ADDIS ABABA UNIVERSITY

COLLEGE OF NATURAL AND COMPUTATIONAL SCIENCE

SCHOOL OF INFORMATION SCIENCE

INFORMATION NEEDS AND INFORMATION SEEKING BEHAVIOR OF ACADEMICIANS: THE CASE OF DEFENSE COMMAND AND STAFF COLLEGE, ETHIOPIA

BY

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ADDISABABA, ETHIOPIA

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DECLARATION

This thesis belongs to Addis Ababa University, which awarded the graduate student an MSc/PhD degree and partially or fully endorsed research costs. The research was carried out with the help and supervision of the Advisors at the assigned academic institution. Without the approval of the research supervisor(s) and the graduate student, it is strictly forbidden to publish, edit, communicate to, or place at the disposal of a third party the entire document or any part of it. This research has never been approved for a degree and is not submitted in candidacy for any degree at any university at the same time. I assert that this thesis is the result of my own work. With the help and advice of my research advisor, I conducted the study on my own. Citations with explicit references recognize other sources. There is a list of references at the end of the paper.

DEDICATION

This research work is dedicated to the Lord Jesus, who has strengthened, led, and inspired me during the research project, by His great mercies. Secondly, this paper is dedicated entirely to my life.

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Table of Contents

DECLARATION iii
DEDICATION iv
ACKNOWLEDGEMENTS v
Table of Contents vi
List of Tables ix
List of figures x
Abstract xi
1. Introduction 1
Background of the study 3
The problem statement of the study 4
Research Questions 5
The Study objectives 5
General objective 5
The Specific Objectives of the study 5
The Scope of the Study 5
The Limitation of the study 6
The Significance of the study 6
CHAPTER TWO 7
Review of Selected Literature 7
2. Definitions of information 7
Definitions of the Needs of Information 9
Types of Information Needs 9
Current Information Need 9
2 2.2 Exhaustive Information Need 9
Everyday Information Need 10
Catching up Information Need 10
2.3. Information Behaviour 10
Information Seeking Behaviour 12
Information Behaviour models 13
Figure 1: end-user information need model by (Kebede, 2002) 13
Wilson Model, 1981 15
Leckie's information-seeking framework model (1996) 15

Figure 3: The model of information and seeking behaviour a highly experienced groups (Leckie et al, 1996) 15
Literature review model of (Leckie et al., 1996) 20
Further studies following the model of (Leckie et al., 1996) 22
The Benefits of an Information Behaviour Model 23
The Evaluation of information 23
Academicians' information requirement 23
Types of resources utilized by academicians 24
2.9. Academicians' information use habits 26
The varieties of information's required by academicians 28
Academicians' behaviour of Information-Seeking Factors 28
Academicians' Behaviour of information utilization: The Strategies Used for Improving 29
Related work reviews 31
An overview of related works 37
CHAPTER THREE 38
Research Methodology 38
3. Introduction 38
Research Methods 38
Population of the study 38
Data collection methods 39
The study Variables 39
Questionnaires 40
Interviews 41
Pilot Testing 41
Methods of data analysis 41
3.9 Ethical consideration 42
CHAPTER FOUR 43
4.1 The descriptive statistical analysis 43
Information-Seeking Behavior: Determining Factor Correlations 60
Qualitative result of the study 61
DISCUSSIONS 62
Types of information needed by academicians at DCSC 62

Information sources and satisfactions offered by the DCSC library 63
Academicians' Information-Seeking Behavior 63
Academicians' preferred resource format 64
The variety of resources used by academicians 64
Information sources and academician satisfactions 64
Factors Affecting Academicians' Information Needs and Information Seeking Behavior at DCSC 65
Approach to Improve Academicians' Desires of Information and use Behavior 65
The Implications of the Research 66
The study's strength 67
CHAPTER FIVE 68
Summary, Conclusion and Recommendations 68
Summary 68
Conclusion 69
Recommendations 70
FUTURE WORK 72
REFERENCE *73*
APPENDIX A 80
APPENDIX B 86

List of Tables

TABLE 4. 1:**RATE OF RESPONDENTS IN THE STUDY** 43
TABLE 4 2: THE BACKGROUND DETAIL INFORMATION OF THE RESPONDENTS 44
TABLE 4 3: THE SKILL OF ICT FOR ACADEMICIANS 45
TABLE 4 4: THE PURPOSE OF INFORMATION SEEKING FOR ACADEMICIANS 47
TABLE 4 5: INFORMATION NEEDS SATISFACTION IN THE LIBRARY 48
TABLE 4 6: ACADEMICIAN INFORMATION PREFERENCE 50
TABLE 4 7: THE TYPES OF RESOURCES USED 51
TABLE 4 8: RESOURCE FORMATS REQUIRED FOR TEACHING 51
TABLE 4 9: QUALITY OF LIBRARY RESOURCES 52
TABLE 4 10: FREQUENTLY ACCESSED RESOURCES IN THE LIBRARY 53
TABLE 4 11: THE RESULTS OF THE COLLECTED RESPONSES 54
TABLE 4 12**:** TECHNIQUES FOR BETTER ADDRESSING THE NEEDS OF ACADEMICIANS 57
TABLE 4 13: CORRELATION RESULTS FOR SELECTED VARIABLES 58
TABLE 4 14:REGRESSION MODEL 58
TABLE 4 15:THE MODEL SUMMARY 59
TABLE 4 16: REGRESSION RESULT OF KEY VARIABLES 60
TABLE 4 17: INFORMATION-SEEKING BEHAVIOR: DETERMINING FACTOR CORRELATIONS 61

List of Figures

Figure 1: end-user information need model by (kebede, 2002) 13

Figure 2: wilson's model of information behaviour (wilson, 1999)..... 14

Figure 3: the model of information and seeking behaviour a highly experienced

Groups (leckie et al, 1996*)* 15

List of Acronyms

AAU	Addis Ababa University
IBM	Information Behavior model
DCSC	Defense Command and Staff College
INB	Information Need behavior
IN&SB	Information Needs and Seeking Behavior
ISB	Information seeking behavior

Abstract

The purpose of this study is to examine the academicians' information needs and seeking behavior of Defense Command and Staff College. There has been a remarkable rise in information in recent years, which has important consequences for teaching and learning, as well as education in general. It takes library efficiency to the next level by allowing users to customize their knowledge to match their own needs. In addition, the study attempts to examine users' information wants in order to evaluate academicians' information wants and seek behavior.(1) The resources used, (2) the types of information available, (3) assessing user awareness, and (4) evaluating the DCSC Library's user education. A questionnaire and an interview were used to measure the respondents' thoughts on their level of information needs. The qualitative data were assessed and used for further information for the conclusion and recommendations, while the quantitative data was investigated using the Statistical Package for Social Sciences (SPSS) version 26.

The descriptive study research method was involved 111 academicians. The findings also recommended that Defense Command and Staff College library needs to provide better awareness and training programs for the users of library resources, e-resources, and services, provide adequate and sufficient quantity and scope of library materials. In other words, the study examined the preferred information sources used by academicians for conducting research, class preparation, curriculum preparation, etc. Here, appropriate recommendations were provided by the findings of the study. The descriptive study was used on 111 questionnaires, but only 95 academic members were returned, and six academicians were interviewed. The study reveals that, academicians mostly depend on printed and electronic resources. To address the information needs of academicians in the college, it is advised that the library should be reorganized with internet access and sufficient resources. In addition, librarians should provide users with basic training to assist them in accessing electronic resources.

CHAPTER ONE

1. Introduction

Information is a crucial instrument in achieving any person's aim or objective. It has become an important asset to any community. Libraries, as information centers, play an important role in helping academicians to develop lifetime learning skills. Academicians must improve their information management abilities, as well as their knowledge of how to use information tools and databases, in order to find appropriate information sources relevant to their studies and courses. Furthermore, it will contribute to one's personal development. As a result, library effectiveness can be thought of as information personalizes to match individual needs (Kadir et al., 2018).

Now a day, human beings with no information cannot contribute to the everyday aspects of the social and political environment. Therefore, it plays an important role in decision-making, planning, and all development activities. In current days, only those who have the right information at the right time will succeed (Nagar et al., 2018).Any dynamic and efficient research system is built on the foundation of information. Researchers can benefit from quick access to current, accurate, and relevant technical information. On the contrary, a lack of understanding will result in additional research and a waste of financial, material, and human resources (Majid et al., 2000). This is an information age where accessing information becomes more and more important. In the information society of the 21st century, everyone needs information to excel in his or her chosen profession. Information is a valuable resource for developing the skills and experience of academics in delivering powerful performances (Ikenwe, 2014). Similarly, information is more crucial than ever to stay current in one's field, and therefore, it has been defined from several angles (Demmelash, 2018) also defined it as the basic resource that makes a significant contribution to the development of a country.

According to the findings investigated by(Uche & Nwankwo, 2018), there is also a term "information explosion" which refers to the exponential increase for data broadcast as well as the implications of this expansion in data. Because of open data, management of information becomes more challenging, perhaps resulting in information overload. Therefore, information and information overload gave rise to the idea of identifying information demands and the habit of looking for certain library consumer groups. Obviously, there is no area of research in the world where information is not regarded as a vital topic, as it plays a major role in decision-making, planning, and any progressive action. To improve their information provision, information professionals are often interested in learning why and how users seek

information. Over the years, technical developments and inventions have transformed libraries from merely a warehouse of printed materials to a world of information. The library is no longer just a storehouse of books and records. The way libraries gather, store, and disseminate information has changed significantly because of information and communication technologies.(Nagar et al., 2018). The most important areas of research for information scientists and sociologists are information needs and seeking behavior, which can be expressed in a variety of ways, ranging from reading printed materials to research and experimentation (Tahir, 2015).

This research study wants to a deeper understanding of academicians' information needs and information-seeking behaviors. Gender, educational qualification, work experience, and other factors affect their needs and use of information, which include research scholars, assistant lecturers, lecturers, and assistant professors. For the reason that of all these differences, the needs and seeking behavior information come to be different (Ikenwe, 2014). Academicians can use relevant resources to find the information they need to operate as efficiently as possible. When working on a dissertation, an assistant must collect information from a variety of resources. A researcher, on the other hand, sometimes needs information about a similar subject and will use reference resources to do it. As a result, regardless of their age, title, or years of professional experience, as (Makinde,2020) studied, to survive in the twenty-first century, the wider world needs and desires information, including doctors, lawyers, professors, students, and even the elderly, all desiring information for their everyday tasks (Makinde et al., 2020).Similarly, as (Majid et al., 2000) stated, information needs and information-seeking behaviour are challenges for educational libraries' planning and policymaking in order to offer quality services to community researchers and scientists.

The rapid growth of the Internet and e-resources has proven itself as a powerful educational tool. With the increasing impact of information and communication technologies on Agricultural research; all those concerned with Technological education are attempting to grasp how ICT could help in modernizing the process of development and research. This days' library with its rich web /digital resources is capable of disseminating information and at the same time providing the fastest access to the right kind of information in nanosecond of time to end-user at any time and at any place in the world.

In the teaching environment, academicians need information for a number of reasons, including developing their searching skills, finding answers to exciting questions they find when looking for information, and suggesting potential solutions. (State et al., 2015).

Libraries play a significant role in providing resources in the teaching and learning environment, allowing teachers to get the information they need quickly and easily. Educational libraries are involved in the implementation, design, and preparation of information resources in their schools, and librarians formulate strategies to promote information literacy among the users in their institutions. Libraries must determine user needs and study their information-seeking behaviour to develop means and advance the use of library facilities (Tahir et al., 2008).

Background of the study

The Defense Command and Staff College started in 2006 EC, offering 12-month programs at the Ethiopian Defense Command and Staff College (DCSC) to Ethiopian military officials and from neighboring countries. The college is founded in Addis Ababa, behind the Egyptian Embassy in the Gulele sub-city of Wearda02. Military officials commit officials who focus on "know-how their learning," and they must be able to apply it in a unique way at their work location. It provides the National Defense Forces with capacity building activities and a good military force capable of fighting in all missions. Defense Command and Staff College need well-educated military leaders who are well prepared with experience, skills, and attitudes to play their role in ensuring the country's rapid monetary development, stability, and democratization process (John , 2018). The key objectives of DCSC are to meet the country's defense needs, especially in terms of ammunition and, to a lesser extent, armament and other military assets. Furthermore, to develop strong defensive and quality commanders capable of successfully executing combined internal security operations, as well as local and worldwide missions, and to develop effective higher technical degree commanding officers(Troxell, 2009).

Thus Library staffs were benefited from the information needs and seeking behavior of a variety of users. This allows librarians to make comparisons between the discovered habits and the standards(Daniel , 2013) .Librarians must focus more on providing good information services and guaranteeing optimum user satisfaction as well, since academics are primarily information seekers in education(Garcia-Cosavalente et al., 2010). However, there is a lack of intensive information for academicians' information needs and seeking behavior, and thus no research has been conducted on this topic at DCSC yet. Nearly all information sources have increased, at times dramatically, over the last several years. Therefore, the DCSC library needs to adequately address the changing needs of academicians; they need to know more about the information that users need and what influences their information seeking, location,

and use. To address those questions, this study needs to investigate information needs and the seeking behavior of academic staff at DCSC.

Statement of the problem

In this time, information becomes one of the most valuable resources. This is because it is so prevalent and ubiquitous that it appears in almost every endeavor. This is why, after land, labor, and capital, many researchers are starting to think of knowledge as the fourth economic resource. However, it has been noted that academicians in Defense Command and Staff College have a universal premise that they require and seek information (Daniel, 2013). Thus, investigating academicians information needs and seeking behavior is critical to understanding their information needs and where they are seeking for information. This knowledge helps the libraries to disseminate appropriate information to meet the needs of scholars, system designers, and database developers, thereby improving facilities and services and efficiently meeting the information needs of users (Ferede & Mathew, 2015).

It is difficult to carry out teaching and learning activities without adequate information (Moly, 2015).Various studies have been conducted locally in Ethiopia; however, academicians , in higher education in Ethiopia receive little attention. Teaching and research are two fields that need an infinite supply of hard and soft data to satisfy people's academic desires. Academicians must always keep themselves up to date with contemporary resources and journals that will help them improve their work. The implication of the library is also to afford information resources and an estimated service to their users. In order to assure the success of the initiative of the study, it is essential for the Defense Command and Staff College to identify and recognize information needs, seeking behaviour and aspects that affect Information Needs and Seeking Behaviour of academicians.

Information is an essential resource that can be needed by Academicians to perform well in their academic work. Since, the College is newly established; studies have not been conducted before to establish information need and seeking behaviour of academicians. Without understanding the information needs and seeking behavior of the academicians, information providers could not understand the information requirements and problems that academicians face (Ferede & Mathew, 2015). As the result, system designers cannot develop systems that will meet the needs of these academicians. These gaps affect the teaching learning and research activities of the College. Starting from these gaps, for that reason the research was conducted in the information needs and seeking behaviour of academicians in DCSC.

Research Questions

1. What are the information need behaviour of academicians at Defence Command and Staff College?
2. What are the information resources used by academicians for teaching purposes?
3. How do factors relate to various types of information sources affect academician's information needs and behaviour while seeking more information?

The Study objectives

General objective

The research's main objective is to investigate academicians' information-needs and seek behaviour at the Defence Command and Staff College.

The Specific Objectives of the study

♣ To gain a better understanding of academicians' information need behaviour at the Defence Command and Staff College.

♣ To evaluate the information resources used by academicians in their teaching, research, and other academic activities.

♣ To investigate the factors that affect academicians' information needs and seeking behaviour.

The Scope of the Study

The scope of a study, as per Mugenda (1999), is the area, extent, or degree that it covers. Similarly, (Simon, 2011) define a study's scope as the parameters within which it will operate. The current research focuses on the information needs and seeking habits of around 111 academicians at Defense Command and Staff College, with a focus on their information needs and seeking patterns. The coverage of this study was limited academicians at the Defence Command and Staff College. The researcher was analyzed and discussed the results based on what the participants reported through survey questionnaires and interviews. The College is found in Addis Ababa at sadist kilo behind Egypt embassy. The study covers information needs of academicians, information resources available to academicians, the information-seeking behavior of academicians, extent to which the information needs of academicians are met, the factors affecting information needs and information seeking behavior of academicians of DCSC and how the identified problems could be taken care of.

The Limitation of the study

This research was carried out at the Defence Command and Staff College of Academicians. Students and support staff were not included in the study. The key problem was the degree of coverage of the study due to time and money constraints.

The Significance of the study

It is critical to address the informational necessities and the seeking behavior of many individuals since this facilitates in making plans, adoption, and management of places of work services and infrastructure (Davidson and Lingman, 1997).This study becomes significant because it helps to identify and evaluate academicians' information needs and information-seeking activities of the Defence Command and Staff College. One of the main reasons for choosing this population is that academicians at the institution still have not been researched as a unique type of user in terms of their needs for information and information behaviors. For the purpose of this research, the questionnaire was developed and pre-tested before being used with the study population. Regardless of their status, all respondents received the same questionnaire. Any of the respondents who voluntarily agreed to participate in the study received a questionnaire. The respondents interviewed also filled in the gaps. The population of this study is all Academicians in the defence command and staff college. Academicians, librarians, and other researchers are expected to benefit from the results of this report. The results of this study are intended to be useful to the college's academicians, as well as expose the knowledge tools that are available. Other information researchers, particularly those dealing with human behaviour, may benefit from the study's findings. The study findings will undoubtedly assist librarians in determining the precise needs of academicians in college and identifying the techniques that academicians most require, allowing them to make arguments for getting better library services as well as services to aid academicians in meeting their teaching and research requirements. It will allow organizations to purchase information items that serve a variety of customer requirements. The findings of this study will be also beneficial to institutional management because they aid in determining information needs and behavior.

Chapter Two

Review of selected literature

Definitions of information

Information is a fundamental resource for human life, which plays a significant role in our individual as well as professional lives. In addition, it also grows every day in different formats and can be found on different channels, formal and informal. It has been well defined as platform for the knowledge generation, the source of inventions, and the provision of resources for higher education, giving it a vital resource for the advancement of civilization (Thanuskodi, 2012).and therefore, Information is an important asset that can be used to achieve any goal set by individuals or groups (Kadir et al., 2018). In addition, (Sinha et al., 2014) defined the term “information" as an organization of data structured in such a way that they contribute significantly further than the facts independently. The term "information" similarly used to describe all of living creatures' socio - economic situation as they become more familiar with the concept of knowledge explosion, especially in the area of science and technology. Furthermore, this term refers to the current data accumulation miracle. In this sense, monitoring and arranging information in such a way that it is used to prevent the issue of information overload is a difficult task (Kumar, 2015).

People require information at all levels of their lives, from the organizational to the personal, from the highly educated and experienced to schoolchildren, from the famous to the ordinary. There is so much information being generated in this information age that we are confronted with information growth, which leads to an information explosion and exponential information pollution. People are perplexed about their information needs, information access, and information sources because of the information boom or information pollution. Therefore, depending on one's needs, information available varies from person to person. As a result, information seeking is a type of communication activity that is influenced by a variety of elements. Personal motives for seeking information and the techniques and sources used to collect the needed information are all covered (Sinha, 2014).

According to (Ojohwoh, 2019), information has been identified as an important factor in improving the agricultural production of any nation. Ojohwoh (2019) has defined information as data for decision-making. It is described as a resource that must be obtained and utilized in order to make an informed decision. Every person, whether literate or illiterate, requires information to make judgments. Thus, every sector of the population is engaged in research to enable them to improve, so they need timely and up-to-date information. Based on Ojohwoh (2019), information users require the following types of information.

- Scientific information
- Commercial information
- Cultural information
- Legal information

Information users generate these categories of information and they appear in various formats, such as monographs, books, journals, reports, feasibility reports, annual reports, theses, etc. Information, therefore, is fundamental to life and human beings, and it continues to form a whole as well as in carrying out research tasks. The major function of information is to increase the knowledge of the user, to reduce their level of uncertainty, or to reduce the variety of choices available. Similarly, information, as stated by (Ambedkar, 2019), is the "data value" for " planning, decision-making, and evaluation" of any program. A set of data that has been subjected to some processes is capable of answering a user's question, whether it has been recorded, summarized, or merely gathered, to aid decision-making. The concept of information, in the sense of knowledge, as we use it in everyday life, plays a crucial role in society. Although knowledge and its exchange are fundamental features of all human societies, ours is distinguished as an information society by the rise of information technology and its worldwide implications. It is normal to think of information as a fundamental requirement for economic progress, alongside money, labour, and raw materials. Yet, what makes information so important now is its digital aspect (Olalekan et al., 2015). Teachers were less concerned about government documents, dissertations/theses, and conference proceedings as sources of knowledge, as per a study by (Thilagavathi & Thirunavukkarasu, 2015). It has been found that a large number of teachers are satisfied with the library collections. The circulation, reference, computerized, and photocopying services were the most popular among users. According to Thanuskodi (2012), academicians employ a variety of information sources, along with their main sources of information, various techniques for gathering the information, and how they use the information

Definitions of the Needs of Information

When it comes to information needs, (Brittain, 1970) discusses that the word is impossible to define accurately. Furthermore, he noted that asking people to communicate their information demands is not always practical. According to Brittain, several information requirements studies were actually information demand studies. (Wilson, 2000b) ascribed the difficulties of the phrase information requirement to the term's complexity and various conceptions.He believes that rather than "the lack of any meaningful conception," the uncertainty had something to do with a failure to distinguish between various explanations.

Information need is a term used in information science to describe a person's or a group's demand for information to fill a knowledge gap and it is the desire that is needed to fill a gap in knowledge (Laaro, 2018). In addition, (Khan& Shafique, 2011) discussed the term information needs as the desire to locate and obtain information to satisfy a need. In a more technically restricted sense, it could be seen as an ambiguous state of mind indicating the need to seek knowledge of a particular phenomenon. Information needs and seeking behaviour is observed to be a complicated form of action people slot in while seeking information. Wilson (1981) coined the concept of information seeking behaviour when he observed that information needs could not be directly observed without observing a pattern of information seeking behaviour. Users' information needs and information-seeking behavior must be understood in order to design library collections, upgrade facilities, and improve services that successfully satisfy those needs (Tahir et al., 2008).

Furthermore, Nicholas (2000) and Wilson (2000b) believe that the following demands arise from a desire to meet one of the most basic human requirements. Though knowledge is not classed as a main need like food or security, Wilson (2000b) claims that it may be essential to fulfill everything or part of basic human needs. He demonstrated that the three types of individual needs (physiological, emotional, and cognitive) are interconnected, and that a person's information seeking behavior may include all three in order to meet needs. To deal with the complexities of determining information needs, Line (1969) suggested that a needs analysis include a study of usage & need. Furthermore, Bailey et al. (2000) claimed that user information needs research studies require knowledge of users' behaviours that may have an impact on their information needs, like as their surroundings in using sources of information and the systems they utilize or have direct connections to, as well as their professional roles and related works (doctor, manager, clinician, etc.).

As a result, it is thought that information needs are linked to basic needs. It's also linked to a disconnect between what people comprehend and how they solve difficulties. Furthermore, through use and demand, information needs can be communicated and determined. Many factors, including

the user's job function and related duties, as well as their prior experience with information systems, can influence their information demands.

Taylor, as cited by (Laaro, 2018), identified four (4) levels of information needs explained for information needs in the following four steps.

The following are some of them:

- Both conscious and unconscious people have a need for information that is not present in their memories of experiences.
- A deliberate mental description of an ambiguous location of indecision;
- The question as it was submitted to the database;
- A clear and concise description of the inquirer's concerns.

Types of Information Needs

The information needs of the users vary, in particular cases, at a particular point of time. In general, there are four kinds of information needs:

2.2.2. Current Information Need

In order to keep the users up to date in their respective fields of development, the necessity of current information is intended to make available the right information in the right format for the user at the earliest possible time.

2 2.3 Exhaustive Information Need

This is necessary when users need specific information in a comprehensive manner. Users can reach appropriate conclusions in a certain area of activity by using detailed information about that field.

Everyday Information Need

Day-to-day activities differ from one person to the next. At different times, different users require different types of information.

Every day, some consumers require information about a specific activity.

Catching up Information Need

Reliable information is one of the qualities of this type of user requirement. Users should be able to simply grasp the information if it is as straightforward and to the point as possible. Information needs can be described as the amount of information that individuals or groups of users need to have for their work. As a result, information requirements, develop whenever people find themselves in a scenario that necessitates knowledge in order to cope with the circumstance as they see fit (Stephen & Ukawuba, 2020).

Siatri, as cited by (Cln et al., 2019), stated that "information need" is a concept that has similar meanings to words such as "wants", "requests", and "demands". "Information needs is a good word that is directly connected to information seeking behaviour. As a result, a user perceives a need for information, formulates it into a question or request, and communicates it through formal or informal channels of communication and information systems in order to receive an answer that meets that need. (Khan & Shafique, 2017) reported that lecturers' information needs for preparation is generally acquired from their library**.** (Thilagavathi & Thirunavukarasu, 2015), used a questionnaire method to investigate both resource needs and seeking behaviors by academic staff. In a survey of 334 university faculty members, it was discovered that books, journals, and the Internet were the top sources of information for the respondents. Mustafa as referenced by (Uche & Nwankwo, 2018) defined information needs as something for an individual or a group's motivation to obtain resources to fulfill subjective or objective needs.

As a result, information needs begin with a confused sense that something is lacking and finish with the discovery of knowledge that improves in perception. In addition to finding answers to specific questions, people seek information. When an individual knows there is a lack in his or her level of understanding, they try to develop the skills necessary to overcome it.

Information Behaviour

The concern in information behavior can all be traced back to the Royal Society Scientific Information Conferences of 1948, as per Wilson (1999b), when several studies addressed the information behavior of researchers and technologists. Although the concept of information behavior was not explicitly stated, it was definitely present. This suggests that the word was used before Chris Hanson developed the term "information science" in 1954.There has been a significant quantity of material addressing people's information demands and information seeking behavior since the Royal Society Conference.

It is the totality of human behaviour with respect to information encompasses both online and offline information seeking and utilization, as well as resources is referred to as information behaviour. Information Searching Behaviour also refers to the searcher's "micro-level" behaviour when dealing with various sorts of information (Wilson, 2000). The term "information behavior" is now widely used to describe the way that different users seek out and use information (Bates, 2017).

In addition to this, (Bitso, 2012) revealed that knowing the information behaviour of users can help in the development of effective information services that consider the information demands, information seeking, and information source preferences of target users. Information behavior is an expressive phrase used in the field of library and information science to describe a variety of studies done to better understand human correlations when identifying their own information needs, obtaining information for any reason, and using or transferring information. Ideas concerning databases building and maintenance, community information that needs, information services, and a variety of other issues resound with the phrase in the library sector (Bharadwaj & Khan, 2016).in addition to this Case (2002), cited by (Michael et al., 2014), agreed that information behavior covers all involuntary activities that do not involve seeking, such as avoiding knowledge. (Wilson,2000) proposed a model for information-seeking behavior that clearly favors three phases, namely, the causes that lead to an individual's perception of need and the variables that influence the individual's response to that perception of need; and the procedures or behavior patterns that participate in the information-seeking behavior.

According to Taylor (1991), as referenced by (Michael et al., 2014), "information is the result of some characteristics of the information utilization context. According to Taylor, those certain components appear to be: a set of people's opinions prior to as well as informally learned perceptions about their workplace; the types and structure of problems deemed difficult and typical of this group of people; the limiting factors and possibilities of typical situations within which any team operates and takes a job.

(Wilson, 1999a) describes the behaviour of information as

- ♣ The identifying of a need for information
- ♣ The searching for information
- ♣ The utilization of information.

Information Seeking Behaviour

Information seeking is as old as man himself is. Each person, at one time or the other, intentionally or unwittingly, participates in the demonstration of data chasing. Information sources are varied and that is the thing that decides the nature of information at one's disposal (Akinola, 2009).Similarly, information seeking is a complex task, and so it is one of the most pressing issues in the field of information science (Thani, 2011). In the same way, Information seeking is an activity that every person engages in as he or she recognizes a need for information seeks it in any way imaginable, and uses or shares it.Information needs and information-seeking behaviors are affected by many factors (Patil & Oak, 2014).

On the other hand, information seeking behaviour could be understood from the point of view of the behavior of the information searcher in interacting with information systems (Laaro, 2018). It is the deliberate pursuit of information for the purpose of achieving a certain goal, whether through published or unpublished documents, or by communication with peers (Kumar et al., 2014). Information seeking is a complicated, flexible, and sociable human activity that demands a holistic view of the problem to completely appreciate it; anyway, there are still many unresolved issues (Qureshi et al., 2008). As the research finding on the information-seeking behavior of researchers at institutions of higher learning done by (Patil & Oak, 2014), respondents stated a wide range of information needs, extending from the fulfillment of assignments and projects to referencing for teaching reasons. Moreover, just 8% of participants went to the library every day to look for information, while the great majority of respondents preferred remote access to electronic information resources. At the Federal University of Petroleum Resources, (State et al., 2015) looked into academics' information-seeking behavior. By using research instruments, it was determined that books were the most popular source of information among the participants.

Unfortunately, several academics scholars were dissatisfied with the library's resources and selected Google as a source of knowledge, but the weak internet services prevented them from doing so. The most significant difficulties were a lack of appropriate power and a lack of time. In the same way; information seeking is an essential human habit that manifests itself in a specific sort of behavior. Personal goals for seeking information, the kinds of information collected, and the techniques and resources used to get critical knowledge are all things to consider while forming information-gathering habits. University libraries currently use cutting-edge technology provide the electronic information through a variety of services and to build surrounding networks of information sources available to the academic community, including students, research scientists, and instructors (Amiya & Das, 2014).

Information Behaviour models

Models were created to serve as theories and concepts for rationally revealing the various characteristics of users' information behavior in general, and specifically, their information seeking and searching behavior, as well as the wide range of variables that may influence it.However, compared to the number of models on information seeking and searching behavior, Wilson (1999a) claims that there aren't as many models on general information behavior. Wilson argues that the information behavior model incorporates both information seeking and information searching behavior models.

Information behaviour models are developed to have knowledge of specific problems wherever theories are not significant. Models are also the reason for the occurrence of theories. Models can provide an entire tangible meaning through illustrations in the form of diagrams, charts, graphs, etc. It is in need of a model that includes the core of end-user information needs as a mix of content and non-content (e.g., information resources and end-user skills), as well as the reality that information needs vary depending on the information environment in which they occur.

To this end, (Kebede, 2002) suggested a framework for end-user information needs of the electronic information environment, in which users' "information needs" are determined by the nature of "user tasks," the state of "electronic information resources," and the level of "user experience" with existing electronic information resources. The picture can further depict the model's environment and theories about the interrelationships between the constructs.

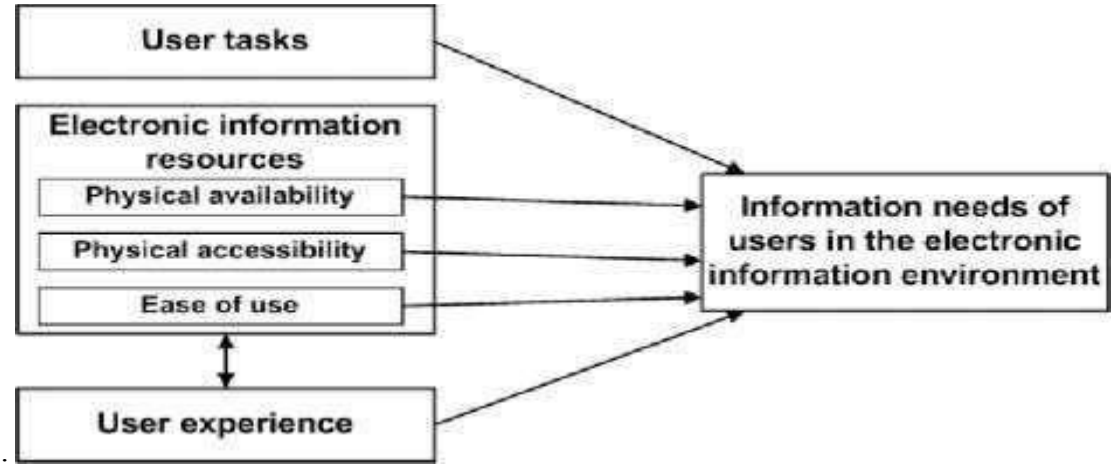

Figure 1: end-user information need model by (Kebede, 2002)

As (Kebede, 2002) argued, this is an end-user information needs model that implies information needs are simply content-related, making no distinction between the several information settings in which needs occur and must be addressed. As a result, a model is necessary to capture the core of end-user information needs as a pairing of content and non-content, as well as the fact that information needs vary based on the information context where certain events occurred. Thus, this kind of models is rarely used to discover

correlations between theoretical notions; instead, they are used to uncover relationships that are worth researching or testing.

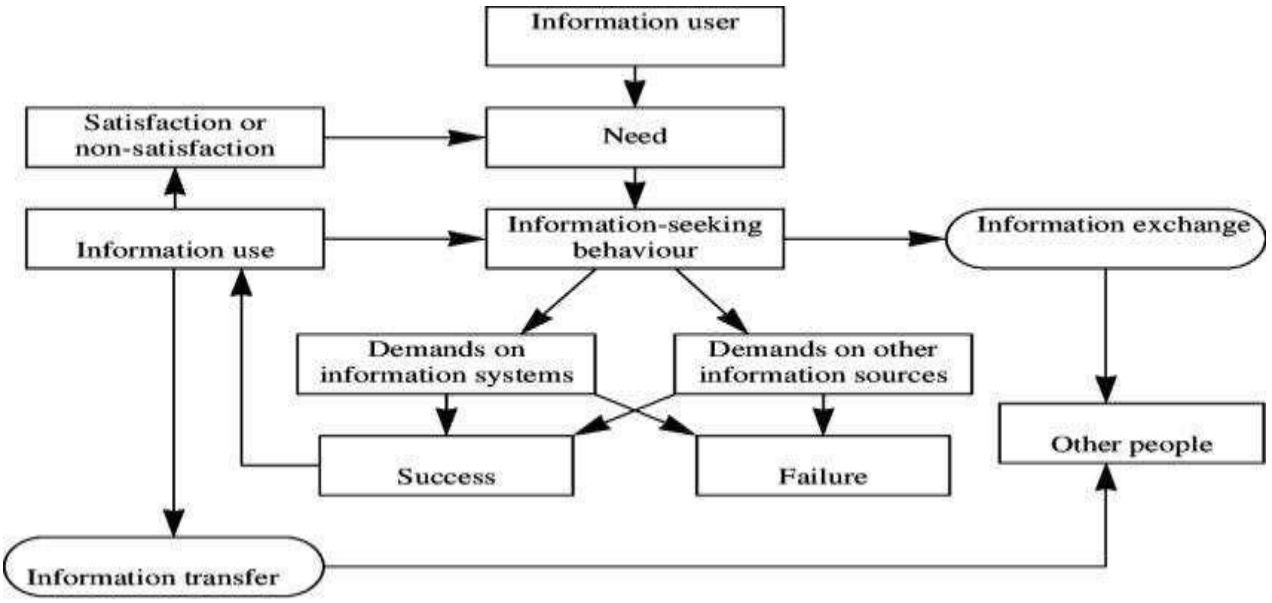

Figure 2: Wilson's Model of Information Behaviour (Wilson, 1999)

Despite the fact that the diagram's coverage is far broader and that it tries to cover the maximum values of what has been covered right here information behavior,' the primary goal of this model has been to describe the various areas entirely covered by suggests as to what the researcher proposed as information seeking behavior,' as an alternative to the then-common "facts dreams, "Information-seeking behavior model is prompted by a perceived need by an informational consumer, who, in order to satisfy that need, makes wishes on formal or informal data assets or services, leading to strength or weaknesses in locating actual information. Whenever a completion occurs, the person usually uses the knowledge discovered to fully or partially meet the perceived need – or, in some situations, fails to satisfy the need and must repeat the search. The version also implies that a portion of the records searching for behavior may involve other people via information alteration, and that good knowledge might be passed on to one-of-a-kind humans as well as being used by the character himself. The fact that information usage had gotten little attention was one of the effects of the evaluation that added to the diagram's attraction, and that assumption remains true now, within the facts generation. The problem with this type of model is that it only provides a map of the area and highlights study gaps; it provides no indication of causative

elements in statistical behavior and, as a result, does not immediately suggest hypotheses to investigate.

Wilson Model, 1981

Wilson's second model was entirely based on the most crucial elements. These physiological, cognitive, and affective requirements are all classified as simple requirements. Political, economic, technological, and other factors are among the most functionally fundamental variables. He then demonstrates how, given the same set of circumstances, the barriers to knowledge seeking will emerge. In order to establish an adequate theoretical framework to guide the research and ensure that theories of information demands and information seeking behaviors were right, some models were studied to see if they were related to the present study. The models were created in accordance with the overall theme of the research. In the literature, several information requests and models have been offered. Wilson (1981, 1999), Wilson, and Walsh (1996) information behavior models are two well-known models to investigate from the literature.

Leckie's information-seeking framework model (1996)

The information demands and information-seeking practices of scholars are investigated using the Leckie (1996) model approach.

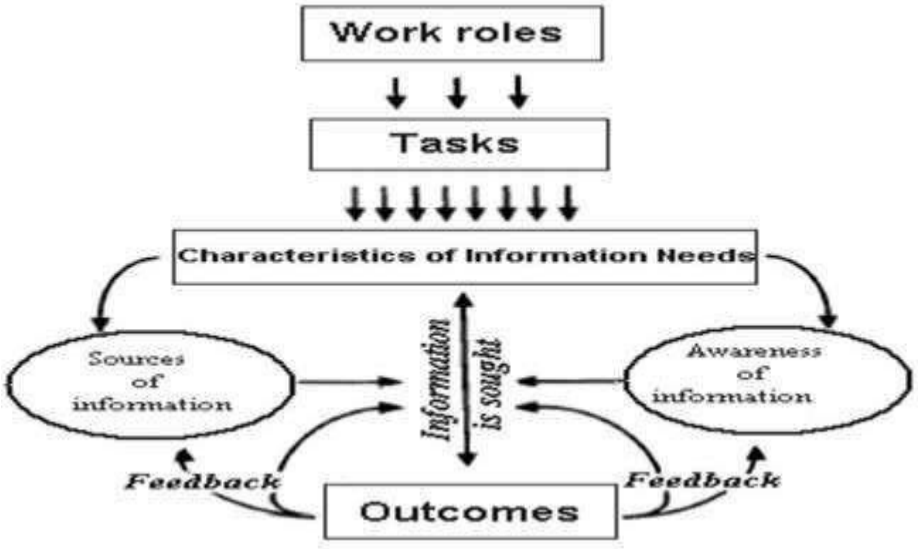

Figure 3: The model of information and seeking behaviour a highly experienced groups (Leckie et al, 1996*)*

Professional tasks, responsibility, needs of information verities, informational knowledge and understanding, internet sources, and implications are all included in the (Leckie et al., 1996)

model. Work activities, as per what he noticed, lead to certain tasks that initiate information requirements depending on the type of both the informational needs and the information seeking. As per the model, work roles contribute to certain tasks that drive information requirements, and based on the types of information needs, information seeking may occur. The information requirements dictate the information sources to be employed and have an impact on information awareness. The information needs determine the information sources to be used and influence awareness of information. The outcomes are the consequence of the information-gathering procedure. These findings reveal details about the information-gathering process, such as information requirements, information sources, and information awareness.

Furthermore, these implications may necessitate the gathering of extra data. Besides that, these consequences may result in the requirement for additional information. It is clear from the model provided by (Leckie et al., 1996) that information needs originate from tasks that arise from professional work positions. Service providers, administrators/managers, researchers, educators, and students are all examples of professionals. Educators refer to the secondary geography teachers who are being studied in this study. Assessment, supervision, counseling, report writing, and other duties are incorporated within the professional positions, as per (Leckie et al. 1996). This would apply to Lesotho's secondary geography instructors. In addition, (Vakkari, 2003) examined the duties of information seeking, retrieval, and searching.

The complexity of a task, as (Vakkari, 1999) indicated, influences its performance and, as a result, its information requirements. In addition to being educators, the geography teachers under investigation will most likely be responsible for assessing, supervising, and writing progress reports for their students. Furthermore, because many Lesotho schools lack trained counsellors, some teachers are tasked with concealing students when the situation warrants it Given the earlier reference to the role of teachers in Lesotho in topic teaching, preparation for work, and their care-giving role in the contemporary HIV and AIDS scenario, counseling obligations may be important to address in this study. Two further reviewers who report on tasks and information-seeking behavior are (Kallehauge, 2010) and (vakkari, 2003).

Information seeking is tightly linked to the performance of a certain function and its accompanying actions, according to a study conducted by (Leckie et al.,1996).Most importantly, staying in progress with industry enhances one's education and abilities is an ongoing part of a professional's job (Leckie et al, 1996).This means that geography

professors, as educators, may need to receive material not just for specific jobs and obligations, but also to stay current on the latest developments in their profession. Professional development is required for teachers to maintain and improve their teaching talents. This is true because both the content of the courses as well as the methods used to teach them are evolving as noticed by Noh (2004).

Information needs come from situations associated with specific activities linked to one or more of the professionals' work tasks, as per (Leckie et al,1996).Information requirements alter with time, according to (Kallehauge, 2010) and (Vakkari, 2003).

Some of external factors are;

- ♣ The frequency with which the need arises
- ♣ Believability (anticipated need or need unexpectedly).
- ♣ The significance of the requirement (the degree of urgency).
- ♣ The need for complication

The nature of the informational needs, as well as its significance, has been highlighted by (Krikelas, 1993) quick and delayed wants. In addition, the model's "information need analysis" component is tied to Leckie concerns' about information needs. It is crucial to figure out how old these teachers are, how long they have been teaching, and where their schools are located because of the moderating affects. This is because teachers in rural schools may have different informational needs than academics in cities. Given that the study's ultimate purpose is to develop an adequate information service for these teachers, determining the frequency with which they require information is crucial. As a result, making frequently requested information available should be prioritized. Furthermore, as Leckie points out, information seeking is deeply affected by the sources of information and ideas of information. This is also obvious in the (Krikelas, 1993) and (Krikelas, 1993) models (Wilson, 1999). First and foremost, experts rely on a variety of sources for information, including colleagues, libraries, handbooks, journals, and their own personal knowledge, experience, and experience. Because they must study a complicated collection of specialist skills before working, professionals place a high emphasis on personal knowledge and experience. Furthermore, individual skills and experience comprise the numerous techniques through which a profession's practice is carried out.

As more than just a result, it is also essential to address the geography teachers' sources of information, as well as their use of personal expertise and experience. Depending on the nature of the information need, various information sources may be useful (Meyers, Nathan

& Saxton, 2007). Assuming that the study's main objective is to impact the design and execution of an information resource, all available sources used and chosen by the teachers must be taken into account.

Leckie (et al, 1996) argue that knowledge of diverse information sources, as well as perceptions developed about the information retrieved, are critical components of the complete information-seeking process. Many academics feel that how people seek information is influenced by their comprehension and perception of information, necessarily content. According to the statement, experts would consult sources with which they are familiar and have proven experience in responding to information requests. Professionals turn to sites they know will deliver accurate information in a way they want. Professional people also choose sources that will supply information on time and that are accessible in terms of distance and cost. In a similar line, (CASE, 2007) states that it is widely assumed that individuals seek information that is consistent with their prior knowledge, ideas, and views, while avoiding information that contradicts their internal convictions. Kuhlthau (1991) says that humans actively and constantly develop their vision of the world by integrating and encouraging new knowledge with much of what they presently know or have skills for, which supports this view. Besides that, because people's capacity for assimilating new knowledge is limited, Kuhlthau (1991) asserts that individuals purposefully manufacture meaning by selecting attending to information that connects to what they already know. And though information source preferences change over time, it is necessary to identify the information source preferences of the geography teachers in this study in order to provide relevant information services (Hepworth, 2007; Wilson, 2006a).However, because change is unavoidable in life, an appropriate information service will necessitate regular examination and close monitoring (Chattopadhyay, et al, 2006).Variables such as demographics, context, information demand, and prior knowledge influence users' choice of information sources in various information behavior models (Taylor, 1991:Wilson,1999).

Finally, the outputs of the information-gathering process are known as outcomes. It is possible that it's the outcome of work-related needs for specific job positions and duties (Leckie et al., 1996) The best outcome, according to the (Leckie et al., 1996) model, is when the information demand is met and the expert has completed his or her duty. Besides this, it is possible that the result does not satisfy the information requirement, resulting in the task not being completed and the need for additional information being pursued. In the model, this is referred to as the feedback loop (Leckie et al., 1996).The current availability of information,

According to (Prabha et al., 2007), makes it critical for information seekers to choose whether information is sufficient to accomplish their goals. (Prabha et al., 2007) explore information-seeking behavior models and when to cease looking for more. One can deduce from their article that decision-making is influenced by a number of elements. Professionals also select sources that will provide timely information and are accessible in terms of distance and cost. Individuals seek information that is congruent with their past knowledge, thoughts, and perspectives, and reject information that violates their own convictions, as per (CASE, 2007). (Kuhlthau, 1991) argues that humans constantly and actively create their view of society by combining and adapting new understanding with something they already learned or have practiced.

Moreover, because people's capacity for accepting new knowledge is reduced, Kuhlthau (1991) claims that individuals purposefully manufacture meanings by selecting attention to information that connects to what they already know. Although active information choices change over time, the geography teachers in this study's information source preferences must be defined in order to provide suitable information services (Hepworth, 2007; Wilson, 2006a). But, while change is unavoidable in reality, an adequate information services will necessitate regular examination and continuous monitoring (Chattopadhyay, et al, 2006).Variables such as demographics, context, information demand, and prior knowledge influence users' choice of information sources in various information behavior models (Taylor, 1991:Wilson,1999).

Finally, the results of the information-gathering process are known as outcomes. It’s possible that it's the result of work-related requirements for specific job roles and tasks (Leckie et al., 1996) The optimal outcome, according to the (Leckie et al., 1996) model, is when the information need is met and the professional has completed his or her task. However, it is possible that the result does not meet the information requirement, resulting in the task not being completed and the need for additional information being pursued. The model's feedback loop has been defined as follows: (Leckie et al., 1996).The current abundance of information, as to (Prabha et al., 2007), makes it critical for information seekers to determine what information is sufficient to achieve their goals.(Prabha et al., 2007) talk about information-seeking behavior models and when to stop looking for more. One can deduce from their article that a number of factors influence decision-making. These elements could be factored into the model's outcomes component's feedback loop (Leckie et al., 1996).Users' feelings about having enough time to write; money and effort; experience and understanding

of trusted reviewers; the severity of the problem and tasks; situation, situation, or setting in which the user is; system; user motivation level; task-domain knowledge; and information-seeking ability, according to Prabha et al., 2007. It's crucial to figure out what geography teachers do when their information needs aren't being met despite their best efforts. The (Leckie et al., 1996) model was chosen as the theoretical framework for this study because it was thought to have characteristics that could help to address the main research question and, as a result, guide the design and implementation of an appropriate information service for secondary level geography teachers in Lesotho.

Furthermore, this model was selected because it encompasses both information needs as well as the information seeking, that are crucial to the current research. In addition, the model was developed by observing professionals in the workplace (lawyers, engineers, and health care providers).(Leckie et al., 1996) claim that their methodology applies to all types of professions. This is significant in this study because it focuses on teachers' information demands and patterns of information seeking in relation to their professional activity. In addition, this model was determined to be straightforward to grasp and follow when compared to the other models examined. Because the (Leckie et al., 1996)model serves as the theoretical foundation for this research, it is useful to see how other academics interpret it. As a result, the next part reviews some literature on this model.

Literature review model of (Leckie et al., 1996)

The (Leckie et al., 1996) model is only applicable to experts, as (Tina Du et al., 2013) explained, it’s no surprise that jobs and tasks are the key motivators for information seeking . As described by (Tina et al.,2013), the packaging, timeliness, affordability, quality, and accessibility of the sources, as well as their trustworthiness, packaging, timeliness, affordability, and accessibility, are all key features of this model. As confirmed by (Tina, 2013), the (Leckie et al., 1996) technique increases awareness of information sources and prompting individuals to examine their needs. The information requirement's behavior and significance are understood as a two-way process. Tina et al. (2013) criticize the narrative for focusing primarily on workplace professionals and ignoring non-work concerns that may influence a professional's behavior. This approach is well-suited to a study that examines teachers' information demands and patterns of information searching for employment purposes in some aspects. The use of the model in this investigation is supported by the limitation mentioned earlier (Tina Du et al., 2013).The technique, on the other hand, might be expanded to include non-subject teaching suggestions for teachers.

According to (Leckie et al., 1996), the model was developed as a result of an examination into the effects on information practices of users' responsibilities at work and the tasks they are tasked with (Court right, 2007).Corporate cultures, individual habits, information sources and systems accessible, and employee commitment to professional progress all influence the tasks that result in information demands and the techniques utilized to satisfy those needs. This implies that the unique work settings of instructors must be taken into account. One of these situations could be that they teach in various schools, in different places, with distinct information resources and school governance.

Teachers at the secondary level may teach a variety of subjects and have varying teaching loads. It's also important to figure out what kind of information sources and systems teachers have access to (Court right, 2007). This could include the organizations and infrastructures in place to help instructors get knowledge. Pettigrew and colleagues (Pettigrew et al., 2001)The (Leckie et al., 1996) strategy is holistic and based on the idea that professional information-seeking research should understand the broader working context and study, in depth, the complexities of each individual's work, including all the roles a professional must fulfill. This is done to account for the complexities and unpredictable nature of the information-gathering process. This means that the study must take into account the context of geography education in Lesotho. Context could refer to the information resources available in schools, their accessibility to instructors, and teachers' opinions of the information content of these resources, for example. Furthermore, everyone should assess geography instructors' obligations, including their roles and responsibilities in the schools where they teach, in order to determine their information needs and the ways by which they obtain that information. The (Leckie et al., 1996) information seeking of professional's model was influenced by lawyers, engineers, and health professionals.

This is very much a scientific group of individuals. Conversely, in this study, the model will be applied to geography professors who are experts in the field of education.(Baker, 2004) thought the (Leckie et al., 1996) model was overly formal, and that it should be applied to conventional types of labor in an institutional setting where information in many formats can be easily accessed. In Lesotho secondary schools, geography is sometimes combined with science disciplines and other times with social sciences.

This study's participants are from a poor country, whereas the literature-based paradigm is more common in developed countries. Regardless of the fact that only some professionals, such as teaching staff, nurses, doctors, librarians, and others, have the responsibility of

sharing and giving information, Baker (2004) claims that the (Leckie et al., 1996) model doesn't really address information-giving (i.e. information-sharing) in the information-seeking process of professionals.

As a result, this model is used, while acknowledging the difficulties rose above, with the anticipation of some discrepancies between the model and the outcomes of this investigation. According to the lawyers surveyed, the five functions indicated in the (Leckie et al., 1996) model did not relate to their information searching activities (Wilkinson, 2001).Wilkinson (2001) defined just two jobs: service provider and administrator/manager, but not the three positions of researcher, educator, and student. Professionals may have fewer or functions that are significantly different from those described in the (Leckie et al., 1996) paradigm, according to Wilkinson (2001). As an outcome, the model's critique and evaluation studies show some crucial facts about the model, such as the need to use it flexibly and recognize that not all of its components and variables are applicable in all situations. The above-mentioned literature on the (Leckie et al., 1996) model underlines the importance of addressing the following: Professionals' broader work setting, including sociopolitical and economic realities in their countries, institutional frameworks, and infrastructure for information services and resources. Nature of the work, which could be scientific or not.The variety of roles, tasks, and requirements connected with each profession, as well as the discipline in which it is practiced. Possibilities for professionals to give and share knowledge at work and in non-work settings.

Further studies following the model of (Leckie et al., 1996)

The model had been utilized as the study framework in many empirical studies, in order to achieve research objectives mentioned in the preceding section, according to the literature. For example, using the model as a conceptual framework, (Du Preez & Fourie, 2009) report on a study of consulting engineers' information behavior in South Africa. (Landry, 2006) studied dentists' work responsibilities, tasks, and information behavior using the model as a conceptual framework Baker (2004) utilized this as a model for investigating the information focus on female cops conducting undercover sex worker operations. The model was used by Kerins et al. (2004) to investigate the information seeking behavior of engineering and law students at a number of Irish colleges. Furthermore, the model was utilized by (Kostiainen, Valtonen, & Vakkari, 2003) to evaluate information seeking in pre-trial police investigations. In addition, (Wilkinson, 2001) created and contrasted a model of practicing lawyers' information-seeking behavior to that of Leckie et al (1996).The technique employed as the

study's conceptual framework has been applied in previous studies on information demands and seeking, as shown in these images. This is extremely important because this model is deployed based on the knowledge that it has been effectively utilized in earlier research projects related to the current study and how it was deployed, as well as a grasp of its shortcomings and other authors' views.

The Benefits of an Information Behaviour Model

A few of the advantages of models and theories is that it can be used to describe and, more importantly, predict future events. To forecast what information the user would choose, a general model of information behaviour can be employed. The product that the user will purchase might be represented by the information selected on the Internet. In other words, it has the potential to forecast an individual's choice and decisions (Ohtoshi & Gottschalg-Duque, 2016).

The Evaluation of information

Once a person has found information that will address their information needs, they match what they have found with what they need and already know. In principle, there is a need to analyses or evaluate the relevance of information before it is used. This process requires people to critically think about the relevance, reliability, validity, accuracy, authority, timeliness, point of view or bias of information sources that they consult. Although most of the sources of information found in the library collection have already been evaluated for inclusion, this does not necessarily mean that these sources are always relevant to users' information needs. By taking this study in advance, (Mahajan, 2009) pointed out that information seeking, behaviour varies from one user to the other. Because of that, libraries must understand the information needs of their users in order to re-engineer their services and provide information efficiently. For the reason that the acquisition of suitable information platforms that would allow for smoother service delivery, consumers' information needs and information-seeking behavior will be better understood. (Chaura, 2015)

Academicians' information requirement

This is to check related writings on the data needs of academicians. Academicians are individuals who are utilized by the college to address, manage understudies research, create courses or subject educational programs, and so forth. For the most part, the term is utilized to incorporate educators of different positions, partner teachers, scholastic specialists (Ph.D) and so on. There are two kinds of academicians in the college, in particular, full-time

academicians and low-maintenance academicians. Academicians who work full-time for the college may be absent from campus during the late spring excursion.It is in this classification that bookkeepers additionally have a place. Then again, low-maintenance academicians are individuals who are contracted for a year out of each year. These sorts of academicians are some of the time called nine-month scholarly, workforce staff, a year scholastics or academicians.

Furthermore, the word "information needs" was defined by (Ishimura & Bartlett, 2014) as "the necessities, wishes, or demands of acquiring information. “Various users may have varied needs for information for various reasons. There seems to be a variety of ways to obtain information, including research, references for specific topics, mindfulness, and far more. It is indeed critical for all users to know the vital information they need in order to have access to the appropriate source for that information. The concepts of "information need" and "awareness" are frequently interchanged (Ishimura & Bartlett, 2014).Academics are expected to attend their classes on time, according to Richmond University (1999).He or she is advised to participate in all academic staff and faculty meetings, to attend enrollments and needs to be sustainable, to serve on academic staff committees with loyalty and diligence, to assist the chair and colleagues of the member's department in carrying out the department's program, and to cooperate fully with the trustees, the president, and the provost. They will indeed be set to continue teaching until the end of the session for which they were hired.

Academicians received much more attention for carrying out the aforementioned responsibilities at the university. He classified library users into general users, specialist users, disabled users, non-reading users, and non-literate users in his classification of library users (Aina, 2002).Specialist users, he claims, frequently use the library to expand their knowledge of their fields. Individuals are indeed usually passionate about the disciplines in which they work and study. He further stated that for students, professionals, and specialists, their immediate information needs center around information that will support learning, teaching, and professional development. As a result, the library's services must include all materials that will help them achieve their educational, professional, and career goals. They also require general information for meeting their day-to-day activities.

Types of resources utilized by academicians

Academic information resources can simply be defined as all of the gadgets that are available and that can be utilized to gather data. Textbooks, periodicals, Internet sources, television, radio, coworkers, and friends are just a few examples.(Kakai, 2004) asserts that the

University Library is the sole well–established institutional information source with diverse information resources for further inquiry, based on the nature and range of information resources in each of the sources. Theses/Dissertations, Reference materials, Newspapers, the Internet, , online databases, Conference Proceedings, and Print Journals were all categorized by the researchers. Physical information, as described by (Amope, 2007), is things that can be seen, such as population data, water points, location of places, maps, and geographic information about places.

According to her, social information includes political news, organizational information, ethnic and cultural considerations, health projects, and living situations. Information-seeking behavior has been influenced by the expansion in the volume, kind, and format of information available on the Internet (Fidel, 1999).Everyone benefits from current information. A significant component of the philosophy is the emphasis on direct, experienced knowledge acquisition in the concrete, physical plane of existence. The philosophical emphasis on direct, experienced knowledge acquisition in the material, physical plane of reality is an important part of information seeking. Individuals seek certain types of information for personal reasons (Leckie et al., 1996). Between 1998 and 2000, both Internet usage and monograph spending increased, as per (Abels, 2004). People seek information from a variety of places, including coworkers, libraries, books, journal articles, and finally personal expertise and experience. This is because current and up-to-date information can be found in periodicals and journal publications. While colleagues share knowledge on academic and other subjects, the library provides, organizes, interprets, manages, and disseminates material in print and non-print formats. Secondary information collected from primary sources such as journals and assembled for various information purposes on various issues or topics is contained in the books.(Leckie et al., 1996) classifies these information sources according to their channels or forms. These can be informal, such as chats or discussions; internal or external, such as sources within the organization or outside; and internal or external, such as sources within the organization or outside.

Several studies have been conducted to look into the use of all of these sources. (Leckie et al., 1996) discovered that scientists and research engineers who work in R&D rely more heavily on formal channels, particularly scientific and technical periodicals, than their peers who work in manufacturing. According to Leckie et al., the latter finds oral communication, relying on coworkers, supervisors, and personal expertise and experience to be the most relevant sources (1996).Oral communication is preferred by scientists and research engineers

as a technique of receiving information since it allows them to explain, charity, and adjust their information requirements.

Today's users do not have to rely solely on the library to obtain information. They use a variety of methods to accomplish this. Users of academic libraries are not immune to this. Teachers and students from academic institutions are the primary consumers of academic libraries. Because many institutional employees have recently become more demanding, we use a variety of printed and non-printed materials to gather information. This research is being carried out in order to examine data in order to determine the behavior of government agencies. There were 187 members in higher education institutions, according to higher education institutions. These users have their own knowledge and use numerous Internet search engines and online databases with printed resources to conduct research projects, such as research projects, education for education, and presentations, among other things. As a result, we needed to research data on teacher behavior at the agency in the current circumstances (Patil et al., 2014).

2.9. Academicians' information use habits

Academicians especially in higher education institutions are responsible for giving learners with the necessary information that will enable them gain confidence and independence. In order to perform their primary functions effectively, academics must be able to determine when information is required, know the sources of information that can meet their needs, know how to access information that can meet their needs, know how to use the information to fill knowledge gaps, and mitigate the challenges that affect their access to information (Ngozi, 2021).similarly, The research by (Andersen ,2000), as referenced on (Bhatti ,2009), on information seeking and It shows how people go about finding the materials they need to fulfill their information needs.

According to (Bhatti ,2009), academicians required information for teaching (class lecture preparation), borrowing books or journals, conducting research, keeping up-to-date knowledge, and reading newspapers. They looked for these by reading library resources, having meetings, and consulting experts in the area, among other things. Based on (Bhatti, 2009), lecturers understand their colleagues as their primary source of informal knowledge. According to the report, more than a quarter consult topic experts, and about a fifth consider lectures, conferences, and workshops to be beneficial in gaining information to up-to-date knowledge. This indicated that the academic staff seeks for their information needs colleagues, subject specialists, seminars, conferences and workshops.

Information is a social process that can be characterized in terms of requirements. All information needs are related to the reason for seeking for information that is relevant to a certain user's concerns, interests, likes, and dislikes. Thus, the user's need determines which information is important and may be accepted, as well as which information cannot be tolerated(Patil & Oak, 2014).Academicians' information needs occur when they want to know something, understand something, or solve a problem; these information needs are referred to as an information problem. Academic staff can face challenges such as how to enhance their teaching, increase their study productivity, establish topic curriculum, update lecture notes, and update their knowledge of health, among other things. Information need can be internal or external driven, according to (Lucky et al. 2013).

Based on (Lucky et al. ,2013), extremely organized information requirements are those, which occur because of a desire to learn from within the person, while externally motivated information needs are those that arise because of a request to react to an external stimulation, such as a question posed. The information issue appears as a void or inconsistency in the individual's structure, and there is a perception that there is an insufficiency in his or her expertise or mental model, whether internally or externally motivated.

The effect of modern ways of processing and accessing information, as well as their significant importance when compared to conventional products and methods, is changing the information seeking behavior of users in general and academicians in turn. This means that there have been new information services and approaches that are growing scholar workers, whereas the conventional approaches are declining their appeal. According to (Gwang ,2013), lecturers in higher education use information literacy to access information more easily on their own rather than relying on library staff. (Womboh 2008) stated that academic staffs in higher education have no longer need traditional, non-ICT literate librarian.

The varieties of information's required by academicians

Different studies have observed that library users use multiple resources for various reasons in order to meet their various information needs. (Thanuskodi, 2009)revealed that compared with printed fonts, respondents use IT-based library fonts and facilities less frequently. This may be due to lack of understanding of its usability, wrong choice of materials, or unfamiliarity with these products. Similarly, it was also observed that email is the most popular Internet application, while a small number of respondents only use other Internet-based services and applications. This is a worrying issue, because electronic information sources and the Internet are considered extremely important tools for effective teaching and research today. Therefore, the Central Law School Library wants to review its electronic information resources.

Compared with printed resources, Academicians use IT-based library resources and facilities less frequently. This is due to lack of understanding of its usability, wrong material selection or unfamiliarity with these products. Similarly, it is observed that email is the most popular Internet application, while a few scholars (Majid & Kassim, 2000)pointed out that only other Internet-based services and applications are used. This is a worrying issue because electronic information sources and the Internet are considered extremely important tools for effective teaching and research today.

Academicians' behaviour of Information-Seeking Factors

Information sources especially journals, indexes and obstructs. They have also computers as their disposal, as well as access to the usage of the internet, as per different the source revealed. Beside email, very little use is made of other internet facilities. The non use of the internet is attributed to problems of accessibility, ease of use and cost. Different literature works shows that information needs and seeking behavior are affected by a variety of factors, depending on the condition. A lack of search skills, a lack of reliable communication facilities, an unfamiliarity of existing services, a lack of well-trained specialists, and a lack of relevant sources, among other things, could be some of the reasons.(Laki et al. 1996) discussed the factors that affect academician's when seeking for information, such as lack of information sources, such as manuals, magazines, articles, targeting tools, and personal experience; lack of information knowledge: direct or indirect knowledge of various sources and processes; and lack of

information skills. On the other hand, the perception of information obtained during the information search process.

Therefore, the individual's general knowledge of the source or content of the information can determine the process of finding route information. Describe how the best information needs will be met for the reason that the information search process and how academicians will complete the task. Similarly, (Aguolu, 1999) in his opening speech at the University of Maiduguri, attributed the lack of information search to users due to: Due to low education or illiteracy, there is a lack of awareness of the value of information; there's also a lack of understanding of the potential of existing information services; there is indeed a lack of understanding of the nature of the problem; and there's also a lack of adequate library and information services. A lack of understanding of available resources is another issue that affects academicians' information seeking behavior.

According to (Adimorah, 19977), the selection and usage of information resources is limited by a lack of awareness of current services and competence about existing services. He theorized that the lack of use of information services in Nigeria and Latin America is due to a lack of awareness of their existence. Another factor that influences academicians' information necessities and information seeking behavior is a lack of trained staff. Whereas, (Kanki, 1998) observed that the variety of people working in a library can have an impact on information searching. As the study stated, a shortage of library specialists affects many libraries.

Academicians' Behaviour of information utilization: The Strategies Used for Improving

Finding of behaviors to capture information query obstacles is one of the solutions to advance once' information query behavior. The strategies adopted to promote the information needs and seeking behaviour of academicians includes, offering user education, the provision of sufficient information resources, sufficient trained personnel, the provision of search strategies, the provision of an environment favorable services.

(Martin and Metcalfe, 2001) stated that ways of informing are individual to each person's concerns, as are the issues they want to be informed about, given that communication with academic personnel in information institutions is either through reference interviews or bibliographic training sessions. Several authors point out that libraries have attempted to meet this demand in the past by promoting user education services (UES) and selective dissemination

of information (SDI), which can be done in print or electronically.(Lau, 2001) found that, despite taking on the role of user information trainers, librarians' work tended to be done in isolation. To make library education a part of the learning experience, collaboration was required. An information institution's public relations services have a significant impact on how its resources are used and how users seek information. The library should propose a well-planned user training and information skills program, as well as physical development of collections and structures. It should advocate for funding to expand print and electronic collections, including serials and reference databases; extend access points, most likely electronically; and increase the number of librarians serving the university's ever-growing student body. Everything should be done in order to address the information resource providing plan.

According to (Udo-Anyanwu and Uche, 2008), the librarian is responsible for ensuring that information items such as textbooks, reference books, and serial publications are obtained while keeping in mind the institution's courses and programs. They do urge, however, that the librarian should not be biased in this area of responsibility, and that resources should be acquired in a reasonable manner. This has the effect of demoralizing users, whose courses are not covered, causing them to lose interest in the library. The resources also need to be current and structured in such a way that users can quickly find and access them in the least amount of time to meet their information demands. Another useful method to use is to create a conducive environment for academics to engage in knowledge seeking activity. Institution libraries should not only be positioned in the optimal location, such as in the heart of the university where students would utilize them, but they should also be located in an environment that is not favorable to their intended purpose. Fundamentally, libraries must be user-friendly in terms of cooling, entrance spaces, stacks, comfortable seats and sitting configurations, and study opportunities, among other things. For security concerns, (Ogbonna and Okenyi, 2006) highlighted that the building should have only one access and exit point. The temperature range, including wind and sunshine, should be calculated. Pollution should not be permitted since it harms books. Externally, (Udo-Anyanwu and Uche, 2008) suggested that the librarian and the architect work closely together throughout the building's design, taking into account the library's existing and future users. The external environment of the library should allow for the planting of attractive trees, proper drainage, adequate parking, and future extension.

Another important approach to improving academic staff's quest for knowledge is to deliver a search strategy. According to (Avery, 2001), librarians should investigate what people need and decide what will offer the best services to users. Academic institutions should be informed about how totally computerizing their libraries enhances the usage of on-line reference sources, as per (Aguolu, 2002). The machine must be connected to the internet, synchronized, and used in everyday tasks. Users can use this system to access online reference sources. Users can login from faraway areas, browse resources, and make reservations without having to physically visit the library because of proper networking. As a result, both users and staff should be instructed on how to use these technologies to retrieve on-line materials for their research studies. This will go a long way toward increasing postgraduate students' use of online reference services in university libraries.

When it comes to training, (Daniels and Mathews, 2000) claims that the internet allows for global access to on-line reference tools and a number of other reference resources. The Internet has grown into a magical weapon in the reference librarian's foundry for easily answering user queries. According to (Kresh, 2001), library staff needs proper training in order to work effectively. Professionals must be sent to in-service training on a routine basis to stay current on the expanding frontiers of knowledge and the most up-to-date methods of accessing and distributing information.

Related work reviews

In this subsection, Adhena (2020) carried out a study of the electronic information seeking behavior of the faculty and staff of the Maichu Institute of Technology. The results showed that respondents used electronic information most frequently for research, communication, general awareness and teaching purposes. The results of the interview showed that most of them use the Internet every day. However, academic staff less frequently uses electronic information for entertainment. The results showed that most of the 43 respondents (66.2%) used electronic information for general understanding. The results also showed that the interviewees were not satisfied with the Internet connection speed (Adhena, 2020).

In particular, to determine information needs and information-seeking behavior, (Khan & Shafique, 2011) conducted a study of college teachers in Bahawalpur, Punjab, Pakistan. The purpose of the study was to look into the information needs and behaviors of college staff in Bahawalpur. To collect data, a questionnaire was employed.As per the findings, university

lecturers and administrators are most interested in learning about course preparations, important skills to develop, and current events. They typically obtain information from books and monographs, but they also frequently rely on informal sources of information such as conversations with coworkers and close friends. College libraries should be renovated with better facilities and collections, according to the report. Libraries should be provided with appropriate hardware and technology, as well as internet access to related information.

(Demmelash, 2018) also studied the information seeking behavior of academic staff at Wachemo University. The main purpose of the study was to examine the information seeking behaviour of academic staff at Wachemo University. The findings from this study showed that most academic staff did not use the library because of unavailability of internet connection, lack of updated information sources, and academic staff in the university faced several problems, such as: poor library facilities, poor internet connection, lack of searching skills, inadequate information communication technology facilities, lack of information, accessibility and quality of information, power failure, and lack of time. Administrators and librarians who are in charge of monitoring the day to day running of the information systems are empowered with all the relevant academic information and university administration need to facilitate internet access for academic staff in their offices.

This study is similar to the current one in that it relied on the information demands and information seeking behavior of academics, also known as academic staff, which are the brains behind the current study. Furthermore, the study was using a questionnaire as the research instrument, which was also one of the instruments used in the current investigation. The distinction is that the latter was done at a different location (Bahawalpur). The performance took place at the Defence Command and Staff College.

Furthermore, (Kakai, 2004) did an investigation into the information seeking behavior of Makerere University undergraduate students in Uganda. The goal of the study was to figure out how to improve undergraduate students' information-seeking behavior. A questionnaire, interview, and observation approach were used to obtain data from a sample population of 108 undergraduate students. The six generic information–seeking actions proposed by Ellis were put to the test in order to determine how undergraduate students seek information. The mentioned hypotheses were tested using the chi–square statistic. The results offer awareness of the factors that influence students' information-seeking behavior and the information sources they use. The

study recommends that may assist students in improving their information-seeking behavior and resource utilization. To test the hypotheses, the chi–square statistic was employed.

The research discussed above has some similarities to the current study in that it concerns information seeking behavior, which is a variable in the current study. The work also uses the same data collection tool (questionnaire, interview, and observation method) as was employed in the current investigation. The study, however, was limited to undergraduate students at Makarere University in Uganda, whereas the current study covers the information needs and information seeking behavior of academicians at Defense Command and Staff College. In addition, the information needs and behavior of arts and humanities teachers: a survey of the University of Punjab, Lahore, and Pakistan (Tahir and Shafique, 2008).The study's goal was to look into the methods and sources of information used by humanities professors to get the information they needed. The questionnaire was used to gather information from a total of 120 full-time academics and researchers.

According to this study findings, consulting subject-matter experts and then discussing with peers is the preferred approach to receiving information. The most significant teaching resources are reference books. The most important source of information for research is consultation with knowledgeable people or experts in the field. Nowadays, many social sciences academics use their department library as a source of information; for this reason, they have private collections. According to the report, libraries and information professionals, particularly in Pakistan, should do research on users' information needs and provide resources that are more appropriate and services for various user groups. Because one of the data collection devices used in the current study was also used in the prior one, it is taken into account in this one. The formal, once again, dealt with academic staff's information demands and seeking behavior, with the exception that it was limited to arts and humanities professors at various universities.

Similarly, at the International Islamic University Malaysia, (Majid & Kassim, 2000) performed study on the information-seeking behavior of legal research researchers. The purpose of this study was to determine which information sources were used by law academic staff at International Islamic University Malaysia, along with their preferable sources of information, information seeking methods, overall resource utilization. The Questionnaire was used to gather information from 80 law professors. It was discovered that responders gathered information from a variety of sources. The most essential source for teaching and research was books, which were

followed by legal reports and legislation. According to the findings, the IIUM library should assess its electronic resources while also launching a comprehensive library advertising and user education program.

The Study (Majid & Kassim, 2000) reviewed current work because it focused on the information seeking behavior of faculty and staff, that is, academic staff in universities. Furthermore, this study also used tools (questionnaires) used in previous studies to strengthen this relationship. The distinction is that the earlier study was limited to the Law School of the Islamic University of Malaysia, utilizing only questionnaires to gather data, whereas the current study covers the information demands and search behavior of the whole Defense Command and Staff College's academicians.

In Enugu State, (Umunnakwe & Eze, 2015) studied on secondary school guidance counselors' information requirements and provisions. The purpose of the study was to determine what kind of information secondary school guidance counselors in Enugu State required. A descriptive survey was used to conduct the research. A sample of 119 professional guidance counselors was used because the study was available. The data collection tool was a questionnaire. Department specialists checked the instrument for clarity, proper phrasing, appropriateness, and item adequacy. With the help of three experienced assistants, the researcher gathered data and analyzed it using frequencies and the mean. Counselors need information for consulting, and they get it from multiple sources, including conversations with people and coworkers, religious organizations, and even learning and academic library resources and many other library services. Lack of time and money, as well as a post-primary school administration board hesitant to provide critical information, were among the issues noted by the study.

The study recommended that guidance counselors be provided with current journals and textbooks, that conference proceedings be used to alert them to the availability of information, that available materials be organized for easy retrieval, that in-service training be provided, and that computer training be provided. Because it dealt with information needs, the study that was focused at is relevant to this one.It used the same descriptive survey design as this one.

The distinction is that the study in issue was designed to look into the information needs of guidance counselors in Enugu State secondary schools. The goal of this research was to determine what information is needed and how academicians at the Defense Command and Staff College obtain it. In a related development, (Annune et al., 2014) looked into the information

needs and distribution to artisanal fishers in three Benue State local government areas. The study's goal was to find out what information artisanal fishermen needed and how they went about getting it in three local government areas in Benue State. The study was designed using a descriptive research methodology, with a sample size of 198 fisherman chosen from a total population of 391 utilizing purposeful simple random sampling approaches.

A questionnaire, structured interview, and focus group discussion were used to collect data. For the sake of reliability, the instrument was validated. The researcher gathered data with the assistance of three trained field assistants and analyzed it using frequencies and mean. The findings revealed that artisanal fishermen in Benue State have information needs in a variety of areas, including modern fishing methods, modern fishing facilities, the effects of noxious fishing practices, conflict resolution, water pollution, weather effects on fishing, and the organization of fishing cooperatives. Traditional and modern approaches are used to provide information to artisanal fisherman in Benue State. However, not every one of them works. The absence of extension workers and rural libraries, among other problems, were identified as factors affecting information needs and dissemination among artisanal fishers in selected areas in Benue State.

According to the report, the government should hire more librarians and extension workers, as well as create a link between the public and extension workers, so that they can efficiently communicate information to artisanal fishers in the state's affected local government regions.

The above-mentioned study (Okwu et al., 2011) is similar to the current work in that it concerns information needs. The distinction is that in Okwu's study, the information needs described are those of artisanal fisherman, whereas in the current work, the information needs discussed are those of academic personnel and their seeking behavior. Okwu's initiative covered several towns in three Benue State local government areas, whereas this one is limited to the Defense Command and Staff College. Similarly, (Sawyerr, 2012) investigated the information needs and distribution of five rural villages in Bayelsa State's Sagbama Local Government Areas. The purpose of the study was to determine the information needs of rural people in Bayelsa State descriptive survey design was used in this investigation. The overall population of the study was 187146, and a purposeful sampling technique was used to sample 1% of the entire population. A questionnaire and focus group discussion were used to collect data (FGD).Two expect validated the gadget in order to confirm its reliability. The researcher collected data with the help of field

assistants and analyzed it using mean and standard deviation. Rural residents in Bayelsa State's Sagbama Local Government Areas have access to information about health, education, government and its agencies, occupations, and agricultural challenges, according to the findings. Apart from that, information demands are not addressed due to poverty, illiteracy, ignorance, and a lack of infrastructure. The government and its agencies, as per the study, should provide a good information environment for rural residents by organizing adult literacy classes, training more information providers, and broadcasting news in the people's native languages so that they can understand the information given to them.

(Utor, 2008) conducted a research of parliamentarians' information demands and information seeking behavior in the North Central States of Nigeria's house of assembly. The research looked on the information needs and preferences of MPs in Nigeria's houses of assembly in the North Central States. A survey research design was used in this study from a total population of 160 people, 80 were chosen using the purposive sampling technique. The Questionnaire was the primary data collection tool. The instrument was validated by experts in the field of reliability. The primary data collection tool was a questionnaire. Experts in the field of reliability validated the instrument. The researcher gathered data and used frequencies, percentages, and the mean to analyze it. The study's findings show that the respondents used a variety of strategies to meet their information needs, including discussions with coworkers, friends, party members, professional associations, religious bodies, and other information centers. The findings reveal a variety of issues, including staff reluctance to provide information materials, information material distortion, and so on. The study recommended that free access to information legislation be enacted and internet facilities be acquired, among other things, to enable parliamentarians to seek and meet their information needs.

The above-mentioned Utor study is pertinent to this one because it looks at information needs and behavior, which is also the objective of this one. The distinction is that Utor's study focuses on lawmakers' information needs and behavior, and it covers all of Nigeria's North Central States, whereas the current study focuses on academicians information needs and behavior, and it is limited to the Defense Command and Staff College.

An overview of related works

The study of literature examines the information provisions and activities of educators. Academicians are defined as faculty members who have been appropriately prepared to acquire, organize, process, and share knowledge in college. The researchers found many scholarly articles to see what factors that affect their information needs and search behavior. Needs and wants, sources of information accessible, information-seeking behavior, and the extent to which information requirements and seeking behavior intersect Efforts to raise academics' information demands and seeking behavior are also underway. Several studies on information needs, information resources, information seeking behavior, the importance of information needs, factors that determine academicians' information necessities and seeking behavior, and options to improve academicians' information needs and seeking behavior were also discovered in this study.

Chapter Three

Research Methodology

Introduction

This part of the study covers the research method used in conducting research about the facts in the information-seeking behaviour of DCSC. It covers the research design, the population of the study, data collection approaches, data collection instruments, and validity and reliability of the studies. To answer the research issues, this study used a mixed-method sequential descriptive approach. A face-to-face interview and a questionnaire method about academicians' information behavior at DCSC were used to further the research. There are eight sections in this chapter: study methodologies-literature review of information behavior; research design; population; research instruments; (5) data collecting processes; ; statistical analysis procedures.

Research Methods

A research methodology is a process for solving a research problem in a comprehensive way. This can be mentioned as a science that studies how scientific research is carried out (Çelik et al., 2018).This study applied a descriptive research method with both quantitative and qualitative methodologies. Data was collected via a self-administered questionnaire and an interview. This researcher conducted a census survey method of research. The approach as per (Aina, 2002), is an all-encompassing collection of data on people's ideas, attitudes, feelings, beliefs, and behaviors obtained through conversations. i.e., using an interview and surveys of the whole respondents. As a result, based on the assessments and viewpoints of respondents in this area of the study, it is important to investigate information needs and seeking behavior.

The quantitative method was used to investigate academicians' information needs and information seeking behavior. Similarly, The qualitative technique can be used to enhance the quantitative method by including qualitative information seeking behavior in areas where quantitative data is lacking. Therefore, both quantitative and qualitative methods carried out for this research study. They performed it using a questionnaire and interview research equipment. Quantitative data is produced from data collection instruments and analyzed using the SPSS software version 26.

Population of the study

Thus, this study used a total enumeration method called Census method to include all members of the academicians of the College. Because of the population is too small, thus, a census method was used. An interview was held with the dean of the college and other academicians who have

managerial positions in the college to find out about the information needs and seeking behaviour of academicians in the college as well. On the other hand, to make sure the uniformity of the questionnaire, a pilot test was used.

The data obtained through the interview was analyzed qualitatively by giving a summary of the short notes. Impressions of information needs were acquired from(Ezinwanyi and Opeke, 2013) and questions regarding to information seeking, access or usage of information resources were collected from (Larbi-Apau & Moseley, 2012 and Ge, 2010).

This research addresses questions for academicians at DCSC who traced and used the relevant information, particularly the internet resources and printed materials, to address their teaching, research, and academic tasks.

The data for this study was collected from all academicians at DCSC, in terms of the nature of academicians' information needs and seeking behaviour, as well as to determine the barriers that they faced during the information-seeking process. On top of that, principal variables affecting them was identified, and the differences between academicians, which are based on gender, age, level of education and Skill of ICT used by the Academicians defined too. This study also seeks to establish ways of improving academicians' information needs and seeking behaviour in the college and to provide a full picture of the use of information in actual research practices and academic contexts among academicians.

Data collection methods

Methods of data collection are the steps taken by the researcher to collect the information needed, and the most common tools employed are interviews and questionnaires.

The study Variables

A dependent variable is one that is influenced by the independent variable (s).The study's dependent variable was information-seeking behavior of academicians. The independent variables are changed an experiment to see how it affects the dependent variable. The study's primary independent variables were gender, age, work experience, educational qualification, and computer skills.

Questionnaires

The necessity to describe academicians' information needs and information seeking behavior encouraged the use of questionnaires in this study. Based on the studies done by (Macdonald & Headlam, 2008) and (Walliman, 2011), questionnaires are considered for collecting quantifiable data types. In the same way that the above demonstrations, (Gray, 2014) also show, questionnaires are the way that individuals answer the same set of questions in a measured direction. Questionnaires for this study are used to obtain quantitative data for academics. These questions include accurate questions to obtain data for demographic information, research involvement, and position in college; questions such as the time spent on information seeking and the methods used for information seeking and use.

An interview questions was used to address qualitative data. The questionnaire consisted of two parts as follows; part one demographic information for academicians, including age, gender, years of teaching, skills in ICT, and their level of education. Academicians are required to pick appropriate answers. Part two of the questionnaire covered the information needs and information-seeking behaviour of academicians at DCSC.

The aim of the first section of the questionnaire is to collect data on the background details of academicians. The focus of the second section of the questionnaire help to collect data on the time academician's information needs and information seeking practices and the methods academicians preferred for information seeking (Al-Suqri, 2011). In the third section of the questionnaire, data on the information use of academicians was collected. The questionnaire was scheduled to ask a few background and demographic questions, investigating academicians' own involvement in research. In the second part of the questionnaire, was to gather information on current services provided to college academicians.

The final part of the questionnaire used to collect data on the opinions and perceptions of information academicians regarding their current as well as future roles in providing information support to academicians. In this part, the dean of the college and other academicians who have managerial positions were interviewed to point out how they viewed their own roles in research and teaching. The most important roles of academicians were to ensure effective information support to students. The questions in this section were the same as the questions that were asked in the questionnaire about academicians' opinions. The intention of this study was to understand the opinions and perceptions of academicians like Schonfeld and House (2009).

Interviews

An interview is a tool, which involves verbal communication between the researcher and the interviewee. Interviews are commonly used for survey designs in exploratory and descriptive studies. According to (Polit & Beck, 2012), Interview is one of an instrument for collecting data and the interviewer someone who takes responses from the interviewee by means of an email or face to face, through calls etc. On top of that, (Gray, 2014) states that there are different situations where an interview occurs. Similarly, (Gray, 2014) agreed that there are five types of interviews, i.e.: informal conversational interviews, non-directive interviews, focused interviews, structured interviews, and semi-structured interviews. For this research, face-to-face interviews were held to obtain enough the required information from academicians. The researcher scheduled formal appointments with DCSC's selected academicians and the dean and carried out the interviews. The benefit of face-to-face interviews, as stated by (Mugwisi, 2014), has a marked advantage in empowering the researcher to establish a connection with potential respondents and to gain their cooperation and support towards achieving the goals of the researcher. The researcher collected the qualitative data using short note taking.

Pilot Testing

The questionnaires were tested in order to make sure the required data was as expected by the researcher. The test was conducted mainly to find out whether the questionnaire is easily understandable as well as to identify any ambiguous or confusing questions in the questionnaire. In the presence of the researcher, five academicians were assigned to complete the questionnaire. All of the chosen respondents agreed that they had no trouble answering the questions. The questionnaire was not changed significantly after that to make it more reliable.

Methods of data analysis

Descriptive statistics was used to analyze the data based on the Social Science Statistical Package (SPSS) version 26. Quantitative data was analyzed by using descriptive statistics such as (frequency, mean and percentage). The data gained through the interview was used to present additional information for the conclusion and recommendation. Qualitative content analysis was used to expand on the study's quantitative findings. Three main approaches to qualitative content analysis are conventional, guided, and summative. The study, on the other hand, took a summative method. Content analysis is a qualitative research technique that has seen a lot of

application in recent studies (Hsieh & Shannon, 2005). Therefore, the content analysis method was applied for this study.

3.10 Ethical consideration

This Special Concern has provided an overview of a variety of methodologies and procedures available to academicians. However, ethical issues around conducting research are just as important as selecting a suitable research methodology and procedures. (Fleming & Zegwaard, 2018) outlines various ethical difficulties that an ‘insider researcher' may face, such as power differences and continuous interactions with participants, in this Special Issue. However, it is critical to address the fundamentals of ethical research involving human subjects in greater depth. The participants in this study were not misinformed in any way. The information gathered by the researchers was only used to carry out this study. During the study process, interviewees were allowed to share their opinions without fear of internal or external pressure, personal information was kept private, and all research operations were conducted in a legalized manner.

CHAPTER FOUR

4.1 The descriptive statistical analysis

This section of the study provides a result of this research using a research questionnaire and an interview that has been conducted in the Defence Command and Staff College. Data analysis and interpretation is an issue that must be related to the objectives and research questions of the study. The study is drawn together into different groups, i.e. Academicians' demographic information, information needs, information seeking, different information sources used and influencing factors for academicians' information needs and seeking behavior, ICT presence in the college, challenges to academicians' resource use, and on academicians' information needs and seeking behavior are all covered in this section of the study.

The data collected from the respondents were then cleaned and recorded with the statistical package software SPSS version 26. The significant association between study variables and interpretation of data was done using a 95% confidence interval and at a p-value of 0.05. Content analysis or narration was used to analyze qualitative data according to the objective of the study. The study findings of this study were represented using words or explanations, tables and pie chart as necessary.

The percentage rate of respondents

No.	Number of questioners distributed with and their Frequencies		percent
1	The Number of returned Questionnaires	95	85.8
2	The Number of Questionnaires not returned	16	14.4
	total	111	100

Table 4. 1: Rate of respondents in the study

Based on the table 4.1, indicates that, the population of the study was 111 participants, and the data was collected via a questionnaire. Ninety-five academicians submitted the copies of the questionnaire, which were applied in this research. However only (85.6%) of the respondents

were returned, and the rest, 16 (14.4%), did not return, due to lack of willingness and absence from their respective offices for the given time period. Thus, the researcher is obligated to do data analysis of the collected data only. This part of the study shows the better explanations of the demographic details of academicians and the data was collected from their teaching experience, gender, age, educational qualifications.

Respondents' basic demographic information

Variables	Grouped variables	Frequency	Percent
Gender	Males	74	77.9%
	Female	21	22.1%
Age	20-30	15	15.8%
	31-40	30	31.6%
	41-50	28	29.5%
	51 and above	22	23.2%
Education Qualification	Bachelor degree	15	15.8%
	Master' s degree	61	64.2%
	PhD degree	19	20%
Experience of academicians	1-5	12	12.6%
	6-10	23	24.2%
	11-15	38	40.0%
	16-20	16	16.8%
	21 and above	6	6.3%

Table 4 2: the background detail information of the respondents

From the collected data in table 4.2, the findings show that ninety-five (95) respondents were asked about their age, gender, experience, and level of education. It showed that 74 (77.9%) respondents were males and 21 (22.1%) were female respondents. The researcher concluded that the number of male respondents was larger than female respondents in the college.

The distribution of respondents according to their age group, as observed in table 4.2, shows that 31.6% of academicians were found in the years ranging from 31-40, the next 29.5% were in the

years ranging from 41-50, and 23.2% ranging from 51 and above, while the smallest number, 15.8%, was found in the 20 – 30. This showed that higher numbers of academicians were found in colleges under the age range of 31-40. Respondents were also asked about their experiences as academicians in college. Thus, almost all academicians' teaching experience is found in the range of 11 to 15 (38.9%), then 6 to 10 (24.2%) is found in the second place, and then 16 to 20 (16.8%) is found in the fourth, and then 1 to 5 (9.5%) is the lowest teaching experience in the college. In this demographic information, respondents were also requested to show their academic qualifications. Therefore, the results from the table above showed that among 95 respondents, 29 respondents (30.5%) were bachelor degree and 55 (57.9%) were a master degree and 11 (11.6%) were a doctorate degree. as the result indicated the higher number of respondents were master degree holders, however a doctoral degree holders were too small in the college.

The rate of ICT skill for Academicians

The Skill of **ICT** for the respondents	Frequency	Percent
very good	28	29.47%
good	38	38.95%
fair	9	9.47%
poor	11	11.5%
Very poor	10	10.53%

Table 4 3: the skill of ICT for Academicians

According to table 4.3, the respondents with a frequency and percentage rate of (28: 29.47%) have very good computer skills, while those with a frequency and percentage rate of (38:38.95%) have good computer skills, those with a frequency and percentage rate of (9:9.47%) have fair computer skills, and others with a frequency and percentage rate of (9:9.47%) have fair computer skills.

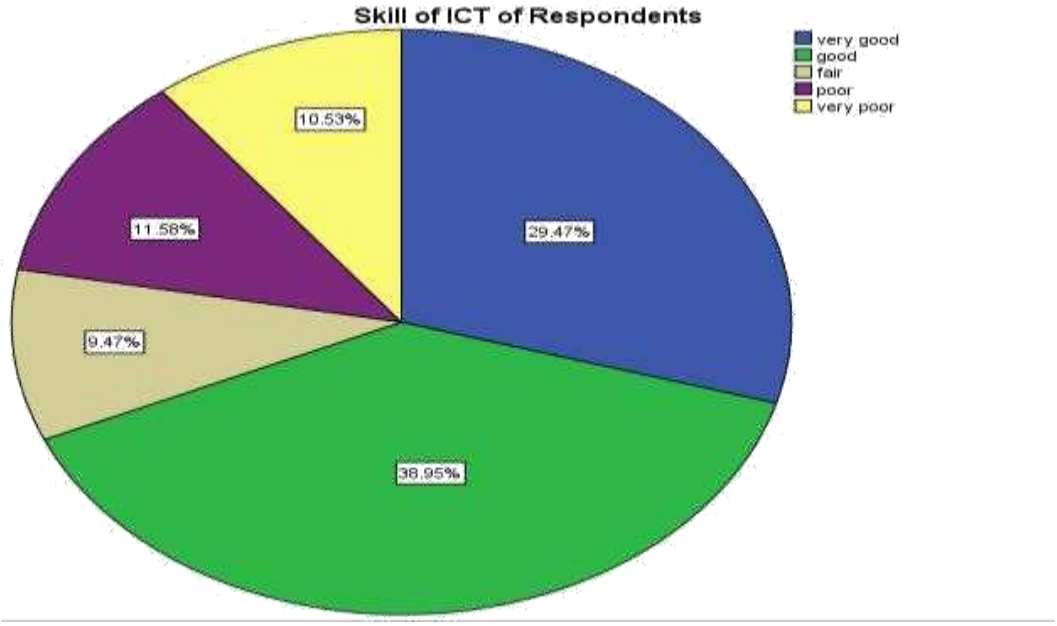

Figure: 1 the skills of ICT

What are the information needs of academicians at DCSC?

There are a number of studies observed about the information needs and information seeking behavior of academicians that can be seen as their data asset preferences, web-utilizing tendencies, utilization of library assets, and the reasons for information needs and seeking for information requirements are a broad word that has been described in a variety of ways by academics. Questionnaires were created based on the many types of information that responders require for their specific needs. All of the questions related to the goal were answered. The second attribute of information-seeking behavior was a model of information behavior (Wilson, 1999).The information gathered was examined, analyzed, and presented in a clear and concise manner.

What exactly is the point of seeking information?

Research Question	Reasons of Information-Need	Responses and Frequency		Percent
Purpose of Information seeking	Education information	Yes	73	76.7%
		No	22	23.3%
	Research information	Yes	80	84.2%
		No	15	15.8%
	General knowledge information	Yes	61	64.2%
		No	39	35.8%
	Political information	Yes	54	56.8%
		No	46	43.2%
	Curriculum information	Yes	81	85.3%
		No	14	14.7%
	Health information	Yes	51	45.9%
		No	44	39.6%
	Social information	Yes	58	61.1%
		No	42	38.9%

Table 4 4: the Purpose of Information seeking for academicians

The results indicate that Curriculum information (Yes: 85.3%, No: 14.7%) is the most important reason for information seeking followed by research information (Yes: 84.2%, No: 15.8%) followed education information (Yes: 76.7%, No: 23.3%), followed by general knowledge updating (Yes: 64.2%, No: 35.8%) followed by Political information (Yes: 56.8%, No: 43.2%) followed by Health information (Yes: 45.9%, No: 39.6%) and Social reasons (Yes: 61.1%, No: 38.9%). Thus, the finding of this study reveals that curriculum information, research information, and educational information are the top information needs of Defense Command and Staff College Academicians.

How often are you satisfied on your information needs in the library?

Information need satisfaction at Library	**Option**	**Frequency**	**Percent**
	often	39	41.1%
	sometimes	44	46.3%
	never	12	12.6%
	total	95	100.0%

Table 4 5: information needs satisfaction in the Library

Findings of this study showed that almost all study participants whose frequency rate is 44 (46.3%) responded that they are sometimes satisfied with the resources offered by the library, whereas the other participants, with a frequency and percentage rate of 39 (41.1%), responded that they are often satisfied with all the resources offered by the college library, and the last and least number of participants, 12 (12.6%), responded that they are never satisfied with all the resources offered by the library.

What are the types of information needs do academicians have in the institution? **NB: P=Poor: VP= Very poor: N= Neutral: VG=Very Good: G=Good**

Research Variables	**Frequency**		**Percent** %	**Mean**	**Rank**
Research information needs	P	10	10.5	3.832	2
	N	8	8.4		
	G	65	68.4		
	VG	12	12.6		
curriculum information needs	P	11	11.6	3.853	1
	N	7	7.4		
	G	62	65.3		
	VG	15	15.8		
Sport information	P	13	13.7	3.653	9
	N	16	16.8		

	G	57	60.0		
	VG	9	9.5		
social development information	P	14	14.7	3.705	7
	N	9	9.5		
	G	63	66.3		
	VG	9	9.5		
Political information	P	13	13.7	3.747	5
	N	10	10.5		
	G	60	63.2		
	VG	12	12.6		
promotion information	P	14	14.7	3.7156	6
	N	11	11.6		
	G	58	61.1		
	VG	12	12.6		
health information	P	15	15.8	3.695	8
	N	11	11.6		
	G	57	60.0		
	VG	12	12.6		
current affairs information needs	VP	1	1.1	3.758	4
	P	12	12.6		
	N	8	8.4		
	G	62	65.3		
	VG	12	12.6		
security information	VP	7	7.4	2.611	10

	P	48	50.5		
	N	20	21.1		
	G	15	15.8		
	VG	5	5.3		
Educational information needs	VP	1	1.1	3.8316	3
	P	10	10.5		
	N	8	8.4		
	G	61	64.2		
	VG	15	15.8		

Table 4 6: Academician information preference

The results from table 4. 6 show that respondents' first choice of information was curriculum information needs, with a mean of 3.85.Then The second higher group of respondents, with a mean of 3.83, required research information, whilst the third, with a mean of 3.82, required educational information. With a mean score of four, current affairs information was rated fourth (3.76). Political information needs ranked 5th with a mean value of 3.75, promotion information needs ranked 6th with a mean value of 3.72, social development information needs ranked 7th with a mean value of 3.71, health information needs ranked 9th with a mean value of 3.70, and sports information needs ranked 9th with a mean value of 3.70 (3.65). Finally, security information needs were 10th with a mean value of 2.61.

Different types of resources used

The types of resources	Frequency	Percent
printed books	13	13.7
printed journals	5	5.3
online database	4	4.2
electronic books	24	25.3
DCSC Library	14	14.7
different search engines	35	36.8
Total	95	100.0

Table 4 7: The types of resources used

According to table 4.7, the result reveals that a larger number of participants having a frequency and percentage of (35:36.8%) used different search engines to address their information needs, whereas (24:25.3%) had access to electronic books only, (14:14.7%) had used the DCSC Library, (13:13.7%) had used printed books from any location, (5:5.3%) had used printed journals, and last and least (4:4.2%) had accessed online databases.

What are the various resource formats that are required for teaching?

different formats of the resource	Frequencies	Percent’s
Printed resources	14	14.7
Electronic resources	30	31.6
Both printed and Electronic Resources	51	53.7

Table 4 8: resource formats required for teaching

Based on different studies, Information users are greatly influenced by the format of information sources. Users must now blend new, evolving formats with the traditional ones to which they have become accustomed (TSEHAY, 2017)The results showed that using both printed and electronic sources (51: 53.7%) was preferred by the majority of respondents for their information needs, followed by electronic resources (30-.31.6%), respondents who preferred electronic resources were higher than print resources (14, 14.7%). respondents who were inexperienced

with how to access and search for relevant materials on the internet were appreciative to use printed resources. Most academicians do not have enough time to access internet sources on a fast internet connection, there are not enough computers in their office and therefore they prefer printed sources. Based on Table 4.8, the majority of respondents prefer to use both electronic and printed resources at the same time. The frequency and percentage of respondents were (51: 53.7%). The number of respondents using only electronic resources at the same time ranks second, with 30 respondents. Frequency and percentage of users: (30-.31.6%). The third and last respondent affirms that they use printed materials at the rate of 14 (14.2%) of all academicians.

What is the service quality of the College Library?

Variable	Preferences	frequency	Percent
How would you rate the college library infrastructure	Very good	4	4.2%
	Good	21	22.1%
	Poor	43	45.3%
	Very poor	18	18.9%

Table 4 9: service quality of the College Library?

Findings from this study indicated that the majority of participants stated the college library performed poorly (45.3%). The second group of respondents (22.8%) stated that the library was good, while the third group of respondents (18.9%) stated that the college had a very poor library. and the last group of participants (4.2%) responded that the college had a very good library.

The frequency with which the college library's available resources are used

Types the resources	Option	Frequency	Percent
Print books	Regularly	26	27.4%
	Rarely	49	51.6%
	No way	20	21.1%
E-journals	Regularly	24	25.2%
	Rarely	38	40%
	No way	31	32.6%

E-books	Regularly	44	46.3%
	Rarely	35	36.8%
	No way	18	18.9%
Print journals	Regularly	12	12.6%
	Rarely	58	61.1%
	No way	25	26.3%
Print reference materials	Regularly	26	27.4%
	Rarely	48	50.5%
	No way	21	22.1%
Print theses/dissertations	Regularly	24	25.3%
	Rarely	41	43.2%
	No way	30	31.6%
Electronic reference materials	Regularly	47	49.5%
	Rarely	31	32.6%
	No way	16	16.8%

Table 4 10: Frequently accessed Resources in the library

Results on the Table 4.10, shows that electronic reference materials are the most often used method for seeking information with the highest value of frequency and percentage (47:49.5%), followed by electronic books with the highest value of frequency and percentage (44: 46.3%), then followed by printed books (26: 27.4%). While accessing E-journals, print journals and print theses/dissertations is the least frequent method, all have minimum frequency and percentage.

What are the factors that influence academicians' information needs and information seeking behavior at DCSC?

Information Seeking Behaviors are influenced by a variety of factors.	Frequencies with percent (%)				Mean	Rank
	The Most Dangerous Effect	Effects That Are Serious	Effect: Slightly Serious	There is no effect.		
a lack of training	22, 44.2%	31,362.6 %	18,8.4 %	24, 14.4%	2.07	7
a scarcity of time	50, 52.6%	14, 14.7%	10, 10.5%	21, 22.1%	2.82	1
While in absence of a proper library	17, 17.9%	24,25.3 %	13,13. 7%	41, 43.2%	2.59	4
Lack of access to the internet	12, 12.6%	39, 41.1%	27,28.4 %	17, 17.9%	2.47	5
Power supply that is unbalanced	11, 11.6%	28, 29.5%	45, 47.4%	11, 11.6%	1.94	10
Library professionals are in short supply.	32, 33.7%	38, 40.0%	11, 11.6%	14, 14.7%	2.04	8
Lack of adequate information	24, 25.3%	34, 35.8%	20, 21.1%	26, 27.4%	2.66	2
Poor searching skills	18, 18.9%	40, 42.1%	26, 27.4%	11, 11.6%	2.31	6
Distance from source	15, 15.8%	54, 56.8%	6, 6.3%	11, 11.6%	2.021	9
Lack of awareness to the existing resources	14, 14.7%	39, 41.1%	25, 26.3%	17, 17.9%	2.60	3

Table 4 11: the results of the collected responses

Table 4.11 shows the results of the collected responses. The lack of adequate time was the 1st factor that affects respondents' information needs and seeking behavior with mean value of

(2.82), and the lack of adequate information was the 2nd factor that affected respondents' information needs and seeking behavior with mean value of (2.66). In addition, the third group of respondents (2.60) responded that lack of awareness of existing resources was an issue, while the fourth group with mean value of (2.59) responded that the absence of a proper library slowed down their information needs and seeking process. Moreover, the fifth was Lack of access to the 6th group of respondents responded that a lack of access to the internet was the factor that affected respondents' information needs and seeking behavior with mean value of (2.04) Then the 7th group of respondents responded that distance from the source was the factor that affected respondents' information needs and seeking behavior with mean value of (2.04). Moreover, the last respondents revealed that unbalanced Power supply was the factors that affected the respondents' information needs and seeking behavior with mean value of (1.94).

What are the strategies to better meet academician's information needs?

The purpose of this research question is to obtain data that will recommend ways to improve the information needs and seeking behaviour of academic staff in information behaviour. Below is a tabular representation of the respondents' views.

- **NB**: **St. A** =strongly Agree: **A**=Agreeing: **N**=Neutral: **D**=Disagreeing: **St. D** =Strongly Disagreeing

Research Variables	**Frequency**		**percent**
The library should employ more library staff to serve users	St. A	35	36.8
	A	40	42.1
	N	11	11.6
	D	7	7.4
	St. D	2	2.1
The library should give more training to their staff	St. A	29	30.5
	A	41	43.2
	N	10	10.5
	D	4	4.2
	St. D	1	1.05

There must be simple organization of library materials	St. A	43	45.3
	A	55	57.9
	N	5	5.26
	D	1	1.05
	St. D	1	1.05
Library should create awareness of the information resources available	St. A	58	61.05
	A	33	34.74
	N	2	2.1
	D	2	2.1
	SD	0	0
User education should regularly be conducted	SA	44	46.3
	A	31	32.6
	N	1	1.05
	D	15	15.8
	SD	4	4.2
Internet facilities should be provided to enhance easy access to online resources	SA	63	66.3
	A	24	25.3
	N	3	3.2
	D	5	5.3
	SD	0	0
Suitable library should be provided by the library	SA	54	56.8
	A	39	41
	N	2	2.1
	D	0	0
	SD	0	0
Library should provide a standby generator in	SA	41	42

case of power failure	A	22	23.2
	N	6	6.3
	D	19	20.1
	SD	7	7.4

Table 4 12**:** techniques for better addressing the needs of academicians

The table above illustrates that academicians at DCSC agree on the items offered as recommendations for improving effective information seeking behavior. The most notable thing among the items mentioned is that the college must provide the proper library, with an average percentage rate of 3.56. With mean ratings of 3.54, 3.50, 3.49, and 3.47 closely following this, the library should be provided internet facilities, proper and simple organization of library resources for easy access and retrieval, and user education on a regular basis. On the other hand, with mean ratings of 3.45, 3.45, and 3.37, the library should employ more staff to serve customers, the library should provide more training to their personnel so that they can assist users, and the library should promote awareness of the information resources available.

Correlation

VARIABLES		Information-Seeking Behaviour
Gender	Pearson Correlation	.035
	Sig. (2-tailed)	.734
Age	Pearson Correlation	-.049
	Sig. (2-tailed)	.640
Teaching experience	Pearson Correlation	-.502**
	Sig. (2-tailed)	.000
Level of Education	Pearson Correlation	.420*
	Sig. (2-tailed)	.032
Skill of ICT	Pearson Correlation	.661**
	Sig. (2-tailed)	.000

Table 4 13: correlation results for selected variables

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Based on table 4.13, the model shows the correlations between the independent variables from the background information, i.e. (Gender, Age, Teaching Experience, Educational Qualification, and ICT skills) and the dependent variable was information seeking behaviour. The findings suggest that experience (negative), ICT skills (positive), and educational qualifications also (positive) are all factors affecting information needs and seeking behavior at Defense Command and Staff College. The correlation model reveals that ICT skills (p = 000), work experience (p = 000), and education level (p =.032) all have a significant correlation with information seeking behavior, although age (p =.640) and gender (p =.743) do not have significant relations with information needs and seeking behaviour and thus, age and gender cannot affect the information seeking behaviour of academicians in the staff college

Regression model Anova

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	50.389	5	10.078	137.656	.000[b]
	Residual	6.516	89	.073		
	Total	56.905	94			

REGRESSION MODEL SUMMARY

a. Dependent Variable: Information-Needs and Information-Seeking Behaviour

b. Predictors: (Constant), Skill of ICT for Academicians, Age , Gender, Educational Qualifications, working-experience

Source: SPSS output from data analysis, 2021

Table 4 14: **the Model Summary**

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.878	.767	.737	.38369

a. Predictors: (Constant), Age , Gender, Skill of ICT for Academicians, working-experience, Educational Qualifications

The MODEL SUMMARY:

As the table4.15, indicated the R square -value, which shows various correlations between Information needs and seeking Behaviour and ICT skill age, gender, teaching experience, and educational level. The R-squared result shows that independent factors explain 76.7% of the dependent variables, as shown in the model summary in Table IV, showing that the model is effective.

The Regression Model Coefficients

Model	**Unstandardized Coefficients**		**Standardized Coefficients**	**T**	**Sig.**
	B	Std. Error	Beta		
(Constant)	2.824	.521		2.767	.000
Gender	.056	.067	.031	.840	.403
teaching-experience	-.378	.030	-.717	-12.639	.000
Educational Level	-	.060	-.097	-1.884	.003

	.113				
Age	-.030	.028	-.039	-1.067	.289
Skill of ICT	.140	.035	.208	3.978	.000

Table 4 15: Regression result of key variables

The Regression model summary table reports the strength of the relationship between the model and the dependent variable. The correlation coefficient is the linear correlation between the observed and model-predicted values of the dependent variable. Its large value indicates a strong relationship. The independent variables are gender, age, teaching experience, educational qualification, and computer skills. In the regression model reveals that teaching experience, educational qualifications and computer skills were significant at ($p < 0.05$), age ($p = .289$) and gender ($p = .403$). Both of them have ($p > 0.05$), do not have significant relations with information seeking behaviour'.This findings suggest that experience (negative), skills of ICT (positive), and educational qualifications (negative) are all factors affecting information needs and seeking behavior at Defense Command and Staff College. However, another study conducted by (Demmelash, 2018) founded that educational qualifications had no significant relations with information seeking behaviour of academicians.

Information-Seeking Behavior: Determining Factor Correlations

The factors for Information Seeking Behaviour		**Information Seeking Behaviour**
Distance from source	Pearson Correlation	-.032
	Sig. (2-tailed)	.758
Poor searching skills	Pearson Correlation	.539**
	Sig. (2-tailed)	.000

Lack of awareness to the existing resources	Pearson Correlation	-.638**
	Sig. (2-tailed)	.000
Lack of ICT usage training	Pearson Correlation	.202*
	Sig. (2-tailed)	.049
Lack of time	Pearson Correlation	.967**
	Sig. (2-tailed)	.000
Lack of appropriate library	Pearson Correlation	.406**
	Sig. (2-tailed)	.000
Lack of internet	Pearson Correlation	-.154
	Sig. (2-tailed)	.137

Table 4 16: Information-Seeking Behavior: Determining Factor Correlations

According to Table 4.15, findings indicated that poor searching skills, a lack of awareness of existing resources, a lack of ICT usage training, a lack of time, a lack of appropriate library were all significant factors that are affecting the information-seeking behaviors of academicians, as well as other factors such as distance from the source and lack of the internet, were insignificant factors for information seeking behavior.

The researcher utilized a quantitative strategy to gather data and then used a qualitative approach to triangulate the findings.

Qualitative result of the study

This section of the study deals with qualitative analysis collected through interviews . The qualitative approach was held to support the quantitative method of data analysis. For the interview, respondents were selected to observe the information resources and information seeking behavior of the academicians. The findings of a study conducted at DCSC are used to better understand the information needs and seeking behaviors of academicians. The research began with interviews with six academicians with the goal of addressing the following research objectives.

- ✓ To gain a better understanding of academicians' information needs.
- ✓ Determine academicians' information seeking behaviour for teaching and other related issues.
- ✓ To determine the challenges that academicians face while seeking and using information for teaching.

The qualitative method was carried out through interviews with some selected academicians at the Defense Command and Staff College. to gain a better understanding of the academic's information needs and seeking behavior, as well as the problems confronting the Defense Command and Staff. The researcher conducted interviews with six interviewees. The researcher conducted five semi-structured interview questions. The interviewees themselves provided similar responses. During the data collection process, the researcher first explained the purpose of the research and obtained the interviewee's agreement to participate in the research. The six academicians who were accepted for face-to-face interviews lasted about 45 minutes. All responses to the interview were briefly discussed.

This part of the study introduces the qualitative data analysis of related data like information needs, the sources of information available, the information seeking behavior of academicians, and the factors that affect information needs and information seeking behaviors. The interview process begins with the primary source of teaching material at the college. According to the interview conducted, academicians used a variety of methods to get academic information. Although lack of time, lack of awareness to the existing resources, lack of suitable library and lack of searching skills are among common and significant barriers. According to the study findings, the majority of participants agree that institutes needs to provide more training on resource utilization. In order to enable access to and manipulation of information from essential information sources, the resources available in the library service must therefore be increased.

Discussions

Based on the research questions and objectives, the findings from this study were discussed in this chapter.

Types of information needed by academicians at DCSC

Based on the data provided and analyzed in this study, academicians at the DCSC required information as part of a course and research. Academicians require information in a wide variety

of fields, including academic resources, information about health, research, security mechanisms, and syllabus information. Based on the findings of this study, the top three informational needs of Defense Command and Staff College Academicians are curriculum information (85.3%), research information (84.2%), and educational information (76.7%) information needs. Furthermore, the study showed that they required information for updating knowledge (64.2%), followed by political reasons (56.8%), followed by health information needs (45.9%) as well as social reasons (61.1%).All the findings are comparable to the study (Perveen, 1996), who believed that staying current, learning, and associated concerns is one of the reasons for the need for knowledge.

Academicians at DCSC have a variety of information needs, including curriculum-related needed data for a variety of reasons, the most important of which was to educate Information needed for educational reasons, information needed for medical cases, information needed for research, information needed for security issues, professional information requirements, promotional information requirements, information needed for current events, and information needed for political reasons are all examples of information requirements.

Information sources and satisfactions offered by the DCSC library

The findings of the study demonstrated that DCSC library has different types of information resources. Books, research papers, colleagues, periodicals, resource managers, friends, telephones, conference proceedings, and briefing papers are some of the information resources available. Computer systems, monitors, slide projectors are all used in the classroom. as Findings of this study showed that almost all study participants 44 (46.3%) responded that **sometimes** satisfied with the resources offered by the library and the other participants with a frequency and percentage rate of 39 (41.1%) responded **often satisfied** with all the resources offered by the college library, however the last and least number of participants, 12 (12.6%) responded that they are **never satisfied** with all the resources offered by the library.

Academicians' Information-Seeking Behavior

Academicians needed information in a number of ways, per this study's findings. Very few possibilities include requests to library professionals, seminars, conferences, periodicals, the internet, radio and television broadcasts, visits, and debates. These are in line with the (Ellis, 1993) and (Eisenberg and Kuhlthau, 1992) models, which were used to follow movements in

information seeking or to describe how information might be requested regularly in a variety of roles.

Academicians' preferred resource format

According to the table drawn above, the result reveals that the highest number of participants with frequency and percentage of (35:36.8%) prefers to use search engines, whereas (24:25.3%) prefers to use electronic books only, (14:14.7%) prefers to use printed books from any location, (5:5.3%) prefers to use printed journals and the last and least (4:4.2%) prefers to use online databases. As a result, the major means by which academicians at the institution gather information is by asking library staff, workmates, or friends. Other techniques include journals, seminars, conferences, publications, the personal computer, radio and TV shows, discussions, meetings, and debates. People seek or desire to know through asking library information questions, browsing, participating in conferences, workshops, studying periodicals, internet browsing, or television broadcasts, and visiting, debating, and conducting interviews.

The variety of resources used by academicians

The current study reveals that electronic reference materials are the most often used method for information seeking with a value (49.5%), followed by electronic books with a value (46.3%), and then followed by printed books (27.4%). However, accessing E-journals, print journals, and printing theses or dissertations materials were the minimum frequent methods with low frequency and percentage rates.

Information sources and academician satisfactions

The findings of the study demonstrated that the academicians' information needs and seeking behaviour in the areas of education, research, health, security, current affairs, curriculum and welfare, career, sports, politics, behavioral development, promotion social development, and transportation information were largely addressed. The study is supported by (Suriya and Nambi, 2004) who claim that library customers visit repetitively per week to meet their information needs. As a result, the preceding assumption implies that in order to meet one's information demands, one must get a source of desirable information. This is because information requirements cannot be completed without the assistance of a consultant or a source. As a result, the availability of information resources in the College prepared the way to meet their

information needs in education, research, health, security, current affairs, curriculum and welfare, career, sports, politics, social development.

Factors Affecting Academicians' Information Needs and Information Seeking Behavior at DCSC

The research revealed that a number of factors influence academicians' information needs and information seeking behavior at Defense Command and Staff College. They largely influenced by scarceness of time, lack of adequate information and a lack of awareness of the information-seeking process. These are followed by a lack of suitable internet facilities, information resources. Unstable power supply and lack of information of the current offerings of existing information services, as well as a lack of appreciation for the value of information. These findings agree with those of (Adimorah ,1997), (Lackie et al. 1996), and (Aguolu 1999), who identified issues with information needs and seeking behavior as a lack of awareness of existing services, ignorance of the potential possibilities of existing services, and a lack of information sources. This implies that a variety of factors have a positive impact on academicians' information needs and information seeking behavior. Lack of suitable library, lack of adequate information resources, lack of appreciation of the value of information, lack of awareness creation about the process of seeking information, and lack of knowledge of the process of seeking information are all factors that affect academicians' satisfaction of information needs and information seeking behavior.

Approach to Improve Academicians' Desires of Information and use Behavior

The collected and analyzed data reveals that there are a number of methods in existence at the Defense Command and Staff College to improve academicians' informational consumption and exploration behavior. The library's main strategy for improving academicians' information needs and seeking behavior is to provide an appropriate library. Some of these are maintained and controlled by providing a backup generator in the event of a power outage, and providing enough internet access to facilitate easy access to online resources. There should be appropriate and easily organized library materials for easy access and retrieval, and user education should be

conducted on a regular basis, by employing more staff to the library to serve users, and providing more training to the library users.

These findings are in line with (Kakai et'al 2004) as cited by (Khan & Shafique, 2011), suggested that, information sources have a direct impact on users' learning and teaching processes, the library should undertake a number of broad tasks, including leasing with tacking facilities to develop appropriate collections and providing a number of digital information services that can be accessed by a large number of users. Furthermore, academicians should constantly seek information for lecture preparation and to increase personal capabilities from their libraries, which are stocked with resources to meet their needs by the parent institution.

On the other hand, (Collision, 1993) also supports the idea of building awareness and user education by stating that it is not enough to simply give readers a well-chosen stock of books; they must also be taught how to make the best use of the resources. Providing a sufficient library is a major approach for improving information demands and information seeking behavior among academicians at the Defense Command and Staff College. This is because a welcoming environment will attract information searchers and project a positive image of the College library as a resource for meeting information needs.

The Implications of the Research

Information is critical in all aspects of human life. As a result, it becomes a critical commodity for a society's advancement because it serves as the foundation for knowledge development, the foundation for innovations, and the resources for informed citizens. Academicians' information needs, available information resources, academicians' information seeking behavior, the level to which their information needs are met, factors affecting their information needs and seeking behavior, and approaches for improving academicians' information needs and seeking behavior were all identified in the study. The college would be expected to defend the rationale for offering information resources to meet the information needs of academicians..

The study revealed academicians' information needs and information seeking behavior, allowing the College to take a bold step forward in terms of planning for a suitable environment and the availability of information resources, as well as training librarians who would educate or create awareness of the resources available, allowing the College to take a bold step forward in terms of planning for a suitable environment and the availability of information resources, allowing the

College to take a bold step forward in terms of planning for a suitable environment and the availability of information resources, allowing

The study's strength

Final thoughts on research can be more trustworthy if the study is strengthened. This can be accomplished with appropriate methodological approaches and the evaluation of relevant literature. This study took into account and implemented all necessary activities in order to reduce errors that could jeopardize the study's conclusions. The following are some of the study's strengths: This study is the first in the field, and the findings will be used as a baseline for future researchers and other interested parties. The study used both qualitative and quantitative methodologies. The study employed the "Include all technique" to ensure that sample bias was kept to a minimum. It also employed questionnaires that had already been pretested, with minor modifications, from other relevant research conducted outside and inside Ethiopia.

CHAPTER FIVE

Summary, Conclusion and Recommendations

Summary

According to the study's findings, academicians have information requirements in the following areas: research study, safety and security, professional information needs, improvement, current affairs, politics, social development, and research. Academicians have also access to a variety of information resources, including the internet, textbooks, journals, audiovisual, collaborators, media, data providers, friends, and the cellphone, while personal computers are not. The institution's academicians sought information through inquiries to friends or librarians, phone calls, newspapers, seminars, workshops, magazines, the internet, radio and television broadcasts, interviews, visits, and debate.

The maximum information needs of academicians at the college were for preparation of the teaching curriculum, research tasks, educational reasons, security, current affairs and politics, and promotion of social development. The major influence of academicians' information demands and information seeking behavior is a lack of time and lack of awareness of the resources. A proper library environment should be supplied by the library as a significant approach for improving the information needs and information seeking behavior of the University's academicians. In the event of a power outage, the library should be equipped with a backup generator.

Conclusion

The focus of this research is to identify information needs and information seeking behavior of academicians at Defense Commands and Staff College. Participants of the study revealed that they were dissatisfied with the facilities at the library. The reasons agreed are lack of relevant materials, outdated information sources, unfavorable environment and insufficient infrastructure. These reasons explain why some interviewees do not use the library at all, and therefore believe that the library's functions and services are insufficient. Based on the above conclusions, it is easy to suggest that more funds should be allocated to the library so that it can store relevant, up-to-date, and high-quality resources, realize the automation of library functions and services. In addition, there must be a virtual library. Moreover, Academicians should also be encouraged. The shortage of funds faced by the library was reduced with the commercialization of some of its services. Through these suggestions, it is hoped that the information systems and services available to interviewees can be improved to meet their information needs.

The study investigated the information needs and seeking behavior of academicians at Defense Command and Staff College and made recommendations based on the findings for effective information provisions. The specific objectives of the study were to identify the information needs and information seeking behavior of academicians necessary to fulfill their academic purposes, identify the predominant sources used, problems that academicians encounter when needed, and seek information. A variety of factors influences information needs and information-seeking behaviour. The study is also determined the information needs and seeking behavior of academicians at the Defense Command and Staff College.

The purpose of the study was to identify the information needs of academicians at DCSC, and therefore, how they acquire, utilize, and share information, as well as their attitudes towards electronic information resources. The study discovered that academicians' information behavior is characterized by a need for information for teaching and research in their fields. Academicians have a favorable attitude toward using both electronic and printed resources, as seen by the widespread use of electronic journals and online databases in teaching and research. Based on the results of this study, the conclusion shows that most academicians focused on both print and electronic sources to seek relevant information. However, majority of the respondents were not satisfied with the information provided either in the library. Based on respondents' perspective, the library did not provide enough information sources with updating. In addition, the work area

did not have sufficient reference documents to access electronic resources. The researchers clearly identified that, the major factors that affected the information needs and seeking behavior of academicians were lack of adequate time, lack of adequate information, poor of awareness to the existing information resources, poor quality of resources, poor ICT skills, low search skills, lack of training, poor internet facilities, absence of suitable library were significant factors for information seeking behavior. From the demographic variables, work experience, ICT skills, and academic qualifications had significant relationships with information-seeking behavior, but gender ($p = 0.062$) and age ($p = 0.120$) did not have a significant relationship with information-seeking behavior.

Information seeking behavior studies help libraries and system designers with collection development and to provide better services to their users. Academicians needed information to improve their skills and knowledge through dynamic interaction with academic information space. Thus, they need to use information sources and the internet efficiently and effectively to become satisfied with their needs and become knowledgeable about different issues. This study is necessary to understand their information needs and behaviors in order to develop specialized information services as well as information literacy programs specially designed for academicians.

Recommendations

In the Defense Command and Staff College, The libraries should provide continue ICT training and self-development to enhance their information seeking behavior for effective performance and the management should encourage staff training and capacity building to enhance their skills. The College administration should facilitate enough internet resources for the academicians in their office. Most of the recommendation above cannot be implemented without fund, College administration should occupy a pride of place in budget and government for effective running of the libraries should provide adequate fund. There is a need to organize user experience sharing among the staffs in the college and other institution through conferences, workshops, and seminars can help to improve knowledge and skills of the academicians. ICT and Library office should improve academicians‟ web usage for academic works by giving attention to enhancing technical and organizational (physical) infrastructures. In addition to this, expanding private internet cafes in the town can increase their internet use. The Library needs to

communicate with the concerned stakeholders to get the printed sources timely so that the college community can access and use on time. The library image to those respondents was not good, and needs to be improved; it is alarming that some respondents would prefer not to visit them simply because the library environment is believed old. Further research should be done on the topic that can bring higher learning culture and strengthen institutions in Ethiopia, so that result can scale up information seeking behaviour at national higher education level.

Based on the findings, the following suggestions were provided. Since the academician makes less use of library, the creation of a dedicated and well-furnished space which is comfortable and equipped with uninterrupted internet and power supply for ease of access to print and electronic information resources could encourage the professoriate to make use of the college library. Since the academician still relies on textbooks for teaching and research, the space will create a conducive environment for study and reference to both print and electronic information resources. There is a need for the college library to acquire up-to-date collections to address the academic and research needs of academician in their disciplines and to create a system that can inform the academician of recent collections in their fields. At last, the findings of the study will aid in the design of institutional policy by allowing the academic library to establish a service and system architecture that focuses on addressing the academician's unique information needs. Lastly, The acceptance of electronic information resources and related technologies by academicians has far-reaching implications. It suggests a future direction in an information era where technology-averse people will have no choice except to adapt to new technologies or avoid missing out in a world where technological advancements are mostly driving educational advancements.

As a result of the research, the following recommendations were made:

- The college should place a high priority on technological infrastructure/information technology challenges, particularly in regards to Internet service as well as generator.
- To address the information demands of academicians, enhance the library collection on a regular basis with current documents.
- Academicians should have access to a well-organized training program on information seeking skills, as well as printed tutorials.

- To maintain and facilitate access, the library should be digital, with all relevant information resources digitized.
- Library staffs share their current events expertise, helping them to spot both common and unique problems and design solutions, allowing for an interchange of ideas at all levels.

FUTURE WORK

- Study the significant effect of information needs and user behaviors on academician's academic performance private academic institutions in Addis Ababa
- Conduct a framework research on information needs and seeking behavior of academicians at DCSC.

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APPENDIX A

QUESTIONNAIRE ON INFORMATION NEEDS AND INFORMATION SEEKING BEHAVIOUR OF ACADEMICIANS AT DEFENSE COMMAND AND STAFF COLLEGE

DEAR PARTICIPANT,

I'm Alaye Zerihun. Here I'm studying "Information Needs as well as Information Seeking Behavior of Academicians at Defense Command and Staff College" at Addis Ababa University. As a professional educator, you have been selected to take part in my research. As a result, I respectfully request that you complete this questionnaire thoroughly.

Thank you very much for your support!

Mr. Alaye Zerihun Arega and Email :(Alaye93@gmail.com)

Section A. Backgrounds information for the respondents

Demographic Information**:** (Please choice appropriate box) 1. **Gender**: Male☐ Female ☐

2. How long have you worked there? use this symbol √

A) For 5 years☐,B). 6-10 years,☐ C) 11-15 years,

3. Academic qualification**:**

☐Assistant lecturer ☐ Professor

☐ Lecturer ☐ Assistant Professor

☐ Associate Professor

Section B: Information needs and information-seeking behavior of academicians 4. What types of information you need to have as an academician?

☐ Educational information needs

☐ Social development information needs

☐ Political information needs

☐ Curriculum-related information needs

☐ Health information needs

☐ Research information needs

5. As an academician, when do you need of information? (you can pick more than once√)

☐ When carrying out research

☐ When solving personal needs

☐ When attending to academic needs

☐ For general awareness purposes

☐ For work related discussions

6. When you need information, which source, do you need to use?

Print source ☐ Electronic source ☐ both of the two☐ I use exchangeablly ☐

7. If you got an option, which information sources would you prefer to satisfy your information needs in terms of references material. (Please reshuffle your options from 1 to 3)

☐ Print copy

☐ Electronic copy

☐ Both (Print & Electronic)

7. How often do you use the Internet for academic purposes?

☐ Every day once a month

☐ Twice to three times a week

☐ Once in semester

☐ Once a week

8. Do you always find any information that you need from the library?

☐ Yes

☐ No

THE ETENT OF HAPPINESS TO YOUR INFORMATION NEEDS

Hint: E = excellent, VG = Very Good, G = good, NA = Not at all

9. Clearly show how satisfied you are with your information needs.

S/N	**Items**	E	VG	G	NA
10.1	Information for academic reasons				
1 0.2	Information for research reasons				
10.3	Information for Political reasons				
10.4	Information for Social development reasons				
10.6	Information for Security reasons				
10.7	Information for Promotion reasons				
10.8	Information for Career-related reasons				
10.9	Information for Health reasons				
10.10	Information for Current affairs reasons				
10.11	Information for Curriculum reasons				
10.12	Information for Sports reasons				
10.13	Information for Welfare reasons				

Section C: Academicians' information needs and seeking behavior are influenced by a variety of factors.

INDICATION**: SA** = Strongly Agree**, A** = Agree**, D** = Disagree**, SD** = Strongly Disagree

10. Show the factors that can influence your information seeking behaviour to fulfill your needs

S/N	**Items**	SA	A	D	SD
11.1	Insufficient information resources For example, books, journals, and many more.				
11.2	Lack of awareness for information seeking and use behaviour				
11.3	Lack of appreciation of the value of information due to poor instruction				
11.4	Carelessness of the available information services' potential capabilities				
11.5	Inability to grasp the context of the problem				
11.6	Absence of suitable library				
11.7	Internet connectivity unsatisfactory				
11.8	power supply lacking				
11.9	Shortage of library staffs				

1.

12. What challenges do you have with searching electronic resources? (Pick your appropriate options using this symbol (√)

Reliability of e-resources

☐ Electrical power stability

☐ Issues with referencing e-resources

☐ HTML documents

13. How has electronic dissemination of information affected your information-seeking habits in the last five years?

☐ Very different (I use completely different sources than I did five years ago.)

☐ About the same, (I still use the same sources as I did five years ago.)

☐ None (no influence)

14. How would you rate the ICT infrastructure of your office/department?

- ☐ Very good
- ☐ Adequate
- ☐ Underprivileged

15. How would you rate your ICT skills/ competencies?

- ☐
- ☐
- ☐
- ☐

16. Has the use of information technology affected your visit to the institute's library?

- ☐ Yes
- ☐ No

18. Do you always find the information you are seeking for from the library?

- ☐
- ☐

19. How would you rate the institute's library, in terms of its collection of books, journals and services offered?

- ☐ Very good
- ☐
- ☐
- ☐

20. For what purposes do you use ICT resources and services? (Select all options that appropriate for you)

- ☐ To communicate with academicians
- ☐ Professional communication with colleagues
- ☐ Personal communication with friends
- ☐ For purposes of research
- ☐ For educational purposes
- ☐ To communicate with publishers

21. Has the use of information technology affected your visit to the institute's library?

- ☐ Yes

☐ No

22. How often do you use mobile phones in getting academic information?

☐ Often

☐ Sometimes

☐ Never

23. How often do you request for assistance during information seeking from library staff?

☐ Often

☐ Sometimes

☐ Never

24. How-often do you practice the following information resources use this symbol(√)

	Collection types	Regularly	Rarely	No way
24.1	Print books			
24.2	E-books			
24.3	Print journals			
24.4	E-journals			
24.5	Print reference materials			
24.6	Electronic reference materials			
24.7	Print theses/dissertations			
24.8	Electronic theses/dissertations			

APPENDIX B

Interview schedule

1. PERSONAL INFORMATION

- Your position in the college: ……..
- Gender: ……..
- Years of experience: .....
- Highest qualification acquired ……

1. What type of material do academicians mostly use?

   ……

   ……

   ……..

2. What basic roles can ICT plays in offering information for academician?

……

……

……..

3. What information services do you currently provide to support the information needs of academicians?

……

……

……..

4. Would you say that academicians are satisfied with all the resources provided by institute's library?

……

……

……

5. What skill training did you attend in the last three years in preparation to provide support to academicians in terms of their information needs?

……

……

……..

THANK YOU VERY MUCH FOR YOUR SUPPORT!