Original Paper

Predictors of Support Needs of Distance Education Students in the Institute of Distance Education and e-Learning (IDeL), University of Education, Winneba, Ghana

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Abstract

The study sought to establish the predictors of support systems for students in distance learning. Using the pragmatist paradigm, the study employed the concurrent triangulation design *where 623 distance education students were randomly sampled from 41 study centers in Ghana for the quantitative phase of the study. Concurrently, 18 participated in 3 separate focus group discussions made up of 6 students each whilst the Registrar was also interviewed. Questionnaire adapted from Ozoglu (2009) was used to collect quantitative data whilst self-constructed semi-structured interview guides were used to collect qualitative data from the respondents. Means and Standard Deviations as well as Multiple Regression were used to analyse the quantitative data. The qualitative data were analysed using content analysis for respondents' interview data. The study found that the most critical learner support needs were assistance in overcoming technical problems, orientation to the course media/delivery format of IDeL, help with the admission/registration process, counseling services to overcome students' concerns about their education and textbooks provided by IDeL. The Regression Analysis showed that the learner support needs of the distance education students were predicted by sex, age and certificates students' have enrolled for. It was recommended, therefore, that IDeL should consider the sex, age and certificates students' have enrolled for in the provision of support systems for their students as they predict the support needs of the students.*

Keywords

distance education, learner support, demographic characteristics

1. Introduction

Distance education continues to gain attention globally. The advancement of technology coupled with the upsurge in the number of individuals seeking knowledge and credentials has increased the demand for distance education. Distance education is now available in various parts of the world for people who find it difficult to access traditional education as a result of their work schedules, family demands or financial circumstances. In essence, distance education is aimed at expanding participation and overcoming geographical, social and economic barriers (Kelly & Mills, 2007) with the objective of promoting lifelong learning, improving the country's skills base and resolving historical gaps in education delivery (Baloyi, 2012). Holmberg (1977) describes distance education to include different forms of study at all levels which are not subject to continuous, immediate supervision of tutors present with their students in lecture rooms or on the same premises, but nevertheless, benefit from the planning, guidance and teaching of a tutorial organization (p. 9). Therefore, distance education approaches concentrate on expanding access to education and training provision, freeing learners from constraints of time and place, and providing flexible learning opportunities for individuals and groups of learners (UNESCO, 2002). Badat (2004) adds that, through distance learning, access is provided to people who would not have the opportunity to study full-time due to work obligations, personal and social circumstances, geographical distance or poor quality or lack of prior learning experience.

In the case of Ghana and for that matter the Institute for Education and e-Learning (IDeL), University of Education, Winneba (UEW) different groups of people such as working adults, unemployed persons and school leavers who need tertiary education remain the target (Nsamba, 2016). Distance education learners in Ghana are often isolated from their student mates, lecturers as well as their institutions. Though face-to-face interactions with students and lecturers are organised, it only happens on two days after every two weeks. Therefore, most of these distance education students often feel isolated with little sense of connection and belonging and lack of motivation for studies (Boyle, Kwon, & Simpson, 2010). Consequently, the institutions that run distance education programmes are required to provide appropriate and adequate learner support schemes for their students. In fact, Lee (2003) mentions that one criterion that is often considered before distance education programmes are accredited is learner support scheme for students.

Learner support is an institution-wide programme aimed at reducing the distance between teaching and learning by which distance learners receive information and respond through periodic face-to-face dialogical intervention (Mckay & Makhanya, 2008). Through the provision of quality support services students have the confidence that they are not being left on their own in the academic pursuits, but that the institution is interested in their academic progress (Ngaaso & Abbam, 2016). Research (LaPadula, 2003) has shown that learner support services contribute to the educational, personal and career growth of students and help them overcome the inherent challenges of distance learning. In fact, Mills (2003) posits that to a high extent, the quality of distance education depends on the quality of learner support services provided by the mother institution. Though, Rumble (2000) had earlier suggested that despite

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the criticality of learner support in distance education, it remains the most overlooked component of quality assurance efforts in distance learning. However, Scheer and Lockee (2003) have established that distance educators have realized the need to provide appropriate learner support systems in order to improve the quality of education received by students through the distance mode

Distance education has rightly been recognized and acknowledged for its ability to "open doors" to a large number of people who have no other access to further education and training (Mowes, 2005). In fact, data from the Institute of Distance Education and e-Learning (IDeL), University of Education, Winneba reveal that currently the institute has student population of over 32,500 spread across 41 centers in Ghana. Majority of these students remain working adults, and other people who desire to have adequate training but cannot enroll in the traditional system of tertiary education. Invariably, these distance education learners need support services from the institution if they are to finish their programmes of study successfully. It, however, appears that few methodological, empirical and contextual studies have been conducted to ascertain the support needs of the students in distance learning.

Studies in learner support systems need attention by researchers for a number of reasons. First, studies (Latchem, Özkul, Aydin, & Mutlu, 2006; Perraton, 2012) reveal that graduation rates in distance education are usually between 25.4% and 49.5%. In order to boost graduation rates, studies need to be conducted to establish the support needs of the distance learners. As suggested by Gregori, Zhang, Galvan-Fernandez, Fernandez-Navarro (2018), strong learner support is assumed to be positively correlated with the successful completion of a distance education programme. Second, most students see the methods and procedures in distance education – from registration through to course selection to graduation – difficult, unusual and confusing (Ozoglu, 2009). In fact, Gursoy (2005) most students in distance education seem unprepared for independent and self-directed learning. For the students to navigate their way through the hurdles of distance learning, effective learner support systems are required. Effective learner support systems can only be provided if empirical studies point to the kind of support systems the students' rate higher.

Distance education leaners have unique needs as compared to their colleagues in traditional classroom (Lee, 2003). Koul (2006), therefore, asserts that learner support services should be provided on the basis of a thorough understanding of learner's circumstance, their abilities and requirements. Since students' personal characteristics, circumstances and true needs vary, proper consideration beforehand of all these factors is necessary if institutions want to design an effective and efficient learner support system. Axelson (2007) maintains that the most effective support services are those that have been redesigned from the learners' perspective. Ozoglu (2009), however, indicates that most learner support systems are designed based on studies conducted in Europe and other advanced countries. Meanwhile, distance education learners in the advanced countries differ from those in Africa in different ways including school leadership, geographical context, technological infrastructure and student characteristics. As indicated by Lee (2003), learner support should be heavily contingent on local

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circumstances.

Whilst various empirical studies (Sekyi, 2013; Shehu, 2014; Ngaaso & Abbam, 2016) have been conducted in Ghana to unearth the learner support needs of students in general, it appears none of these studies assessed the extent to which the demographic characteristics of the students could predict their support needs. The current study, therefore, sought to identify the learner support needs of distance education students in the Institute of Distance Education and e-Learning (IDeL), University of Education, Winneba in order to fill the contextual gaps in the literature. The study was guided by the following research questions;

1.   What are the support needs of distance education learners in the Institute of Distance Education and e-Learning?

2.   What are the predictors of support needs of distance education learners in the Institute of Distance Education and e-Learning?

2. Theoretical Framework

This study was grounded in the Transactional Theory of Distance Education propounded by Moore (1993). Distance education students are often separated from the physical presence of learning activities (Rangara, 2015). This often creates communication gaps and barriers, misunderstandings and learning deficiencies (Moore, 1993). According to Benson and Samarawickrema (2009), there is a transactional distance in every educational format. The case, however, seem to be worse in distance education. In distance learning, the transactional distance is felt in all learning activities including the preparation of lesson plan, content material, class interaction, administration, peer support, feedback and other general activities. Nevertheless, the provision of appropriate support structures reduces the transactional distance between the distance learners, peers, teachers and institutions. Using this theory as a lens in this study, it is argued that most distance education learners in Ghana are separated from their institutions not just by distance but pedagogically as well. In order to close this "transactional" gap between the students and their institutions, appropriate learner support systems have to be provided by the institutions. However, appropriate support systems can only be provided if proper considerations are given to learning needs of the students as well their demographic characteristics. Extant literature suggests that the consideration of the background of the learner is very crucial if support systems are to be provided to suite the learner. Arguably, if the learner's needs' as well as background characteristics are not assessed in an attempt to cater for their support needs, there is bound to be a gap in meeting the expectations of the learners (Dampson, Owusu-Mensah, Apau, & Osei-Owsusu, 2019). This study, therefore, employs the Transactional Theory of Distance Education as the basis of the study and for that matter the needs of the distance education to assess the needs of the distance education students as well as the contribution of their demographic characteristics to their support needs in order to provide empirical evidence that would aid IDeL in the provision of learner support systems.

3. Methodology

The study adopted the pragmatist paradigm. Specifically, the concurrent triangulation design was employed in which the quantitative and qualitative data sets were collected simultaneously and analysed. The two data sets were merged into one overall interpretation for better understanding of the research problem (Tashakkori & Teddlie, 1998; Creswell, Plano-Clark, Gutmann, & Hanson, 2003).

The target population of the study comprised all distance education students in the 41 study centers in IDeL, University of Education, Winneba. Twelve (12) study centers with accessible population of 2,650 were randomly selected from which 623 were randomly sampled. Using Krejcie and Morgan's (1970) table for determining sample size, 623 respondents were sampled for the quantitative phase of the study where they responded to an adapted Turkish Open Education System Learner Support Questionnaire (TOESLSQ) by Ozoglu (2009) on their support needs. Qualitative data was collected from 3 (three) focus groups made up of 6(six) students in each group as well as interview with the Registrar of IDeL. Both the students in the focus group as well as the Registrar were purposively sampled. For the data analysis, the quantitative phase used descriptive and inferential statistics; specifically, Means and Standard Deviation, and Linear Regression. The qualitative phase involved content analysis of quotes from respondents' interview data. Integration of the two data sets was done by first reporting the quantitative statistical results with subsequent support or otherwise and explanations with the qualitative results.

4. Discussion

This section deals with the discussion of the results of the data collected from the field. The demographic characteristics of the respondents are first presented. The relevant data to answer the research questions are also presented and discussed with appropriate literature.

Table 1. Demographic Characteristics of the Distance Education Students

Variable	Sub-scale	N (%)
Age	22-25	69(11.1)*
	26-30	240(38.5)
	31-35	171(27.4)
	36-40	72(11.5)
	41-45	72(11.5)
Sex	Male	150(24.0)
	Female	474(76.0)
Marital Status	Single	269(43.1)
	Married	355(56.9)
Certificate Enrolled for	Diploma	284(45.5)

	Degree/Post Diploma	280(44.9)
	Master's	60(9.6)
Employment Status	Civil Service	293(47.0)
	Private Employee	181(29.0)
	Self-Employed	150(24.0)

Source: Field Data, 2019, *Percentages in parenthesis.

Table 1 shows the demographic characteristics of the respondents. From the Table, majority of the respondents were between 26 to 35. Invariably, most of these distance education learners are youths. With the necessary support mechanisms, they can cope with the excessive demands of combining work, school and family-related issues. The provision of adequate and appropriate support needs become dire when the demographic characteristics reveal that majority (474) of the respondents were females whilst a few (150) were males. With majority being women, it is expected that they play significant household roles within the family threshold. As evident in the Table 1 majority 355 (56.9%) of the respondents were married. Dampson et al. (2019) maintain that most of the women who have enrolled in distance education are petty traders and nursing mothers who need appropriate support if they are to complete their programmes of study successfully.

The Table further reveals 284 (45.5%) of the students have enrolled for Diploma, 280 (44.9%) for Degree/Post Diploma whilst 60 (9.6%) for Master's Degree. Finally, 293 (455%) of the respondents were Civil Servants, 81 (29.0) were Private Employees whilst 150 (24.0%) were Self-Employed. Essentially, majority of distance education learners in Ghana belong to the working class. As a result, they may need appropriate and adequate support systems that meet academic, personal and administrative needs. Dampson et al. (2019) maintain that the attainment of academic laurels in distance learning largely rests on the provision of appropriate support systems for its learners. Any attempt, therefore, at providing distance education learners with support systems must consider their demographic characteristics.

4.1 Research Question One: What are the Support Needs of Distance Education Learners in the Institute of Distance Education and e-Learning?

This research question examined the support needs of the distance education students in the Institute of Distance Education and e-Learning. Five-point Likert-type questionnaire ranging from 1 (Least Needed) to 5 (Very Needed) adapted from Ozoglu (2009) was used to collect the quantitative data. Further qualitative data was collected through focus group discussions for triangulation purpose. Descriptive statistics were first computed to ascertain the support services the students need. In this study, a mean score of 3.5 and above represented a high degree of the support needed. A mean score between 2.5 and 3.4 indicated moderate level of support need whilst a mean score of 2.4 and below represented a low level of support need. The results from the analysis is presented in Table 2.

Table 2. Mean Analysis of Support Needs of Distance Education Learners

Support Need/Service	Mean	SD
Assistance in overcoming technical problems	3.7	1.2
Orientation to the course/media delivery format of IDeL	3.6	1.2
Help with the admission/registration process	3.5	1.2
Counseling services to overcome students' concerns about their education	3.4	1.3
Textbooks offered by IDeL	3.3	.86
Administrative services provided at the IDeL	3.2	1.4
Counselling services to promote students' motivation	3.2	1.5
Mobile-Quest Information Services	3.1	1.4
Counselling Services to promote students' self confidence	3.1	1.5
Information about IDeL related activities	3.1	1.4
Activities to promote social interaction among students	3.0	1.5
Online practice questions and tests	3.0	1.5
Communication with course instructors	2.9	1.4
Communication with other distance learners	2.8	1.4
Face- to face academic counseling (tutoring)	2.3	1.3
Academic support through radio programs	2.3	1.4
Educational software produced by IDeL	2.1	1.4
Online academic counseling (Tutoring)	2.0	1.1
Academic support through TV programs	2.0	1.0
E-learning portals for students	1.9	1.2
Supplementary resources prepared by other people or institutions	1.4	.73
Supplementary tutoring offered by private institutions	1.2	.52

Source: Field Data, 2019.

Table 2 presented the support needs of distance education students (Ozoglu, 2009; Sekyi, 2013; Ngaaso & Abbam, 2016; Dampson et al., 2019) in the Institute of Distance Education and e-Learning, University of Education, Winneba, Ghana. From the ratings on the Likert-type questionnaire it is evident that assistance in overcoming technical problems (Mean = 3.7, SD = 1.2), orientation to the course/media delivery format and help with admission/registration process are the highest rated support need required by the distance education students. The students revealed through the interview that they don't get the necessary administrative support whilst on the programme. For example, the students said as in the following quotes to represent their common sentiment:

> *We hardly get support from IDeL in overcoming technical problems we encounter. In fact, there is no toll-free line or email that give instant feedback to students. If we encounter challenges, we*

have to find our own ways to deal with it.

Orientations are organized once in the life time of every student. This usually take place just after the admissions have ended. Even that takes just a day. Afterwards, the student is made to be responsible for whatever happens on the programme.

Another group also indicated:

Coupled with the inadequacy of orientation services for students is the issue of help with the registration process. The students did admit that though they receive some help from the local administrators at the study centers, the administrator-student ratio makes it difficult to have enough help from the administrators. For instance, the students said:

In terms of registration we often receive help from the coordinators and administrators at the study centers. However, they are just two people. Most often than not we have to consult past students from the programme to assist us whenever we are registering.

The institution can provide technical support through phone calls, online through the e-support, website, e-mail, or the mobile-learning guide available online.

Another area that the students rated highly were related to counseling services to overcome their concerns about their education (Mean = 3.4, SD = 1.3), counselling services to promote students' motivation (Mean = 3.2, SD = 1.4) and counselling Services to promote students' self-confidence (Mean = 3.1, SD 1.5). In the interview with the registrar of the institute, he did admit that though they would have loved to provide individual counselling for the students, their numbers make it almost impracticable. He said:

It is not that we are not ready to support our students with counselling. Their large numbers make it difficult to plan for such activities in the study centers. As of now, we don't have professional counsellors in the various study centers.

The focus group interview with the students also confirmed the view of the registrar. For example, the students generally admitted:

We don't have counsellors here. When you have any problem, the best people to counsel you are your friends. The counsel from your friends may not be exactly what you need.

It can, therefore, be inferred from these quotes that apart from face-to-face counseling courses, students in distance learning programmes hardly satisfy their counselling needs.

Additionally, it was evident from Table 2 that the distance education students needed Mobile Quest Information Services (Mean = 3.1, SD = 1.4). From the interview, the students as well as the registrar did confirm that Mobile Quest Service utilization in their activities remain at the undesired level. A student said:

We don't often receive update from IDeL. Sometimes the only form of updates from the IDeL may come from your friends.

Another group also concurred:

As a matter of fact, we are not often updated concerning our own welfare on the programme. The

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only way we see our results is when they are posted on the notice board.

The registrar also indicated:

It is very true that we don't use Mobile Quest Devices to update our students about happenings in this institute. In fact, I agree that most of our activities related to students' records have not been well modernized.

Unsurprisingly, the students admitted that they need information about IDeL-related activities (Mean = 3.1, SD = 1.4). The least ranked support needs of the students in IDeL included supplementary tutoring (Mean = 1.2, SD = .52) and supplementary resources prepared by other people or institutions (Mean = 1.4, SD = .73). As shown by the results in Table 2, students rate the need for textbooks offered by IDeL (Mean = 3.3, SD = .86) very high. Without it, the students may find it difficult to pass their examinations. Invariably, such approach may limit the students in terms of becoming independent as their preparation is based solely on documents prepared by IDeL.

4.2 Research Question Two: What are the Predictors of Support Needs of Distance Education Learners in the Institute of Distance Education and e-Learning?

The second research question sought to measure the extent to which the personal characteristics of the distance learners predict their support needs. A Multiple Linear Regression was conducted to establish the predictive power of the personal factors. The results of the analysis are presented in Tables 3 and 4.

Table 3. Model Summary for Personal Factors Contributing to Support Needs

					Change Statistics				
Model	R	R^2	Adjusted R^2	Std. Error of the Estimate	R^2 Change	F Change	df1	df2	Sig. F Change
1	0.338	0.114	0.107	0.37753	0.114	15.961	5	618	0.000

*p<0.05 significant

The multiple regression results in Table 3 revealed that student's personal factors such as sex, age, marital status, employment status and the certificate enrolled for collectively contributed 11.4% of the variance in the students' support needs which was found to be statistically significant [F (5, 618) =15.961, p<0.05]. This result implied that other factors not included in this study were responsible for 88.6% influence on students' support needs. It is inferred from this result that generally students' personal factors were good predictors of their support needs. The study further examined the relative influence of each predictor on the support needs of the students. The results are presented in Table 4.

Table 4. Standardized and Unstandardized Coefficients for Students Personal Factors Contributing to Students' Support Needs

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	2.098	.117		17.920	0.000
Age	-.095	.020	-.275	-4.841	0.000
Sex	.100	.040	0.107	2.478	0.013
Marital Status	0.037	.039	-.021	-.509	0.611
Employment Status	-.019	.037	.036	0.838	0.402
Certificate Enrolled for	.147	.021	.323	7.081	0.000

a. Dependent Variable: Support Needs

Source: Field Data, 2019.

The results in Table 4 showed that age (β=-0.275, t=-4.841, p<0.05), sex (β=0.107, t=2.478, p<0.05) and Certificate Enrolled for (β=.323, t=7.081, p<0.05) contributed significantly to the support needs of the distance learners. However, Marital Status (β=-0.021, t=-0.509, p>0.05), and Employment Status (β=0.036, t=0.838, p>0.05) did not contribute significantly to students' support needs in distance learning and are not critical in determining the kind of support needs at the various Distance Education study centers of University of Education Winneba.

5. Discussions

The study has shown the support needs of distance education students in the Institute of Distance Education and e-Learning, University of Education, Winneba, Ghana. The results have shown that the students have diverse needs that are largely unmet. These needs arise from the malfunctions in the administrative system which includes failure to deliver teaching materials on time or early notification of test results. These malfunctions often hinder the growth of distance learning in the academic environment (Moore, 2003). This is because students in every academic environment can only give their best if they are given the necessary assistance needed to overcome the technical problems created by their institutions, proper orientations as well as help with registration and admission process. This expectation, however, seem unrealistic due to the population of students enrolled in IDeL programmes. The large number of students enrolled often make it cumbersome to provide individualized effective support services at the desired level (Ozoglu, 2009). As such, there is no individual counselling offered by the institute. Arguably, most distance education learners may lack self-motivation and confidence. The lack of emotional support such as guidance and counselling distance learning might further prevent the students from gaining control over their independence and freedom in the studies (Garrison, 1989).

Studies (Holmberg, 1995; Brindley; 2000) maintain that the promotion of counseling has the potential of establishing such a personal relationship and sympathy between teaching and learning parties and, therefore, enhancing the motivation of students to study and promoting their emotional involvement and study pleasure.

The results further imply that most distance education students did not receive periodic updates on their exam results, important registration data, registration status, school fees account balance, face to face counselling schedules and their student status through SMS messages. At best, the only means through which students could receive updates from IDeL might be informal. Arguably, the traditional approach to the provision of information to students still remained dominant in IDeL. However, the blame might not be sorely laid at the doorstep of IDeL. Most of the students come from the remotest part of the country. As such, it is very difficult using mobile phones and other devices in such places as they are not hooked to national electrical grid as well as telecommunication networks. In fact, the lack of information from IDeL to the distance learners have the probability of hampering the academic growth of the leaners. Effective information delivery is an effective way of reinforcing learners' sense of confidence (Tait, 2000).

The lack of resort to textbooks and other materials produced by other distance education institutions is expected giving the fact that the questions that students take from IDeL are normally set from the manuals prepared by experts from the institute. Therefore, any student who resorts to materials as well as tutoring from persons not associated with IDeL is likely to fail their exams. This approach, however, limits the scope of content that students read as any other material not recommended or supplied by IDeL may become fruitless in the students' academic pursuit.

Finally, the study concluded that in the provision of learner support system in distance learning, critical attention should be given to the sex, age of the student and the certificate the students have enrolled for. Mowes (2005) maintains that any attempt to provide appropriate learner support to distance learners should consider the learner as a "client" or "customer" whose demographic characteristics would definitely affect what he or she buys from the "shop". It is, therefore, important that their background characteristics such as sex, age, employment status, marital status and their programme of study are considered since these would affect their support needs in one way or another. Interestingly, extant literature concurs that distance education learners' needs are predicated on their age, gender and their programmes of study (Dampson et al., 2019). Again, Ross (1990) posits that learner autonomy in distance learning can only be realized if the support systems provided are in tune with the learners' demographic characteristics.

6. Conclusions and Implications for Policy and Practice

The study has found that the distance education learners in IDeL have diverse needs. The highly rated needs from the perspective of the students includes assistance in overcoming technical problems, orientation to the course media/delivery format of IDeL, help with the admission/registration process,

counseling services to overcome students' concerns about their education to textbooks provided by IDeL. The study also revealed that the students support needs are predicted by their sex, age and their programme of study. It is, therefore, argued that most students are deficient in the performance of their duties as learners. This may further affect their competence and capabilities as students and as future employees. It is, therefore, recommended that IDeL should put policies in place to provide adequate, modern and appropriate support mechanisms that support the diverse needs of the distance learners. This is can be done by conducting feasibility studies into the individual needs of the students who enroll on distance programme at the beginning of every academic year. In the interim, professional counsellors should be attached to all the centers to assist students. Every effort to provide support for the distance learners in IDeL should also consider the demographic characteristics of the students as this research has demonstrated that sex, gender as well as programme of study affect the support needs of the students.

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