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Satisfaction of students with online tutorials at an open e-learning institution: A confirmatory study

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Abstract

E-learning has become an essential education delivery method widely used and implemented by educational institutions across the globe. Previous studies focused to some extent on the face-to-face tutorials. This study aimed to make a scientific contribution by investigating the student satisfaction with online tutorials at an open e-learning institution using the theory of cognitive presence. A quantitative approach was followed to achieve the research objectives. In adherence to quantitative primary data-collection purposes, a structured online questionnaire was used to collect data from 101 students enrolled to attend online tutorial classes in the Facilitation of Learning Unit at the open distance e-learning (ODeL) institution's North Eastern Region. The online survey has a low response rate; thus, 101 questionnaires were received. Data were analysed using the Statistical Package for the Social Sciences (SPSS) to compile descriptive and inferential statistics. The findings show no positive correlation between attendance at online tutorials and performance (as reflected by a correlation coefficient of .478 at the 99% confidence level). Moreover, the findings show that students indicated factors such as lack of data and internet connectivity in rural areas, feedback from tutors or tutors who do not respond to their e-mails, workshops which do not cater to people living with disabilities as their challenges to receive online tutorial teaching and learning experiences. Cognitive presence was lacking, affecting learning experiences. Focusing on subject-specific workshops could improve assignment and examination performance, potentially enhancing retention and throughput rates.

Keywords: cognitive presence; e-learning; online tutorial; student performance

Introduction

E-learning has become an essential delivery method widely adopted by educational institutions worldwide. Technology, particularly internet technology, plays a crucial role in academic learning (Elfaki, Abdulraheem & Abdulrahim, 2019). According to Eze, et al. (2020), major benefits of e-learning include saving time, enhancing institutional image, advancing knowledge for staff, and improving teaching and learning practices. Admittedly, online education holds advantages in many aspects, such as convenience, better interaction and learning effectiveness, but various disadvantages were also reported, including technical obstacles, poor academic performance and a lack of practical knowledge (Kotrikadze & Zharkova, 2021; Dinh & Nguyen, 2022).

E-learning refers to digitally facilitated learning methods, using devices such as digital cameras, personal computers (PCs), digital videos, tablets, projectors, OHP and software. These tools enhance the interaction of students and teachers (Eze et al., 2020). E-learning uses network technologies to provide learning opportunities ubiquitously, empowering individual learners. In this context, teachers are no longer the sole gatekeepers of knowledge; instead, they serve as facilitators of the learning process (Elfaki et al., 2019). Online learning encompasses teaching delivered electronically, asynchronously and synchronously, allowing for the construction of confirmation knowledge (Garrison, 2011).

Elfaki et al. (2019) highlight that e-learning, also known as online learning, has gained significant global attention in recent years. An

estimated 5-7 million students now enrol in at least one online course annually. The emergence of the COVID-19 pandemic also led to the rise of online education (Asadpour & Yazdani, 2025). Approximately 1.5 billion students of all ages and levels of education across 190 countries turned to online courses from home as a preventative measure against COVID-19 (World Health Organization (WHO), 2022).

However, universities, as educational institutions, face many challenges in teaching and learning owing to the widespread use of electronic educational systems. These systems include remote learning and e-learning platforms, such as Microsoft Teams, multimedia integration and collaboration facilitated by information and communications technology applications (Al-Shboul, 2024). In response to this trend, the University of South Africa (Unisa) started offering online or signature modules in 2013.

Unisa is a leading open distance e-learning (ODeL) institution in South Africa (Unisa, 2016) that operates under the assumption that student learning can effectively use modern electronic technologies to access study materials and interact with lecturers without physical presence (Ngubane-Mokiwa, 2017). However, the assumption warrants critical examination. The problem here is 'assumption'. Moreover, Ngubane-Mokiwa (2017) argues that ODeL students are assumed to have the ability to make optimal use of modern electronic technologies to access their study material and to interact with their lecturers without necessarily being required to make physical contact.

In South Africa, online teaching and learning are well-established practices. However, the challenge lies in transitioning from face-to-face methods to online formats. The COVID-19 pandemic compelled institutions, including Unisa, to offer online tutorials. Unfortunately, many tutors had limited experience with electronic educational systems, including Microsoft Teams. During the pandemic, Microsoft Teams played a crucial role in implementing e-learning as schools and universities worldwide closed their physical campuses. Millions of students shifted to remote learning from home. (Al-Shboul, 2024).

Problem statement

Online learning has gained significant global attention in recent years (Elfaki *et al*., 2019). Moreover, the COVID-19 pandemic led to the rise of online education. Although online teaching and learning are well-established in South Africa, the challenge lies in transitioning from face-to-face to online formats. Access to computers and the internet is critical for effective teaching and learning at Unisa (Mncube, 2023), especially in the North Eastern Region. North Eastern Region encompasses Limpopo and Mpumalanga provinces. These are regarded as rural provinces in South Africa. In rural areas of Limpopo and Mpumalanga provinces, students use cell phones for teaching and learning (Makoe, 2013; Das, Sahoo & Pati, 2021).

Previous studies indicated that there is a lack of limited technological resources, slow internet speeds at home, and a lack of prior training in using the Microsoft Teams platform tools (Al-Nassar, cited by Al-Shboul, 2024). It is, therefore, essential for the satisfaction of students with online tutorials at an open e-learning institution that studies be conducted.

Theoretical background and literature review

In this section, previous studies were reviewed to illustrate the gap this research addresses. It starts by offering some background, including the community of inquiry framework and diffusion of innovation theory, followed by the satisfaction of students with online learning and the performance of students.

Background

Learning is a multifaceted process that encompasses the acquisition of knowledge, the development of skills and the demonstration of performance. Therefore, it serves as a foundational pillar for societal transformation (Elfaki et al., 2019). When designing educational experiences, whether online, face-to-face, or in a blended format, the goal is to structure them so that they lead to achieving the learning outcomes.

To guide this study, the researchers chose the community of inquiry (CoI) framework developed by Garrison, Anderson and Archer in

2000 (Kanuka & Garrison, 2004) and the diffusion of innovation theory by Rogers (1995. The CoI framework was selected to recognise the crucial aspects and preconditions that make for a successful and positive educational experience. According to CoI theory, learning experiences are "embedded within a community of inquiry, comprised of teachers and students" and the underlying assumption is that "effective" or "deep learning" can only take place within a community and that the interaction of three fundamental elements plays a vital role, namely social presence, cognitive presence and teaching presence (Kanuka & Garrison, 2004).

In this study, cognitive presence plays a crucial role in creating successful and positive educational experiences (Kanuka & Garrison, 2004). Cognitive presence is defined "as the exploration, construction, resolution and confirmation of understanding through collaboration and reflection in a community of inquiry (Garrison, 2007). Vaughan and Garrison (2005) further explain that cognitive presence is operationalised through the practical inquiry cycle. This practical inquiry cycle comprises the 'triggering event, exploration, integration and resolution' and sense of puzzlement (information exchange, connecting ideas and applying new ideas). According to these cited authors, successful learning can only occur if the inquiry process has progressed through all four phases (Vaughan & Garrison, 2005).

It is also essential to help learners feel comfortable and confident with the format. Without this comfort, epistemic engagement in online learning suffers. A simple approach would be to encourage students to reflect on their comfort levels when participating in online discussions and to emphasise that proficiency in online discussion is essential for productive learning in the environment (She & Bidjerano, 2009).

However, a study conducted by Kanuka and Garrison (2004) revealed that online discussions do not necessarily support higher levels of learning. Sadaf, Kim and Wang (2021) found that students' perceived cognitive presence, learning and satisfaction were associated more with discussion grades and final course grades. The quality of online learning outcomes has been largely studied through student perceptions of satisfaction and learning owing to the challenge of measuring the depth of course-specific learning (Garrison, 2016). Furthermore, researchers have found a positive relationship between cognitive presence and students' course satisfaction, indicating that students who perceived high cognitive presence tend to be more satisfied with the courses ((Lim, 2024). Studies have also shown cognitive presence as one of the significant predictors of perceived learning and satisfaction (Giannousi & Kioumourtzoglou, 2016)). Akyol and Garrison (2011) concluded that instructional strategies that need group collaboration and knowledge construction could potentially enhance students' perceived learning and final grades. Similarly, Galikyan and Admiraal (2019) found that three out of the four phases in cognitive presence–triggering event, integration and resolution–have a significant positive relationship with students' final grades. This implies that there is a relationship between cognitive presence and student performance. Therefore, the cognitive presence of the CoI framework is essential to guide this paper.

With regard to diffusion of innovation theory, Rogers' diffusion of innovations theory is the most suitable theory in investigating the adoption of technology in education system especially in higher education. The diffusion of innovation theory, especially as used to e-learning, emphasises the significance of knowing how new technologies in education spread via social systems (Pinho, Franco, & Mendes, 2021). The main concepts, namely compatibility relative advantage, complexity, trialability and observability play important role in the process of adoption (Overbye-Thompson & Hamilton, 2025). E-learning innovations are recognised as essential innovations of education, and the theory assists to understand the variables that affect their spread and adoption in higher education settings.

Makokotlela (2022) highlights that the outbreak of the COVID-19 pandemic resulted to a national lockdown that impacted the approach to summative assessment. The ODeL institution was compelled to shift to a full online assessment. New technologies played main role as it facilitated

communication and collaboration among the management, lecturers and students. Announcements were made via email and Intcom to inform the lecturers that digital summative assessments were needed with immediate effect and that no blended or onsite assessments would take place in 2020. The students were informed by the university through the learning management system (LMS), mostly through electronic notices, the announcement tool, the myLife email, and SMSs about writing the online summative assessments. This implies that Unisa adopted technologies for e-learning. This study investigated students' satisfaction with online tutorials at an open e-learning institution.

Satisfaction of students with online learning

Online learning satisfaction refers to the pleasant feelings students experience during teaching and learning. Al-Nassar (cited by Al-Shboul, 2024) conducted a study to identify the obstacles to using e-learning via the Microsoft Teams platform during the COVID-19 pandemic in the State of Kuwait. The results showed that most learners did not experience difficulties with e-learning. However, one of the obstacles is limited technological resources, slow internet at home, and a lack of prior training in using Microsoft Teams tools.

Ismail and Ismail (2021), in their study, explored the impact of using the Microsoft Teams platform for teaching, as well as the obstacles in the online learning environment. The results showed that students found it easy to use, managed their time effectively and felt comfortable and satisfied. Research by Xu and Xue (2023) indicated that satisfaction with online education among students, faculty, and parents before and after the COVID-19 outbreak was 59.5%, 75.3% and 70.7%, respectively, with a significant gap between students' satisfaction and that of their faculty and parents. This means that there is a low satisfaction rate among university students with online education. Therefore, it is important to investigate student satisfaction with online learning using the cognitive presence of the CoI framework.

In their study, Makoe and Nsamba (2019) investigated the gap between student perceptions and expectations of quality support services at the University of South Africa. They found that students' expectations exceeded their actual experiences in three service quality dimensions, with the tangibles dimension showing the largest gaps. Students' expectations were not fully met in the Tangibles, Reliability and Delivery dimensions.

O'Donnell and Sharp (2012), Aldhafeeri and Khan (2016) in the United States of America (USA) and Du Plessis (2012) in South Africa examined students' online views. The study conducted by Aldhafeeri and Khan (2016) found that students showed strong but not overwhelming agreement in their preference for using new technology, such as smartphones and tablet devices, with 62% (n=810) agreeing. Secondly, 88% of students (n=1,157) selected either agree or strongly agree with the statement "I can master the skills necessary to participate in an e-learning course"; only 5.6% (n=73) disagreed. It is worth noting that 73 students did not agree with the statement. O'Donnell and Sharp (2012) revealed that 80% of students at Trinity College and 68% of students at Dublin Institute of Technology agreed that the quality of learning is enhanced by using technologies to augment lectures, which would be in the form of blended learning. The study conducted by Du Plessis (2012) noted that all students lacked guidance on e-learning.

However, 90% of them expressed interest in receiving such guidance. Absence of guidance might contribute to a decrease in students' enrolment in online courses. Mohamed, Noorashid and Abd Razak, (2021) examined literature on student satisfaction with e-learning or LMS using the CoI model revealed that the parameters that contribute to student satisfaction in e-learning were social support or collaboration and quality. A study conducted by Alqahtani, Alamri, Sayaf and Al-Rahmi (2022) revealed that perceived ease of use (PEOU) and perceived usefulness (PU) mediate the effects of educational quality (EDQ), social influence (SOI), and perceived enjoyment (PE), which in turn affect students' attitude toward use (ATU), and students' satisfaction with using e-learning systems (SSE).

Performance of students

Performance of students refers to how well they perform in their educational pursuits, typically assessed through grades, test scores and overall comprehension of academic material. Nsamba (2016) revealed that student performance is affected by the quality of services offered by the distance education institution. Oliver (2016) investigated the impact of face-to-face contact sessions and online discussion forums on students' academic performance at an ODeL university. Oliver's (2016) study indicated that students who attended a written assignment preparation contact session performed significantly better in the written assignment than those students who did not attend this contact session. Furthermore, Oliver's (2016) study indicated that students who attended an examination preparation contact session did not perform significantly better in the examination than those students who did not attend this contact session; while students who used an online discussion forum performed significantly better in the final examination than those students who did not use this forum.

A study conducted by Al-Shboul (2024) showed that there were statistically significant differences between the average scores of students in the achievement test and the self-learning scale post measurement, which was attributed to the teaching method variable and in favour of the experimental group that used the Microsoft Teams application. Elfaki et al. (2019) reported that the mean scores of students in the final exam for the e-learning group (Experimental) were statistically significantly higher than those of the traditional group (controls). Elfaki et al. (2019) found that e-learning significantly improves academic performance and the learning process.

E-learning in education is the use of digital technologies to deliver instructional content and facilitate learning beyond traditional classrooms (Saufi, 2025). E-learning is regarded as learning experiences delivered via digital technologies, involving connected platforms on internet, multimedia, and interactive tools, which permits students to access educational content without being confined to a physical classroom setting (Elumalai, et al., 2021). A study conducted by Matthew, Kazaure and Okafor (2021) support this that three fundamental criteria for e-learning are learning that goes beyond the traditional paradigms of teaching and learning, internet technology and networks. Lynch (2020) found that university students are less likely to have access to technology and to understand how to use it. It is, therefore, essential to determine the performance of students using technologies. It includes a broad range of methods, from fully online courses to blended learning that supplements traditional teaching with digital resources (Elumalai *et al*., 2021). The main idea is that technology enables accessible, flexible and interactive learning for students regardless of their location or schedule.

Aim and objective of the research

The primary objective of the study was to investigate students' satisfaction with online tutorials at an open e-learning institution. Specifically, the study focused on cognitive presence theory at a Facilitation of Learning Unit in the North Eastern Region of this ODeL institution. Additionally, the secondary objectives were twofold: to investigate student satisfaction with online learning using Microsoft Teams in the unit; and to determine students' performance in the unit. The research hypothesis was as follows:

H1: There is no significant relationship between attendance of online tutorials and performance in the Facilitation of Learning Unit in the North Eastern Region.

H2: There is no significant correlation between performance and overall results satisfaction, in the Facilitation of Learning unit at the North Eastern Region.

H3: There is no significant relationship between the help of a tutor and overall satisfaction with results, in the Facilitation of Learning unit at the North Eastern Region.

Contribution of the study

The study provided valuable suggestions to assist the ODeL institution's North Eastern Region in understanding specific constraints related to online tutorials. Additionally, it recommended actions to improve the quality of online tutorials. Beyond the local context,

stakeholders and policymakers in ODeL institutions can benefit from reading this study before engaging with online tutorials. Lastly, consultants working at ODeL institutions can use the study's findings to advise academic and support staff as they prepare to offer online tutorials. Notably, the research significantly contributes to the theory of cognitive presence by investigating the impact of online tutorials on the performance of students at ODeL institutions in a developing country (South Africa).

Research Methodology

This research used explanatory study design with the aim of comprehending variables that affect performance of students, in a Facilitation of Learning Unit at the North Eastern Region. An explanatory study is conducted to investigate a research problem to explain the associations among factors (Saunders, Lewis & Thornhill, 2019). There was no sampling; the census method was used in this study. If the population is relatively small, the whole population can be selected (Saunders *et al*., 2019). Moreover, there is a low response rate in online surveys (Shiyab, Ferguson, Rolls & Halcomb, 2023). At the time of conducting the survey, some students were writing examinations, which affected the response rate.

A questionnaire of structured nature was employed to collect primary data from 101 students enrolled to attend online tutorial classes in Facilitation of Learning Unit at the North Eastern Region to permit collecting and comparing standardised data from a sizeable unit of analysis in a great economic way (Saunders *et al.*, 2019). Questionnaires were administered electronically in collecting data from students enrolled to attend online tutorial classes in Facilitation of Learning Unit at the North Eastern Region registered. The data obtained from the structured questionnaires were used to establish the impact of online tutorials on the performance of students at a Facilitation of Learning Unit in the North Eastern Region.

Quantitative data were analysed using the Statistical Package for the Social Sciences (SPSS) to compile descriptive and inferential statistics. Descriptive statistics were used to describe the basic characteristics of the population and to summarise the data in a straightforward, understandable manner. Furthermore, the study used inferential statistics to evaluate the effects of various factors surveyed among the students. Pearson correlation was used in this study to test the null hypothesis. Saunders *et al*. (2019) asserted that if the number of responses is over 70, then inferential statistics can be computed using SPSS. The SPSS was valuable because it is easy, robust and wide applications (Obilor & Amadi, 2018).

Findings, discussions and conclusions

This section presents the study's findings, in line with the research objectives.

Reliability and validity

Determining the reliability coefficient (Cronbach's alpha) for the items measured in the data set was not done because the questionnaire was adapted from the validated questionnaires of Heydenrych (2010) and Nsamba (2016). Moreover, the questionnaire questions were formulated based on the literature review. Where appropriate, a five-point Likert scale was used. A pilot study was conducted with 20 students who attended online subject-specific workshops. The pilot study results showed that the questionnaires measured what the researcher intended.

Location of the student during the study

In the study, most students (55) were based in rural areas (Table 1). The remaining students were distributed across the urban areas (25) and townships (21). Notably, among 55 rural students, 26 did not perform well. High unemployment rates characterise the rural areas. According to Statistics South Africa (2023), the national unemployment rate increased by 0.2% to 32.9% in the first quarter of 2023. In this context, distance learning is a well-known option for South African students seeking to further their studies (Preston, 2020) because it is accessible to various groups and affordable.

Online tutorial satisfaction of students

The respondents were asked to rate the online tutorial attendance on a four-point Likert scale (ranging from not at all to extremely)

regarding the following five issues: The results are depicted in Table 2.

How much did the tutor help you to prepare for the examinations? About 30.7% reported that tutoring slightly helped them prepare for the examination; about 28.7% found tutoring quite helpful; and 26.7% considered tutoring extremely helpful. Only 13.9 did not find any help from tutoring.

How well did your tutor explain the course materials? About 32.7% reported that the tutor explained the course materials quite well; an additional 31.7% indicated that the tutor explained the course materials extremely well; and about 23.8% reported that the tutor explained the course materials only slightly. Only 11.9% indicated that the tutor did not explain the course materials at all.

How well did your tutor understand operating Microsoft Teams? About 37.6% indicated that the tutor understands Microsoft Teams quite well; an additional 30.7% found that the tutor understands it extremely well; and about 17.8% mentioned that the tutor slightly understands it. Only 13.8% of respondents found that the tutor did not understand Microsoft Teams at all. Knowing the complexity of e-learning is essential for educators and learners alike, as it affects the overall effectiveness and satisfaction of the learning process (Overbye-Thompson & Hamilton, 2025).

Did the tutorial improve your ability to manage your studies? About 29.7% reported that tutorials improved their ability to manage their studies; an additional 25.7% said tutorials moderately improved their ability to manage their studies; and 23.8% felt tutorials slightly assisted them in improving their ability to manage their studies. Lastly, 20.8% indicated that tutorials did not contribute to improving their ability to manage their studies.

Did the tutorial help you to pass the examination? About 29.8% reported that the tutorials did not contribute to passing the examination, about 28.8% reported that the tutorials helped them pass the examination, and an additional 21.8% reported that the tutorials significantly helped them pass the examination. About 19.8% of respondents indicated that the tutorials slightly helped them to pass the examination.

Table 1: Location of students during the study

		Rural area	Township	Urban area	Total
I performed well in my studies	Strongly Disagree	9	0	0	9
	Disagree	6	2	3	11
	Unsure	11	3	2	16
	Agree	17	13	13	43
	Strongly Agree	12	3	7	22
Total		**55**	**21**	**25**	**101**

Students performance

The respondents were asked to rate the student's performance on a five-point Likert scale (ranging from strongly disagree to strongly agree) (Table 3) about the following three issues:

I performed well in my studies. About 64.4% (42.6% plus 21.8%) reported performing well. Conversely, 19.8% did not perform well and 15.8% were unsure of their performance. These results align with those of Elfaki et al. (2019), showing that e-learning significantly improves academic performance and the learning process. This means that online tutorials play an important role in students' studies. Additionally, the availability of platforms, like Microsoft Teams,

can boost students' confidence, alleviating fears associated with ODeL registration by facilitating interactions with fellow students and tutors.

I am satisfied with the overall results. About 57.4% (41.6% plus 15.8%) expressed satisfaction with the overall results, and about 29.7% reported dissatisfaction. Only 12.9% were unsure about their satisfaction level. These results align with research by Xu and Xue (2023), which found that 59.5% of students and faculty reported satisfaction with online education before and after the COVID-19 outbreak. However, it is worth noting that 57% of respondents are satisfied, 42.4% still express dissatisfaction. One possible reason could be the challenge of linking the workshop topics to their registered modules. Offering subject-specific workshops may help students to better link workshop content with their studies.

I need academic support. About 82.2% of respondents expressed a need for academic support, while 10.9% stated they do not need it. Additionally, 6.9% were unsure if they needed academic support. This implies that more support systems are required to orient students to their studies to receive learning experiences.

Table 2: The online assessment preparation satisfaction

	Extremely	Quite	Slightly	Not at all	Total
How much did the tutor help you to prepare for the examinations?	26.7%	28.7%	30.7%	13.9%	100%
How well did your tutor explain the course materials?	31.7%	32.7%	23.8%	11.9%	100%
How well did your tutor understand operating Microsoft Teams?	30.7%	37.6%	17.8%	13.8%	100%
Did the tutorial improve your ability to manage your studies	29.7%	25.7%	23.8%	20.8%	100%
Did the tutorial help you to pass the examination?	28.7%	21.8%	19.8%	29.8%	100%

Pearson correlations

Given that many of the study's propositions involve relationships, the correlation outcomes play an important role as significant findings in the research. Specifically, the study that employed the Pearson correlation to analyse these relationships. This was degrees of freedom (two-tailed test) used to make sure that the hypothesis test is valid, and the conclusions are the reliable (Obilor & Amadi, 2018). Moreover, Obilor and Amadi (2018) reported that the degrees of freedom are used to find the corresponding critical t-value from a t-table or statistical software.

***Attendance of online tutorial and the* performance**

The respondents were asked to rate the student's performance on a five-point Likert scale (ranging from strongly disagree to strongly agree) (Table 4) about the following three issues:

I performed well in my studies. Many students (64.4%) agreed that they performed well in their studies because of attending online tutorials. While 19.8% did not agree with the statement "I performed well in my studies", about 15.8% were unsure. These results are similar to those found by Shah and Barkas (2018), which show that student engagement as measured by

attendance had an insignificant impact on performance.

I am satisfied with the overall results. The majority of students (57.4%) showed satisfaction with the overall results because of attending online tutorials. These results are similar to those reported by Xu and Xue (2023), which show that students' satisfaction with online education after the COVID-19 outbreak was 59.5. While 29.7% of students showed dissatisfaction with the overall results, only 12.9% of students were unsure of their overall results because of attending online tutorials.

I need academic support. About 82.2% of students need academic support. These results imply that if online academic support is provided to students, then attendance would be increased, resulting in student performance and satisfaction.

Table 3: The student's performance

Factor	Strongly disagree	Disagree	Unsure	Agree	Strongly agree	Tota l%	Mean	Std. Dev
I performed well in my studies.	8.9%	10.9%	15.8%	42.6%	21.8%	100	4.04	2.73
I am satisfied with the overall results.	15.8%	13.9%	12.9%	41.6%	15.8%	100	4.04	2.4
I need academic support.	6.9%	4.0%	6.9%	43.6%	38.6%	100	4.04	3.91

To test Hypothesis 1, which posits that there is no significant relationship between attendance of online tutorials and student performance. The study examined p-values. After analysing the p-values, it was revealed that none fell within the range of -1 to +1.

The results in Table 5 show no positive correlation between attendance at online tutorials and student performance (as reflected by the correlation coefficient of .478 at the 99% confidence level). Consequently, the null hypothesis is accepted, suggesting that attendance of online tutorials does not impact student performance.

Performance and overall results satisfaction.

The null hypothesis H_02: There is no significant correlation between performance and overall satisfaction with results. There is a significant positive correlation between performance and overall results satisfaction, as shown by the coefficient value of 0.690 (Table 6) at a 99% confidence level. The null hypothesis is, therefore, rejected, suggesting that student performance does indeed influence overall satisfaction with the results. These results are similar to those found by Diab-Bahman, Al-Enzi, Sharafeddine and Aftimos (2022) which show that attendance and the year of the students did have a statistically significant influence on grades.

Tutor's help and overall results satisfaction

The study aimed to test hypothesis 3, which posits that there is no significant relationship between tutor assistance and overall satisfaction with results. After analysing the p-values, it was revealed that none fell within the range of -1 to +1. Specifically, the results in Table 7 show no positive correlation between overall satisfaction with results and tutor assistance (as reflected by the correlation coefficient of .308 at the 99% confidence level). As a result, the null hypothesis is accepted, suggesting that tutor assistance did not significantly influence satisfaction with results.

Table 4: The online tutorial attendance satisfaction

Factor	Strongly disagree	Disagree	Unsure	Agree	Strongly agree	Total %	Mean	Std. Dev.
I performed well in my studies	8.9%	10.9%	15.8%	42.6%	21.8%	100	4.04	2.73
I am satisfied with the overall results	15.8%	13.9%	12.9%	41.6%	15.8%	100	4.04	2.4
I need academic support	6.9%	4.0%	6.9%	43.6%	38.6%	100	4.04	3.91

Table 5: Attendance of online tutorials and the performance

		Did you attend tutorial classes offered online?	I performed well in my studies
Did you attend tutorial classes offered online?	Pearson correlation	1	-.071
	Sig. (2-tailed)		.478
	N	101	101
I performed well in my studies	Pearson correlation	-071	1
	Sig. (2-tailed)	.478	
	N	101	101

Confidence interval: 99%α=0.01** and Confidence interval: 95%α=0.05*

Table 6: Performance and overall results satisfaction.

		I performed well in my studies	I am satisfied with the overall results
I performed well in my studies.	Pearson correlation	1	.690
	Sig. (2-tailed)		<.001
	N	100	1001
I am satisfied with the overall results.	Pearson correlation	.690	1
	Sig. (2-tailed)	<.001	
	N	100	100

Confidence interval: 99%α=0.01** and Confidence interval: 95%α=0.05*

Online tutorial improvement

Students were asked to provide feedback on how online tutoring could be improved to enhance its value. Their responses highlighted several challenges, including a lack of data and internet connectivity in rural areas; insufficient feedback from tutors or unresponsive tutors in workshops that do not accommodate people living with disabilities. These findings indicate that students' expectations are not met. Interestingly, this aligns with Du Plessis's (2012) research,

which revealed that all students lacked guidance on e-learning, despite 90% expressing interest in receiving it. This means that cognitive presence, as suggested by Kanuka and Garrison (2004), about the fundamental successful and positive educational experiences, was not available. One student responded as follows:

(*E-tutor never responds to questions posted online. There was no support in preparation for the exam. An online lesson is not presented online, and there are no assignments. Examples, if we are in the week leading up to assignment 2, online lessons are still on the modules covered under assignment 1.*

Because workshops start late, students often email to request one-on-one assistance or clarification on advanced content. Unfortunately, tutors might mistakenly assume that students are overwhelmed with their studies, leading to delayed responses as the teaching and learning progress continue.

Table 7: Tutor's help and overall results satisfaction

		I am satisfied with the overall results	**How much did the tutor help you to prepare for examinations?**
I am satisfied with the overall results	Pearson correlation	1	.105
	Sig. (2-tailed)		.308
	N	100	96
How much did the tutor help you to prepare for examinations	Pearson correlation	.105	1
	Sig. (2-tailed)	.308	
	N	96	97

Confidence interval: 99%α=0.01** and Confidence interval: 95%α=0.05*

Conclusion

This study confirms that students performed well in their studies and were satisfied with the results they received after the examination. Satisfaction has a positive influence on student performance. The tutor's assistance was slightly helpful in preparing for the examination. However, nearly a quarter of respondents felt that tutorials did not help them pass exams. There is an absence of a positive correlation between attending online tutorials and student performance. Many respondents expressed a need for academic support. These results imply that if online academic support is provided to students, then attendance would be increased, resulting in student performance and satisfaction. Students highlighted factors such as a lack of data and internet connectivity in rural areas. Additionally, issues with tutor feedback and workshops not accommodating people living with disabilities were reported. Cognitive presence of the CoI framework assisted in understanding the relationship between performance and overall satisfaction with results. While the diffusion of innovation theory assisted in understanding technologies such as Microsoft Teams.

Recommendations and practical implications

In this study, cognitive presence theory can be based on the fact that the students should first understand the culture of ODeL of institutions in South Africa and globally, if performance in assignments and examinations is to be achieved. Second, students need to recognise that online learning necessitates access to a computer or laptop with internet connectivity. The awareness directly impacts online tutorial attendance and performance, which, in turn, affects overall examination satisfaction. ODeL institutions should actively educate students about technology resources essential for successful online study. Technologies such as the complexity of e-learning refer to the numerous levels of engagement and interactivity that students can experience within

educational systems. It includes a range of methods and tools used to facilitate learning, from passive content delivery to fully interactive, gamified experiences. Knowing the complexity of e-learning is essential for educators and learners alike, as it affects the overall effectiveness and satisfaction of the learning process.

Students' confidence in their subjects or modules increases when they know that tutors will promptly respond to their queries. Misalignment of information exchange between students and tutors can lead to confusion. Efforts should prioritise subject or module-specific workshops. These workshops may play a significant role in achieving performance in assignments and examinations. Achievements and performance contribute significantly to retention and throughput rates. Cognitive presence, when fostered, would improve students' pass rates, enhancing satisfaction and performance.

Future research directions

The study recommends that future research investigate students' first-year experiences in online teaching and learning. In addition, future studies are suggested to measure cognitive presence in an ODeL institution. Lastly, the effectiveness of the multipurpose centres should be evaluated to determine the connectivity during loadshedding in different parts of South Africa and other countries.

Ethical compliance

The Professional Research Committee (PRC) at Unisa provided ethical clearance, with certificate no. 2022_PRC_REW_002. Permission certificate to conduct study no. 2022_RPC_039.

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Declaration statement

I Master Maapae Maebane declare that I received no financial support for the research. I do not have any financial or other interest of whatsoever nature.

I Master Maapae Maebane declare that the manuscript has not been published previously and is not under simultaneous review elsewhere. Moreover, article is original work, does not violate any contractual agreement and has not been published or is not under consideration for publication elsewhere.

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