February 2022.
- Nyathi TT 2006. Academic performance of Grade 12 learners in Bushbuckridge District. MEd dissertation. Pretoria, South Africa: Tshwane University of Technology. Available at <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.505.2323&rep=rep1&type=pdf>. Accessed 28 February 2022.
- Odumbe AG, Enose MWS & Ayodo TMO 2015. Factors influencing student academic performance in day-secondary schools in Kenya. A case study of Migori Sub County. *Greener Journal of Educational Research*, 5(3):78–97. <https://doi.org/10.15580/GJER.2015.3.071815099>
- Ogunbanjo PE 2001. Factors influencing the academic performance of underachieving learners in secondary schools with an inhibitive learning climate. PhD dissertation. Pretoria, South Africa: University of South Africa.
- Okongo RB, Ngao G, Rop NK & Nyongesa WJ 2015. Effect of availability of teaching and learning resources on the implementation of inclusive education in pre-school Centres in Nyamira North Sub-country, Nyamira county, Kenya. *Journal of Education Practice*, 6(35):132–141. Available at <http://ir-library.mmarau.ac.ke:8080/bitstream/handle/123456789/3198/Wesonga%209.pdf?sequence=1&isAlloved=y>. Accessed 28 February 2022.
- Onyara BN 2013. School based factors influencing student's academic performance at Kenya Certificate of Secondary Education in Teso South District. MEd dissertation. Nairobi, Kenya: University of Nairobi. Available at http://erepository.uonbi.ac.ke/bitstream/handle/11295/56553/Onyara_School%20Based%20Factors%20Influencing%20Student%20e%2080%99s%20Academic%20Performance%20At%20Kenya%20Certificate%20Of%20Secondary%20Education%20In%20Teso%20South%20District.pdf?sequence=3&isAll

- owed=y. Accessed 28 February 2022.
- Organisation for Economic Co-operation and Development 2013. Student assessment: Putting the learner at the centre. In *Synergies for better learning: An international perspective on evaluation and assessment*. Paris, France: OECD Publishing.
<https://doi.org/10.1787/9789264190658-7-en>
- Palinkas LA, Horwitz SM, Green CA, Wisdom JP, Duan N & Hoagwood K 2015. Purposeful sampling for qualitative data collection and analysis in mixed method implementation research [Special section]. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5):533–544.
<https://doi.org/10.1007/s10488-013-0528-y>
- Plunkett SW & Bámaca-Gómez MY 2003. The relationship between parenting, acculturation, and adolescent academics in Mexican-Origin immigrant families in Los Angeles. *Hispanic Journal of Behavioral Sciences*, 25(2):222–239.
<https://doi.org/10.1177/0739986303025002005>
- Read T 2015. *Where have all the textbooks gone? Toward sustainable provision of teaching and learning material in Sub-Saharan Africa*. Washington, DC: World Bank Group.
<https://doi.org/10.1596/978-1-4648-0572-1>
- Russell J & Booth B 2005. *Quantitative data analysis using SPSS12*. Sheffield, England: Corporate Information and Computing Services, University of Sheffield.
- Shui E, Hair J, Bush R & Ortinau D 2009. *Marketing research*. Berkshire, England: McGraw-Hill Education.
- Sibandze SF, Oloyede OI & Pereira L 2020. Exploring the impact of blended learning on learners' academic performance in Accounting. *IOSR Journal Of Humanities And Social Science*, 25(5):1–11. <https://doi.org/10.9790/0837-2505030111>
- Teddlie C & Yu F 2007. Mixed methods sampling: A typology with examples. *Journal of Mixed Methods Research*, 1(1):77–100.
<https://doi.org/10.1177/1558689806292430>
- Urquiola M & Verhoogen E 2009. Class-size caps, sorting, and the regression discontinuity design. *American Economic Review*, 99(1):179–215.
<https://doi.org/10.1257/aer.99.1.179>
- Verhoef G & Samkin G 2017. The accounting profession and education: The development of disengaged scholarly activity in accounting in South Africa. *Accounting, Auditing & Accountability Journal*, 30(6):1370–1398. <https://doi.org/10.1108/AAAJ-08-2015-2192>
- Wiersma W 2000. *Research methods in education: An introduction* (7th ed). Boston, MA: Allyn & Bacon.
- Wolf SJ & Fraser BJ 2008. Learning environment, attitudes and achievement among middle-school science students using inquiry-based laboratory activities. *Research in Science Education*, 38:321–341. <https://doi.org/10.1007/s11165-007-9052-y>
- Zwane SL & Malale MM 2018. Investigating barriers teachers face in the implementation of inclusive education in high schools in Gege branch, Swaziland. *African Journal of Disability*, 7(0):a391. <https://doi.org/10.4102/ajod.v7i0.391>