First-Year Accounting Student Teachers' Perceptions of their Classroom Learning Environment

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Abstract. This study assessed the perceptions of first-year accounting student teachers about their classroom learning environment. The study was prompted by studies which argue that the academic performance of students is correlated with their perceptions of the learning environment and the context in which teaching and learning takes place. The population for the study was first-year Accounting students at a university of technology in South Africa. The study employed a mixed-method approach, and data were collected from students using a Constructivist Learning Environment Survey (CLES) which covered 42 items. The findings from the quantitative part of the study revealed that the students view their learning environment positively. Evidence to this effect is demonstrated by the mean obtained in the categories of the learning environment which were all above three. The themes which emerged from the qualitative findings also corroborated the quantitative findings. However, the qualitative data further reveal that the students felt far away from issues directly related to their teaching and learning. Consequently, a more student-participative approach to the planning and designing of instruction is recommended to mitigate the identified challenges.

Keywords: Student teachers; Learning environment; Perceptions; Constructivism

1. Introduction

Actually, it has been acknowledged that the performance of first-year accounting student teacher in accounting is to some extent unsatisfactory as shown in the results of the second semester of 2016. The average class performance in Accounting was 51%, while it was 69% in Business Management and 67% in Economics. This is a very low class average as compared to the other two major subjects which form part of the programme. Furthermore, in the final exam of 2016, there were twenty-one students who sat for the re-evaluation examination in Accounting 1 against three in Economics 1 and none in Business Management

1. Nationally, this problem is highlighted in the statistics provided by Masondo and Fengu (2019), Raborife (2017) and Seepe (2005), the National Council on Higher Education, (2013), as well as the sentiments of Mapuya (2018) and Makola (2016). Since Accounting 1 is a compulsory module in the programme, students' poor performance in this module has raised some concerns and thus necessitated this study. Based on the exiting literature, it has been found that such a failure is closely associated with learners' perceptions and the outlooks they have towards the learning environment. Hence, the present research paper discusses what the literature says about the issue under investigation, and attempts to find out first-year accounting students teachers' perceptions about their classroom learning environment. In this concern, the investigator put forward the following research question:

1. How do first-year Accounting student teachers perceive their classroom learning environment?

2. Theoretical Framework

Masondo and Fengu (2019) and Hodgson, Lam and Chow (2010) argue that first-year students need to adjust from highly structured and supportive learning environments in their secondary schools which promote learning dependence to a complex learning environment at university which emphasizes autonomous learning. To this effect, Killen (2016), Mapuya (2018), and Millet (2015) warn that the perceptions of students about their learning environment have a significant impact on their transition to university life and their overall development and academic progression. Furthermore, Killen (2016) and Millet (2015) agree that the dynamics of adjusting to the social, academic and learning environments constitute the difference between a negative and positive experience for most first-year students. These dynamics also influence how students ultimately perceive the learning environment.

2.1. Meaning of a Learning Environment

The term 'learning environment' has been approached differently by different researchers. To start with, it is used to refer to a few contextual aspects or elements of the teaching and learning process (Mapuya, 2018). It refers to the social atmosphere or climate in which teaching and learning takes place (Killen, 2016; Rankin, 2005; Millet, 2015; Arisoy, 2007). It also denotes the physical setting of the classroom and its social norms (Litmanen, Loyens & Lonka, 2014). Lastly, it refers to the physical activities in the classroom, the teaching strategies used in the teaching and learning process, the type of learning in which students are engaged and the assessment methods used to evaluate teaching and learning (Doppelt, Christian & Schunn, 2008; Cleveland & Fisher, 2014). These definitions offer a more holistic and comprehensive all-inclusive view of the learning environment, but the one put forward by Doppelt et al. (2008) and Cleveland and Fisher (2014) is found to be more relevant and applicable to this study.

2.2. Benefits of Knowledge about the Learning Environment and Why it is Necessary

The learning environment includes several elements such as social relationships, the classroom interactions, the general approach to learning activities and the physical attributes of the classroom that contribute to learning. It comprises what is perceived or experienced by both the students and the lecturer and stands out to be a learning variable which can exacerbate or mitigate academic success of students (Abraham, Ramnarayan, Vinod, & Torke, 2008; Bakhashialiabad et al, 2015). A comprehensive description of the learning environment should incorporate the culture within a lecture hall and its existing ethos, distinctive features and student interactions. It should also include how the lecturer organizes the educational environment to enhance and stimulate teaching and student learning, the type of learning in which students are engaged and the assessment methods used to evaluate teaching and learning (Litmanen et al., 2014; Doppelt et al., 2008; Cleveland & Fisher, 2014). Bakhashialiabad et al. (2015) corroborated with the view of Du toit (2018) who contended that the contextual variables of the teaching and learning process and the psycho-social engagements in the classroom have a significant effect on the students' ability to learn and achieve their goals.

Bakhashialiabad et al. (2015) provided a two-side view of the learning environment which includes both the physical and psychological aspects to illuminate the implications for teaching and learning. They identified the physical domain of the learning environment which refers to variables such as facilities, spaces, ventilation, furniture, lighting, and all the other features which influence the students' comfort and safety and ultimately their learning experience and personal development. On the other hand, the psychological environment focuses on the variables within the classroom context in terms of the social relationships among the stakeholders in the classroom. This is also referred to as the classroom social interactions and relationships.

Most researchers and educational psychologists who have explored the learning environment through the socio-ecological paradigm developed by Moos (1974) subscribe to the conclusion that the learning environment can be a powerful indicator of academic achievement of students and their attitudes (Myint & Goh, 2001; Brown, Williams & Lynch, 2011; Penlington, Joyce, Tudor & Thompson, 2012; Arisoy, 2007; Pintrich & Schunk, 2002; Eccles & Wigfield, 2002). The dominant view that emerged from investigations in chemistry, physics, biology and mathematics education corroborates with the finding that the perceptions of students regarding the climate and atmosphere in which they learn is a major qualifier of differences in academic achievement than factors related to the characteristics of students (McLoughlin& Luca, 2004; Abraham, Ramnarayan & Torke, 2008; Lin, 2003; Bakhashialiabad et al., 2015; Lakhan & Ekundayo 2013).

2.3. Research on Learning Environments

Many studies have been conducted on the learning environment and how it is related to the academic performance of the students. Among others, the investigations by Radovan and Makovec (2015), Dahlin, Fjell & Runeson (2010), Nel, Nel & Hugo (2010), Urdan (2004) and Bakhshialiabad, Bakhshi &

Hassanshahi (2015) have produced compelling evidence to argue that a significant relationship exists between students' perspectives of the learning environment, and the development of their cognitive and effective domains and their overall academic performance.

Bakhashialiabad et al. (2015) confirmed that meaningful and successful learning is positively correlated to the students' perceptions of the learning environment. Penlingthon, Joyce, Tudor and Thompson (2012) indicated that studies on learning environments have connected the perceptions of students about their learning environment to their quality of learning. In other terms, students tend to learn much better and more efficiently when they have some positive perceptions of their learning environment. Rakici (2004) claimed that the students' attitudes towards teaching and learning activities are directly associated with their perceptions of the learning environment in their classrooms.

Den Brok (2006) and Arisoy (2007) added that gender is a significant factor that consistently influenced the students' perceptions of the learning environment, irrespective of the interest in the learning environment. Rakici (2004) and Den Brok (2006) revealed that girls rated their learning environment and the teacher's interpersonal behaviour more favourably than their male counterparts. The girls who participated in an investigation by Arisoy (2007) showed positive perceptions that are superior to those of boys. However, they were also more motivated to learn than the boys. These claims were later reinforced by Brown, Williams and Lynch (2011) whose findings demonstrated that female students indicated a more positive perception of the learning environment than males. It was also found that the students viewed the learning environment of male educators as more cooperative than that of female educators. Also, male educators were also rated as being stricter in the classrooms than female educators.

With regard to the above said, Arisoy, (2007) and Rakici (2004) suggested that Moos (1974) developed the socio-ecological approach to illustrate the influence the environment has on the perspectives of individuals who occupy it and how it can be modified to improve their quality of life. As observed by Lakhan & Ekundayo (2013), Moos (1974) argued that the psychosocial environment has three central dimensions that focus on the majority of settings in which people find themselves in their daily lives, namely: a relationship dimension, a personal development dimension, and systems maintenance and systems change dimension.

2.4. The Relationship Dimension
Rodavan & Makovec (2015) and Lakhan &Ekundayo, (2013) asserted that the relationship dimension assesses and evaluates the degree to which students are involved in the learning environment. It considers the extent to which students assist and support each other to promote their education. In the same line of thought, Rakici (2004) contends that the relationship dimension is concerned with the nature and type of interactions and relationships between the people who occupy a given environment. Rodavan & Makovec (2015) further note that this dimension emphasizes the nature, quality and power of personal relations in any

given context. These relations can either be negative or positive, depending on the effect they have on both the students and the lecturer. Den Brok, (2006) agreed with Lakhan & Ekundayo, (2013) in which the elements which Moos (1974) included in this category evaluate and examine the types and levels of personal relationships among the students in the classroom.

2.5. The Personal Development Dimension

The personal development dimension evaluates and analyses the degree to which the learning environment creates and offers students opportunities to develop their self-esteem and self-enhancement. It covers all the aspects through which the learning environment encourages the growth, development and promotion of students. Lakhan & Ekundayo, (2013) suggested that at the university, this dimension includes competition, academic success and task orientation. Rakici (2004) complemented and added that under this dimension, self-discovery, anger aggression and personal status are also important qualifiers. Lakhan & Ekundayo, (2013) subscribed to an earlier view of autonomy by Allegrante, Hanson, Sleet & Marks (2010), in which they agreed that autonomy assesses the degree to which students are encouraged to be independent and self-sufficient scholars. This view of autonomy is consistent with a social constructivist oriented teaching and learning approach. It is also in harmony with the graduate attributes envisaged by the Central University of Technology (CUT), Free State and some of the educational imperatives of the National Curriculum Statement (Grades R - 12), and the Curriculum Assessment Policy Statement (2015). Moos (1974) identified the variable of autonomy under the personal development dimension to be particularly prevalent and important in universities.

The practical orientation of the personal development dimension looks at the degree to which the learning programme prepares and orients students towards training for employment, focusing on the future and working towards the achievement of concrete goals (Den Brok, 2006). This is also consistent with the CUT graduate attributes and the educational goals and objectives pronounced in the National Curriculum Statement (Grades R - 12) and the Curriculum Assessment Policy Statement (2015). All schools and universities continuously strive to realize and achieve the practical orientation of the learning environment. Arisoy (2007) and Lakhan & Ekundayo, (2013) pointed out that the personal problem orientation element of the personal development dimension evaluates the extent to which students are encouraged to be conscious of their feelings and problems and make attempts to understand them. This is an important element of the learning environment, especially in light of the complex and diverse nature of the various problems encountered by first-year students in universities as identified by Pieterse, (2015), Makola (2016), Bojuwoye, (2002) and Bitzer, (2003).

2.6. The Systems Maintenance and System Change Dimension

The third dimension of the environment as propounded by Moos (1974) is the systems maintenance and system change dimension. This dimension encompasses components such as organization, order, clarity in expectations of both the students and the lecturer and control of the environment and physical comfort. Rakici (2004) further noted that it also includes innovation of the learning environment at the university and that student influence is a variable which is

related to system change at universities. Radovan and Makovec (2015) added that the system maintenance and system change dimension refers to the rules, the surveillance mechanisms, the ability and manner in which the system responds to changes. These changes can be in terms of learning needs and the overall strategies used to implement into the curriculum. They are reflected and shown in the differentiation of lessons, how clear the classroom rules and instructions are and how differences in terms of thinking are accepted in the classroom. This further affirms the need to create classroom learning environments which embrace students' diversity and always keep pace with their individual needs.

With reference to the above said, the relationship, personal development and systems maintenance and change dimensions of the learning environment directly affect how students perceive that specific environment, their learning experience and ultimately their academic success (Bakhashialiabad et al, 2015; Brown et al., 2011; Penlingthon et al., 2012). In this regard, specific reference must be made to Bakhashialiabad et al. (2015) who hypothesized that the contextual variables and realities of the teaching and learning process point to the efficiency of the education process.

3. Methodology
3.1. Research Design
An exploratory mixed-methods research design was used in this study. It was indeed found to be compatible and consistent with the theoretical framework of the study and the set research question. This method also enabled the researcher to collect both quantitative and qualitative data which were required to answer the research question. As advanced by Creswell (2013), combining both quantitative and qualitative methods in a single study results in a comprehensive understanding of the problem being investigated than can be achieved by either method alone.

3.2. Participants
The participants of this study were 112 first-year Accounting students at a University of Technology in South Africa.

3.3. Research Instruments
A constructivist learning environment questionnaire was used to collect data from the respondents. The administration of this questionnaire also enabled the researcher to measure how first-year accounting student teachers perceived their teaching and learning context through the use of a five-point Likert-type scale. Quantitative data were obtained from the ratings given by the students to each of the 42 statements posed to them while qualitative data were gathered from the open-ended section of the constructivist learning environment questionnaire.

This research instrument was adapted to be used in this study because its developers have tested it for reliability and validity, and therefore the researcher wanted to test its applicability to university students in South Africa. Although it was initially developed and intended for secondary school students, it was found to be useful and relevant to first-year students because there is a small gap in terms of transition between them and the secondary school students (Aldridge,

Fraser, Bell & Dorman, 2012). It was also used by Walker and Fraser (2005) and Aldridge, Fraser, Bell and Dorman (2012) in various investigations which also sought to obtain the perceptions of students about their learning environments and learning experiences.

3.4. Data Collection Procedure and Analysis

The questionnaires were administered by the researcher in person. To guarantee a 100% return rate for the questionnaires, the researcher and the students unanimously agreed that the questionnaires would be completed in class during a free double period. The students handed in the questionnaires immediately after completion. As noted by Creswell (2012), the first step in processing data from Section B of the questionnaires used in this study was editing. The editing of the questionnaires comprises of three main checks, namely completeness, accuracy and uniformity. To ensure that every question was answered, the researcher conducted a completeness check. On the other hand, to determine whether all questions had been answered as accurately as possible, an accuracy check was carried out. A uniformity check was meant to establish the extent to which all the students have interpreted the questions and instructions in a similar way (Cohen, Manion & Morrison, 2013).

The responses to the open-ended section of the questionnaires were coded before being assigned unique codes for further analysis. Babbie (2013) notes that this coding process requires the researcher to provide interpretations of responses, a requirement which can lead to misinterpretation and researcher bias (Manion & Morrison, 2013). Measures of central tendency and descriptive statistics (McMillan & Schumacher, 2010; Terre Blanche et al., 2011; Johnson & Christensen, 2014) were used to analyze and describe the students' ratings of the various statements that were presented to them

4. Findings

The study findings are presented on the complete questionnaire used in the study. However, when discussing the findings, reference will only be made to findings on learning to learn (shared control) and learning to communicate (student negotiation). These are the sections of the questionnaire which directly address the research question posed in the study.

Table 1. Presentation of students' ratings of 42 statements

	Statements	Mean	Standard Deviation
	A. LEARNING ABOUT THE WORLD (Real Life, Personal Voice)		
	In this class		
1	I learn about the world outside of school.	4.21	0.75
2	My learning starts with problems about the world outside of school.	3.62	1.19
3	I learn how Accounting can be part of my out-of-school life.	4.32	0.83

4	I get a better understanding of the world outside of school.	4.07	0.98
5	I learn interesting things about the world outside of school.	3.91	1.02
6	What I learn has nothing to do with my out-of-school life.	*2.48*	1.40
	B. LEARNING ABOUT ACCOUNTING (Uncertainty)		
	In this class		
7	I learn that Accounting cannot provide perfect answers to problems.	3.14	1.42
8	I learn that Accounting has changed over time.	3.58	1.30
9	I learn that Accounting is influenced by people's values and opinions	3.42	1.37
10	I learn about the different Accounting concepts used by people in other cultures.	3.63	1.33
11	I learn that modern Accounting is different from the Accounting of long ago.	3.58	1.44
12	I learn that Accounting is about inventing theories.	3.38	1.36
	C. LEARNING TO SPEAK OUT(Critical voice)		
	In this class		
13	It is acceptable to ask the teacher "Why do we have to learn this?"	4.24	1.15
14	It is acceptable to question the way I am being taught.	4.27	0.98
15	It is acceptable to complain about activities that are confusing.	4.34	1.03
16	It is acceptable to complain about anything that prevents me from learning.	4.46	0.87
17	It is acceptable to express my opinion.	4.63	0.74
18	It is acceptable to speak up for my rights.	4.32	1.08
	D. LEARNING TO LEARN (Shared control)		
	In this class		
19	I help the lecturer plan what I am going to learn.	2.74	1.33
20	I help the lecturer decide how well I am learning.	2.77	1.28
21	I help the lecturer decide which activities are best for me.	2.60	1.38
22	I help the lecturer decide how much time I spend on activities.	2.62	1.40
23	I help the lecturer decide which activities I do.	2.36	1.29
24	I help the lecturer assess my learning.	2.94	1.50
	E. LEARNING TO COMMUNICATE (Student negotiation)		
	In this class		
25	I get the chance to talk to other students.	4.43	0.84
26	I talk with other students about how to solve problems.	4.47	0.84
27	I explain my ideas to other students.	4.21	0.93
28	I ask other students to explain their ideas.	4.31	0.89
29	Other students ask me to explain my ideas.	4.08	0.97
30	Other students explain their ideas to me.	4.22	0.93
	F. ATTITUDE IN LEARNING ACCOUNTING (Commitment)		
	In this class		
31	I am interested in Accounting lessons.	4.98	0.19

32	I am willing to learn.	4.63	0.88
33	What we do in this Accounting class is important to me.	4.82	0.68
34	I try my best.	4.82	0.54
35	I pay attention.	4.77	0.57
36	I enjoy Accounting lessons.	4.70	0.61
	G. LECTURER SUPPORT IN LEARNING ACCOUNTING		
	In this class		
37	The lecturer is friendly to me.	4.56	0.91
38	The lecturer helps me with the work.	4.31	1.02
39	The lecturer is interested in my problems.	4.00	1.32
40	The lecturer goes out of his/her way to help me.	4.15	1.24
41	The lecturer moves around the class to talk to me.	4.14	1.27
42	The lecturer considers my feelings.	4.01	1.27
		3.9	**1.05**

Reference is made to Section D: Learning to Learn (Shared control) of the questionnaire presented in **Table 1** above. This section displays the students' responses which reveal that they perceive the learning environment as sometimes enabling them to learn, while they believe that they seldom help the lecturer to decide their learning. These findings highlight the fact that the prevalence and amount of collaborative learning and lecture support in teaching and learning activities are underscored. All the means to statements that are presented to the students in this category are below 3.0, which is a factor of some concern. These findings also indicate that the conditions in the classroom are perceived by the students as not promoting their personal development dimension or the systems maintenance and systems change dimensions of the socio-ecological model. The results also do not conform to the notion of autonomy and active involvement of students for active learning (Abraham et al., 2008; Bakhashialiabad et al., 2015; Visser, & Vreken, 2013). The students' concerns in this regard are also raised in the focus group interviews in their responses to questions on the personal dimension of their learning environment.

Section E: Learning to Communicate (Student negotiation) in the above **Table 1** presents the perceptions of first-year accounting student teachers on the degree to which the variables in the teaching and learning context permit students to negotiate and engage actively with other students in teaching and learning activities. This category represents the relationship dimension of the socio-ecological model of learning environments.

Table 2. E. learning to communicate (Student negotiation)

	Statements	Mean	Standard Deviation
	In this class		
1.	I get the chance to talk to other students.	4.43	0.84
2.	I talk with other students about how to solve problems.	4.47	0.84
3.	I explain my ideas to other students.	4.21	0.93
4.	I ask other students to explain their ideas.	4.31	0.89
5.	Other students ask me to explain my ideas.	4.08	0.97
6.	Other students explain their ideas to me.	4.22	0.93
	Overall Mean	**4.29**	**0.90**

As shown, the students' ratings of all the individual statements in this category scored a mean of 4, which means that the learning environment often promotes student negotiation and their ability to communicate in the classroom. Under this category of learning to communicate and student negotiation, the students seem to be unanimous that communication in the classroom and among them is very satisfactory. This is demonstrated by the means to each statement which are all above 4.20 and all the standard deviations which are below 1. These responses indicate that students perceive their classroom learning environment to be very helpful and supportive to their negotiation, communication and open dialogue in the learning process. This is one of the most fundamental principles and pillars of social constructivism and the relationship dimension of the socio-ecological model of the learning environment. The lecturer should maintain and sustain the good work being done under this category.

5. Discussion

An overall mean above 4.00 from the quantitative findings implies that the students have rated the specific statements under the broad category in the affirmative. Thus based on the data from the quantitative and qualitative parts of the data collection instrument, first-year accounting student teachers show that they have some positive perceptions about most aspects of their leaning environment. This confirms the findings of earlier studies by Dorman (2012), Litmanen et al. (2014) and Cleveland & Fisher (2014) in which the study participants demonstrated relatively high levels of satisfaction with their learning environment. Similarly, the students indicated that they perceive the classroom learning environment as supportive. However, similar to the findings of Bakhashialiabad et al. (2015) and Radovan and Makovec (2015), it was also found that the students felt alienated and marginalized from the designing and planning of their academic activities and the overall classroom instruction. This is actually revealed by the low means and overall mean in the category of learning to learn which were all below 3. This quantitative finding of students being excluded from issues relating to their teaching and learning as signified by an overall mean below 3.00 is also consistent with the students' qualitative responses where most students indicated that they need to be more actively involved in matters relating to their teaching and learning.

6. Conclusion

In conclusion, the learning experiences of students have some significant implications on how students ultimately perceive the atmosphere and the setting in which they engage in teaching and learning activities. As such, students formulate perceptions about the learning environment based on their experiences in that particular learning environment. It is thus imperative for teacher educators and universities to ensure that the curriculum is implemented in ways that promote positive perceptions about the learning environment.

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