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INVESTIGATING THE IMPLEMENTATION PROCESS OF OPEN AND DISTANCE LEARNING FOR TEACHERS' PROFESSIONAL DEVELOPMENT AT THE LEARNING CENTRES

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ABSTRACT

The effective implementation of open and distance learning (ODL) at the learning centres is vital for helping distance learners to achieve their educational goals. This study examines the implementation process by focusing on the availability and distribution of teaching and learning materials, the provision of face-to-face sessions, the effectiveness of learner support services, the relevance of the ODL program, and the challenges faced by both learners and facilitators during the program's implementation. The research is conducted across ten ODL centres under the Institute of Adult Education in Dar es Salaam, Mbeya, and Ruvuma. A mixed-methods research design was used to provide a comprehensive understanding of the implementation processes of the ODL and its effectiveness in enhancing educational experiences. The study included a total of 608 participants. Data collection methods included closed-ended questionnaires, interviews, and observations. Quantitative data were analysed descriptively, while qualitative data were analysed thematically. The findings reveal statistically significant differences across the regions in the implementation process of the ODL at the learning centres, particularly regarding support services and the infrastructure. The study highlights the critical role of resource availability in creating a conducive learning environment and its impact on learners' academic performance and satisfaction.

Keywords

Open and distance learning (ODL), Adult learning, Teachers' professional development, learning centres, implementation process.

1. INTRODUCTION

1.1 Background Information

Open and Distance Learning (ODL) has emerged as a transformative force in modern education delivery, offering flexible and accessible learning opportunities to a diverse range of learners worldwide, including those who may not have access to conventional

institutions, such as adult workers (Palvia et al., 2018). Advancements in science and technology, along with the growing demand for flexible and accessible learning options, have propelled the adoption and expansion of ODL in recent years (Kannadhasan et al., 2020). ODL has successfully overcome several barriers, enabling teacher training institutions to reach large groups of teachers, particularly those from remote areas, who wish to develop professionally and address the growing shortage of teachers in the education system (Hashmi et al., 2023). The quality of education provided by ODL programs is determined by a variety of factors, including the teaching system, the quality of the lecturers, and the learning environment (Maphorisa et al., 2017).

Quality education, particularly in open and distance learning, is directly dependent on the effective implementation that facilitates the learning process. Badu-Nyariko and Amponsah (2016) emphasised that the effective implementation process of ODL is crucial for delivering relevant and high-quality education to ODL learners. To address the diverse needs of distance learners, ODL institutions have developed learning centres that offer a variety of services designed to support students in their educational journey. These services are crucial in creating an inclusive and enriching learning experience for learners from diverse backgrounds and abilities, as well as providing a supportive environment that fosters both academic success and personal development (Sánchez-Elvira Paniagua & Simpson, 2018). These learning centres offer comprehensive academic and administrative support to learners throughout the implementation process. This includes the provision of study materials and guidelines, face-to-face sessions, support services (counselling services), well-equipped study centre infrastructures, online library access, prospectuses, and academic calendars (IAE, 2021). To ensure effective teaching and learning at these centres, it is essential to closely monitor learner engagement and motivation. This continuous monitoring helps improve the quality of education and enhances professional development (Mukama, 2018). Additionally, the use of technology to facilitate communication and provide timely feedback can significantly enhance the learning experience and outcomes for ODL learners.

Despite its advantages in terms of accessibility, flexibility, and affordability, open and distance learning (ODL) encounters numerous challenges during the implementation process in both developing and developed countries. Literature indicates that ODL institutions worldwide encounter a variety of obstacles. Ukpo (2005), Benson et al. (2021), and Oliver (2021) have pointed out that inadequate funding often leads to ineffective implementation of these programs. Additionally, Kintu & Wanami (2019) have highlighted that learners frequently struggle with the methods of content presentation and delivery. Furthermore, Zuhairi et al. (2020) noted that inadequate instructional design and insufficient support systems in both academic and administrative services pose further challenges for learners.

Open and distance learning (ODL) remains a valuable educational model, particularly for working adults who cannot attend full-time classes. Effective implementation processes at all levels play a significant role in shaping the quality of education in ODL programs (Ferri et al., 2020). While numerous studies, such as those written by Buyisani and Duduzile (2022) and Madlela and Ngakane (2024), on ODL have explored its implementation at the institutional level, little is known about its specific implementation process at learning centres, specifically those affiliated with the Institute of Adult Education in the Dar es Salaam, Mbeya, and Ruvuma regions. As Majaule (2023) emphasizes, effective teaching and learning in ODL programs requires institutions to assess both the academic and administrative support services provided to learners at these centres. Since the learning environments at these centres vary, these differences have a significant impact on the implementation of open and distance learning at the learning centres. Therefore, this study aims to investigate the implementation of open and distance learning at these specific centres, focusing on the availability and distribution of teaching and learning materials, the provision of face-to-face sessions, the effectiveness of learner support services, the relevance of the ODL program, and the challenges encountered by both learners and facilitators during its implementation.

1.2. Theoretical Review

This study is guided by Moore's (1997) Transactional Distance Theory (TDT), which posits that in any educational context, particularly in distance education, there is psychological and communication space to be crossed, described as a transactional distance. According to Moore, this distance was influenced by three variables: dialogue, which means the interaction between the teacher and the learner; structure, which is the design of the course, including the flexibility and rigidity; and learners' autonomy, the degree of self-direction and control the learner exercises. Moore's theory of transactional theory is relevant to this study as it guides the effective implementation of open and distance learning at the learning centres. Through the application of the theory based on the variables, distance learning institutions can address the psychological and communication barriers caused by a dialogue by establishing regular communication that allows learners to have frequent interaction with their facilitators or other learners, on structure by allowing learners choices in the assignment, projects or assessment, and on learners autonomy by encouraging learners to take responsibility for their own learning through setting personal learning goals. This ensures that the open and distance learning are implemented effectively at the learning centres.

2. METHODOLOGY

2.1. Study area

The study was carried out at the Institute of Adult Education learning centres in Dar es Salaam, Mbeya, and Ruvuma. The selection of these learning centres found in Dar es Salaam, Mbeya, and Ruvuma was purposeful. Dar es Salaam, serving as the site of the main campus and head office, represents a central educational hub. Mbeya was selected because it is one of the regional centres with a significant learner population, providing a comprehensive understanding of ODL dynamics. Ruvuma, on the other hand, was chosen for its numerous learning centres with relatively fewer learners. These regional variations were carefully considered to identify important aspects regarding the implementation process of open and distance learning at the learning centres.

2.2 Study approach and design

This study aims to investigate the implementation process of ODL, focusing on the availability of teaching and learning materials, the process of receiving these materials, the face-to-face sessions provided to learners, the effectiveness of learner support services, the relevance of the ODL program, and the challenges faced by both learners and facilitators during the program's implementation at the learning centres. To achieve this, a mixed-methods approach with a convergent parallel design was employed, incorporating both quantitative and qualitative data collection methods. The use of a mixed research approach and parallel research design allowed for triangulation, enabling the researcher to address questions that neither a quantitative nor qualitative approach alone could fully answer (Creswell & Plano, 2018). This approach also helped validate the collected data and provided a more comprehensive understanding of the findings (Shorten & Smith, 2017). Therefore, the combination of quantitative and qualitative methods complemented each other, enhancing the depth and completeness of the analysis (Creswell & Creswell, 2018).

2.3 Target population

The study focused on diploma students enrolled in Open and Distance Learning (ODL) programmes at the Institute of Adult Education learning centres in the Dar es Salaam, Mbeya, and Ruvuma regions of Tanzania. The diploma program was deliberately chosen due to its widespread popularity across mainland Tanzania within the Institute of Adult Education's curriculum offerings (IAE, 2021).

2.4 Sampling procedures and sample size

Both random and purposive sampling techniques were employed in this study. To obtain the sample of learners, a multistage sampling approach was utilized. This method allowed the researcher to divide the population into clusters or groups, as suggested by Cohen et al. (2018). The choice of multistage sampling was driven by its ability to gather a large volume of data from a diverse population while ensuring a reasonable level of accuracy. The process of selecting the samples involved several steps. In the first step, samples were selected based on specific criteria related to the learning centres. In the second step, learners within these centres were chosen according to their year of study. In the third step, learners were stratified by gender (male and female) to ensure representation, and finally, learners were randomly selected from each stratum.

A total of 608 respondents were used as a sample. Among them were 03 regional coordinators and 09 centre coordinators, and 20 facilitators who were purposively selected, and 576 continuing and graduated diploma learners who were randomly selected from three regions: Dar es Salaam, Mbeya, and Ruvuma. The regional coordinators and the centre coordinators were purposively sampled because they oversee all program matters in their respective regions and supervise all ODL teaching and learning activities at the learning centres. Therefore, they possess comprehensive information regarding the implementation process of open and distance learning in their regions. In addition, centre coordinators were included in the study because they are responsible for the overall management of the learning centres, facilitating and assisting learners, particularly during face-to-face sessions. Their inclusion was crucial as they provided valuable insights into the implementation of the open and distance learning at the learning centres. Generally, they were considered information-rich due to their experience serving the learners at the learning centres.

Table 1 below summarizes the demographic characteristics of the study sample, which includes learners, facilitators, regional coordinators, and centre coordinators.

Table 1: Demographic characteristics of the study sample

Variable	Learners	Facilitators	Regional coordinators	Centre coordinators	Total	
Gender	f	f	f	F	f	%

Male	216	10	2	6	234	38.4
Female	360	10	1	3	374	61.5
Education						
Degree		15		8	23	71.8
Masters		5	3	1	9	28.1
Age						
Below 35	232				232	38.1
35-44	234	20	2	6	262	43.0
45-54	103		1	3	107	17.5
55-59	7				7	1.1
Marital status						
Single	63			-	63	10.3
Married	513		3	9	525	86.3
Region						
Dar es Salaam	214	2	1		217	35.8
Mbeya	269	8	1	4	282	46.3
Ruvuma	93	10	1	5	109	17.7

Respondents' questionnaire responses 2023. KEY: f = Frequency, % = Percentage

The data show that males were 38.1% and females were 61.1%. Among them, 38.1% were below 35, 43.0% were 35-44, 17.5% were 45-54, and 1.1% were 55-59. In addition, singles were 10.3%, while married were 86.3% married; among them, 35.8% were from Dar es Salaam, 46.3% were from Mbeya, and 17.7% were from Ruvuma. Additionally, among facilitators, regional coordinators and centre coordinators, 71.8% had a degree and 28.1% had a master's.

2.5 Data collection tools

The study employed questionnaires, interviews, and an observational checklist to collect data on the implementation process of ODL at the learning centres. It focused on the availability and distribution of teaching and learning materials, the face-to-face sessions provided to learners, the effectiveness of learner support services, the relevance of the ODL program, and the challenges faced by both learners and facilitators during the program's implementation. The semi-structured interview guide was employed to regional coordinators and centre coordinators. The regional coordinators were coded RC1 to RC3 and CCA to CCI for centre coordinators for ease of reference and to maintain their anonymity while the closed-ended questionnaires were employed for learners. The closed questionnaire was found proper in this study because it helped the researcher gather specific, quantifiable data for a large group of people.

2.6 Data processing and analysis

In analysing and interpreting the data, both quantitative and qualitative approaches were employed. The combination of quantitative and qualitative approaches complemented each other and allowed for complete analysis. The quantitative data that were collected were coded and entered into the Statistical Package for Social Sciences (SPSS version 23), whereby descriptive statistics were analysed to include frequencies and percentages. Pearson Chi-Square tests using a significance level of $P < 0.05$ were also used in the quantitative data analysis. The Chi-square test was found valuable in analysing the categorical data and determining whether there were significant associations between variables. The qualitative data that were collected through semi-structured interviews were analysed thematically. Thematic analysis was found valuable for the study because the tool helped researcher to uncover patterns, trends, and insights that inform the understanding of the data and support research objectives (Corbin & Strauss, 2008). Then the results were merged to compare if the information conforms or disconfirms.

3. RESULTS

The results of the study centred on the implementation process of ODL, examining the availability of teaching and learning materials, the process of receiving these materials, the face-to-face sessions provided to learners, the effectiveness of learner support services, the relevance of the ODL program, and the challenges encountered by both learners and facilitators during the program's implementation at the learning centres.

3.1 Availability of ODL teaching and learning materials

In the study area, the kind of teaching and learning materials available and used by learners during their teaching and learning process at the learning centres were examined. Results are indicated in Table 2 below.

Table 2: Learners view on ODL teaching and learning materials available (Learners)

Resource	Region	A		N		NA		P-Value
		f	%	f	%	f	%	
i. Printed hard copy module	Dar	139	64.9	31	14.4	44	20.5	.000
	Mbeya	135	50.1	26	9.6	108	40.1	
	Ruvuma	53	56.9	17	18.2	23	24.7	
ii. Soft copy module and materials sent through social media networks such as what's up	Dar	137	64.0	40	18.6	37	17.2	.000
	Mbeya	137	50.9	38	14.1	94	34.9	
	Ruvuma	78	83.8	11	11.8	4	4.3	
iii. Materials uploaded on the institutional web link	Dar	111	51.8	43	20.9	60	28.0	.000
	Mbeya	86	31.9	67	24.9	116	43.1	
	Ruvuma	47	50.5	25	26.8	31	33.3	
iv. CD-ROM and DVD loaded with learning materials	Dar	72	33.6	56	26.1	86	40.1	.000
	Mbeya	81	30.1	52	19.3	136	50.5	
	Ruvuma	38	40.8	9	9.6	46	49.4	
v. Reference books	Dar	98	45.9	55	25.7	61	28.5	.000
	Mbeya	86	31.9	55	20.4	128	47.5	
	Ruvuma	60	64.5	14	15.0	19	20.4	
vi. Equipped library resource centres	Dar	109	50.9	61	28.5	44	20.5	.000
	Mbeya	105	39.0	41	15.2	123	45.7	
	Ruvuma	62	66.6	21	22.5	10	19.7	
vii. Face to face lecture notes	Dar	146	68.2	32	14.9	36	16.8	.000
	Mbeya	128	47.5	40	14.8	101	37.5	
	Ruvuma	83	89.2	6	6.4	4	4.3	

Learners' questionnaire responses, 2023. Keys: 3=Available (A); 2=Neutral (N); 1=Not Available (NA), F=Frequency, % = Percentage.

The data show that, printed hard copy modules and soft copy modules (sent through social media) are highly preferred in all regions, especially in Dar es Salaam (64.9% & 64.0%) and Ruvuma (56.9% & 83.8%). Additionally, materials uploaded on institutional web links and face-to-face lecture notes received mixed responses, with both significant agreement and notable disagreement. CD-ROMs, DVDs, and reference books showed a higher level of disagreement, indicating a lower preference in some regions, particularly in Mbeya (50.5% & 47.8%). Equipped library resource centres are well-regarded, especially in Ruvuma (66.6%), and face-to-face lecture notes are extremely popular in Ruvuma (89.2%) compared to other regions ($P < 0.05$).

These findings align with an interview with the regional coordinator 2 on September 4th, 2023, who stated, "Modules in hard copy are mostly used as teaching and learning materials by our learners, but face-to-face lecture notes and reference books are also helpful in providing additional materials for those who can access them" (Regional Coordinator from Region 2). Additionally, during a site visit to learning centres for face-to-face sessions, researchers observed that learners and facilitators used hard copy modules and lecture notes during teaching and learning activities.

In conclusion, while there are common trends in the use of teaching and learning materials like hard copy modules, reference books, and face-to-face notes among learners, regional preferences and perceptions vary significantly.

3.2 The actual process of receiving teaching and learning materials

The study gauged the learners’ views on the actual process of receiving the teaching and the learning materials. Results are in Table 3 below.

Table 3: Learners view on actual process of receiving of teaching and learning materials

Statement	Region	A		N		DA		p-value
		f	%	f	%	f	%	
i. All the modules for the new semester were received before the tutorial sessions	DAR	136	63.5	37	17.2	41	19.1	.003
	MBEYA	130	48.3	40	14.8	99	36.8	
	RUVUMA	18	19.3	17	18.2	58	62.3	
ii. All modules for the semester were prepared and received on time	DAR	139	64.9	51	23.8	24	11.2	.000
	MBEYA	127	47.2	40	14.8	102	37.9	
	RUVUMA	65	69.8	15	16.1	13	13.9	
iii. Some learners were forced to share modules with fellow learners	DAR	55	25.7	42	19.6	117	54.6	.000
	MBEYA	79	29.3	54	20.0	136	50.5	
	RUVUMA	31	33.3	14	15.0	48	51.6	
iv. Learners did not receive some of the modules for the courses they were enrolled in before the actual session.	DAR	78	36.4	42	19.6	94	43.9	.005
	MBEYA	101	37.5	54	20.0	114	42.3	
	RUVUMA	31	33.3	9	9.6	53	56.9	
v. Both learners and facilitators receive the modules well in advance of the actual tutorial session.	DAR	120	56.0	43	20.0	51	23.8	.001
	MBEYA	128	47.5	53	19.7	88	32.7	
	RUVUMA	64	68.8	10	10.7	13	13.9	

Learners’ questionnaire responses, 2023. KEY: 3= Agree(A), 2= Neutral (N), 1= Disagree (DA), F=Frequency, %=Percentage]

The study reveals significant disparities among regions regarding the timely receipt of modules for the new semester, the on-time delivery of all prepared modules, the necessity for some learners to share modules, delays in tutors receiving certain modules, and the early receipt of modules before tutorial sessions ($P < 0.05$).

Moreover, the data show that while there are consistent trends, among learners on the actual process of receiving the teaching and learning materials, regional differences in preferences and perceptions are evident. Dar es Salaam generally shows more positive responses in receiving modules on time and before sessions compared to Mbeya, while Ruvuma disagreed. Issues such as forced sharing of modules and delayed receipt before sessions are more prominent in Dar es salaam and followed by Ruvuma and Mbeya. This indicates that while Dar es Salaam and Ruvuma have relatively better processes in receiving the teaching and learning materials, there are considerable areas for improvement in Mbeya, especially concerning the timely and complete receipt of materials.

These results align with comments from a centre coordinator from Learning centre B during an interview on April, 12, 2023. The coordinator noted,

"The modules for the new semester were received on time by our facilitators and learners, though there were times, especially when the curriculum changed, that we did not receive them on time. In those cases, we were asked to use course outlines during the sessions" (Centre Coordinator from Centre B).

In summary, while there are common trends in the process of receiving teaching and learning materials, there are significant regional variations in experiences and perceptions.

3.3 Face to face sessions

The respondents’ views on face-to-face sessions provided at the learning centres were gauged and their responses are presented in Table 4 below.

Table 4: Learners’ view on face-to-face sessions at the learning centre

Statement	Region	A		N		DA		P-value
		f	%	f	%	f	%	
i. Face to face is helpful because tutors are reliable for consultation	Dar	164	76.6	19	8.8	31	14.4	.001
	Mbeya	213	79.1	9	3.3	47	17.4	
	Ruvuma	77	82.7	8	8.6	8	8.6	
ii. Tutor help in understanding	Dar	158	73.8	30	14.0	26	12.1	.000

instructional material/ modules	Mbeya	234	86.9	9	3.3	26	9.6	
	Ruvuma	78	83.8	5	5.3	10	11.8	
iii. Tutor clarify difficult areas from the instructional materials.	Dar	162	75.7	28	13.0	24	11.2	.009
	Mbeya	232	86.2	25	9.2	12	4.4	
	Ruvuma	11	11.8	5	5.3	77	82.7	
iv. Tutor use participatory teaching methods	Dar	150	70.0	33	15.4	31	14.4	.001
	Mbeya	229	85.1	15	5.5	25	9.2	
	Ruvuma	76	81.7	9	9.6	8	8.6	
v. Tutor discuss with the learners about ODL study skills	Dar	161	75.2	33	15.4	20	9.3	.003
	Mbeya	236	87.7	16	5.9	27	10.0	
	Ruvuma	79	84.9	7	7.5	7	7.5	
vi. Respective tutors teach ICT skills in practical	Dar	98	45.7	49	22.8	61	28.5	.000
	Mbeya	159	59.1	32	11.8	91	33.8	
	Ruvuma	58	62.3	22	23.6	13	13.9	
vii. Tutor module contents during face-to-face sessions	Dar	122	57.0	31	14.4	39	18.2	.000
	Mbeya	158	58.7	20	7.4	39	14.4	
	Ruvuma	73	78.4	11	11.8	9	9.6	
viii. Face to face sessions motivates ODL learning	Dar	150	70.0	25	11.6	39	18.2	.184
	Mbeya	193	71.7	37	13.7	39	14.4	
	Ruvuma	76	81.7	8	8.6	9	9.6	
ix. Face to face sessions improves academic achievement	Dar	157	73.3	32	14.9	25	11.6	.102
	Mbeya	215	79.9	28	10.4	26	9.6	
	Ruvuma	76	81.7	5	5.3	12	12.9	
x. Face to face sessions provides conducive learning environment	Dar	147	68.9	37	17.2	30	14.0	.261
	Mbeya	205	76.2	28	10.4	36	13.3	
	Ruvuma	70	75.2	10	10.7	13	13.9	
xi. Face to face sessions offer pedagogical supports	Dar	155	72.4	36	16.8	23	10.7	.005
	Mbeya	214	79.5	20	7.4	35	13.0	
	Ruvuma	72	77.4	10	10.7	11	11.8	
xii. Face to face sessions offer administrative supports	Dar	157	73.3	28	13.0	29	13.5	.038
	Mbeya	204	75.8	25	9.2	38	14.1	
	Ruvuma	77	82.7	7	7.5	9	9.6	

Learners' questionnaire responses, 2023. KEY: 3= Agree (A), 2= Neutral (N), 1= Disagree (DA), F=Frequency, %=Percentage

The data reveals that generally, respondents had the highest agreement on face-to-face sessions, particularly in regions where tutors are available for consultation, help with understanding instructional modules, and use participatory methods. There are significant regional disparities, in the effectiveness of tutors in clarifying difficult areas (Dar es Salaam 75.7%, Mbeya 86.6%, and Ruvuma 11.8%) and providing ICT skills (Dar es Salaam 45.7%, Mbeya 59.1%, and Ruvuma 62.3%). Learners in Dar es Salaam (72.4%) ($P < 0.05$). However, responses on face to face motivate learners and provides conducive learning environment do not show significant differences across the regions ($P > 0.05$).

These findings are consistent with comments from regional coordinators. A regional coordinator from region 1 stated, "Face-to-face sessions are very helpful for our learners, particularly in their performance. Those who attend these sessions perform much better than those who do not" (Regional Coordinator 1, April 11th, 2023). A centre coordinator from Centre G added, "Face-to-face sessions are good; we spend time with our learners on difficult areas. However, the duration of these sessions is very short. As our learners are employed and lack time for self-study, we should extend face-to-face time to provide more support" (Centre Coordinator from Centre G, September 6th, 2023).

Furthermore, during a site visit to face-to-face sessions, researchers observed learners discussing in groups, guided by their facilitators.

Moreover, facilitators were asked the same questions, with the researcher's focus on determining whether these sessions effectively provided opportunities for them to assist ODL learners. The findings revealed that facilitators did not perceive face-to-face sessions as particularly significant ($P > 0.05$). A higher p-value indicates that there are no significant regional differences in the facilitators' views on the effectiveness of the face-to-face sessions.

In conclusion, the findings reveal that while learners and centre coordinators generally perceive face-to-face sessions positively, there are significant regional differences in preferences and perceptions.

3.4 Support services at the learning centre.

The data in Table 5 below presents information about learners' views on the effectiveness of the support services provided at the learning centres.

Table 5: Learners' view on effectiveness of support services given at the learning centre

Statement	Status	L		N		U		P-Value
		F	%	F	%	f	%	
i. The academic support given to learners is appropriate	Dar	143	66.8	30	14.0	41	19.1	.000
	Mbeya	193	71.7	28	10.4	48	17.8	
	Ruvuma	83	89.2	5	5.3	5	5.3	
ii. Assignments are submitted on time by learners	Dar	153	71.4	28	13.0	33	15.4	.347
	Mbeya	191	71.0	37	13.7	41	15.2	
	Ruvuma	72	77.4	12	12.9	9	9.6	
iii. Program run on a regular schedule	Dar	144	67.2	40	18.6	29	13.5	.000
	Mbeya	189	70.2	44	16.3	36	13.3	
	Ruvuma	80	86.0	9	9.6	4	4.3	
iv. Feedback for assignments is on time	Dar	154	71.9	31	14.4	31	14.4	.001
	Mbeya	173	64.3	47	17.4	49	18.2	
	Ruvuma	59	63.4	28	30.1	6	6.4	
v. Individual academic support is adequate	Dar	140	65.4	35	16.3	39	18.2	.001
	Mbeya	200	74.3	39	14.4	30	11.1	
	Ruvuma	83	89.2	7	7.5	3	3.2	
vi. Study materials are received on time by learners	Dar	145	67.7	36	16.8	33	15.4	.006
	Mbeya	192	71.3	37	13.7	40	14.8	
	Ruvuma	80	86.0	8	8.6	5	5.3	
vii. Assignments are assessed and evaluated in time	Dar	150	70.0	41	19.1	23	10.7	.001
	Mbeya	185	68.7	35	13.0	49	18.2	
	Ruvuma	78	83.8	8	8.6	7	7.5	
viii. Academic guidance is provided in a timely manner	Dar	149	69.6	32	14.9	33	15.4	.000
	Mbeya	208	77.3	26	9.6	35	13.0	
	Ruvuma	83	89.2	7	7.5	3	3.2	

Learners' questionnaire responses, 2023. KEY: 3= Agree(A), 2= Neutral (N), 1= Disagree (DA), F=Frequency, %=Percentage

The data show that, learners from the Ruvuma region had the highest agreement on the appropriateness of academic support (89.2%), regular program schedules (86.0%), timely receipt of study materials (86.0%), assessment (83.8%), and academic guidance (89.2%). In contrast, learners in Dar es Salaam and Mbeya showed less consistency in these areas ($p < 0.05$). However, response on assignments is submitted on time by learners do not show significant differences across the regions ($p > 0.05$).

These findings align with the statements made during an interview with one of the centre coordinators, who confirmed, "Learners are supported by our facilitators in different ways. Although we do not have a dedicated counselling unit, we assist our learners whenever they face challenges" (Centre Coordinator from Centre 4, September 5th, 2023).

Moreover, facilitators were asked the same questions to determine their views on the support services provided to ODL learners. The findings revealed that facilitators did not perceive the support services as particularly significant ($p > 0.05$). A higher p-value indicates that there are no significant regional differences in the facilitators' views on the effectiveness of the learner support services.

In conclusion, while learners appreciate the support services provided to them, regional preferences and perceptions vary significantly. Learners from Dar es Salaam and Mbeya show less consistency in their perceptions compared to those from Ruvuma.

3.5 Relevance of the ODL

The data in Table 6 below presents information about learners' views on the relevance of the ODL at the learning centres.

Table 6: Learners’ views on the relevance of ODL

Statement	Region	R		N		FR		p-value
		f	%	f	%	f	%	
i. The plans for distance learning are relevant to the program	DAR	136	63.5	38	17.7	40	18.6	.000
	MBEYA	185	68.7	50	18.5	34	12.6	
	RUVUMA	83	89.2	5	5.3	5	5.3	
ii. The plans set for distance learning is relevant to the need and interest of learners	DAR	145	67.7	46	21.4	23	10.7	.000
	MBEYA	190	70.6	35	13.0	44	16.3	
	RUVUMA	83	89.2	6	6.4	4	4.3	
iii. The goals and objectives for distance learning are relevant to the context of the programme	DAR	139	64.9	35	16.3	40	18.6	.000
	MBEYA	204	75.8	40	14.8	25	9.29	
	RUVUMA	83	89.2	6	6.4	4	4.3	
iv. The strategies set for distance learning are relevant to the program plan	DAR	143	66.8	40	18.6	31	14.4	.013
	MBEYA	186	69.1	50	18.5	33	12.2	
	RUVUMA	82	88.1	8	8.6	3	3.2	
v. The implementation process of the programme considers the critical issues arising from distance learning practices	DAR	132	61.6	50	23.3	32	14.9	.008
	MBEYA	190	70.6	58	21.5	21	7.8	
	RUVUMA	78	83.8	11	11.8	4	4.3	

Learners’ questionnaire responses, 2023. KEY: 3=Relevant (R), 2= neutral (N), 1= Fairly relevant (FR), F=Frequency, %=Percentage.

The data show that, learners from the Ruvuma region expressed the highest agreement on the appropriateness of academic support (89.2%), regular program schedules (86.0%), timely receipt of study materials (86.0%), assessment (83.8%), and academic guidance (89.2%). In contrast, learners in Dar es Salaam and Mbeya showed less consistency in these areas (p<0.05).

These findings are consistent with statements made during an interview with one of the centre coordinators, C, who affirmed, "This program is beneficial for teachers because it allows them to acquire skills they did not have before" (Centre Coordinator from Centre C, April 13th, 2023).

In conclusion, while learners and the centre coordinators have a generally positive perception of the ODL program's implementation at their respective centres, regional preferences and perceptions vary significantly.

Furthermore, the researcher was interested in identifying any challenges learners and facilitators encounter during the implementation of the ODL at the learning centres.

3.6 Challenges in the Implementation of the ODL

The study examined information from learners and facilitators about the challenges they encounter during the implementation of the ODL program at the learning centres. Both groups were asked to respond to statements that outlined various challenges, as presented in Table 7 and 8 below.

Table 7: Facilitators challenges on the implementation of the ODL

Statement	Region	A		N		DA		p-value
		f	%	f	%	f	%	
I. Shortage of funds at the learning centres	DAR	2	100					.003
	MBEYA	8	100					
	RUVUMA	1	10.0			9	90.0	
ii. Shortage of the teaching and learning materials at the learning centres	DAR	2	100					.011
	MBEYA	7	87.5			1	12.5	
	RUVUMA	1	10.0			9	90.0	
iii. Shortage of time in coverage of the course contents	DAR	2	100					.267
	MBEYA	7	87.5			1	12.5	
	RUVUMA	10	100					
iv. Some learners lack of permissions and support to attend face to face sessions	DAR	1	50.0			1	50.0	.167
	MBEYA	4	50.0	1	12.5	3	37.5	
	RUVUMA	10	100					
v. Changes of learners’ school timetables	DAR	1	50.0	1	50.0			.128
	MBEYA	8	100					

	RUVUMA	8	80.0			2	20.0	
vi. Inadequate Interaction with learners.	DAR	1	50.0			1	50.0	.042
	MBEYA	5	62.5	1	12.5	2	25.0	
	RUVUMA	8	80.0	2	20.0			
vii. Distance from learning centres.	DAR	1	50.0	1	50.0			.039
	MBEYA	7	87.5			1	12.5	
	RUVUMA	10	100					
viii. Learners' lack distance learning skills	DAR	2	100					.391
	MBEYA	7	87.5	1	12.5			
	RUVUMA	9	90.0	1	10.0			
ix. Learners' face challenges in accessing examination result	DAR	2	100					.089
	MBEYA	7	87.5			1	12.5	
	RUVUMA	2	20.0			8	80.0	
x. Delayed examination result	DAR	1	50.0	1	50.0			.044
	MBEYA	6	75.0			2	25.0	
	RUVUMA	10	100					

Facilitator's questionnaire responses, 2023. KEY: 3= Agree(A), 2= Neutral (N), 1= Disagree (DA), F=Frequency, %=Percentage.

The data show that, facilitators in Mbeya, Ruvuma, and Dar es Salaam encounter significant challenges in implementing the ODL at the learning centre, including shortages of funds, shortages of teaching and learning materials at the centres, difficulties in learners' interactions with each other, distance to the learning centres, and delayed examination results ($p < 0.05$). The nature and severity of these challenges vary across regions. However, responses on shortage of time in coverage of the course contents, lack of permissions and support from employers, changes of learners' school timetables, learners' lack distance learning skills and learners face some difficulties in accessing examination result do not show significant differences across the regions ($P > 0.05$).

Additionally, learners were asked similar questions about their experiences with the implementation of the ODL at their respective learning centres, as detailed in Table 8 below.

Table 8: Learners challenges with the implementation of the ODL

Statement	Region	A		N		DA		p-value
		f	%	f	%	f	%	
I. Shortage of funds to attend face to face	DAR	100	46.7	40	18.6	74	34.5	.000
	MBEYA	167	62.0	43	15.9	51	18.9	
	RUVUMA	41	44.0	10	10.7	40	43.0	
ii. Shortage of time in coverage of the course contents	DAR	112	52.3	45	21.0	57	26.6	.000
	MBEYA	182	67.6	46	17.1	41	15.2	
	RUVUMA	40	43.0	13	13.9	40	43.0	
iii. Lack of employer permissions and support	DAR	104	48.5	46	21.4	64	29.9	.118
	MBEYA	162	60.2	49	18.2	58	21.5	
	RUVUMA	48	51.6	21	22.5	24	25.8	
iv. Changes of learners' school timetables and face to face timetables	DAR	98	45.7	43	20.0	73	34.1	.000
	MBEYA	170	63.1	50	18.5	49	18.2	
	RUVUMA	47	50.5	16	17.2	30	32.2	
v. Inadequate interactions with facilitators	DAR	102	47.6	41	19.1	71	33.1	.000
	MBEYA	158	58.7	56	20.8	55	20.4	
	RUVUMA	43	46.2	9	9.6	41	44.0	
vi. Lack of access to computer and network coverage.	DAR	102	47.6	40	18.6	72	33.6	.000
	MBEYA	189	70.2	39	14.4	41	15.2	
	RUVUMA	54	58.0	15	16.1	24	25.8	
vii. Lack distance learning skills	DAR	106	49.5	40	18.6	65	30.3	.000
	MBEYA	187	69.5	39	14.4	43	15.9	
	RUVUMA	63	67.7	12	12.9	18	19.3	
viii. Difficulties in accessing examination result	DAR	72	33.6	39	18.2	103	4.6	.000
	MBEYA	174	64.6	45	16.7	50	18.5	
	RUVUMA	84	90.3	3	3.2	6	6.4	

ix. Lack of information from learning centre	DAR	86	40.1	52	24.2	76	35.5	.004
	MBEYA	156	57.9	50	18.5	63	23.4	
	RUVUMA	50	53.7	17	18.2	26	27.9	
x. Delayed examination result	DAR	104	48.5	32	14.9	78	36.4	.000
	MBEYA	164	60.9	43	15.9	62	23.0	
	RUVUMA	87	93.5	4	4.3	2	2.1	

Learners' questionnaire responses, 2023. KEY: 3= Agree(A), 2= Neutral (N), 1= Disagree (DA), F=Frequency, %=Percentage.

The data show that, Shortage of funds to attend face to face, shortage of time in coverage of the course contents, changes of learners' school timetables and face to face timetables, inadequate interactions with learners, poor access to computer and network coverage, learners' lack distance learning skills, learners face some difficulties in accessing examination result, lack of information from learning centre and delayed examination result ($P < 0.05$). Furthermore, the highest percentage of learners reporting delayed examination results was in Ruvuma (93.5%), while this issue was less prevalent in Dar es Salaam (48.5%) and Mbeya (60.9%). However, responses on lack of permissions and support from employers do not show significant differences across the regions ($P > 0.05$).

Moreover, the data in Tables 7 and 8 reveal that both learners and facilitators identified several significant challenges in the implementation of the ODL program at their learning centres. Key challenges for both include the shortage of funds and delayed examination results. On shortage of funds, learners and facilitators from Dar es Salaam and Mbeya show higher percent in agreement compared to Ruvuma while on delayed examination results, Ruvuma and Mbeya show higher percent of agreement compared to those from Dar es Salaam.

These findings are consistent with remarks from a centre coordinator who stated, "The major challenge here is with learners' results, which is a key reason for some learners dropping out of the program" (Centre Coordinator from Centre H, September 7th, 2023). Additionally, a regional coordinator noted, "We face financial challenges at our learning centres. The funds provided are insufficient for all activities. Learners also experience financial difficulties with tuition fees and accommodation during face-to-face sessions and examinations" (Regional Coordinator from Region 1, April 11th, 2023).

In conclusion, findings from learners, facilitators, centre coordinators, and regional coordinators indicate that significant challenges, such as a shortage of funds and delayed examination results, affect the implementation process of the ODL. These challenges vary notably across different regions.

4. DISCUSSION

The results show that the types of the teaching and learning material used, the actual process of receiving the teaching and the learning materials, the effectiveness of learners' support services, face-to-face session, relevance of the ODL program and challenges in the implementation of ODL program seems to differ across the regions. This implies that regional differences significantly impact the acceptance and perceived usefulness of these mode of learning. By modifying resource distribution and teaching methods to better align with regional centres, learner satisfaction and engagement could be improved. Additionally, providing a diverse range of teaching materials would enable learners to select those that best suit their specific environments.

The study revealed that learners in professional development programs at learning centres prefer printed hard copy modules, reference books, and face-to-face lecture notes as their primary teaching and learning materials. In addition to these, they also utilize institutional websites, libraries, and digital materials as supplementary resources. This preference aligns with findings by Muchanji (2017), who noted that printed materials are often the primary delivery method for ODL learners in developing countries, such as Kenya. The reliance on printed materials is largely due to the shortage of computers, limited internet access, and low levels of computer literacy among ODL learners, particularly in many African institutions (Reju, 2016). The study also highlighted that learners' choices of teaching and learning materials are influenced by their accessibility, both within their environments and at the learning centre.

Addition, learners receive their modules well before the actual tutorial sessions, a finding that contrasts with Lumadi (2021), who identified slow and difficult physical distribution of study materials as a significant challenge for ODL learners. This result also differs from Nyakuleha & Simengwa (2023), who reported that learners often received study materials late or not at all, and struggled with the inflexibility of materials on institutional websites. Timely receipt of materials at the learning centre is crucial for ODL learners, many of whom are working adults with multiple responsibilities. Delays in receiving materials can lead to demotivation, while prompt receipt can enhance motivation. Therefore, maintaining an efficient distribution of materials across all learning centres is essential.

Also, learners generally had a positive opinion of face-to-face sessions, valuing them as opportunities to interact with facilitators and peers, and to discuss learning challenges. This aligns with Moges (2017), where 56% of respondents found tutorial sessions valuable, and Tamrat (2022), who noted that learners preferred face-to-face sessions for enhancing their knowledge and skills. However, other learners at certain centres expressed dissatisfaction with how facilitators utilized these sessions, particularly when they were not effectively used to clarify difficult areas. This concern is consistent with Dhar et al. (2023), who found that some learners were unhappy with face-to-face sessions because their tutors did not make them engaging, clear, or productive. Despite this, there were

instances where tutors made the classes interesting and engaging. Face-to-face sessions are particularly beneficial for ODL learners, helping to improve academic performance and reduce the psychological challenges of distance learning. To enhance academic achievement, strategies should be made to improve face-to-face sessions at learning centres, ensure all learners attend, and addressing specific areas where perceptions are less positive.

In addition, learners expressed appreciation for the social, academic, psychological, and pedagogical support provided at the learning centres. This is consistent with Lekhetho's (2022) study, where the majority of learners were satisfied with the support services offered at regional centres. However, this contrasts with Achemfour's (2017) findings, which highlighted gaps in learner support services in ODL, particularly for those in rural areas who struggled to access these services, negatively impacting their studies. Jena (2020) further noted that most adult learners in ODL lacked adequate academic and psychological support. This study emphasizes the importance of learner support services at learning centres in helping learners succeed. Improving these services, especially for adult learners, can motivate more students to pursue ODL and reduce dropout rates.

Additionally, the implementation process of the ODL received positive feedback from learners, particularly regarding the plans, goals, objectives, strategies, and critical issues addressed at the learning centres. This aligns with the findings of Lekhetho and Shikulo (2020), where 80% of respondents positively evaluated the support services offered at these centres. Similarly, Umar et al. (2023) highlighted that many female learners were drawn to the ODL program due to socio-economic and personal factors that were thoughtfully considered during the program's planning. The program's implementation and the establishment of learning centres within the learners' communities were especially beneficial for adult learners who utilized this mode of learning to advance their careers. To further motivate adult learners, particularly those in the workforce, efforts should be made to ensure that ODL plans, goals, and objectives are aligned with learners' needs and demands across different regions, keeping the program current and relevant.

Moreover, learners and facilitators identified several challenges faced during their ODL experience, including financial constraints and delayed examination results. These issues echo the findings of Oyemike et al. (2021), who highlighted financial difficulties at learning centres as a major setback for ODL programs. Similarly, Adam et al. (2021) noted that many distance learners struggled to complete their studies on time due to financial challenges, such as tuition fees and other expenses. Sarkar et al. (2024) also found that delayed publication of examination results was a common issue among distance learners. Additional challenges included limited access to computers and poor network coverage, which both learners and facilitators found problematic. This aligns with Clarin & Baluyos (2022), who found that a lack of computers and poor internet connectivity were significant barriers in open and distance learning. Furthermore, many learners lacked essential distance learning skills, such as self-study and time management, as revealed by Fojtik (2018), which negatively impacted their academic performance. Addressing these challenges uniformly can help improve the overall effectiveness of distance learning programs across different regions.

5. CONCLUSION AND RECOMMENDATIONS

This study aims to investigate the implementation process of ODL regarding the availability of teaching and learning materials, the actual process of receiving the teaching and learning materials, face to face sessions provided to learners, the effectiveness of learner support services, the relevant of the ODL program and the challenges that learners and facilitators encountered during the implementation process of the ODL program at specific centres, where teachers often pursue further professional development through this mode of learning. Additionally, it seeks to propose strategies to strengthen the implementation process of these programs at the learning centres. The study identified several challenges that ODL learners face during their professional development, which require improvement. These challenges include a shortage of funds, limited time for covering course content, changes in school timetables and face-to-face session schedules, inadequate interaction with other learners, poor access to computers and network coverage, lack of distance learning skills, difficulties in accessing examination results, lack of information from the learning centre, and delayed examination results. Consistently addressing these challenges can significantly enhance the effectiveness of open and distance learning programs across various centres in the region.

Based on the findings, the study recommends that the government should increase funding for open and distance learning (ODL) programs. ODL institutions should maintain and improve the distribution of learning materials where necessary, enhance the examination process, and increase support for face-to-face sessions. Furthermore, ODL institutions should expand the learner support services at the learning centres to assist learners. Continuous monitoring and evaluation should also be conducted by the ODL institution to assess the implementation process of the ODL programs and to identify and address emerging challenges.

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