

Information Behaviour of Masters and Doctoral Students in Accessing and Using the Theses and Dissertation Database at the University of Dar es Salaam

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Abstract

The main purpose of the study was to assess ways by which postgraduate (i.e. masters and doctoral) students from the College of Arts and Social Sciences at the University of Dar es Salaam (Tanzania) became aware of University of Dar es Salaam Theses and Dissertations Database (UDSM DATAD). It also sought its perceived usefulness, challenges encountered as well as opinions on access to and use of the database. This was prompted by a reported low usage of the database. The population for the study consisted of 77 masters and 40 doctoral students in the College of Arts and Social Sciences as well as all seven librarians in the section for Reference Services Collection of the University of Dar es Salaam Library. Data was collected through self-administered questionnaire and individual face-to-face semi-structured interviews. Results from the study reveal that only few students were aware of the database and they used it to know what others have done in their research areas as well as finding relevant keywords for searching in other databases. The study recommended that students should be encouraged to use electronic theses and dissertations to improve on their research work.

Introduction

Studies on information behaviour in institutions of higher learning have demonstrated ways by which students accomplish their tasks through utilising various information retrieval systems (Urquhart and Rowley, 2007; Saleh and Large, 2011). These studies note various ways employed by different categories of users to access and use information retrieval systems, according to their information needs, associated tasks, and skills in utilising the systems (Petter et al, 2008). One such type of information retrieval system that is of specific importance in academic environments is databases of theses and dissertations (Sarkar and Mukhopadhyay, 2011). Theses and dissertations are important sources that postgraduate students and established researchers use to retrieve information to support their academic work particularly in research projects (Adio and Arinola, 2012). They also use theses and dissertations to find related literature, compare similar studies and to acquire background information related to their research projects. However, due to lack of awareness of electronic theses and dissertations databases by students and academicians, the use of such systems is poor (Salau and Oyedum, 2019).

Because of the low database search and use skills by many students at the university, it was thus important to understand how the theses and dissertations database at the University of Dar es Salaam (UDSM) is used. This could assist in improving the search interface, search options and

support to users in improving their information search skills. Although the database is known as the University of Dar es Salaam Theses and Dissertations Database (UDSM DATAD), this paper will only refer to the database of theses and dissertations.

Background on the Database of Theses and Dissertations

The University of Dar es Salaam was first established in 1961 as a college of the University of London. In 1963, it became a constituent college of the University of East Africa and became a fully-fledged University in 1970 by an Act of Parliament No. 12 of 1970. The main campus of the University of Dar es Salaam offers a variety of academic programmes in the liberal arts, sciences and engineering and technology. The University also established a number of colleges, schools and institutes as permitted by the act that established the University. Currently, the University has a total of seven colleges, two constituent colleges, seven schools and institutes respectively. It has one main library serving staff, students and researchers. The total number of students is 24,159 (UDSM Annual Report Plan, 2019).

Due to the need to increase research productivity and infusing results from local context, the University of Dar es Salaam Library launched a Database of Theses and Dissertations in 2008 (UDSM DATAD meeting, 2008). The purpose of establishing the database was to aid postgraduate students and researchers in obtaining relevant information that would assist them in fulfilling the requirements for their theses and dissertations. The database is part of the Database on African Theses and Dissertations (DATAD) that was established by the Association of African Universities (AAU) in Accra-Ghana in 1998 (Materu-Behitsa, 2003). The purpose of DATAD in Accra-Ghana was to make available online abstracts of theses and dissertations from 13 universities which included University Yaoundé 1 (Cameroon), Addis Ababa University (Ethiopia), University of Dar es Salaam (Tanzania), Makerere University (Uganda), University of Ghana (Ghana), University of Cheikh Anta Diop (Senegal), Eduardo Mondlane University (Mozambique), University of Zimbabwe (Zimbabwe), University of Jos (Nigeria), Obafemi

Awolowo University (Nigeria), Ain Shams University (Egypt), Kenyatta University (Kenya) and CODESRIA (Council for the Development of Social Science Research in Africa - Senegal). When the DATAD of Accra Ghana stopped in 2008 the University of Dar es Salaam Library decided to create its own database that would take up the role that was initially played by DATAD in Accra-Ghana to continue providing access to abstracts of theses and dissertations produced by the University's students (which is called UDSM DATAD). Initially it was made available to students only within the University's Local Area Network due to some restrictions in connection with copyright agreement in the university. However, following some adjustments to the system, abstracts can now be accessed worldwide. Although full text of theses and dissertations cannot be accessed pending rectifications of copyright issues. Users of the database include students, academic staff and researchers within the university. Data on theses and dissertations is added to the database as soon as students submit their completed thesis or dissertation topics to the University of Dar es Salaam main Library.

Problem Statement

Understanding information behaviour of the users of a retrieval system is an important aspect in establishing whether such a system serves to meet their information needs (Ferro, 2017). Based on the above, this study sought to gain an understanding of aspects of the information behaviour of masters and doctoral students at the University of Dar es Salaam's College of Arts and Social Sciences. This was because since the University's library implemented UDSM DATAD, it has not been clear as to whether the database was effectively utilised by the students for the intended purpose. Hence the main objective of this study was to examine the information behaviour of masters and doctoral students in the College of Arts and Social Sciences in accessing and using UDSM DATAD at the University of Dar es Salaam (Tanzania). Specifically, the study sought to (1) determine information behaviour of students with special reference to their awareness of the database; (2); solicit their perceived usefulness to users; (3) identify challenges they faced when accessing and using the databases and measures to mitigate the identified challenges.

The main question of the study was:

What is the information behaviour of masters and doctoral students in the College of Arts and Social Sciences in accessing and using the theses and dissertation database at the University of Dar es Salaam (Tanzania)?

The above question was followed by subsequent sub-questions as follows: (1) What is the information behaviour of students with specific reference to their awareness of the database? (2) What is the perceived importance of the databases? (3) What challenges do they face when accessing and using the database and the suggestions they might have for improving the database as an information retrieval tools. The above sub-questions assisted to guide the study through obtaining relevant data to address the main question.

Research Methodology

This study used a case study research design to collect data through questionnaire and interview. It used quantitative approach to gather statistical data that was useful to quantify opinions, attitudes and behaviours of postgraduate students with regard to accessing and using an electronic theses and dissertations database. This data helped to answer the “how much”, “how many”, “how often” and “to what extent” type of questions (Johnson and Christensen, 2008). In addition, this study employed a qualitative research approach, which refers to investigations of social phenomena to understand people’s social life. It is concerned with the understanding of ways by which individuals behave and form opinions, their experiences and feelings, thereby producing subjective data (Hancock, 2002). The qualitative approach was deemed important in this study as it helped to describe social phenomena occurring among postgraduate students when accessing and using electronic theses and dissertations databases. These phenomena may include behaviour they exhibit when interacting with the system, their opinion on its usefulness and ways in which it helps them meet their information needs. The researcher realised the importance of the aforementioned data collection approaches by

designing questionnaire and interview to gather data on awareness, usage patterns, usefulness, attitudes and feelings of students when accessing and using the database of theses and dissertations. A closed-ended questionnaire was developed based on key issues raised in the research questions that guided the study. These were pre-tested among 10 chosen students to test their suitability. In addition, semi-structured interview questions were developed based on the research questions for issues related with awareness of databases by students and methods of accessing the same.

This study was carried out in two phases. The first one was during the writing of a master’s dissertation in 2014 and the second phase took place in 2019 as explained further below. During the dissertation writing phase in 2014, the researcher selected a population of postgraduate students (masters and doctoral students in the College of Arts and Social Sciences) and librarians from the Reference Services Collection of the University of Dar es Salaam Library. A purposive sampling technique was used to generate a sample where by the researcher used his judgment to select participants that enabled him to answer the research questions and meet the research objectives. Copies of closed-ended questionnaire were distributed to purposively selected 130 masters’ students and 85 doctoral students from the College of Arts and Social Sciences. Only 117 students were able to return filled-up questionnaire. In addition, interviews were conducted to seven reference librarians.

The questionnaire aimed at collecting factual data from postgraduate students on aspects such as the awareness of the database, purposes of use, perceived usefulness and challenges in accessing and using the system. This method was selected as it was considered to be inexpensive, offered greater assurance of anonymity and reduced bias that could be caused by the presence or attitude of the researcher as well as their ability to collect a large amount of data within a short period (McBurney and White, 2009). Face-to-face interviews were used to collect data from seven reference librarians to seek information on aspects of database usage by students such as ways in which the library promoted the use of the database, ways in which the postgraduate students were engaged with the databases, the challenges they encountered and the efforts the

library was making to promote the effective usage of the theses and dissertations databases.

In the second phase, a follow-up study, was conducted in 2019 to find out whether issues identified during the dissertation phase were addressed. These included strategies towards accessing full-text theses and dissertations, appropriate methods to promote access and use of databases, choice of suitable database system and the formation of a national consortium of electronic theses and databases. A purposive sample was drawn from 20 masters and 15 doctoral students who participated during the mini dissertation stage and who were willing to be contacted at later stages. These students were issued with closed-ended questionnaire to provide information on the aforementioned issues.

To put ethical issues into consideration, research clearance was obtained from the University of Dar es Salaam in order to approach authorities at the College of Arts and Social Sciences for permission to carry out the study at the institution and to invite research participants. Students as well as the librarians were asked to sign a consent form which permitted the researcher to use the data collected. Furthermore, to properly organise qualitative data from interviews, responses were labelled using numbers such as Reference Librarian 1, Reference Librarian 2 and so on. Quantitative data was analysed using Microsoft Excel to derive at frequencies and percentages while qualitative data was analysed by creating a table with the main themes and their corresponding quotes.

Findings for Post-Graduate Students during the Initial Phase

At the time when the study was conducted, most students were at the stages of writing research

proposals and reviewing the literature for their research projects while just a few were collecting data and finalising with their research reports. As such, since many were in early stages of their research, this was thought to be the appropriate timing when students would be expected to use UDSM DATAD as a tool for finding information to support their research projects. Since both categories of respondents, that is masters and PhD students, were involved in proposal writing stages, there was no distinction made to separate their results (although the tables indicate separate results for both categories).

Awareness of UDSM DATAD

The researcher asked respondents to indicate whether they were aware of UDSM DATAD. This question aimed at determining whether respondents came across UDSM DATAD at different points during their studies. This finding would assist the researcher to determine whether awareness played an influential role in encouraging students to access and use the database. Results from the study revealed that most of the respondents were aware of UDSM DATAD whereas 33.3% were not.

When asked how they became aware, 22.5 % of the students indicated that they were informed about UDSM DATAD by librarians during information literacy training while 19% saw about it on the library brochure while 15.5% saw an advert about UDSM DATAD on the notice board. In addition, the study found that after hearing about UDSM DATAD, 62.4% of the respondents accessed and tried it out whereas 37.6% did not. Out of the 62.4% students who tried it, 38.4% did so in a month's time whereas those who tried it immediately, that is within a day, were only 4.1%. In addition, 31.5% tried it out within a week and 26% did so within a year. Table 1 below summarises their responses.

Table 1: Period between Awareness and Immediate Use of UDSM DATAD

Period	MastersN=44	DoctoralN= 29	TotalN=73	Percentage (%)
Day	2	1	3	4.1
Week	13	10	23	31.5
Month	18	10	28	38.4
Year	11	8	19	26
Over a year	0	0	0	0

Those who did not try it realised that it contained only abstracts and therefore less significant to them. Results indicate further that major reasons that made students used UDSM DATAD were to find out what others had done in their research (24.4% respondents), while 17.9% used it to find relevant keywords for searching in other databases and 12.8% identified research topics from recommendations given for further research.

Perceived Importance of UDSM DATAD

In addition to understanding the usage of UDSM DATAD, students were asked to indicate whether they agreed or disagreed with the fact that the visibility of their work in the institution would be higher if it was availed on the database that could make it easily accessible by colleagues, other researchers and collaborators. A total of 60.2% respondents agreed to the statement above while 39.8% disagreed.

The aspect of the usefulness of the database considered also other features such as access points. The researcher intended to gather data on the usefulness of title, author, subject, year, list of titles

and subject disciplines. It was generally felt by students that access points such as author, title, subject, list of titles and subject disciplines were considered useful. For example 32% of students felt that the author field was very effective while 23% of respondents were not happy with the year field. In addition to using UDSM DATAD, students were asked whether they accessed and used other theses and dissertations databases. This question intended to find out whether the respondents were in a position to compare and apply UDSM DATAD features with those they had found in other databases. The study discovered that 78% of the students accessed other databases apart from UDSM DATAD. These included Ohio Link and ProQuest (UMI) Dissertations and Theses Databases, the National ETD portal of South Africa; and Networked Digital Library of Theses and Dissertations (NDLTD) databases. Among these databases, Ohio Link and ProQuest (UMI) Dissertations and Theses Databases were found to be used by 29.2% of all students compared with other databases. Table 2 below provides a summary of other databases accessed by students.

Table 2: Other Databases Accessed by Postgraduate Students

Other databases	Masters	Doctoral	Total	Percentages
National ETD Portal of South Africa	7	4	11	18.7
Networked Digital Library of Theses and Dissertations (NDLTD)	5	4	9	22.9
Ohio Link Electronic Theses and Dissertations Database	9	5	14	29.2
ProQuest Dissertations and Theses Databases (UMI)	8	6	14	29.2

Furthermore students were asked to give their views with regard to using other databases apart from UDSM DATAD. Students were on the view that the university should consider subscribing to more electronic theses and dissertations database than those currently available. This was revealed by 34% of respondents while 33% recommended that the available database should be made known to more users across the university. Students suggested that UDSM DATAD should allow for the

provision of full-text access just like with other databases.

As for the 33% of students who did not access and use UDSM DATAD, this study discovered that reasons for the non-use of the database were based on its inability to provide access to full-text materials; which made it difficult for them to use it. While 23.1% of students found that the database could not provide full text to materials, others (15%) commented that UDSM DATAD was not accessible

outside campus where the bulk of the postgraduate students at the University of Dar es Salaam reside.

Challenges of Accessing and Using UDSM DATAD and Recommendations for Improvements

In addition, all the postgraduate students were asked to indicate the challenges they faced when accessing and using UDSM DATAD. Whereas most comments about the challenges were concerned with slow Internet connection and erratic electricity power supply, there were other challenges that were directed to the failure by the database to meet users'

needs. For example, 11.1% of students commented about the absence of options for being notified of new information added to the database. Moreover, the database was not regularly updated and it was not possible to save the search results. On improvements that could be made on the database, respondents gave various opinions. For example 29.1% respondents were of the view that UDSM DATAD should allow access to full-texts while other 26% recommended that should also be accessible off-campus. Table 3 below summarises recommendations by students on improving UDSM DATAD usage.

Table 3: Recommendations for Improving UDSM DATAD Usage

Recommendations	Masters N=81	Doctoral N=36	Total N=117	Percentages (%)
UDSM DATAD should allow access to full-text materials	24	10	34	29.1
The library should promote UDSM DATAD to more users across campus	23	8	31	26.5
More improvements on the UDSM DATAD search interface are needed	8	5	13	11.1
More search options should be added	9	6	15	12.8
UDSM DATAD should be accessible outside campus	17	7	24	20.5

In short, results from this study reveal that, to some extent, students appreciated UDSM DATAD and considered it useful in supporting their academic work. This was evident from some aspects pointed out by the postgraduate students such as its search features and options, its usefulness in making their research work available to colleagues and raising the profile of their institution. However, students were not happy with UDSM DATAD as it lacked certain features that would make it even more useful in supporting their work in terms of its search interface and options. These included its failure to provide full-text information and access from within and from outside the university.

Findings for Librarians

A total of seven librarians participated in this study and interviews were conducted to find out several

aspects on approaches used to promote access to UDSM DATAD and other databases to students. Librarians were also expected to provide information on perceived usefulness of the UDSM DATAD to postgraduate students, challenges they faced in managing UDSM DATAD and efforts being applied to overcome them. The data was collected through hand-recorded interviews and reported in the form of verbatim quotations. In order to avoid revealing their identities, numbers were used in place of their names. Reference librarians were asked to comment on approaches in place that were used to promote access to UDSM DATAD and other databases. The purpose of this question was to find out how the students became aware of UDSM DATAD. One of the respondents commented as follows:

There are several ways to promote students' and staff's awareness of UDSM DATAD and other electronic theses and dissertations database. These include distribution of brochures to different colleges and postings on notice-boards all over the UDSM campus. The second approach is done by staff from the reference section by approaching different departments, schools and college heads and informing them about UDSM DATAD and others electronic resources. Lastly is through Orientation courses and Information literacy programmes taken at the UDSM library. (Reference Librarian I)

This comment shows that the common approaches applied at the University of Dar es Salaam were mainly the notice-boards, library brochures, word of mouth, orientation sessions and information literacy training in the library. Librarians were asked to comment on how they perceived the usefulness of UDSM DATAD to postgraduate students. The responses of the librarians indicate that they appreciated the usefulness of UDSM DATAD in supporting students' academic activities as one of their comments in verbatim quotations illustrates:

UDSM DATAD is very important since it can support research activities by providing students and researchers with overviews of various research topics which have already been done. From UDSM DATAD, students and researchers can see what has been done on their desired topic, and from UDSM DATAD they can get ideas that help them formulate their new topics of interest and avoid repetitions. (Reference Librarian VI)

From this comment, it was learned that librarians appreciate the importance of UDSM DATAD in supporting postgraduate students' academic work by helping them to find out what literature says about certain topics, learn appropriate

research methodologies and helps them to be able to formulate new research topics from what others have already done. The librarians were also asked to comment on challenges the library faced in managing UDSM DATAD. A number of challenges were raised as the following response illustrates:

There are many challenges. Here are a few of them: inadequate bandwidth, inadequate and frequent electricity power cuts which hinder access to UDSM DATAD. Currently, there are few computers used to access UDSM DATAD and other electronic resources in the library. Thus, more and new efforts are needed to market and promote UDSM DATAD. (Reference Librarian IV).

It is apparent from the study findings that the serious challenges the library faced included inadequate bandwidth and erratic power supply that prevented regular access to UDSM DATAD. Other impediments included poor and slow connectivity to the UDSM DATAD server and the limited nature of UDSM DATAD access since the students could do little with the abstracts that were available. Despite these challenges, the study found that various efforts were being made by the University to overcome them. Librarians mentioned various efforts such as continued support to enhance access and use of the UDSM DATAD through the provision of information literacy training and encouraging students to use electronic theses and dissertations database as a supplement to other electronic and non-electronic resources available in the library. The responses from one of the librarians can be exemplified by the following comment:

I have been providing one-to-one training sessions to students on how to access and use UDSM DATAD. (Reference Librarian VII).

This and other comments by librarians indicate that although users faced difficulties in accessing and using UDSM DATAD, assistance from the librarians helped to encourage the users of the database to get better returns. Librarians were also asked to air their

views on accessing and using UDSM DATAD. One of the librarians responded as follows:

The electronic theses and dissertations are very important as far as research is concerned. Therefore, the UDSM DATAD database should be made useful by being made available all the time to the users. Training for the users is necessary to teach them how to retrieve easily the information. (Reference Librarian V).

It was realised from reference librarians that efforts should be made to procure more computers to provide students with access to UDSM DATAD and that regular training sessions on awareness and search skills be held to boost the students' use of UDSM DATAD and other databases they access in their MA, MSc and PhD studies. The implication is that the value of UDSM DATAD would be enhanced when the students can access more than just the titles and abstracts.

Findings from Follow-Up Survey

As was pointed out in the methodology sub-section above, a total of 20 masters and 15 doctoral students were issued with questionnaire to seek their opinion

on improvements to be made on UDSM DATAD database. Among the issues included suggestions on strategies towards accessing full-text theses and dissertations. All 35 students agreed that theses and dissertations were accessible in full text formats and that the database allowed users to print and download the same. However, it was noted that the database could only be accessible within the university's LAN and no access could be obtained outside the university. In order to make users aware of the database, several options were made available by the library management. Therefore when students were asked to point at the most popular marketing strategies made by the library, they came up with a number of methods.

Information literacy (IL) sessions, university opening days as well as university research week were the mostly used methods in promoting the databases while a few mentioned the use of media such as the university's television, newspapers and social media. In addition to the above, a follow-up question was asked to students in order to affirm the deployment of a new system that had more features than the previous one. This was due to observations made during the first phase of the research that students were not happy with the database interface, absence of features such as help tools, search suggestions and others. As such, the following were mentioned as being present in the new system:

Table 4: Suggestions on the Choice of Database System Based on Features

Proposed feature in system	Masters N=20	Doctoral N=15	Total N=35	Percentages (%)
Refining search results	8	4	12	34.3
Suggesting other search engines/tools	3	2	5	14.3
Options to save/export search results	2	2	4	11.4
Options to share results on the web	4	3	7	20
Options to print searched documents	2	2	4	11.4
Presence of thesaurus/term lists	1	2	3	8.6

Discussion

From these results, it was observed that information literacy plays a role in making library users aware of information resources including theses and dissertations databases and could, therefore, be a

driving mechanism for influencing students to access and use them (Besseh et al, 2017) . In addition, traditional methods such as using brochures were considered to be effective ways of communicating the availability of electronic resources in libraries and

particularly the Database of African Theses and Dissertations (DATAD), as was noted by Materu-Behitsa (2003) in Accra, Ghana. It was expected during this study that one effective means by which users became aware of UDSM DATAD would be the library's website. However, the findings indicate that this was not the case since at the time when the research was being conducted the link to UDSM DATAD was not even available on the University of Dar es Salaam's Library website. Nevertheless, the study found that apart from information literacy training, users became aware of UDSM DATAD through common means such as library brochures, notice-boards and supervisors.

The findings from this study signify the relevance of electronic theses and dissertations database for being useful tools for assisting students in finding background information on their topics and learning about what others have written about similar topics. By knowing what other have done about similar topics electronic theses and dissertations database become useful in assisting students to find background information on their topics and therefore shape their research topics (Haridasan and Khan, 2009). Theses and dissertations databases promote institutional visibility to communities within the country and beyond. Furthermore, electronic theses and dissertations database allow students' work to be recognised among their peers and experts in similar and related fields of studies. Electronic theses and dissertations also assist in raising the profile of the institution, making it known among other institutions within and outside the country (Fasae et al, 2017). Results from this study contrast with others such as Webley et al, (2011) who revealed that databases such as the National ETD portal in South Africa, also includes various features such as recent submissions, collections statistics and options to search by using different access points such as title, institutions, year of publication and others. In addition, a number of theses and dissertations available through this portal can be accessed in full-text format. Based on results from this study, it can be argued that the effectiveness of an electronic theses and dissertations database depends on its wide accessibility and its ability to include appropriate search options that are more user-friendly

Much as the students were made aware of the availability of online databases such as UDSM

DATAD, several factors may inhibit them from trying them out. For example, databases only providing access to bibliographic information without providing links to full-text information are likely to discourage users from using them (De Groote and Dorsch, 2003). Other reasons for users' failure to utilise databases even after learning about them, which to some extent differ from the ones noted in this study, include the irrelevance of the database to the users' needs and as such they may lose interest in accessing and trying it out (Dadzie, 2005). Therefore, for a database to be relevant to users, it should contain useful content and be regularly updated. With regard to challenges encountered by users when accessing and using UDSM DATAD, results from this study imply that the failure by users to access and use electronic theses and dissertations database might result from insufficient marketing strategies, poor infrastructure such as networks, reservations about the relevance of the resource and lack of skills of accessing and using such databases. The aforementioned challenges are similar to studies conducted by other researchers such as Ezema and Ugwu (2013) who found that Nigerian universities face several challenges including poor ICT infrastructure, poor funding, irregular power supply, and poor Internet connectivity to mention but a few. Other studies such as Salmi (2008) in Arab States and Ubogu (2006) in South Africa found that problems associated with a fear of plagiarism and copyright issues have contributed to students not being encouraged to access and use electronic theses and dissertations database.

Conclusion

Results from a follow-up study reveal that as a result of earlier suggestions on improving UDSM DATAD, a number of transformations have been put in place. For example, the database system was changed from Greenstone to Dspace with more features and capabilities including the ability to browse and search, the ability to provide external references, download full text theses and dissertations, field search (such as title, author and others) as well as accessing material in a database from Google Scholar. In addition, the library improved its marketing strategies for creating publicity for the database through teaching it in information literacy sessions,

demonstrations during university open days and the research week which takes place each year. To some extent, these methods helped a lot in marketing the databases to users. Through efforts by the university, the Tanzania Commission for Universities (TCU) formulated a committee to oversee the formation of an electronic theses and dissertations portal at a national level, as the case with South Africa which has shown significant results (Webley et al, 2011).

Furthermore, results from this study indicate that although users faced difficulties in accessing and using UDSM DATAD, assistance from the librarians helped to encourage the users of the database to get better returns. The literature reveals that librarians play an important role in encouraging access and use of electronic resources through promoting and marketing of such resources to users as well as in training them on effective ways of accessing and using the same (Dhanakar *et al.*, 2008). Therefore, it can be noted that librarians play a role in encouraging postgraduate students to make good use of UDSM DATAD.

From the views given by students and librarians, it can be noted that they generally appreciated the availability of UDSM DATAD and were enthusiastic that given improvements, the database would be a useful tool to support the research activities among postgraduate students. In other words, UDSM DATAD as presently constructed was deemed useful; however, the information users at the University wanted more so that they could make optimum use of the database.

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