

Examining the Support of Students in e-Learning Context: e-Tutors' Perspectives

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Abstract

Student support received some attention from e-learning institutions but with some caution in the extent of empirical studies where e-tutors' perceptions were explored. The premise of this research paper is to contribute to an understanding of how support is understood from the e-tutors' perspectives. It also aims to suggest new and alternative support mechanisms for the e-tutors. Six e-tutors were participants in the Design Thinking and Technology course modules for honours students at a distance learning institution. A quantitative approach and web questionnaires were used to collect the data and were analyzed and visualized through pie charts to represent the data. The findings reveal a significant gap in the e-tutors' ability to effectively support students based on the constructs that were developed. This highlights a critical area for improvement in the training and resources provided to e-tutors to enhance the efficacy of online education.

Keywords: Student Support, E-Tutors, Perspectives, Multimedia Technologies

INTRODUCTION

E-learning gained extensive attention within university-level education over the past decade and has become the standard method of learning (Monib, 2023; Zeng and Liu, 2023). E-tutors become facilitators who provide specifically tailored support for online content with the application of multimedia tools (Romiti et al., 2023). To become an e-tutor, one must acquire a basic understanding of skills related to support of assigned modules for online students (Albrahim, 2020). E-tutors work closely with individual students to provide personalized academic support (de Metz and Bezuidenhout, 2018). The relevance of e-tutors is to provide online support since they serve as the human resource with the necessary competence and skills (Segbenya et al., 2021; Youde, 2020).

A myriad of studies were conducted on e-tutors. E-tutor training, (Kuset, et al., 2021; Segbenya et al., 2022; Vlachopoulos & Makri, 2021). E-tutors' technological issues and students' perspectives (Martin et al., 2020; Ooi et al., 2021; Segbenya et al., 2022). The focus of this paper is based on student support from the perspectives of e-tutors. This paper is an addition to the literature on e-tutor support for students studying online about their perspectives. The research question was grounded to examine e-tutors' perspectives on student support within an e-learning context. To achieve both the aim and the research question set for the paper, literature that seek to address the two was imperative. To achieve the target, some constructs were developed to address specific topics that would ground the aim and research question for the paper. Three constructs of, e-tutor skills to use of multimedia files to deliver the online course content; the delivery of online tests by e-tutors for online students and students' satisfaction levels about the synchronous teaching media were developed to provide insights from literature.

E-tutor skills to use multimedia files to deliver online course content: Literature on e-learning suggests the following multimedia for student support at distance learning institutions. (MOOCs, Moodle, LMS and mobile-learning) (Al-Nuaimi and Al-Emran, 2021; Alsswey & Al-Samarraie, 2019; Bettayeb et al., 2020; Mustafa & Ali, 2023; Sharifov & Mustafa, 2023; Ziraba et al., 2020). Scholars (A'isy et al., 2024; Mai et al., Salendab et al., 2024; Shogren et al., 2024) agreed about the lack of desirable skills in multimedia files to deliver online course content. Salendab et al., (2024) pointed to video conferencing technology results where there was no correlation between its perceived usefulness and reported learning outcomes. The same medium study was done by A'isy et al., (2024) which indicated that there were challenges during the online learning process through

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Zoom Video Conferencing which included time limitations, internet connectivity issues, and technology access disparities among students. At the same time, it was revealed that an application of PowerPoint (PPT) in teaching vocabulary takes time for the e-tutor to find and select materials and pictures, as well as money because it requires a computer Mai et al., (2024). In another report, Shogren et al., (2024), it was established that e-tutors were not prepared or confident with supporting students via Zoom, WebEx, and Google Meet multimedia within the Goal Setting Challenge (GSC) Application platform.

Further proficiency skills for multimedia files' goal usage were also reported from studies. (Banyoi et al., 2023; El Bakkouri & Raki, 2023; Khasawneh, 2023). Banyoi et al. (2023) mentioned that the synchronous learning media files provided disadvantages to students who did not master the modules' content. An explanation was that students felt squeezed into the limited time frame of the educational process. El Bakkouri and Raki (2023) mentioned that students perceived chatbot multimedia as annoying and even disappointing in terms of response quality especially for them to complete their modules' complexity tasks. Proficiency evidence, Khasawneh (2023) mentioned unavailable video content with descriptive pros for deaf students that were appropriate for the topics to be taught. Additional studies exploited e-tutor multimedia capacities with students' achievements. Turnbull et al., (2023) attested that the capacities of e-tutors to exploit multimedia applications in some cases within LMS were low. Also, (Arazo et al., 2023; Qiao et al., 2023) provided reports of distracted students 'attention especially from the use of gamification tools.

In contrast, some positive implementation capacities for multimedia files towards the delivery of online course content were reported (Aljermawi et al., 2024; Lacey et al., 2024; Pandita and Kiran 2023; Pohorielov et al., 2024; Xie et al., 2024). Study results, Aljermawi et al., (2024) delved into flipped classrooms within an LMS platform, it was evidenced that the flipped classrooms increased the students' interest in learning and also met their needs. Lacey et al., (2024) study report, suggested that interactive videos allowed students to make suitable choices about which video content to engage with and hence the autonomy in the learning process which positively influenced their learning process. The study results Pandita and Kiran (2023), (discussion boards, video conferencing, and threaded discussions) asserted that the multimedia files provided smoother learning setups for the students with access and collaboration to interactive tools. Pohorielov et al., (2024) integrated electronic learning systems, reported that vocational education teachers study results on transport specialities highlighted their readiness for crucial digital world with improved and mastering of professional competencies. And Xie et al., (2024) study focused on multimedia technology which benefited online students' learning and possibilities of improved online delivery of education. Some more account, Khalil et al., (2023) claimed that the integration of multimedia prepared, improved, and enabled students 'personalized and individual learning from sharing study materials, browsing for lesson content, creating and watching instructional videos and audio lessons about course contents.

Additional positive plan capacities results were reported by (Alzahrani and Alhalafawy., 2023; Gunadi and Nugroho., 2023; Mustapha et al., 2023; Rizki, 2023; Shahriar and Hayawi, 2023). According to Alzahrani and Alhalafawy (2023) there was an indication that from gamification, students were stimulated to actively participate in course modules and their e-tutors. Gunadi and Nugroho (2023) results indicated that the Google Classroom medium, its acceptance levels among state high school students was high and its application influenced students' achievements of their course objectives. Also, Mustapha et al., (2023) results expressed an opinion that the integration of WhatsApp and Facebook into the LMS platform significantly increased the involvement among student during online course modules activities. To which, Rizki (2023) results' indication was that social media tools increased social interaction and students became active and were engaged in the learning process. Further results by Shahriar and Hayawi (2023) indicated that the ChatGPT was rated as a high-performance medium when it scored remarkably well with accuracies of 89.5% in accuracy results for a broad range of course contents.

The delivery of online tests by e-tutors for online students: The delivery of online tests construct was used as the key in highlighting the provision of support from the e-tutors. Evidence by Ribeirinha and Silva (2024) alluded that online tests caused some students anxiety and stress since the application that was employed to carry out the online assessment tests did not allow reflection and self-corrections on the answers given by the

students. Siregar (2024) pointed to Computer Based Tests (CBT) with tendencies to focus on assessing correct or incorrect answers and less able to assess student creativity in formulating solutions or strategies which can affect the development of creative thinking during learning. Additional results were from Huber et al. (2024) which corroborated Ribeirinha and Silva, (2024). It was established that there were minor plan variations on capacity decisions which were raised as negative issues concerning online tests whereby well-designed online test assessments needed resource availability. For example, variations in whether students were required to turn cameras on in scheduled classes or whether invigilated examination software was available or mandated all impacted the academic integrity of online tests and assessments.

In addition, literature results by Cleophas et al., (2023) alerted to an obscuring tendency of software applications which yielded reformulation tendencies where false negatives results were obtained. A report mentioned that students reformulated answers from another exam sentence-by-sentence and structurally plagiarize the original answer. Slack and Priestley (2023) also reported that students who were exposed to ChatGP lacked some grasp of the online test course content with the results of them obtaining negative values scores. From Neumann et al., (2023) results, e-tutors experienced online tests as more time-consuming assessments and felt an increase in the workload as a result of the integration of ChatGPT into online exams. Another addition to the results by Neumann, et al., (2023) was from Sullivan et al., (2023) where e-tutors accounted that the online tests as an assessment method was a threat as a result from using ChatGPT. Malinka et al., (2023) also contributed with results online exams were a copy and pasted activity which was completed in a smaller number of pages and in less amount of time by the students.

Some opposite positive results were obtained in contrast to those present priorly about key components of engagement and support. In a study by Chukwuemerie et al., (2024), it was established that online students had pleasant experiences when they found online courses examination easier than physical classroom examination. The Chukwuemerie et al., (2024) results were in tandem with Osabutey et al., (2024) findings that online tests assessments improved student outcomes. This was a sign that the design of the assessment of online tests took into consideration how it aligns with the available technologies. To which, there was an indication from Moorhouse (2023) that students' performance in online tests assessments improved from the use of videos. In addition, Jurayev (2023) results notified that the results of experiments have shown that the use of teaching methods based on the proposed technology in teaching the course content module provided some positive interactions with online assessment.

Students' satisfaction levels with the synchronous teaching media: This construct targets the support element based on the synchronous teaching media. There is existing research with valuable insights into the factors that explain specific variables that affect the students' satisfaction levels with synchronous teaching media. The following studies focused on variables that affect students' satisfaction with synchronous teaching media (Al-Adwan et al., 2022; Al-Azawei, 2019; Aparicio et al., 2016; Topal, 2016). There were some other results from Khasawneh et al. (2024) indicating that the overall sentiment of students remained predominantly favourable satisfaction levels with the synchronous teaching media. The same sentimental results about the students' satisfaction levels about the synchronous teaching media were obtained from Purwanto and Tawar (2024) with a claim that the use of computer software platforms in online learning had a positive effect on online student satisfaction levels. In support to Khasawneh et al., (2024), (Almuarik and Alangari, 2024; Purwanto and Tawar, 2024) results reported that the students generally held positive attitudes and cited convenience concerning the synchronous hybrid teaching media. Furthermore, study results by Ofori, et al. (2023) reported about the students' categories where it was found that there were similar levels about their positive satisfaction levels of synchronous media in their online studies. Another set of results was obtained from Innab and Alqahtani (2023) with a claim that students who had access to the synchronous type media were positively influenced and their satisfaction levels were at a peak as a result. Furthermore, Kundu et al., (2023) attested in their results that students who were introduced to a flipped model increased their satisfaction levels with the course content.

More positive results about the students' satisfaction levels were obtained (Alfalah, 2023; Gou and Lee, 2023; Magreñán et al., 2023; Nikou & Maslov, 2023). Alfalah, (2023) presented a report that student satisfaction levels about their online module course had a positive impact since they were provided with the flexibility of learning

at a distance with the LMS platform. A report, by Gou and Lee (2023) indicated that online students were positively influenced by e-tutors who adapted to the changes during the pandemic and utilized LMS more to support the teaching. The increased results levels of satisfaction also correlated with their achievement of their online modules' objectives. Magreñán et al., (2023) study results reported that the students who were introduced to the Escape Room indicated that they understood the procedures of the tool which heightened their satisfaction levels within the LMS platform. There was a corroboration by Nikou and Maslov (2023) who alluded that those students who participated in flexible online learning achieved good learning outcomes and met the learning completion criteria. And the students' levels of satisfaction were at a peak with the course online module.

Some studies underscore what was presented earlier in the fore gone section about students' satisfaction levels from literature. (Anthonysamy & Singh 2023; Millidonis et al., 2023; Slack and Priestley 2023) reported less positive results about the students' satisfaction levels with synchronous media. A study report, Anthonysamy and Singh (2023) indicated negative satisfaction levels from the students about their scholastic achievement from e-tutors who were newly introduced to operate within LMS digital learning. Millidonis et al., (2023) report results agreed with Anthonysamy and Singh (2023) study findings. There was an indication of negative levels of satisfactions about their course modules mainly this was due to e-tutors who encountered challenges to fulfil what constituted excellent teaching practices within the LMS. In addition, Slack and Priestley (2023) results also added to the results that some students experienced fewer rewarding experiences and insecurities which affected their satisfaction levels about the LMS. Abd et al. (2023) study findings also found out that students experienced lower satisfaction levels since they were managed with complex technologies which compromised their security levels within the LMS. An additional study, Ustun et al., (2024) indicated results where the students' satisfaction levels showed that students did not sufficiently participate in the synchronous learning platform activities and hence they registered negative satisfaction levels about the synchronous platforms. The results were supported by Wang et al. (2024) with a claim that student participants expressed the lowest satisfaction with their e-tutors' organization and management of online teaching platforms.

Theoretical background: Goerge Siemens' connectivism learning theory for the digital age was preferred for the paper. The theory makes learning with technologies a necessity for those trying to seize opportunities presented by emerging technologies in contexts for learning and education (Bell, 2011). The theory consists of three pedagogies stages: cognitive presence, e-tutor presence and social presence. The cognitive presence stage is where the interactions on networks take place and students develop networks of their own and increase their cognitive presence during learning (Davies, 2003). E-tutor presence stage centres around methods that e-tutors use to create quality online instructional experiences that support and sustain the learning experiences of the students online (Reeve 2015). Social presence is the final stage that differentiates communications media according to their capabilities for conveying media users' sense of engagement with other users in a different time and space (Short et al. 1976). In this paper, a presumption is that students will be supported (multimedia interactions), engaged (online assessment activities), and general satisfaction with the knowledge of networks (Majewska and Zvobgo, 2023; Martin and Bolliger, 2023; Üstün, 2023).

The present study: This study, was intended to suggest providing a structure that the process of student support might go beyond what is readily discovered from literature. Therefore, the argument in this study was initiated by collecting data from e-tutors about their perspectives on student support.

Problem: The perspectives of e-tutors about their perspectives on student support became the preliminary problem of the study. With that stated as a reason, the e-tutors' perspectives were explored utilizing literature constructs. Such an action was thought of to be authentic and supportive of discovering knowledge about their perceptions of student support.

Participants: The present study participants were 6 e-tutors at a distance learning institution recruited to support online students with Design Thinking and Technology modules. The College Ethics Committee on Graduate Studies cleared ethical and consent procedures. The e-tutors' participation in the study was fair: that is, they were adequately informed, agreed to participate, their participation had no impact on the employment contract and consented to their work being published.

Research question: The main research question that this paper seeks to develop is: “What are the e-tutors’ perspectives on student support within an e-learning context?”

METHODOLOGY

In the study, quantitative enquiry (Creswell, 2011) was selected to provide solutions for the research question mentioned earlier. A quantitative and web questionnaire Babie (2016) were employed for the thought process. Data were collected from the LMS used in modules’ daily interactions between the e-tutors and the students. They incorporated a range of statements regarding e-tutor support and engagement for online students. The original questionnaire questions from a research project were divided into six thematic groups: E-tutor abilities to deliver online tests by e-tutors for online students; E-tutor abilities to teach 2d and 3d diagrams with technologies (7 aspects); e-tutor abilities to maintain students’ satisfaction levels about the synchronous teaching media (8 aspects); E-tutor abilities to deliver online tests for online students (6 aspects); E-tutor skills to use of multimedia files to deliver online course content (6 aspects) and e-tutor abilities to encourage students’ familiarity with multimedia technologies during their online learning process (10 aspects). The division was thought justifiable since it provided coherent themes and abilities to comprehensively analyze the topic under discussion. This paper focused on single items within three themes of e-tutor abilities to deliver online tests for online students; e-tutor abilities to maintain students’ satisfaction levels about the synchronous teaching media; e-tutor skills to use of multimedia files to deliver online course content. The focus on three constructs within the original scale was to ascertain particular competencies that were guided by the main research question formulated for the paper. The purpose of the data alteration process was to broaden and enhance comprehension (Bryman, 2012). A Microsoft form supported the collection process where within the forms, a five-point Lickert Scale with rating scales was used. The scale's simplicity ranged from "Strongly Disagree" to "Strongly Agree"; “Disagree to Agree” and “Neutral”) makes it easy for respondents to understand and respond to survey items (Jamieson, 2004). The validity and reliability of the measurement instruments accurately assess intended constructs and yield consistent results from the design and pretest by senior experts in the field specialization (Bryman, 2012; Trochim & Donnelly, 2008).

FINDINGS AND RESULTS

This section of the results contains three figures, 1-3 where each captures the characteristic intention for the aim which was established. Figure 1: “I can use multimedia files to deliver course content”; Figure 2: “I can deliver online tests for online students”; Figure 3: “I can maintain online students’ satisfaction levels with synchronous teaching media”.

The results for Figure 1 are below.

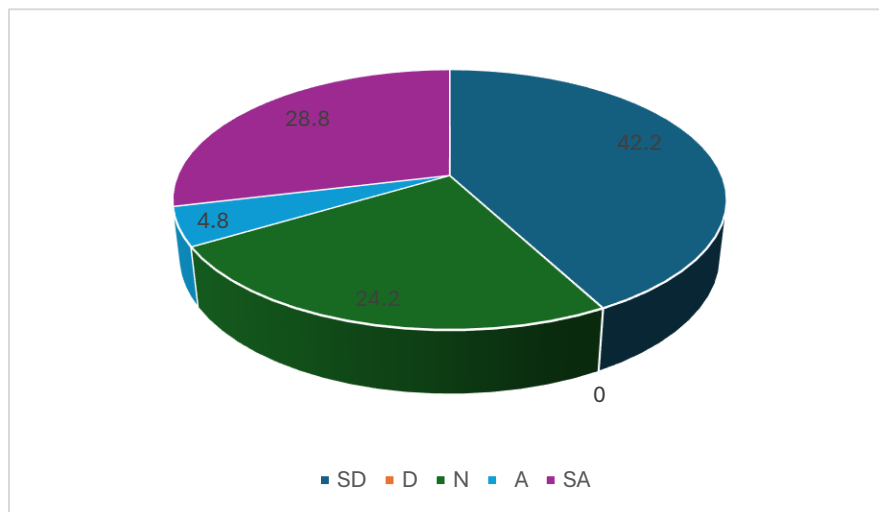


Figure 1: I can use multimedia files to deliver course content

An objective of figure 1 was to identify the capacities of e-tutors to use multimedia files to deliver course content. The objective was responded with an assertion to either strongly agreed or agreed at a value of 33.6% by the respondents. What is reported by the results in relation to the construct suggests that e-tutors by association were unable to use multimedia files during the delivery of content for the students. The 33.6% value score when taken together with those at 24.2% neutral score, did not provide different significant results at less than a 50% score to influence what was originally reported about the construct. A further analysis indicated that those who strongly disagreed with the construct were at 42.2% to the best of those who registered 0% agreed. An elaborate commentary based on the results which were obtained about the construct is that e-tutors were on the negative side utilities of multimedia during presentations of course content. Figure 2 is next for a discussion.

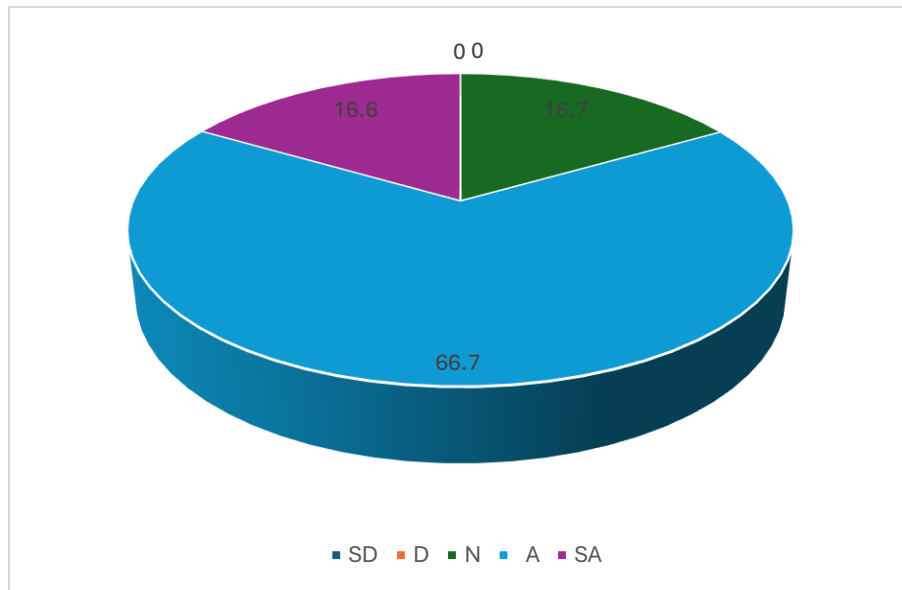


Figure 2: I can deliver online tests for online students

Data from figure 2 was obtained from an excerpt which needed a response whether e-tutors were able to deliver online tests for their online students. The results of those who responded with strongly agree or agree to the construct contributed to a 83.3% value score. Based on the results, it was considered to extend and make a comment that would assist with how best to describe the results which were obtained from the construct. A comment is that the e-tutors were able to deliver online tests for their online students. Further results which were obtained from those who were neutral did not provide any significant differential results to those whose report was at 83.3% (strongly agree or agree). Those who also accounted 0% scores at strongly disagreed and disagreed offered no influence differences from was obtained with the construct. An extrapolation based on the score at 83.3% is that the e-tutors were able to deliver the online tests for the students in online settings. The next discussion results focus on figure 3.

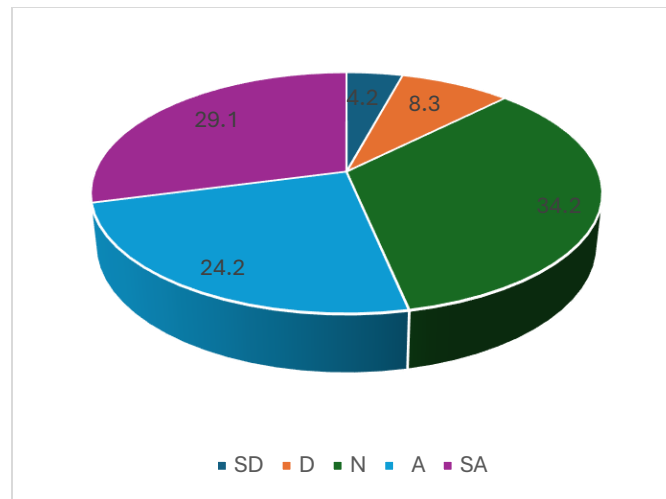


Figure 3: I can maintain online students' satisfaction levels with synchronous teaching media.

Figure 3 was informed from a construct whose aim was to explain whether e-tutors were able to maintain online students' satisfaction levels with synchronous teaching media. A slightly above half a percentage score at 53.3% was a resultant from three respondents whose submissions either of strongly agreed or agreed were captured. What is seen here from the submission might be attached to a conclusion to mean e-tutors were able to maintain their students' satisfaction levels of synchronous teaching media. In another set of other results which were from those who were neutral (34.2%) about the construct, their feedback did not change the outcome from those whose contributions were positive about the construct. From which, an inference may be sought to mean that the e-tutors were able to maintain their students' satisfaction levels of synchronous teaching media. The were also concurrent results which earthed results of a percentage disadvantage (12,5%) from what was already noted about the construct. A conclusion is drawn to say all the six e-tutors were able to maintain their students' satisfaction levels of synchronous teaching media.

DISCUSSION

E-tutor support is imperative for students whose mode of curriculum delivery is at a distance. The success of support in the ODeL context equates to e-tutors who can achieve cognitive abilities with network interactions and methods including their general social presence. This study aimed to evaluate how e-tutors support students with the implementation of modules in an online e-learning context. The primary research question addressed how e-tutor support altered the implementation of modules in an online e-learning context.

I can use multimedia files to deliver course content: The study results indicated that e-tutors were not able to use multimedia files during presentations of online course content. The present findings do not support impacting student support for multimedia tools (A'isy, et al., 2024; Salendab, et al., 2024). The same finding was corroborated in studies by (Mai et al., 2024; Shogren, et al., 2024). Their studies reported that e-tutors lacked confidence in supporting students with Zoom technology and that e-tutors could not find relevant pictures from Zoom to teach vocabulary lessons. More similar findings were corroborated in studies by (Arazo et al., 2023; Güneş & Adnan, 2023; Qiao et al., 2023; Turnbull et al., 2023). In addition, other sets of non-positive results was found in the literature which served as a further corroboration barometer to the construct about the multimedia usage by e-tutors. (Banyoi et al., 2023; El Bakkouri & Raki 2023; Khasawneh, 2023).

I can deliver online tests for their online students: This construct was based on the focus that was set for the section of the paper. The paper's finding indicated that the e-tutors were able to deliver online tests for their online students. Chukwuemerie et al. (2024) results, Osabutey et al. (2024) study findings, Moorhouse's (2023) results and Jurayev's (2023) results were congruent with the results for this construct.

I can maintain online students' satisfaction levels with synchronous teaching media: The results indicated that e-tutors were able to maintain their students' satisfaction levels with synchronous teaching media.

The results mapped some from the literature, (Almuarik & Alangari 2024; Innab & Alqahtani 2023; Khasawneh et al. 2024; Kundu et al. 2023; Purwanto & Tawar 2024; Ofori et al 2023). More study findings corroborated the study's construct, (Alfalah, 2023; Gou & Lee 2023; Magreñán et al., 2023; Nikou & Maslov 2023). Some results challenged those who agreed with the results of the construct about students' satisfaction levels of multimedia. (Abd et al. (2023; Anthonysamy & Singh., 2023; Millidonis et al., 2023; Slack & Priestley 2023; Ustun, et al. 2024; Wang, et al. 2024).

CONCLUSION

An examination was undertaken to establish support within e-tutoring in a distance learning context perspective. From the research based on the survey respondents, it was revealed that e-tutors were on the negative side of utilities of multimedia during presentations of course content. The findings exposed no significant benefit for student support in distance learning especially for Higher Education contexts. There is a need for continuous training to address the challenge with targeted training programs from the efficacy perspective of the e-tutors in design thinking modules. On a positive score note, there were two affirmations from two constructs that revealed a degree of familiarity with students' satisfaction levels and the delivery skills for online tests. From the findings, students stand to benefit from the association with the constructs that were developed for certainties. At the level of research, the findings suggest that the process of support might go beyond what is discovered in the literature.

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