

Teacher-centred pedagogical approach and student engagement at a private university in Western Uganda

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Abstract. This study investigated the relationship between the teacher-centred pedagogical approach and student engagement at a private university in south western Uganda. The teacher-centred approach was conceived in terms of immediate feedback, continuous practice and reinforcement. On the other hand, student engagement was conceptualised in terms of behavioural, affective, cognitive and agentic engagements. The study adopted the cross-sectional research design on a sample of 264 undergraduate students. Data were collected using a self-administered questionnaire and were analysed quantitatively. Descriptive analysis indicated that students rated high in their levels of engagement and lecturers' use of reinforcement. However, offering of immediate feedback to students and carrying out of continuous practice were rated moderate. Regression analysis revealed that reinforcement positively and significantly predicted student engagement. However, immediate feedback and continuous practice positively but insignificantly predicted student engagement. It was concluded that while immediate feedback and continuous practice are not the most essential teacher-centred pedagogical practices for promoting student engagement, reinforcement is very imperative. Therefore, it is recommended that lecturers in universities should ensure effective use of reinforcement while teaching.

Keywords: Contextual, continuous practice, immediate feedback, reinforcement, student engagement, teacher-centred.

INTRODUCTION

Student engagement describes the amount of physical and psychological energy that a student devotes to the academic experience (Holmes, 2018). Therefore, student engagement is how a student is involved or interested in his or her learning and how connected the student is in classes, the institution and other students (Axelson and Flick, 2010). Student engagement is the sustained association a learner has towards any aspect of learning, schools or education (Abla and Fraumeni, 2019). However, scholars do not consider student engagement from the student's perspective only but it is also considered to involve the student's and institution's time, energy and resources spent on activities designed to enhance learning at university (Holmes, 2018). Thus, student engagement concerns the time and effort students devote to activities

that are empirically linked to desired outcomes of a university and what institutions do to induce students to participate in these activities (Groccia, 2018). Student engagement encompasses academic involvement, involvement with lecturers and involvement with student peer groups (Hallinger and Lu, 2013). Montenegro (2017) describes student engagement as a multi-dimensional component that involves behavioural, affective, cognitive and agentic engagements of students.

Behavioural engagement refers to the student's interactions with the academic setting that are active, goal driven, flexible, constructive and persistent (González and Paoloni, 2015). Behavioural engagement is indicated by planning, effort, on-task attention, concentration, hard work, persistence, time expended, attendance, voluntary

participation, task involvement, and following of classroom rules and norms by the student (Fredricks and McColskey, 2012; González and Paoloni, 2015). Affective engagement explains students' feelings and attachment toward their school, learning, teachers and peers, students' positive and negative reactions or feelings, and students' ties to their school (Havik and Westergård, 2019). Cognitive engagement reflects the extent to which one is thinking about the learning activity, or attending and focusing on the task. The concept is about self-regulated learning and the student's use of metacognitive strategies and is exhibited by perseverance in learning (Ben-Eliyahu *et al.*, 2018; Parsons *et al.*, 2014). For example, students who are cognitively engaged after the end of a lecture may prolong their stay in the lecture room in order to think more about what they have been learning in the lecture (Parsons *et al.*, 2014).

Agentic engagement is the students' constructive contributions to their own learning process and the transactional and reciprocal processes from which students go through with teachers and peers. In other words, agentic engagement points to the proactive contributions initiated by the learner (Montenegro, 2017). Maralani *et al.* (2018) indicates that with agentic engagement, during the learning process students make suggestions endogenously, state their preferences, ask questions, discuss what they need and think about, suggest goals and objectives, talk about their interests, ask for resources or learning opportunities, look for solutions to the questions, and seek for more clarification for the instructions. In all, student engagement in its multi-dimensionality is important as far as learning is concerned. It is considered the starting point of learning (Groccia, 2018). Students need to be actively engaged in order to achieve. Student engagement is a robust predictor of student learning, grades, achievement, test scores, retention and graduation (Parsons *et al.*, 2014). Pilotti *et al.* (2017) indicate that several studies have found that students' engagement is related to students' satisfaction, persistence, and academic achievement.

While the importance of student engagement has been recognised, there is still lack of empirical analysis of the concept and its antecedents in the context of universities in Uganda. This study thus investigated the relationship between the teacher-centred strategy and student engagement in the context of a university in Uganda. This was because while the teacher centred approach has received criticism as encouraging spoon feeding affecting the ability to think (Fry *et al.*, 2008), preventing students' educational growth (Lak *et al.*, 2017), propagating passive learners (Zhao *et al.* 2014), thwarting students initiative (Garrett, 2008), preventing independent learning (Muianga *et al.*, 2018), and leading to rote memorisation (Otara *et al.*, 2019), it is the widely and commonly used teaching pedagogical approach used in Ugandan universities (Muganga and Ssenkusu, 2019). Since student engagement has been identified as being important for

for students' learning, this study sought to find out how the commonly used pedagogical approach related to it. Therefore, the study investigated the relationship between the teacher-centred pedagogical approach and student engagement.

LITERATURE REVIEW

Theoretical review

The Behavioural Theory introduced by Watson (1913) and developed further by Skinner (1953) was the basis for this study. Watson posited that specific stimuli influenced human behaviour (Overskeid, 2018). On his part, Skinner conjectured that behaviour or learning is followed by a consequence and the nature of the consequence modifies the organism's tendency to repeat the behaviour in the future (Jones-Smith, 2014). The Behavioural Theory proposes that learning is the product of the stimulus conditions and the responses (Uribe *et al.*, 2019). Thus, to modify people's responses, there is need to alter the stimulus conditions in the environment (Bastable *et al.*, 2019). The Behavioural Theory suggests that learning occurs after presentation of a specific stimulus by the teacher (Ertmer and Newby, 2013). Therefore, learning can effectively take place through a teacher-centred approach involving giving learners immediate feedback (Omomia and Omomia, 2014), emphasising repeat or continuous practice with feedback (Rao, 2018), and strengthening learning stimulus-response associations through reinforcement (Alzaghoul, 2012; Ertmer and Newby, 2013). Overall, the Behavioural Theory indicates that learning is a result of a teacher-centred approach involving immediate feedback, continuous practice and reinforcement. Basing on the Behavioural Theory, this study related the teacher centred-learning pedagogical approaches that are immediate feedback, continuous practice and reinforcement to student engagement.

Immediate feedback and student engagement

Feedback refers to passing of information from an agent such as a teacher, peer or any other about one's performance (Leibold and Schwarz, 2015). Therefore, immediate feedback can be defined as prompt or timely response from an agent such as a teacher. The importance of immediate feedback is that it is constructive leading to improvement in performance by correcting mistakes (Omer and Abdularhim, 2017). The purpose of giving feedback is to point out strengths and provide comments on areas for improvement and development. Clear, effective, meaningful feedback is a robust way to foster learning. With feedback, students are able to reflect on their knowledge base and think about what they need to learn after considering the feedback for improvement (Leibold and Schwarz, 2015). Some scholars have related

immediate feedback and student engagement. For instance, Cooper *et al.* (2018) examined the effects of immediate response of teachers on academic engagement of students with emotional and behaviour disorders in a rural south eastern town in the USA. The results indicated that immediate response increased student academic engagement.

Sancho-Vinuesa *et al.* (2013) examined the influence of immediate feedback in enhancing student engagement with the course using students at the Open University of Catalonia in Spain. Their findings indicated that providing feeding back to students significantly reduced the number of students who dropped out and improved academic results. Sutherland *et al.* (2003) examined the effect of an increased rate of opportunities to actively respond to academic requests on the classroom behaviour of students using American students with emotional and behavioural disorders. The results suggested that increases in opportunities to respond were associated with increased correct responses and task engagement and decreased disruptive behaviour. Zhang and Hyland (2018) in an analysis of the effect of feedback on student engagement used Chinese students of English. The findings revealed that immediate feedback in form of formative assessment had a great potential of facilitating student engagement. While the studies above revealed that there was a relationship between immediate feedback and student engagement, literature search suggested that limited studies had been carried out. Further, no study had been carried out in the context of institutions in the developing countries of Africa. In the context of a university in Uganda a developing country in Africa, this study tested the hypothesis to the effect that:

H₁: There is a relationship between immediate feedback and student engagement.

Continuous practice and student engagement

Continuous or repeat practice is about students learning new material through repeated study and being tested on that material (Ludigo *et al.*, 2019). The principle for continuous practice is that for one to learn something well such as a set of facts, concepts, skills or procedures, a single exposure is usually not adequate. Therefore, subsequent review or practice generally leads to superior learning (Kang, 2016). Continuous practice is important in teaching and learning because it leads to mastery as it reduces and out rightly prevents the loss of ability to retrieve from either short term memory or long term memory (Ludigo *et al.*, 2019). Therefore, the practice of continuous practice in any teaching and learning process will enhance the retrieval abilities in the process of recovering information in the memory of the learners (Gbarato and Mandah, 2017). Carrillo-de-la-Peña and Perez (2012) studied the effect of continuous practice

through continued assessment using students at a Spanish University. The study reported that continuous assessment had a positive impact on academic outcomes. Also, the findings revealed that students perceived the practice as a procedure that promotes deeper learning.

Holmes (2018) assessed the effect of increasing continuous assessment on increasing student engagement using undergraduate students at the University of Northampton, UK. The findings indicated that introduction of continuous assessments increased engagement with the module throughout the academic year compared to the previous year. Kang (2016) carried out analysis on the effects of spaced repetition or continuous practice on efficient and effective learning in a review. The review revealed that repeated spaced practice enhanced cognitive engagement. Sancho-Vinuesa *et al.* (2013) in a study that considered immediate feedback and student engagement reported that providing feeding back to students significantly reduced the number of students who dropped out and improved academic results. While the above studies point to the relationship between continuous practice and students engagement, still literature search showed that there were limited studies relating the concepts. Therefore, this study further investigated the relationship between the concepts testing whether:

H₂: There is a relationship between continuous practice and student engagement.

Reinforcement and student engagement

Reinforcement refers to an increase in the probability of an organism to behave in a specified way and in a specified situation owing to the consequences of its behaviour in that situation (Smith, 1974). Reinforcement is either positive or negative. Positive reinforcement entails any stimulus that is enjoyable which increases the likelihood of a particular behaviour (LaFreniere and Newman, 2019). Negative reinforcement involves the removal, reduction, postponement or prevention of stimulation strengthening the response on which they are contingent (Ludigo *et al.*, 2019). Adibsereshki *et al.* (2014) expound that teachers often use reinforcements as a form of discipline in the classroom. The reinforcements include extrinsic rewards like tangibles to reinforce behaviour and social reinforcers such as praise, affection, and attention. The relationship between reinforcement and student engagement has attracted attention of some scholars. For example, Firdaus (2015) analysed the use of praise and its influence toward students' engagement in a qualitative study involving high school students in Bandung, Indonesia. The results revealed that students showed positive engagement after being praised by the teacher. Hapsari and Anni (2017) examined the effect of token economy technique on increasing behavioural engagement of pupils in a school

in Semarang in Indonesia. The results revealed that reinforcement reduced the disengagement and increased behavioural engagement.

Kennedy and Jolivet (2008) studied the effects of increasing teacher positive verbal reinforcement using students in a residential treatment facility in the USA. The findings revealed that increasing positive verbal reinforcement decreased the amount of time they spent outside the classroom which indicated engagement. Markelz and Taylor (2016) in a review examined the effects of teacher praise on attending behaviours of students. The review showed that teacher praise positively affected attending behaviours with increases in on-task behaviours and decreases in disruptive behaviours. Soto (2014) studied the impact of behaviour-specific praise on student engagement using pupils of a school in central California in the USA. The study revealed that increasing the amount of praise influenced the learning environment allowing students to facilitate their own learning. Tshomo and Lhaden (2015) investigated how reinforcement strategies helped students improve their learning and academic achievements using pre-service student-teachers. The findings indicated that improvement in the use of reinforcement facilitated student participation. However, while the literature above showed that there was a relationship between reinforcement and student engagement, all literature was skewed outside Uganda. Therefore, in the context, this study tested whether:

H₃: There is a relationship between reinforcement and student engagement.

METHODOLOGY

Research procedure

The study adopted the positivist paradigm; hence data were collected using questionnaire survey on a sample of undergraduate students of the Western Campus of Kampala International University in South Western Uganda. The data collected were analysed using statistical procedures to generate generalizable findings. The study adopted the cross-sectional research design which enabled the collecting of data on the part of the population for information on the study problem about what was going on at the particular time. The cross-sectional research design also helped the researchers to obtain useful data in a relatively short period. The conducting of the study strictly followed research ethics. Hence, informed consent, anonymity, confidentiality and respect for privacy of the students were observed during data collection.

Participants

The study sample comprised 264 (52.3% male, 47.7%

female) students in the age categories of 1.5% below 20 years, 93.9% 20-25 years, 4.5% above 25 years. The students were from different faculties of the University (28.8% Education, 21.2% Business and Management, 27.3% Allied Health Sciences, 9.1% Science and Technology, and 13.6% Clinical Medicine and Dentistry). The students were also drawn from different years of study (1.5% year one, 15.2% year two, 79.9% year three and 3.4% year four). Simple random sampling was used in collecting the data from the students. Thus, the students were selected at random and entirely by chance. This gave each student equal chance of participating in the study which enabled the collecting of representative data necessary for generalisation of the findings. Class coordinators who had students' lists in their possession helped in the collecting of data.

Instrument

The study used a self-administered questionnaire (SAQ) to collect data from the different students participating in the study with sections A through C. Section A contained question items on the students demographic characteristics. Section B was on student engagement the dependent variable (DV). The section covered four aspects that are affective engagement, behavioural engagement and cognitive engagement with question items adopted from Lam *et al.* (2014), and agentic engagement from Reeve (2013). The question items in section C were on the teacher centred pedagogical approach the independent variable (IV) comprising aspects of immediate feedback (8 items $\alpha = 0.88-0.96$) from Boerboom *et al.* (2011), continuous practice (6 items $\alpha = 0.81$) from Stothard (2014) and reinforcement (7 items $\alpha = 0.94$) from Aliakbari and Bozorgmanesh (2015). The question items were scaled on the five-point likert scale (Where 1 = strongly disagree, 2 = disagree, 3 = undecided, 4 = agree, and 5 = strongly agree). The validity of the instrument was tested using Exploratory Factor Analysis (EFA), Varimax rotation method provided by SPSS to ascertain the correlation among factors (Rossoni *et al.*, 2016). Items that loaded highly at 0.50 and above were considered valid (Watkins, 2018). For reliability of the instrument, the reliabilities for the various constructs were tested using Cronbach's Alpha (α) and were attained at $\alpha = 0.70$ above which is the benchmark (Taber, 2018). The validity and reliability results follow here under.

Data analysis

Analysis of data was done using descriptive and inferential statistics. Descriptive statistics involved means while the inferential analyses were correlation and regression. Correlation analysis was used at preliminary level to establish the existence of a linear relationship between the

teacher-centred pedagogical approaches that were namely; immediate feedback, continuous practice and reinforcement with student engagement. At confirmatory level, a regression model was run for the four teacher-centred pedagogical approaches on the dependent variable. Data analysis was done using the Statistical Package for Social Sciences (SPSS 24.0).

RESULTS

Student engagement

Student engagement was considered as a multi-dimensional factor comprising affective, behavioural, cognitive and agentic engagement. At univariate level descriptive statistics that are means are presented on student engagement. Validity and reliability test results that are factor loadings and Cronbach's alpha (α) are also presented. These validity and reliability results show the accuracy and interrelatedness of the items measuring the factor of student engagement. The descriptive, validity and reliability results were as presented in Table 1.

Table 1 shows that the students rated their engagement as high (overall means for affective engagement = 4.10, behavioural engagement = 3.93, cognitive engagement = 3.86 and agentic engagement = 3.93 all corresponding to agreed). With all the means close to code 4 which on the five point Likert used corresponded to agree, the results implied that the students rated their engagement as high or good. Factor Analysis showed that the components of affective, behavioural and cognitive engagement could be reduced to two factors each while agentic engagement could be reduced to one factor. However, since each of the factors loaded once on each component at 0.5 and above, the items for each component were considered valid. However, for the component of behavioural engagement, item seven did not load hence was considered weak and was thus dropped from use in subsequent analyses (Coetzee *et al.*, 2017). The Cronbach's alphas = 0.843, 0.871, 0.832 and 0.852 for the respective components of student engagement were above the acceptable level = 0.70 (Korstjens and Moser, 2018). This meant that the items for the four student engagement aspects were reliable measures.

Teacher centred pedagogical approach

Teacher centred pedagogical approach was considered as a multi-dimensional factor comprising immediate feedback, continuous practice, and reinforcement. The results for the student centred pedagogical approach include frequencies, percentages, and means. Validity and reliability tests that are factor loadings and Cronbach's alpha (α) are also presented. These validity and reliability results showed the accuracy and interrelatedness of the items measuring the factor of teacher centred pedagogical

approach. The descriptive, validity and reliability results are presented in Table 2.

Table 2 reveals that the students rated the lecturers use of the teacher centred pedagogical approach to be moderate (overall means for immediate feedback = 3.36, continuous practice = 3.24 reinforcement = 3.40 all corresponding to not sure). All the means were close to code 3 which on the five point likert used corresponded to undecided or moderate. Factor Analysis showed that for all the teacher-centred approaches, the items on each component of could be reduced to only one factor. With all the items loading once on each component at 0.5 and above, all the items were considered valid. The Cronbach's alphas = 0.889, 0.846 and 0.851 for the respective components of teacher-centred pedagogical approach were above the acceptable level = 0.70. This meant that the items for the three teacher-centred pedagogical approaches were reliable measures.

Correlation of teacher-centred pedagogical approach and student engagement

To establish the relationship between the teacher-centred pedagogical approach and student engagement that is to test the three hypotheses (H1-H3) in this study, correlation analysis was done. The three teacher-centred strategies used in this study were immediate feedback, continuous practice and reinforcement. The results are presented in Table 3.

The results in Table 3 indicate that there is a positive significant relationship between the teacher-centred pedagogical approach and student engagement. The results revealed that immediate feedback ($r = 0.212$, $p = 0.001 < 0.05$), continuous practice ($r = 0.259$, $p = 0.000 < 0.05$) and reinforcement ($r = 0.402$, $p = 0.000 < 0.005$) had a positive significant relationship with student engagement. These preliminary results revealed that reinforcement had a more significant relationship with student engagement followed by continuous practice and immediate feedback respectively.

Regression of student engagement on the teacher centred pedagogical approach

At the confirmatory level, to find out whether student engagement was determined by the teacher centred approach in terms of immediate feedback, continuous practice, reinforcement of students and collaborative learning, regression was carried out. The results were as in Table 4.

The results in Table 4 show that the teacher-centred approach in terms of immediate feedback, continuous practice, and reinforcement explained 15.8% of the variation in student engagement (adjusted $R^2 = 0.158$). This means that 84.2% was accounted for by other factors not considered in this model. The regression model was

Table 1. Descriptive results for student engagement.

	Means	Factors	α	
Affective engagement (overall mean =4.10)				
I enjoy learning new things during lectures	4.33	0.866	0.843	
Learning is interesting to me	4.26	0.858		
I am very interested in learning	4.50	0.802		
I like what I am learning in this university	4.00	0.784		
I think what we are learning in university is interesting	3.89	0.746		
Most mornings, I look forward to going to the University	3.88	0.519		
I am happy to be at this university	3.88	0.878		
I am proud to be at this university	4.05	0.865		
I like my university	3.98	0.814		
Behavioural engagement (overall mean =3.93)				
I try hard to do well in my university	4.36	0.861	0.871	
I work as hard as I can while on my studies	4.21	0.837		
I pay attention during lectures	4.33	0.830		
When I am in lectures, I fully participate in all activities	4.27	0.778		
When I run into a difficult study problem, I keep working at it until I think I have solved it	4.20	0.640		
If I have trouble understanding a problem, I go over it again until I understand it	4.09	0.572		
When I am in lectures, my mind concentrates	4.09	-		
I take an active role in extra-curricular activities in my University	3.09	0.873		
I am an active participant of university activities such as sports day	3.38	0.864		
I volunteer to help with university activities such as sports day	3.27	0.836		
Cognitive engagement (overall mean =3.86)				
When I study, I try to understand the material better by relating it to things I already know	4.24	0.900		0.832
When learning new information, I try to put the ideas in my own words	4.38	0.845		
I make up my own examples to help me understand the important concepts I learn at university	4.30	0.834		
When studying my university work, I try to see how it fits together with other things I already know	4.12	0.775		
When I study, I figure out how the information might be useful in the real world	4.15	0.652		
When I study, I try to connect what I am learning with my own experiences	4.44	0.864		
When I learn new things, I often try to associate them with what I learnt in other lectures about the same or similar things	4.27	0.764		
Agentic engagement (overall mean = 3.93)				
During lectures, I express my preferences and opinions	3.82	0.850	0.852	
When I need something during lectures, I will ask the lecturers for it	3.83	0.824		
I adjust to whatever we are learning so I can learn as much as possible	4.25	0.762		
I let my lecturers know what I need and want	3.64	0.736		
I let my lecturers know what I am interested in	3.73	0.736		
I try to make whatever we are learning interesting as possible	4.05	0.670		
During lectures, I ask questions to help me learn	4.14	0.511		

significant ($F = 14.851$, $p = 0.000 < 0.05$). Of the three teacher-centred pedagogical approaches, only reinforcement ($\beta = 0.367$, $p = 0.000 < 0.05$) positively and

significantly predicted student engagement. Immediate feedback ($\beta = 0.067$, $p = 0.329 < 0.05$), and continuous practice ($\beta = 0.023$, $p = 0.768 > 0.05$) positively but

Table 2. Descriptive results for student centred pedagogical approach.

	Means	Factors	α
Immediate feedback (overall mean = 3.36)			
The lecturers immediately make us aware of our strengths	3.50	0.843	0.889
The lecturers provide us with immediate concrete feedback on activities we have performed	3.40	0.834	
The lecturers immediately alert us about gaps in our skills	3.44	0.787	
The lecturers are supportive when we experience difficulties with a task	3.23	0.780	
The lecturers immediately alert us about gaps in our knowledge	3.58	0.750	
The lecturers provide us with immediate constructive feedback on activities we have performed	3.29	0.748	
The lecturers immediately make us aware of our weaknesses	3.33	0.702	
The lecturers immediately correct us to demonstrate how correctly different activities are performed	3.02	0.586	
Continuous practice (overall mean = 3.24)			
I have been helped by lecturers to view problems in my work as an opportunity to learn	3.15	0.832	0.846
Lecturers have openly discussed with me my mistakes in order to learn from them	2.94	0.796	
Lecturers guide me to continuously learn from other students	3.77	0.783	
Lecturers always guide me on how to carry out future study tasks	3.02	0.757	
I have previously been rewarded by lecturers for learning	2.97	0.737	
The lecturers allow me time to continuously carry out learning	3.62	0.612	
Reinforcement (overall mean = 3.40)			
Lecturers praise students during lectures	3.57	0.639	0.852
Lecturers display good work of students to the whole class	3.54	0.742	
Lecturers' questions students' behaviour	3.54	0.776	
Lecturers make students of unacceptable behaviour see that they are disgraceful	3.17	0.837	
Lecturers identify indiscipline students for reprimand	3.19	0.801	
Lecturers carry out whole lectures reprimand	3.12	0.750	

Table 3. Correlation between teacher-centred pedagogical approach and student engagement.

	Student engagement	Immediate feedback	Continuous practice	Reinforcement
Student engagement	1	0.212** 0.001	0.259** 0.000	0.402** 0.000
Immediate feedback		1	0.441** 0.000	0.394** 0.000
Continuous practice			1	0.597** 0.000
Reinforcement				1

insignificantly predicted student engagement. This means that only Hypothesis Three (H_3) was supported.

DISCUSSION

The results for the first hypothesis (H_1) to the effect that there is a relationship between immediate feedback and student engagement showed that the relationship was positive but insignificant. Therefore, the hypothesis was

rejected. This finding was inconsistent with the findings of previous scholars. For example, Cooper *et al.* (2018) indicated that immediate response increased student academic engagement. Sancho-Vinuesa *et al.* (2013) reported that providing feeding back to students significantly reduced the number of students who dropped out and improved academic results. Sutherland *et al.* (2003) revealed that increases in opportunities to respond were associated with increased correct responses and task engagement and decreased disruptive behaviour.

Table 4. Regression of student engagement on teacher centred pedagogical approach.

Teacher-centred pedagogical approach	Standardized coefficients	Significance
	Beta (β)	p
Immediate feedback	0.067	0.329
Continuous practice	0.023	0.768
Reinforcement	0.367	0.000

Adjusted $R^2 = 0.158$
 $F = 14.851$, $p = 0.000$

Zhang and Hyland (2018) found out that immediate feedback in form of formative assessment had a great potential of facilitating student engagement. However, with the finding of the study inconsistent with the findings of previous scholars, it can be inferred that in the context the institution studied immediate feedback was not the most significant factor influencing student engagement. This was largely because while the students indicated that their engagement was high, they rated the use of immediate feedback by lectures as moderate.

The results for the second hypothesis (H_2) to the effect that there is a relationship between continuous practice and student engagement also revealed that the relationship was positive but insignificant. This finding was contrary to the findings of previous scholars. For example, Carrillo-de-la-Peña and Perez (2012) reported that continuous assessment had a positive impact on academic outcomes and promoted deeper learning. Holmes (2018) revealed that introduction of continuous assessments increased engagement with the module throughout the academic year compared to the previous year. Kang (2016) revealed that repeated spaced practice enhanced cognitive engagement. Sancho-Vinuesa *et al.* (2013) established that providing feeding back to students significantly reduced the number of students who dropped out and improved academic results. Nevertheless, with the finding of the study contrary to the findings of previous scholars, it can be deduced that in the context of the institution studied continuous practice was not the most important factor influencing student engagement. Indeed, this was because largely because while the students revealed that their engagement was high, they rated use of continuous practice in learning as moderate.

Finally, the results for the third hypothesis (H_3) testing the relationship between reinforcement and student engagement revealed that the relationship was positive and significant. This finding concurred with the findings of previous scholars. For instance, Firdaus (2015) established that students showed positive engagement after being praised by the teacher. Hapsari and Anni (2017) revealed that reinforcement reduced the disengagement and increased behaviour engagement. Kennedy and Jolivette (2008) revealed that increasing positive verbal reinforcement decreased the amount of time they spent outside the classroom which indicated engagement. Markelz and Taylor (2016) also reported that

teacher praise positively affected attending behaviours with increases in on-task behaviours and decrease in disruptive behaviours. Soto (2014) revealed that increasing the amount of praise influenced the learning environment allowing students to facilitate their own learning. Tshomo and Lhaden (2015) agreed that improvement in the use of reinforcement facilitated student participation. With the finding of this study concurring with the findings of previous scholars, it can be confirmed that reinforcement has a positive and significant influence on student engagement.

CONCLUSION

The discussion above led to the conclusion that immediate feedback and continuous practice are not the most essential teacher-centred pedagogical practices for promoting student engagement. This is because while their use was rated moderate, student engagement was high. However, reinforcement is very imperative in promoting student engagement. Therefore, this study recommends that lecturers in universities should ensure effective use of reinforcement while teaching. This should include praising students during lectures, displaying good work of students to the whole class and questioning students' behaviour. The limitations of the current study are that it considered only one pedagogical approach namely, the teacher-centred approach. Therefore, future studies should cover other evident pedagogical approaches namely, student-centred approach in terms of active learning, contextual learning, motivation of learners and collaborative learning (Cholewinski, 2009; Olusegun, 2015), and teacher-student interaction approach in terms of making expectations clear, providing clear feedback and inspires students (Martin and Rimm-Kaufman, 2015). By studying these different pedagogical approaches, the effect of the interaction between pedagogical approaches in predicting student engagement will be established and help in suggesting a framework for promoting student engagement using pedagogical approaches. The practical contribution of this study is that it develops a model suggesting that reinforcement should be given the utmost significance when promoting student engagement.

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