

Evaluating Learner Support in Open Distance E-Learning: A Case Study of Bucodel's Framework and its Impact on Student Needs

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Abstract

Open and Distance Learning (ODL) provided flexible, inclusive learning opportunities but challenges hinder learner satisfaction and retention. BUCODEL framework should help with motivation, accessibility, and intervention. This study appraises the framework's effectiveness using a mixed-methods approach, combining quantitative survey data and qualitative feedback from 82 learners. 49% of learners in the finding express satisfaction with the support system, 30% remain neutral, and dissatisfaction is higher among older learners (40+) and male respondents. The frequency of interaction with support services is a factor, highlighting the critical role of regular engagement in reducing transactional distance and fostering a sense of community. Female learners reported higher satisfaction levels, suggesting existing services align more closely with their needs compared to male learners, who require tailored interventions. The research draws on the Transactional Distance Theory and the Community of Inquiry Framework. Enhanced communication channels, proactive engagement, and personalized support are identified as strategies to reduce psychological distance and foster social presence. The findings suggest that targeted interventions, such as improved technical and emotional support for older learners and tailored communication for male learners, are essential to address demographic-specific challenges. My recommendation is personalized feedback, peer mentoring programs, and increased outreach to promote regular engagement based on the gaps that remain in addressing the diverse needs of learners. Future research should explore longitudinal impacts of these interventions and refine support mechanisms to ensure sustained learner success. This study contributes to the theoretical understanding of ODL and provides practical insights for enhancing learner support frameworks.

Keywords: *Learners Intervention, Learners Support Strategy, Motivation and Retention, Open and Distance Learning (ODL), Student Engagement.*

Introduction

Open and Distance Learning (ODL) has revolutionised modern education by expanding access to learning beyond the constraints of traditional educational systems. It breaks through barriers such as geographical location, time, and the need for physical presence, providing flexible, self-paced education that meets the diverse needs of learners [11]. As UNESCO highlights, ODL is designed to eliminate obstacles to education that many

face, such as financial limitations, gaps in prior learning, age, work and family responsibilities, disabilities, and other personal challenges [3]. The importance of ODL lies in its inclusivity, offering educational opportunities to people who may otherwise be excluded from conventional academic environments. Learners can access programs from anywhere, at any time, allowing them to fit education into their personal and professional lives [16]. This flexibility makes

ODL particularly valuable for adult learners, busy people and individuals living in places with difficulty attending mortar and brick higher education types.

Open and Distance Learning (ODL) poses several challenges that can lead to learner dissatisfaction and increased dropout rates. Many students experience isolation due to the lack of direct interaction with peers and instructors, causing disengagement and overwhelm. Technological barriers, such as unreliable internet access and limited proficiency with digital tools, further hinder progress [14]. The high level of self-discipline and motivation required in ODL, without structured support, adds to the struggle, making it easy for learners to fall behind. Delayed academic feedback and administrative issues—such as confusion over registration, payments, and platform access—exacerbate these problems, leaving students feeling frustrated, disconnected, and unsupported.

Various approaches have been used to address the challenges in ODL, but each has limitations. Peer interaction through online forums aims to reduce isolation, yet often lacks active engagement, leaving some learners still feeling disconnected. Technological support services help resolve technical barriers, but these are often reactive and not readily available when immediate assistance is needed. Time management workshops and self-paced learning modules attempt to foster self-discipline, but without continuous mentorship, many students still struggle to stay motivated. Additionally, automated administrative systems address registration and payment issues, but they lack personalised support, causing further confusion. These limitations highlight the need for more proactive, interactive, and personalised approaches to effectively meet learners' needs in ODL [10].

The researcher has implemented a comprehensive framework aimed at enhancing student success in Open and Distance Learning

(ODL), built on the pillars of motivation, availability, and intervention. Weekly motivational messages are shared to encourage persistence, complemented by personalised solutions tailored to individual student challenges. To ensure accessibility, extended support hours, online peer interactions, and prompt technical assistance are provided. E-tutors maintain engagement through regular communication on learning platforms, delivering academic guidance, and organising live sessions. Collaborative efforts with the ICT unit address technical and administrative issues, ensuring seamless course registration and access, while emotional support is prioritised through mentorship and proactive interventions to mitigate disengagement.

Literature Review

Theoretical Framework

This study employs the theories of Moore (1993) and Garrison et al (2000), that is Transactional Distance theory and Community of inquiry framework—to assess the effectiveness of ODL. These theories provide insights into communication, interaction, and engagement, crucial for fostering learner success in online environments.

Michael G. Moore's Transactional Distance Theory explains perceptions and views that influence learners and instructors. This gap is influenced by three variables: dialogue (interaction), structure (course flexibility), and learner autonomy (student control over learning). As transactional distance increases, barriers like disengagement and misunderstanding become more pronounced. The application of the theory to e-learning, demonstrate that reducing transactional distance through better communication, course design, and autonomy encourages learner engagement and success. This theory is essentially for enhancing e-learning programs especially in settings of lesser or fewer interactions.

Garrison work on the COL (commonwealth of Learning) framework identifies three essential components for meaningful learning in online education. These are teaching, cognitive and social presence. These components create a supportive, interactive learning environment, crucial for online learning where physical interaction is absent. Research by Garrison shows that strong social and teaching presence enhances cognitive engagement, fostering deeper learning and better retention. This framework is particularly relevant to ODL, offering a comprehensive model for designing courses that are engaging, socially connected, and intellectually stimulating, thereby improving learner satisfaction and outcomes.

The theories are highly relevant to this study as they directly address the core aspects of communication, interaction, and engagement in Open and Distance Learning (ODL). Transactional Distance Theory highlights the importance of reducing the psychological and communicative challenges among stakeholders. The COL framework emphasises how the components mirror the researcher's efforts to enhance academic guidance through e-tutors, emotional support, and fostering a sense of community. Together, these theories reinforce the structured support system in place, designed to meet learners' needs and improve their overall academic success and satisfaction.

Related Work

A study [2] explored the use of TI in models to address student's retention needs through a descriptive survey and multistage purposive sampling. It explores how the affordability of education, influenced by Zimbabwe's macroeconomic challenges, and the timely provision of learning materials impacted student retention at the Zimbabwe Open University. One significant finding was that students were struggling with high fees, and the institutional failure to consider

students' financial constraints was a key factor contributing to low retention rates. The lack of timely delivery of educational materials also played a role in exacerbating these challenges, reinforcing the need for comprehensive learner support to maintain student engagement and persistence.

In contrast, is another study [4] based on the transformative role of social media in ODL settings. It was clear that while academic staffs have begun using social media to share and gather educational resources, engagement in actively contributing to these platforms remains limited. Despite this, social media has shown potential in reshaping educational practices and enhancing learning experiences. However, the researcher's findings suggest that a lack of awareness among faculty about the true educational potential of social media could hinder its effective integration into academic settings, limiting its role in fostering educational engagement.

Integrating these findings with more recent research the work [13, 17] shows that enhancing utility for both learner-learner and learner-facilitator—through platforms like social media or structured e-learning environments is essential for boosting student satisfaction and retention. This is further supported by other studies [5, 11], which demonstrate the role integration and settings play in such institutions. These findings resonate with Tinto's model by underlining the need for creating supportive educational and social environments that actively promote student engagement, ultimately enhancing retention in open and distance learning (ODL). Therefore, while social media can serve as a tool for educational engagement, it must be complemented with strong institutional support mechanisms that address both academic and socioeconomic factors affecting learners' experiences, as was [2] emphasized.

This discussion points to the need for ODL frameworks to incorporate strategies that reduce barriers to learning, enhance

communication, and ensure the timely provision of resources. Addressing these challenges will not only improve student retention but also align with the researcher's effort to implement a comprehensive learner support system that integrates technology, social interaction, and timely interventions.

The literature highlights several gaps in ODL learner support, which the researcher's efforts at Bucodel aim to address. There [2] is the importance of considering affordability and timely provision of learning materials, revealing how institutions that fail in these areas struggle with student retention. It was related [4] that educational engagement full capabilities remain underutilised due to limited faculty awareness. Additionally, studies [17] and [11] emphasise the critical role of all concerns in fostering a sense of belonging and improving satisfaction. The results point to the need for a more robust system that can solve such barriers.

The researcher's framework at Bucodel aligns with these insights by offering a holistic learner support system that includes academic, technical, emotional, and administrative assistance. Through weekly motivational messages, tailored interventions, extended support hours, and collaboration with ICT to ensure seamless platform access, the approach aims to improve student retention by addressing common ODL challenges. However, despite initial promising outcomes, the framework has not yet been objectively measured. This article, therefore aims to provide a systematic evaluation of these strategies, validating their for refining support mechanisms and fostering long-term success in ODL environments.

Methodology

A case study research design using surveys to evaluate how the working framework is effective in addressing student needs is adopted. The study will employ both descriptive and thematic analysis, analysing

quantitative data from survey responses and qualitative data from open-ended feedback. This mixed-methods approach enables a comprehensive evaluation of how the learner support system impacts student satisfaction, retention, and success.

Population and Sampling

The study consists of eighty-two (82) Bucodel learners, from a diverse group of students enrolled in various programs within the institution. The target population includes both first-time and continuing learners. The purposeful sampling method was employed in this study.

Data Collection

Quantitative and qualitative data was obtained using Google form. The instrument was designed to collect Likert scale responses of respondents' satisfaction, retention factors, and the perceived effectiveness of the learner support system) and qualitative data (e.g., open-ended questions for participants to share their personal experiences and challenges in the ODL environment). The survey was disseminated through Bucodel's learner communication channels (Email, WhatsApp, and the learning management system LMS).

The survey includes questions that assess the availability and effectiveness of academic, emotional, technical, and administrative support, student satisfaction with motivational and support interventions, and issues or barriers faced in accessing support services.

Data Analysis

The collected data was subjected to descriptive analysis for the quantitative components, summarising the frequency, mean, and distribution of responses related to learner satisfaction and support access. Qualitative data was analysed thematically. The outcome of these findings were combined in evaluating the effectiveness of Bucodel's learner support system.

Findings

82 responses

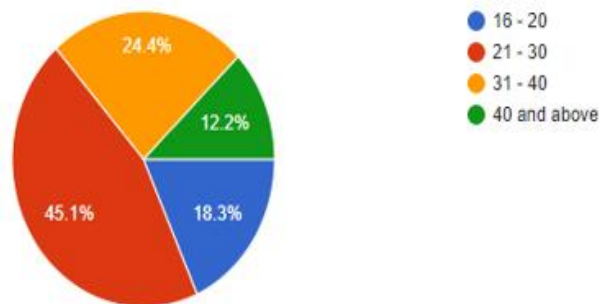


Figure 1. Age of Respondents

Source: Author's survey data (2024)

Table 1. Demographic Results

		Frequency N = 82	Percentage %
Gender	Male	26	31.7
	Female	56	68.3
Marital Status	Divorced	1	1.2
	Married	20	24.4
	Single	61	74.4
Class	Postgraduate	13	15.9
	Undergraduate	69	84.1

Source: Author's survey data (2024)

Table 1 shows the demographic data from 82 respondents, revealing a predominantly female student population (68.3%). Most learners are aged 21-30 (45.1%), followed by

those aged 31-40 (24.4%). The majority are single (74.4%). The majority of students are undergraduates (84.1%).

Table 2. Learners Support Services Used by Respondents

Items	Frequency	Percentage
Academic Advising	25	30.5
Academic Advising Administration Support	2	2.4
Academic Advising Emotional and social Support	1	1.2
Academic Advising Technical Support	4	4.9
Academic Advising, Technical Support, Administration Support	8	9.8
Academic Advising, Technical Support, Emotional and Social Support Administration Support	4	4.9
Administration Support	14	17.1
Emotional and Social Support	1	1.2
Technical Support	18	22.0
Technical Support, Administration Support	5	6.1

Source: Author's survey data (2024)

The data shows that the most sought-after support services are academic advising (30.5%), followed by technical support (22%), and administrative support (17.1%), indicating that learners primarily need help with their

academic progress, resolving technical issues, and navigating institutional processes. A smaller group (9.8%) seeks a combination of these services, while emotional and social support is the least utilised (1.2%).

Table 2. Satisfaction With Support Services

Item		Frequency N = 82	Percentage %
BUCODEL's Technical support	Excellent	16	19.5
	Good	44	53.7
	Neutral	16	19.5
	Poor	5	6.1
	Very Poor	1	1.2

Source: Author's survey data (2024)

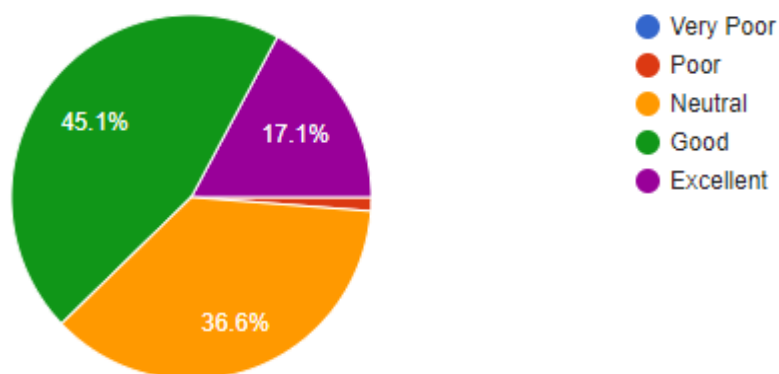


Figure 2. BUCODEL Emotional/Social Support

Source: Author's survey data (2024)

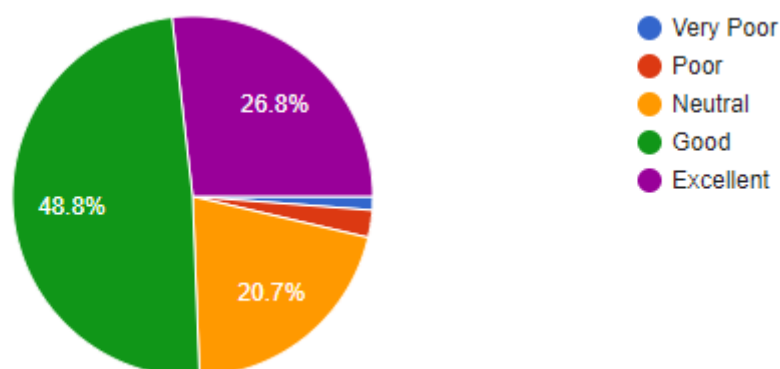


Figure 3. BUCODEL Administrative Support

Source: Author's survey data (2024)

Table 3 indicates that BUCODEL's technical and administrative support are generally well-received, with 73.2% and 75.6% of students rating them positively, though a small percentage express

dissatisfaction. Emotional and social support, while rated positively by 62.2%, has a high neutrality rate (36.6%), suggesting underutilization or limited visibility of these services.

Table 3. Distribution of Learner Satisfaction Levels by Age Group at BUCODEL

	16-20	21-30	31-40	40 and above
Very Dissatisfied	1	1	1	4
Dissatisfied	0	1	1	2
Neutral	5	11	3	20
Satisfied	4	21	12	42
Very Satisfied	5	3	3	14

Table 4 results indicate that satisfaction with learner support services at BUCODEL varied across age groups among the 82 respondents. In the 16-20 age group, a total of 10 respondents participated. Most expressed either being neutral (50%) or satisfied (40%), while 10% reported being very dissatisfied. Among the 21-30 age group, which had 37 respondents (45.1% of the total), the largest portion (56.8%) expressed satisfaction, while 29.7% reported a neutral stance, and 2.7% reported being dissatisfied or very dissatisfied.

The 31-40 age group included 20 respondents (24.4% of the total), most of

whom were satisfied (60%), with a smaller portion expressing a neutral stance (15%) or dissatisfaction (5% each for Very Dissatisfied and Dissatisfied). In the 40 and above category, which had 15 respondents (18.3% of the total), 42.7% expressed being satisfied, while 26.7% were neutral. However, 40% of this group expressed dissatisfaction, with 26.7% being very dissatisfied. Overall, most respondents indicated being satisfied with the services (about 49% of the total), while 30% were neutral.

Table 4. Learner Satisfaction by Frequency of Interaction with BUCODEL Support Services

	Daily	Monthly	Never	Rarely	Weekly
Very Dissatisfied	1	0	0	2	1
Dissatisfied	0	0	0	0	2
Neutral	8	0	1	4	20
Satisfied	25	0	0	5	42
Very Satisfied	6	2	0	2	14

Source: Author's survey data (2024)

Table 5 presents the satisfaction levels of respondents based on their frequency of interaction with BUCODEL's learner support services. Respondents who interacted daily predominantly reported being satisfied (25 respondents) and neutral (8 respondents), with 6 respondents indicating they were very satisfied. Only a small number were very dissatisfied (1 respondent). Those who interacted weekly also showed a strong level of satisfaction, with 42 respondents expressing they were satisfied and 14 respondents

indicating very satisfied. However, 20 respondents were neutral, and 3 respondents expressed dissatisfaction (2 dissatisfied, 1 very dissatisfied). In contrast, respondents who interacted monthly or never reported low levels of satisfaction, with most reporting being neutral or not responding. Among those who interacted rarely, satisfaction levels were mixed, with 5 respondents expressing being satisfied, 4 respondents being neutral, and 2 respondents indicating very dissatisfied or very satisfied.

Table 5. Learner Satisfaction Levels by Gender at BUCODEL

	Female	Male
Very Dissatisfied	0	4
Dissatisfied	0	2
Neutral	5	15
Satisfied	15	27
Very Satisfied	6	8

Source: Author's survey data (2024)

The data shows the distribution of satisfaction levels between female and male respondents regarding BUCODEL's learner support services. Among female respondents, none reported being Very Dissatisfied or Dissatisfied. Instead, the majority of females expressed satisfaction, with 15 indicating they were satisfied and 6 expressing being very

satisfied. A smaller group of females (5 respondents) reported being neutral.

In contrast, among male respondents, 4 expressed being very dissatisfied and 2 reported being dissatisfied. The largest group of males (27 respondents) reported being satisfied, while 8 respondents were very satisfied. A notable number of males (15 respondents) expressed a neutral stance.

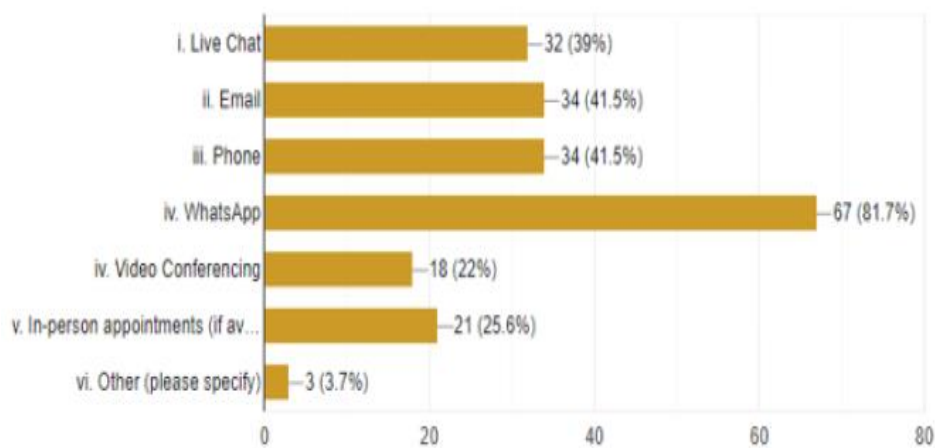


Figure 4. How Would You Prefer to Access Support Services?

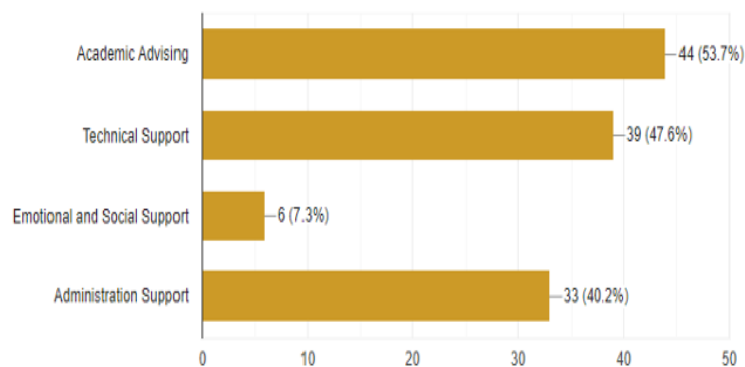


Figure 5. Which Learner Support Services have made the Biggest Difference in Helping you Succeed in your Studies?

No
no
None
Yes sometimes the LMS keeps not working and in the notes they sent to us there are some mistakes that really need to corrected
Couldn't download course materials
Yes
No
Yes because am just starting the have gone far that is the challenges
I was doing my quiz without even submitting it went out of the quiz and I was not done with it

Figure 6. Have you Encountered any Challenges or Difficulties while Utilizing BUCODELs Online Support Services? if yes, please, Describe Briefly?

Nil
Same answer as above
The tutors and learners support staff should please be more available to students when they need help. And also provide bi- weekly one on one session to track students learning growth before exams.
Thank you.
It fine
They should always assist there learners in learning outcomes.
It has been a wonderful classes
Please keep up the great work, and remain open to available improvements.
Still want to emphasize you about the issue of course materials some materials don't use to be complete

Figure 7. Please Share any Additional Comments, Suggestions, or Feedback you have Regarding BUCODEL Online Support Service

Discussion

The findings suggest that BUCODEL's learner support framework should prioritise enhancing both academic and technical assistance while also exploring ways to improve emotional and social support engagement. While the support systems appear effective, there is significant potential for improvement, particularly in addressing the needs of the minority of dissatisfied learners.

Although 49% of respondents expressed satisfaction with BUCODEL's services, a notable 30% reported neutral feelings, indicating that many learners are either ambivalent or not fully satisfied. The highest levels of dissatisfaction were found among respondents aged 40 and above, with 40% expressing some degree of discontent.

These results highlight the necessity of offering different services to different groups of learners. Given the higher dissatisfaction

levels among older learners, BUCODEL should implement targeted interventions to address their specific challenges, such as technological difficulties and a need for enhanced communication. Tailoring support services to younger age groups is equally important, as the high neutral ratings among those aged 21–30 suggest their expectations may not be fully met. Furthermore, the substantial number of neutral responses indicates an opportunity for BUCODEL to gather more in-depth feedback to better understand the concerns contributing to this neutrality. Personalised surveys or focus groups could help uncover specific pain points and provide insights for enhancing the learner experience.

The data also demonstrates a clear correlation between the frequency of interaction and satisfaction levels. Respondents who engage more frequently with BUCODEL's support services, particularly on a daily or weekly basis, exhibit higher satisfaction levels. This trend indicates that regular contact likely enhances the perception of the services provided. In contrast, the relatively high number of neutral and very dissatisfied responses among those who engage less frequently suggests that irregular interactions may result in insufficient awareness or inadequate experiences with the support services. Therefore, encouraging regular engagement through proactive outreach and periodic check-ins is vital for improving learner satisfaction.

Additionally, the data reveals that female respondents generally express higher satisfaction levels, with none reporting dissatisfaction and most indicating either satisfaction or very satisfaction. This implies that the current learner support services are effectively meeting the needs of female learners. In contrast, male respondents exhibit a more varied distribution of satisfaction levels, with some expressing dissatisfaction. The higher proportion of neutral responses

among males suggests they may have mixed experiences or unmet expectations.

These findings highlight the need for targeted strategies to address male learners' concerns, who appear more likely to express dissatisfaction. A thorough investigation into the specific issues faced by male respondents could identify areas for improvement. Furthermore, the relatively high neutral responses among males present an opportunity to enhance support services to convert neutrality into satisfaction. Overall, refining learner support services to be more inclusive and responsive to the diverse needs of both male and female learners will contribute to improved overall satisfaction at BUCODEL.

The findings of this study resonate strongly with the Transactional Distance Theory that emphasises the significance of three interrelated variables: dialogue (interaction), structure (course flexibility), and learner autonomy. The data indicating that satisfaction levels correlate with the frequency of engagement aligns well with this theory. Higher satisfaction among respondents who interact frequently suggests that increased dialogue can effectively reduce transactional distance, which is particularly relevant for ODL, where learners often experience psychological and communicative gaps due to physical separation from instructors and peers.

The findings reveal that a considerable percentage of learners express neutrality regarding support services. This neutrality may stem from insufficient interaction and communication, which Transactional Distance Theory identifies as critical barriers to engagement. Enhancing communication channels and providing opportunities for regular interaction—such as through personalized outreach, workshops, and frequent feedback—can significantly mitigate transactional distance. Moreover, the higher dissatisfaction levels among older learners may indicate that this group experiences greater challenges in navigating the

educational landscape, suggesting a need for structured support that accommodates their specific needs.

The data also indicates variability in satisfaction levels among male respondents, with some expressing dissatisfaction. This underscores the need for a strong teaching presence that actively engages male learners, perhaps through tailored communication strategies or specialized support services that resonate more effectively with this demographic. The study touches on the need to evolve a supportive and interactive learning environment, suggesting that while the current support services at BUCODEL are generally effective, enhancing social presence—such as fostering a sense of community through discussion forums and peer interactions—could further improve learner satisfaction and engagement.

Integrating Transactional Distance Theory and the Community of Inquiry Framework gives a natural understanding of how to enhance learner support in ODL contexts. The findings suggest that by fostering more frequent interactions and improving communication channels, BUCODEL can reduce the psychological distance that many learners feel, particularly those who report neutral or dissatisfied experiences. Building a sense of community among learners can enhance social presence, contributing to a more engaging learning experience. Additionally, the insights into demographic differences in satisfaction highlight the need for targeted interventions tailored to different age groups and genders, ensuring that personalised support aligns with learners' specific contexts.

In essence, the study contributes to our understanding of the theories of ODL - the Transactional distance theory and COL framework. In addition by addressing the identified gaps and enhancing the dimensions of interaction, structure, and community, BUCODEL can create a more inclusive,

supportive, and satisfying learning environment that fosters student success and retention.

Conclusion

Lastly, this study significantly contributes to our understanding of the effectiveness of learner support in Open Distance Learning (ODL), particularly in the context of Transactional Distance Theory and the Community of Inquiry Framework. Through the identification and correction of deficiencies in the current learning support systems, BUCODEL can enhance the classroom environment for all students, thereby enhancing their retention and academic performance. The findings indicate that learners aged forty or older require additional emotional and social support, particularly in light of their apparent dissatisfaction. In order to assist various demographic groups in addressing their challenges, it is necessary to implement targeted solutions, including enhanced technical support and customised communication.

Also, the significance of frequently engaging with support groups and reaching out to them is demonstrated by the strong correlation between learner satisfaction and participation frequency. The fact that male students' experiences are not always consistent, despite the fact that female students typically exhibit greater satisfaction, suggests that they require additional assistance that is specifically tailored to their gender. Providing individuals with constructive feedback can also facilitate their development; therefore, it is advantageous to enhance their awareness through training courses in order to optimise the utilisation of available resources. When considered collectively, these concepts generate an intricate depiction of students' satisfaction in online learning environments. Additionally, they demonstrate the significance of support services' adaptability in

order to increase student engagement and overall satisfaction.

Future studies should focus on conducting longitudinal research to assess the long-term impact of enhanced learner support services on student satisfaction and retention, providing insights into the effectiveness of implemented strategies over time. Additionally, investigating the unique needs and experiences of various demographic groups—such as older learners, male and female learners, and those from diverse cultural backgrounds—will yield targeted insights for effectively tailoring support services. Lastly, testing specific intervention strategies, such as enhanced training for staff or the introduction of peer mentoring programs, could provide empirical evidence of best practices for improving learner satisfaction in the learning environment.

Conflict of Interest

The author declares no financial or personal conflict in this research. However, the author

has professional experience in an institution that encountered the issues discussed in the study. Additionally, the institutions where the author conducted these research shares similarities with the studied context. These factors have been acknowledged, and every effort has been made to ensure objectivity and academic integrity in the analysis and conclusions.

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