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**DETERMINANTS OF INFORMATION RESOURCES AND SERVICES
USE AMONG STUDENTS AND INSTRUCTORS IN SELECTED
FEDERAL ATVET COLLEGES IN OROMIYA NATIONAL REGIONAL
STATE, ETHIOPIA**



M.Sc. Thesis

Tuemay Hayelom

July 2014

Haramaya

**DETERMINANTS OF INFORMATION RESOURCES AND SERVICES
USE AMONG STUDENTS AND INSTRUCTORS IN SELECTED
FEDERAL ATVET COLLEGES IN OROMIYA NATIONAL REGIONAL
STATE, ETHIOPIA**

**A Thesis Submitted to the College of Computing and Informatics,
Department of Information Science, School of Graduate Studies, Haramaya
University**

**In Partial Fulfilment of the Requirements for the Degree of
Master of Science in Information Science**



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July 2014

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SCHOOL OF GRADUATE STUDIES HARAMAYA UNIVERSITY

As Thesis Research advisors, we hereby certify that we have read and evaluated this thesis prepared, under our guidance, by Tuemay Hayelom, entitled " **Determinants of information resources and services use among students and instructors in selected federal ATVET colleges in oromiya national regional state, Ethiopia**". We recommend that it can be submitted as fulfilling the Thesis requirement.

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DEDICATION

I dedicated this thesis manuscript to my beloved parents Abeye and Emeye for nursing me with affections and love and for their dedicated partnership in the success of my life.

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STATEMENT OF THE AUTHOR

By my signature below, I declare and affirm that this thesis is my own work. I have followed all ethical principles of research in the preparation, data collection, data analysis and completion of this thesis. All scholarly matter that is included in the thesis has been given recognition through citation. I affirm that I have cited and referenced all sources used in this document. Every serious effort has been made to avoid any plagiarism in the preparation of this thesis.

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LIST OF ABBREVIATIONS AND ACRONYMS

ATVET	Agricultural Technical Vocational Education and Training
ABOFED	Agarfa Bureau of Finance and Economic Development
DAs	Development Agents
IFLA	International Federation of Library Associations and Institutions
MoA	Ministry of Agriculture

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BIOGRAPHICAL SKETCH

The author was born to his father Hayelom Adhena and his mother Brhan Arefe on October 05, 1980 in Maichew town in Southern Zone, Tigray National Regional State, Ethiopia. He attended Elementary School in Adarbaete and Kindehaw Welday and Secondary School Education in Zelalem Desta Junior Secondary School and Tilahun Yigzaw Senior Secondary School respectively in the same town and joined Arbaminch University, in 2003 and graduated with Advanced Diploma in Meteorological Science on July 2005 and joined St. Mary University College, in 2007 and graduated with BSC in Computer Science in 2009.

After his first graduation, he was employed in National Meteorological Agency in Addis Ababa as meteorological officer for about 4 years and then he joined in one of the federal ATVET Colleges of the nation i.e. Agarfa ATVET College in Oromia Region as instructor of Computer Science. After three years of services in the college, he joined School of Graduate Studies at Haramaya University in July 2012 to pursue his Master of Science Degree in Information Science. The author is married and has one child.

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DETERMINANTS OF INFORMATION RESOURCES AND SERVICES USE AMONG STUDENTS AND INSTRUCTORS IN SELECTED FEDERAL ATVET COLLEGES IN OROMIYA NATIONAL REGIONAL STATE, ETHIOPIA

ABSTRACT

In any academic institution, library is established as a major component of infrastructure to undertake fruitful teaching learning activities. The objectives of this study were therefore, to identify the determinants of use of information resources and services among students and instructors, to examine the level of use of information resources and services and to examine the extent of users satisfaction with the existing information resources and services. The study used survey research and both primary and secondary data collected from the study areas. The primary data were collected from 198 sample respondents selected using stratified sampling technique using questionnaires and observation. Descriptive statistics such as mean, percentage, standard deviation as well as an inferential statistics of chi-square test and binary logit econometric model were used for the analysis of the data. The result of binary logit econometric model showed that gender, satisfaction with field of study and information literacy level for students, satisfaction with the response from library staff for both instructors and students and marital status, satisfaction with the library collections and satisfaction with curriculum for instructors positively and significantly affect use of library information resources and services. Therefore, it is time for the Federal ATVET colleges to see the problems (determinants) of use of information resources and services in their respective colleges' libraries to realize the information needs of users of the library. Finally, The study also recommends that the Ministry of Agriculture as a climax body should follow the teaching learning process of the Federal ATVET colleges.

1. INTRODUCTION

1.1 Background of the Study

The word information became famous since 1950's. The dictionary meaning of the term information is "knowledge", "intelligence", a "fact", "data", a "message", a "signal" and a "stimulus" (Khongtim, 2006). Information is the collection of data in comprehensive forms capable of communicating and using facts to which a meaning has been attached with it and its processing. It is an intelligence or knowledge that contributes to the social, economic, cultural and political well being of society irrespective of the mode of dissemination as written, oral, or audio-visual etc. (Feather and Sturges, 2003).

Information is required from the organizational level to the personal level, from the highly educated and experienced person to school children, from a very famous person to an ordinary person for taking the right decision in every step of life (Khongtim, 2006). As this time people are living in the information age where national and socio economic development of a country is heavily depend on the creation, collection, storage, retrieval and dissemination of information resources. The success, failure or mere existence of any given organization is determined by the availability and accessibility of suitable, important and precise information (Bogale, 2010).

In any academic institution, library is established as a major component of infrastructure to undertake fruitful teaching learning activities by providing necessary information resources and services to its users. According to Mason (2010), an academic library has the mission to build and maintain a collection that will support and enhance the instructional needs of the institution. Academic libraries are responsible for providing relevant, comprehensive, and up-to-date information to diversified users. They are crucial for the future of the parent institution and for the nation as well (Yared, 2010). Moreover, Ofodile and Ifijeh (2013) stated that library provides an alternative that can make available the information resources and services

for the intellectual growth of both the students and lectures of the campus community. It is said succinctly that no system of education is complete without well-equipped libraries.

Regarding the library services of Agricultural Technical and Vocational Education and Training (ATVET) colleges, who had started their duty using some reference materials. However, with the commencement of ATVET programs, the Ministry of Agriculture donated teaching reference materials to all the federal ATVET colleges and upgrade their facilities by constructing modern library buildings. For example, the library service of Agarfa Multipurpose Farmers Training Centre, the present, Agarfa ATVET College started its duty with a few books using small room resident house in 1985. Later on, as the number of users increase, it transferred to a bigger class and tried to follow the rules and regulations of a library at the beginning of 1988. With the upgrading of the centre to college level, the number of students enrolment and the demand for library services in Agarfa College increased. As a result modern library building that can accommodate 500 users at a time started in 2003 academic year to provide different services (including catalogue, circulation, reference, binding and photocopy) and holding more than thirty thousand different resources (Agarfa college, 2004).

Though the ATVET colleges are providing information resources and services to their academic community, issues related to users demand is not clearly known. Therefore, this study intends to examine factors that determine use of information resources and services among instructors and students in the selected ATVET colleges.

1.2 Statement of the Problem

The value of teaching, learning and research activities in any educational organization mainly depends on the quality and quantity of information resources and services that are available and the way of managing these resources and services. The accessibility and use of quality and timely information resources and services are necessarily important for teaching, learning and research activities as well as to update knowledge of users (academic staff and students). In the education system, an academic library is the centre of academic life. An academic library or any other library attached to an institution of higher education exists to support the goals of

its parent organization (Gunasekera,2010). However, the purpose of the creation of libraries is defeated if none of the users patronize the library (Bakare *et al.*, 2013).

As being found in academic institution, libraries in the ATVET colleges are established to serve as the main source of information for the academic community. However, from realistic experience in the federal ATVET colleges (4 years work experience in Agarfa College), the researcher observed that most of the time few students and instructors use the library and sometimes no one was in the library except the library staff, this creates a question why? To be effective, libraries need to measure their performance rigorously against the expectations and real needs of their customers (Yared, 2010). Adeniran (2011) also argued that the purpose of a library is defeated if its users are not satisfied with the resources and services that the library provides. There is no any previous study in Ethiopia concerning the determinants of library information resources and services use. But, there are some studies related to this topic in different countries of the world. For example, Abosede and Ibikunle (2011), Oyedum (2011), Bakare *et al.* (2013), Teoh and Tan (2011) and Ofodile and Ifijeh (2013). However, most of these studies are carried out using descriptive statistics methods and they consider only students.

Therefore, it becomes necessary to examine the factors that influence users (students and instructors) in using the library information resources and services and the current status of use of information resources and services by users in the selected federal ATVET Colleges (Agarfa Agricultural Technical and Vocational Education and Training College and Ardaita Agricultural Technical and Vocational Education and Training College).

1.3 Objective of the Study

The overall objective of the study was to examine the determinants of information resources and services use among students and instructors in Agarfa and Ardaita ATVET colleges.

The specific objectives were to:

1. examine the level of use of information resources and services among students and instructors in the selected ATVET colleges' libraries;

2. examine the extent of users satisfaction with the existing information resources and services.

1.4 Research Questions

To address the objectives stated above, the following research questions were the focus of the study.

1. What are the factors that affect use of information resources and services by students and instructors in their respective colleges' libraries?
2. What is the level of use of information resources and services (information literacy level) by students and instructors in the selected ATVET colleges' libraries?
3. What is extent of users satisfaction with the existing information resources and services in the selected ATVET colleges' libraries?

1.5 Significance of the Study

Having a clear picture of determinants that affect users not to use the library information resources and services and current status of use of information resources and services by students and instructors in the selected ATVET colleges, based on a detailed analysis could help to generate possible suggestions. These in turn will help the colleges to look up the quality and quantity of information resources and services of their respective libraries. However, the aforementioned issues were not yet studied and it was a pressing need to be addressed. In this respect, this study will serve as a primary source of information for the federal ATVET colleges to deal with their information resources and services. Furthermore, the study will also serve as base line information for further study and provide directions for any intervention measures.

1.6 Scope of the Study

This study covered two of the five federal ATVET colleges in the country, namely, Agarfa and Ardaita. The researcher selected these two colleges due to the reason that they are the only federal ATVET colleges found in Oromiya regional state. In addition the college (Agarfa

College) has a rule that researchers have to do their research within 100 km radius from the college. The problems that are identified in the selected colleges are expected to be somehow similar to those which affect the remaining three colleges. This is because all the federal ATVET colleges follow the same procedures as they are administered by one ministry (The Ministry of Agriculture). The study population was also limited to students of the year 2013/14 and instructors of the selected colleges because they are expected to use the library more to perform different activities. Students and instructors as academicians their main duty is related to reading and this assisted to get the correct information about the information resources and services available in their respective colleges' libraries for the study. The total population size for this study was 2266, out of these, 200 respondents were selected as sample size for this study with 50 instructors and 150 students. The detail of this calculation is shown in the sample size.

1.7 Organization of the Thesis

This thesis consists five major chapters. The first chapter deals with background, statement of the problem, objectives of the study, research questions, significance of the study and scope of the study. The second chapter covers review of theoretical and empirical literature related to the investigation. This is followed by the methodology used in the research in chapter three. The fourth chapter presents the results and discussions part of the study. In the fifth chapter, the conclusions and recommendations from the study are briefly described.

2. LITERATURE REVIEW

This chapter presents a brief review of some theoretical and empirical literature related to the research problem. In this chapter an attempt is made to review the concepts of information, definition of important terms, some empirical studies related to information resources and services and conceptual frame work.

2.1 The Concept of Information

The concept of information in an organizational sense is more complex and difficult than the frequent use of this common word would suggest. Information is a basic resource like materials, money and personnel. Information can be considered either as an abstract concept (ideas) or as a commodity, usually in the form of letters and reports. Like energy and politics, technology is changing the ways in which information is captured, processed, stored, disseminated and used. Information, therefore, like any other resource in an organization, should be properly managed to ensure its cost-effective use (Adeoti-Adekeye, 1997). Jorosi (2006), declared information as a strategic weapon for use by managers to carry out their duties. In addition, Kumar and Kaur (2005) demonstrated that adequate flow of information would enhance human productivity and eradicate inefficiency among individuals and in organizations.

Different researchers defined information in various ways. For example: Popoola (2006) defined information as facts, ideas, opinions, news, messages, symbols, sounds, codes, databases, images, and processed data that are capable of improving the knowledge state of the user. According to Kumar and Singh (2009), information means the communication of knowledge about an event or given condition or the spread of knowledge derived from observation, study, experience, or instruction. Moreover, Nkuma-Udah (2012) defined information as a collection of facts from which conclusions may be drawn. Generally,

information is the result of processing, manipulating and organizing data in a way that adds to the knowledge of the person receiving it.

2.2 Definitions of Important Terms

Information resources: the general term for a resource containing information; websites, raw statistical datasets, and e-books are examples of information resources (IFLA, 2012). In academic libraries, millions of dollars are committed annually to the acquisition of and subscription to information resources to meet the research, teaching and learning needs of their clientele. Conversely, many students bypass the library and almost exclusively use commercial browsers or resources (such as Google, Wikipedia) to fulfill their information needs. It is more important than ever for libraries to demonstrate to students and stakeholders the value of using the library's resources and services (Jantti and Cox, 2010). For the purpose of this study it can be defined as the different of available resources in the selected colleges' information centers (libraries) which helps students and instructors as reference materials and as a source of knowledge. These are text books, reference books, news papers , magazines , government publications and other materials that are available in the library. The resources can be printed or electronic materials.

Information services: in the most general sense, information service is the process of helping library users to identify sources of information in response to a particular question, interest, assignment, or problem. Information service is not only limited to helping users who approach a question in the library but also many libraries offer remote assistance via the telephone, e-mail, or internet. Librarians are also creating websites, answer archives, and links to answers to "frequently asked questions," all designed to anticipate user questions and help people find information independently (Cassell and Hiremath, 2006). For the purpose of this study it can be defined as the available services that the information centres of the selected colleges provide to the users like short and long term loan of books, reference services, circulation service, photocopy service, audiovisual service, binding service and advisory services. Besides for the purpose of this study 'use' refers to the make use of the different information resources and services of the library collections and benefit from these collections like to update

knowledge, to study for examinations, to do research, assignments, term papers, projects, to prepare module for students and for recreation purpose.

E-information resources: refers to those supplies that require computer access, whether through a personal computer, mainframe, or handheld mobile device. They may either be accessed remotely via the internet or locally. Some of the most frequently encountered types are: e-journals, e-books, e-images, e-audio/visual resources (IFLA, 2012). Owing to technological revolution and advent of modern information and communication technology, academic community no longer relies upon the traditional library services. Indeed with presumption that electronic resources can utterly manage their information needs in better way as substitute to print resources (Bhardwaj and Walia, 2012). In recent years, internet has emerged as a powerful educational and informational tool. In this era of information, the internet is very important and useful source to fulfil the requirements of the society. Digital resources can be used for efficient retrieval and meeting information needs of users (Thanuskodi, 2010).

2.3 Library Information Resources

The academic library has been described as the “heart” of the learning community, providing a place for students and faculty to do their research and advance their knowledge (Ajayi and Adetayo, 2005). According to Whitmire (2002) academic library resources includes the number of library staff, librarians’ salaries and wages, book expenditures, journal expenditures, computer files search service expenditures, number of volumes, number of journals, general circulation, reserve circulation, and the number of reference transactions in a typical week.

Information is an essential ingredient in work performance of workforce of universities worldwide. Libraries are established in organizations particularly universities to provide much needed information in support of teaching, research and community services (Madukoma and Popoola, 2012). The main purpose of any library is to provide relevant and up- to-date materials with a view of satisfying the information needs of users (Iwhiwhu, 2012). Academic

libraries foster information literacy and provide resources to both students and staff (Andaleeb and Simmonds, 2001).

In today's changing environment, resources mean much more than the size of the library's collections. Access to resources may in fact be seen as vital to judging resource adequacy. Consequently, academic librarians must monitor the needs of the academic environment by remaining networked into their academic institution's curriculum, resource needs of teachers, student preference for how needed information is packaged (i.e., CD-ROMs, journals, audio visuals, Internet, etc.) (Andaleeb and Simmonds, 2001). Popoola (2008) confirmed that the information resources and services available in institutional information systems must be capable of supporting research activities among students and faculty members.

Many studies have investigated the factors that affect the selection and use of different information resources by students. These factors include accessibility, availability and ease of use (Branch, 2003). Young and Seggern (2002) had conducted a focus group study among students and faculty members at Idaho University to investigate their information seeking behaviour and information use. The study revealed ease of use, reliability, accuracy, currency and availability were the main criteria for using the information resources. Information resources, library and information personnel, and users are important components of modern libraries. For proper and systematic planning and development of information resources and services, the user studies are the first step in the development of need-based collections in libraries (Kumar *et al.*, 2011).

2.4 Library Information Services

The philosophy of librarianship is based on the concept of library service and provision of relevant materials for users. To this end, Professional librarians continue to struggle to collect and organize printed and other forms of recorded knowledge in order to satisfy both present and future users (Ajayi and Adetayo, 2005). Libraries and information centres are maintained for use. Library, as an entity, has a bearing on organizational development. Certainly library improves the quality of life and makes known the country's rich scientific and cultural

heritage in multiple forms. It also acts as an intellectual catalyst for the growth of the society and to acquire information and education as well as recreation (Kumar and Singh, 2009). Everyone should want libraries to have a large and positive impact on the communities they serve. We should all want the benefits resulting from investment in library services to be high (Buckland, 2003).

Libraries are established to render different kinds of services to users. Thus, services are the main product of the library system (Iwhiwu, 2012). One of the most important tasks of a resource centre is to make information available and encourage people to use it, by offering a range of information services. Information services should improve access to information, not only for people who can come and visit the resource centre, but also for those who cannot come in to the information centre by different reasons. The most commonly provided services include lending, reservation, advisory services, literature searches and photocopying (Health link worldwide, 2003).

Reference service has direct encounters with customers, and the service quality depends highly on the performance of the reference librarians and their interactions with customers (Hsieh *et al.*, 2000). According to Whitmire (2002) academic library services includes document delivery/interlibrary loan transactions, the number of persons served in presentations, the number of presentations, and public service hours in a typical week. The primary function of the academic libraries is to serve users for meeting their best academic commitments. They are the channel for academicians to imparting education through means of teaching, learning and research. The education can also fundamentally be developed through optimal utilization of libraries and information services (Magara and Batambuze, 2009). The present-day academic library services in the 21st century is focusing more on the area of digital, virtual or libraries without borders all of which have transformed academic libraries and led to transition and transformation in the academic library environment (Abubakar, 2011).

2.5 Factors that Affect Use of Information Resources and Services

There are a number of problems which create barriers in providing information services to users such as user education, lack of professional staff, policy matters, lack of autonomy (self-sufficiency) for the library professional etc. It is very difficult to make available all the desired documents to users but it can be managed to some extent, by keeping views of user's demand while purchasing new books, periodicals, and other print and non-print information materials. To make the library and information services effective, an adequate knowledge about the users, their needs, wants, and demands is necessary (Kumar and Singh, 2009).

Nimsomboon and Nagata (2003) stated problems users encountered when involved in library service are library collections, accessibility, insufficient space, and quality of the service provided. The most problems are about the insufficient and outdate collection and inaccurate accessibility. The re-shelving problem is also most problematic. The users cannot find the books on shelves, though they found information via on-line public access catalogue. For assessment of service quality to be effectively carried out in academic libraries, it is imperative to investigate what service quality is to users (Adeniran, 2011). Physical facilities as one of the environmental factors could influence the students' use of library. Inadequate number of physical facilities such as reading chairs and tables as well as lighting could result in low level of use of the libraries (Oyedum, 2011). It is more important than ever for libraries demonstrate to students and stakeholders the value of using the library's resources and services. The challenge, however, is that the value delivered by libraries is often considered to be of a social, educational or cultural value; values which are difficult to measure (Jantti and Cox, 2010).

Information literacy is increasingly having a pervasive impact on the character of information handling and services. This is connected with the exponential growth of information resources and the resultant complexity of information environment. With this complexity of information environment, what remains open to question is how the information users can take full advantage of the proliferating information resources to enhance their performance in their academic studies, in their work place and in personal life (Madu and Dike, 2012). Etim and

Nssien (2007) stated that information literacy forms the basis for lifelong learning; it is common to all disciplines, to all learning environments, and to all levels of education. It enables learners to master content and extend their investigations, become more self-directed and assume greater control over their own learning. According to them an information literate individual is able to: determine the information needed; access the needed information effectively and efficiently; evaluate information and its sources critically; incorporate selected information into one's knowledge base; use information effectively to accomplish a special purpose. The unique set of competences of the information literate include understanding the flow of information, knowing how to assess and select the appropriate resources for information, having the skill to search for and locate needed information, being able to evaluate and interpret it, extract and organize it (Madu and Dike, 2012).

Tella *et al.* (2009) stated that students were satisfied with the library collections and services but not with electronic resources. As the library is neither networked nor connected to the internet, students usually patronize the cyber cafe close to their school as an alternative. The study also indicated that students satisfied with all the services except electronic information services, which include library web pages, online journals and Internet/Email. The successful library services depend primarily on satisfaction level of its users with the relevant library collections, user-centric library services and library staffs' supportive attitude (Bhatti and Hanif, 2013).

According to Kumar (2009) the review of literature forms a link between the research proposed and the studies already done. It tells the reader about the aspects that have been already established or concluded by other authors and gives a chance to the reader to appreciate the evidence that is already been collected by previous research and thus plans the current research work in the proper perspective. Thus, there are many studies in library and information science throughout the World that are related to this study. For example, Andaleeb and Simmonds (2001), Gunasekera (2010), Ugah (2011), Abosede and Ibikunle (2011), Oyedum (2011), Obinyan *et al.* (2011), Iwhiwhu (2012), Kumar (2012), Teoh and Tan (2011), Bakare *et al.* (2013) and others. Findings on this topic, however, have been differing. This may be due to the reason that most of studies carried out using simple descriptive

statistics methods. Only few of these studies used model analysis. In Ethiopia there are no studies that deals with the determinants of library use. However, there are some studies that are related with academic libraries in different contexts. For example, Gashaw (1999), Yared (2010), Bogale (2010) and others. These studies carried out using descriptive statistics methods.

Ugah (2011) examined the size and quality of information sources and the use of library services in a university library, Nigeria. The data collected were analyzed through the use of frequency tabulation and percentages to answer research questions. From his study, he found that information sources in the university library were inadequate in size, and was not of high quality in terms of the needs of users.

Abosede and Ibikunle (2011) had conducted a study entitled “determinants of library use among students of agriculture: a case study of Lagos state polytechnic” using multi-stage sampling and probit regression. They conclude that gender, age and marital status can affect library use while closing hour and location of the library have no a negative effect on the use of the library. Based on their findings female students use the library more than male students, and as the age of student increases, library use tends to decline. Library use increases with the students’ level of study. As marital status changes from single to married, library use increases. Library staff’s customer handling and use of the library with friend also encourages library use.

Oyedum (2011) examined the Physical facilities as determinants of undergraduate students’ use of Federal University libraries in Nigeria. The study carried out using simple descriptive statistics methods. Oyedum argued that physical facilities could always influence the use of libraries in the universities. Without adequate number of seats and bright lighting systems users would always find it difficult to achieve any meaningful academic work in the university libraries.

Bakare *et al.* (2013) carried out a study entitled “factors affecting library use by academic staff and students of federal university of agriculture, Ogun state, Nigeria”. The data was analysed

using simple percentages and frequency counts. They stated that both academic staff and students use the library but in varying degrees. Respondents were not satisfied with library resources because they faced challenges to retrieve information. Academic staffs mainly use the library for research while students for reading purpose. Furthermore, it was revealed that respondents consult books and printed journals than any other library resources.

Gunasekera (2010) conducted a study entitled “students’ usage of an academic library: a user survey conducted at the main library University of Peradeniya, Sri Lanka” to assess library user satisfaction with current information services and resources. The study carried out using simple descriptive statistics methods such as percentage, graph and table. A questionnaire based survey was used for data collection and concluded that although undergraduate students satisfied with the library resources, services and facilities library resources and services were not being fully used by undergraduates.

Andalee and Simmon (2001) had conducted a study entitled “usage of academic libraries: the role of service quality, resources, and user characteristics”, Pennsylvania State University, using multi-stage sampling and the probit regression technique. They revealed that the use of academic libraries is influenced most by a user’s perceived familiarity with the library and its resources; those who are more familiar with the library are more likely to use academic libraries.

Obinyan *et al.* (2011) carried out a survey study entitled “use of information resources in four branches of a state public library in Nigeria”. The survey research design was adopted with an emphasis on the use of both primary and secondary data. The data was analysed using simple percentages and frequency counts. The study revealed that the majority of users were students and youths whose information needs were basically for examination and personal enlightenment. The available resources in the libraries were found to be inadequate and in most cases, inappropriate. This situation was credited to poor funding of the libraries as well as to lack of local content in the collection of the public libraries as well as lack of internet facilities. In terms of service delivery, the libraries have limited capability and competence to provide translation services to the non-literate group of the communities.

Teoh and Tan (2011) examined the “determinants of library use amongst university students”. The purpose of the study was to examine the factors affecting library use amongst university students. Logistic regression analysis was applied. They found out that users who believe that the library provides a useful avenue for them to achieve their academic goals, and frequent online users are more likely to utilize the library than their cohorts. Students in their third/fourth/final year of studies have a lower propensity for library visits than their second year counterparts. Meanwhile, factors such as gender, parental education, campus residence, field of study, and job status do not affect library utilization in a statistically significant manner.

Iwhiwhu (2012) had conducted a study entitled “public library information resources, facilities, and services: user satisfaction in Benin-city of Nigeria”. The descriptive survey research via the *ex post facto* design was used in the study. He stated that library users are satisfied with some facilities but not with the information resources and services. This was the result of the poor status of information resources and inadequate services rendered by the library staff, coupled with their poor attitude to work. The unsatisfactory level of users has serious implications for the library and its users. This study concluded that information resources, facilities and services influence users' satisfaction.

Kumar (2012) carried out a study entitled "user satisfaction and service quality of the University libraries in Kerala". The data was analysed using simple percentages and frequency counts. The purpose of the study was to evaluate the service quality and the extent of user satisfaction of the university libraries from the perspective of respondents from different user groups. The study found that the quality of services rendered by the university libraries is moderately good. The users of the university libraries in Kerala are largely satisfied with various aspects of service quality except responsiveness and are moderately satisfied with the physical facilities, collection, services and staff behaviour.

Ofodile and Ifijeh (2013) had conducted a study entitled "current trends in library patronage by faculties in Nigerian Universities: a study of Ladoke Akintola University, Ogbomosho,

Nigeria". The study adopts a descriptive survey type of research design. The study revealed that there was significant relationship between library patronage of lecturers and level of awareness. The study also found out that majority of respondents used the library very frequently and most of the respondents used the library daily for class preparation, to seek information for general knowledge and specific interest. The study identified unavailability and inaccessibility of current information materials, poor reference and document delivery services etc. as barriers to library patronage.

Bogale (2010) studied about assessment of information sources and services management in selected government TVET colleges in Addis Ababa to assess and examine the management and utilization of existing information sources and services in the three government TVET colleges in Addis Ababa. The data was analysed using percentages and frequency counts. He revealed that inadequate type of information sources and services; lack of qualified (trained library staff) both in quantity and quality and shortage of budget was the main problems in the colleges.

Gashaw (1999) examined performance evaluation in library and information systems of developing countries: a study of the literature Addis Ababa University Ethiopia. He revealed that performance evaluation for library and information systems in developing countries is almost absent. This is primarily because the information scenario of developing countries makes performance evaluation one of the very difficult tasks to undertake. Specifically then, library and information systems in these countries need to have a framework for performance evaluation that categorically addresses their needs.

Yared (2010) conducted a study entitled "Haramaya university library and information services: looking back to look forward". Yared explained that, the growth and development of a library is vital for effective teaching and learning in any institution of higher learning. Increased access to higher learning institutions in Ethiopia is impacting the overall activities of academic libraries in various ways and changes across all facets of society including demographic, technological, and economic change has the potential to greatly impact higher education and the academic library. Academic libraries are responsible for providing relevant,

comprehensive, and up-to-date information to diversified users. They are crucial for the future of the parent institution and for the nation as well.

As one can understand from the above studies most of the researches are from outside Ethiopia. This may be due to the reason that library and information science is at its early stage in the country. Even though library and information science education was started 1960s at Addis Ababa University in Ethiopia; the program by government institution was at a break for over a decade from 1999 to 2005. But, Jimma University resurrected it and gave birth to other universities launching the program at Adama, Makelle, Haramaya, Gondar, Asosa and Bule Hora with a transformed name of “Information Science”

2.6 Conceptual Framework

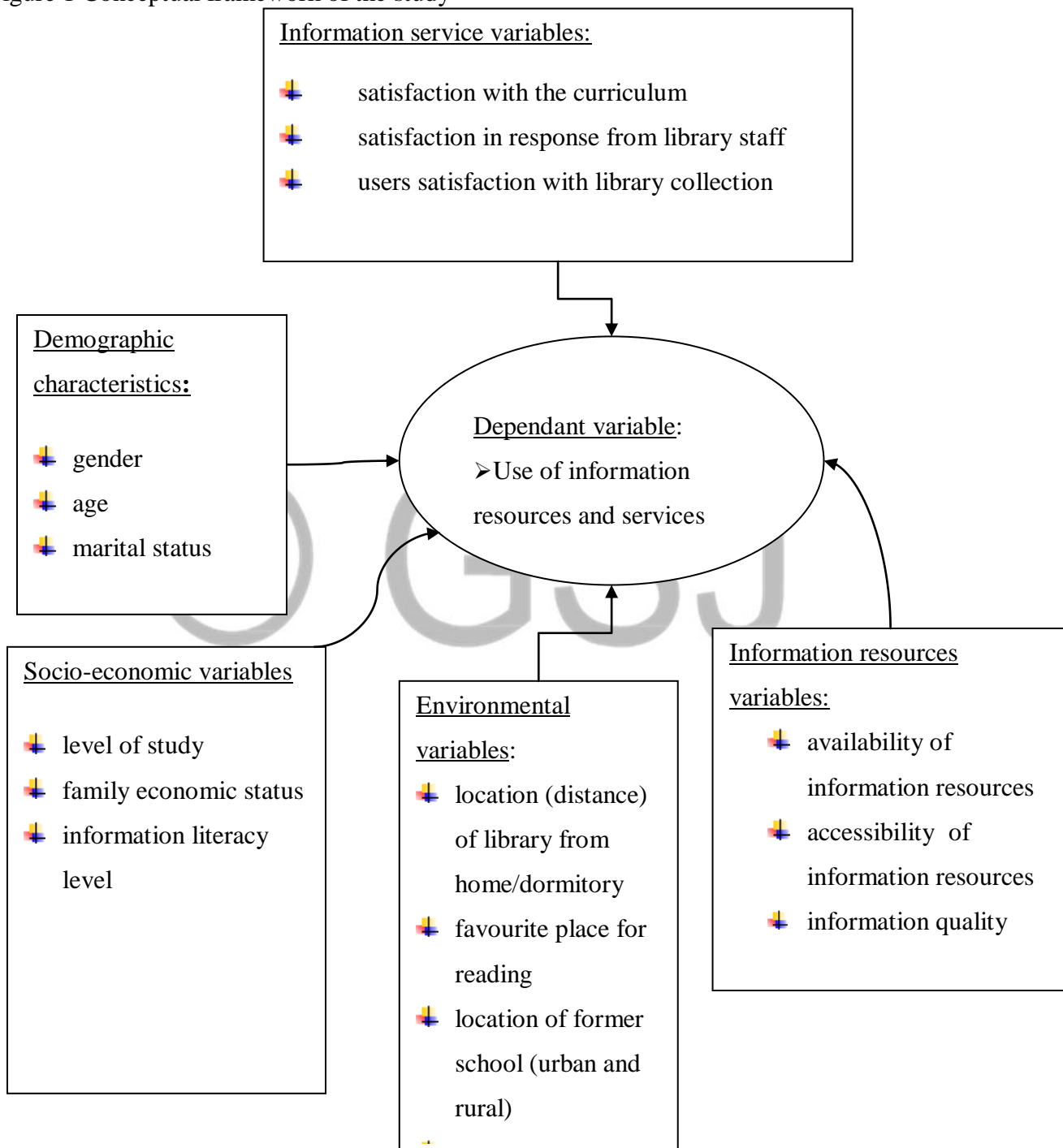
In this study, efforts were made to identify factors that affect use of information resources and services by students and instructors from questionnaires and observations.

The conceptual framework of this study was based on the assumption that use of information resources and services are influenced by a number of factors like information service variables (satisfaction with the curriculum, satisfaction in response from library staff and satisfaction with library collections), information resource variables (availability and accessibility of information resources, information quality), demographic characteristics (gender, age, marital status), socio-economic variables (level of study, family economic status, information literacy level) and environmental variables (location of library, favourite place for reading, location of former school).

In the education system, an academic library is the centre of academic life. Since academic libraries are an integral part of the higher education system, they should provide support services for the formal educational programs as well as facilities for research and for generation of new knowledge. It is important for any information professional working in an academic or any other library to know the real needs of the users and factors that affect use of information resources and services (Gunasekera, 2010).

Figure 1 below presents the most important variables that was hypothesized to influence the use of information resources and services by students and instructors in the study areas.

Figure 1 Conceptual framework of the study



Source: Partially adopted from Whitmire (2002).

3. RESEARCH METHODOLOGY

This section deals with research methodology, specifically sample size and sampling technique, data sources, types and methods of data collection, methods of data analysis and definition of variables.

3.1 Description of the Study Areas

This study was conducted in two selected ATVET Colleges managed by Federal Ministry of Agriculture. These are Agarfa and Ardaita ATVET Colleges, located in Bale and West Arsi Zones of Oromia regional state respectively. The selected colleges are the only federal ATVET colleges found in Oromia Regional State.

3.1.1 Agarfa ATVET College

Agarfa ATVET College is one of the oldest agricultural education institutions in Ethiopia, established in 1982 as “Agarfa Multipurpose Farmers' Training Centre” by the former Government of Ethiopia. It is located in Agarfa wereda, Bale Zone of Oromia Regional State at a distance of 458 km south east Addis Ababa, covering 4224ha area of land at altitude of 2330 meters above sea level with mild and moderate climate. The annual average rain fall and temperature of the college is 830 mm and 15.2 °c respectively. (Agarfa College, 2010). Agarfa wereda falls between Latitude 7°17'N and Longitude 39°49'E (ABOFED, 2009).

At the beginning, the training centre was established with the objective of giving short term trainings on rural technology development and improved agricultural practices to boost agricultural development, and expand cottage industry in order to realize a socialist economy by providing short-term certificate level training for selected farmers from different parts of the country and in turn improve the livelihood of the rural society. In September 2001, the centre was upgraded to college and renamed as Agarfa Agricultural TVET College to provide diploma level programs in three selected agricultural fields (Animal Science, Plant Science

and Natural resources). Agarfa Agricultural TVET College is one of the five colleges selected to continue as federal college to offer training to extension development workers and a wide range of clients in need of specific tailor made trainings (Agarfa College, 2010).

The following description about the library of Agarfa ATVET college is based on interview conducted with the head librarian and researcher's observation in the library.

Currently the library in Agarfa ATVET college can accommodate 500 users at a time and contains more than thirty thousand different resources(like text books, reference books, magazines, news papers, government publications etc.). The members (users) of the library are academic staff, supportive staff and students. The type of the library is traditional (totally un automated). In other words, there is no electronic format of information resources and services in the library. Concerning the library staff, there are only 3 staffs that have diploma in library science. The rest are from different fields with their education level diploma and certificate.

Services available in Agarfa college are circulation, reference, binding service (but old enough to use), catalogue service and loan service (only for academic and supportive staff). The library uses Dewey Decimal Classification system (DDC). The job description by itself has a problem. It is not studied by professionals. So that there is a big problem in both quality and quantity of professionals. Moreover, the library do not have enough budget to perform the different activities of the library. Regarding the service time of the library from Monday to Saturday, morning from 8:00 AM to 12:00 AM and afternoon from 1:30 PM to 5:30 PM and evening from 6:00 PM to 10:00 PM from Monday to Friday. In Sunday the library gives service only from 2:00 PM to 6:00 PM.

3.1.2 Ardaita ATVET College

Ardaita ATVET College was established in March 1984 with former name of ‘Yekatit 25 Cooperative Institute’. It is located in Gedeb Assasa woreda, West Arsi Zone of Oromia National Regional State. The College is about 305 kilo meters far away to south east of Addis Ababa covering a total land area of 1613 hectares.

Ardaita is one of the selected ATVET colleges by the ATVET reform to continue development agents (DAs) training and offer a full range of programs and services which would strengthen its institutional development and orientations towards the private sector. The college is, therefore, entitled to run training programs at certificate/and diploma levels (levels 1-4 according to Ethiopian Occupational Standards) to DAs, rural youth, the private and public sectors. Furthermore, it can offer non-formal training to fill specialized skill gaps, entrepreneurial skills and provide applied technology transfer and technical advisory services to farmers, agricultural business and the public sectors (Ardaita College, 2010).

Currently the library in Ardaita ATVET college can accommodate 500 users at a time and contains more than twenty thousand different resources. The members (users) of the library, type of the library, profession and educational level of the library staff, types of resources, services available (except catalogue service), job description of the library staff, budget problem and the service time of the library are more or less the same with that of Agarfa ATVET college.

3.2 Sample Size and Sampling Technique

The target population of this study comprised of instructors and students who have direct access to the information resources and services in the ATVET colleges under study. According to Kothari (2004) if a population from which a sample is to be drawn does not constitute a homogeneous group, one of the probability sampling techniques, stratified sampling technique is generally applied in order to obtain a representative sample. Stratified sampling technique results in more reliable and detailed information. That is, if P_i represents

the proportion of population included in stratum i , and n represents the total sample size, the number of elements selected from stratum i is n_i .

This research was conducted with a sample of size $n = 200$ that was drawn from a population of size students and instructors. That is total population size of students=2130 and instructors=136.

Then 150 students and 50 instructors that were drawn from their respective population sizes.

This was calculated by the formula given by Kothari as follows.

$N = 136$, which is divided into two strata of size $N_1 = 80$ and $N_2 = 56$

The formula is given as;

$$N_i = \left(\frac{N_i}{N} \right) n \tag{1}$$

Where N =total population size,

N_i =strata size (N_1 for Agarfa, N_2 for Ardaita) and

n =sample size which was 50 for the instructors and 150 for students.

Adopting proportional allocation, the sample size for the instructors was calculated as:

For strata with $N_1 = 80$, $P_1 = (80/136) n$, $P_1 = 50(80/136) = 29$

For strata with $N_2 = 56$, $P_2 = (56/136) n$, $P_2 = 50(56/136) = 21$

Then the total sample size for instructors were $29+21=50$

Similarly the sample size for students for the two colleges and for each department was calculated and the result is provided in the following tables.

Table 1 Population and sample size for instructors

Sample	Total population size			Sample population size			%
	Agarfa	Ardaita	Total	Agarfa	Ardaita	Total	
Instructors	80	56	136	29	21	50	36.76

Table 2 Population and sample size for students of Agarfa and Ardaita

Year	Total population size			Sample population size			%
	Agarfa	Ardaita	Total	Agarfa	Ardaita	Total	
2 nd	640	692	1332	45	49	94	7.06
3 rd	406	392	798	28	28	56	7.02
Total	1046	1084	2130	73	77	150	

Table 3 Population and sample size for students in Ardaita

Department	Population			Sample			
	year		Total	Year		Total	%
	2 nd	3 rd		2 nd	3 rd		
Accounting	331	214	545	23	15	38	6.97
Management	361	178	539	26	13	39	7.23
Total	692	392	1084	49	28	77	

Table 4 Population and sample size for students in Agarfa

Department	Population			Sample			
	year		Total	Year		Total	%
	2 nd	3 rd		2 nd	3 rd		
Animal science	203	138	341	14	10	24	7.64
Plant science	218	132	350	15	9	24	6.86
Natural resources	219	136	355	16	9	25	7.04
Total	640	406	1046	45	28	73	

3.3 Data Sources, Types and Methods of Data Collection

For this study, primary and secondary data were used. The primary data were collected from sample respondents by using questionnaires and observations. The purpose of the observation technique was to have an overview of users how they use the library and the available information resources and services in the ATVET colleges. The questionnaire was pre-tested with a sample of 10 respondents 5 from academic staff and 5 from third year students of the Agarfa college. Based on the pilot study, some parts of the questionnaire were revised for clarity. Enumerators were trained and employed for the data collection.

3.4 Methods of Data Analysis

In this study, both descriptive and econometric model was applied.

Descriptive and inferential statistics analysis

Descriptive statistics such as mean, standard deviations, frequency and percentages were used to describe the constraints that affect use of library information resources and services in the study areas. In addition to this, inferential statistics such as Chi-square test and independent t-test were used. In order to avoid multicollinearity effect for significant variables contingency coefficients was applied for the explanatory variables.

Regression model specification

Both binary and multinomial logistic regressions can be planned for discrete dependent variable systems and to a number of independent variables (Stock and Watson, 2007). It is called binary logistic regression model when the dependent variable is articulated in two categories and multinomial logistic regression model is useful when the dependent variables are expressed by more than two categories in applying the explanatory variables (Leech *et al.*, 2004). Logistic regression model is a proper model when the dependent variable is a discrete one consisting of two, 0 and 1 (Tathdil, 2002).

Thus logistic regression model that was employed in this study is a binary logistic regression model, where dependent variable is Y and the independent one is X. In order to make clear the model, the following logistic distribution function will be used (Maddala, 1986; Greene, 1993; Gujarati, 1995).

$$P_i = E\left(Y = \frac{1}{X_i}\right) = \frac{1}{e^{-(\beta_1 + \beta_2 X_i)}} \quad (2)$$

In the logistic distribution equation, P_i is the independent variable, X_i is the data, i is the possibility of a preference by an individual (option of having 1 and 0 values). When $\beta_1 + \beta_2 X_i$ in Equation 2 is replaced by Z_i , Equation 3 is obtained

$$P_i = \frac{1}{1 + e^{-z_i}} \tag{3}$$

Z_i is between $-\infty$ and $+\infty$, and P_i is between 1 and 0. When P_i shows the possibility of using library information resources and services, the possibility of this event's non-users of the library is $1 - P_i$ (Harrel, 2001). Then, the possibility of none users can be explained as in Equation 4 as follows:

$$1 - P_i = \frac{1}{1 + e^{z_i}} \tag{4}$$

Equation 5 is obtained by dividing the users by non users:

$$\frac{P_i}{1 - P_i} = \frac{1 + e^{z_i}}{1 + e^{-z_i}} = e^{z_i} \tag{5}$$

When the natural logarithm of both sides of the equation is written, Equation 6 is obtained:

$$\ln(P_i / 1 - P_i) = z_i = \beta_1 + \beta_2 X_i \tag{6}$$

Thus, non-linear logistic regression model is liberalized based on both its parameters and variables. “L” is called “logit” and models such as this called “logit models” (Gujirati, 1995, 2003). When there are more than one independent variable, (X_1, X_2, \dots, X_k) , binary and multiple logit regression models apply. In these situations, Equation 2 is used for proper transformations:

$$P_i = E(Y = 1 / X_i) = \frac{1}{1 + e^{-(\beta_1 + \beta_2 X_1 + \beta_2 X_2 + \dots + \beta_k X_k)}} \tag{7}$$

In logistic regression models involving a binary mode, categorical dependent variable has the following assumptions (Agresti, 2002; Tuzunturk, 2007):

- i) Conditional mean of logistic regression model has a value between 0 and 1.
- ii) Error terms in logistic regression model have a binomial distribution.
- iii) If the data is X , the possibility of Y 's being 1 is P_i . That is, $E(Y=1 | X_i, \dots, X_k) = P_i$
- iv) n number of observations about dependent variable are statistically independent.
- v) Defining variables are independent of each other.

Odds and odds ratio are significant terms in logit model. Odds are defined as the ratio of the number of events that occurred to number of events that did not occur . “Odds ratio” on the other hand, is the ratio of two odds, in other words, the ratio of likelihood to another. In Equation 5, two probabilities, users and non-users probability of an event are proportioned and this is the odds of proportion. It is important to understand that possibility, odds, and logit concepts, are three different ways of explaining the same thing (Menard, 2002).

$$Z_i = \beta_0 + E\beta_i X_i + U_i \quad (8)$$

Therefore, the above binary logit econometric model were used for this study to analyze determinants of use of library information resources and services. Finally the data were analyzed using the SPSS soft ware version 16. First, all the hypothesized explanatory variables were tested for the existence of multicollinearity problem before running the logit model. The measure was done using contingency coefficients for testing association among dummy variables. Contingency coefficients (CC) were computed for dummy variables. CC is a chi-square based measure of association. The decision rule states that when the result approaches to 1, indicates existence of multicollinearity whereas values less than 0.75 indicate as there is no problem.

The contingency coefficients are computed as:

$$CC = \sqrt{\frac{\chi^2}{N + \chi^2}} \quad (9)$$

Where, CC= Coefficient of contingency, χ^2 = Chi-square random variable and N = total sample size. The values of the contingency coefficients implied that there was no multi-collinearity problem among the explanatory dummy variables.

3.4.1 Dependent variable

In the estimation of the determinants of use of information resources and services, the dependent variable for the model is use of information resources and services. It is a dummy variable taking value 1 if the respondent use the library information resources and services, 0 otherwise.

3.4.2 Independent variables

The following independent variables were hypothesized to influence use of library information resources and services in the study areas

I. Independent variables for students

Gender: refers to sex of a respondent. It is a dummy variable taking value 1 if the respondent is male, 0 otherwise. Whitmire (2002) in his study on academic library performance measures and undergraduates' library use and educational outcomes and Bakare *et al.* (2013) in their study on factors affecting library use by academic staff and students of federal university of agriculture revealed that more male academics and students used the library than their female counterparts. Therefore, this study hypothesized that male students use library information resources and services more than that of females.

Age: refers to the age of respondents in the selected sample size. It is a continuous variable measured in years. Abosede and Ibikunle (2011) in their study on determinants of library use among students of agriculture: a case study of Lagos State Polytechnic depicted that if age of the students goes up by 1 year, probability of library use will decline by 4.13%. Moreover, Popoola (2008) in his study on the use of information sources and services and its effect on the research output of social scientists in Nigerian Universities revealed that as age increases, library use decreases. This study hypothesized that as age of individual's increases use information resources and services will decrease.

Marital status: refers to respondents who are married or unmarried. It is a dummy variable taking value (Single = 0, Married = 1). Abosede and Ibikunle (2011) concluded that as marital status changes from single to married, library use increases. Erdogan *et al.*(2008) revealed that married students were more successful in their academic achievement as compared to that of single. Therefore, this study hypothesized that married individuals use the library information resources and services more than that of single individuals.

Level of study (class year): refers to the educational level of respondents in the selected sample size. It is a categorical variable measured by year of study. Agboola and Bamigboye (2011) in their study on students' level of study and user of library resources in Nigerian Universities and Wolf (2005) in his study on library use and source selection of undergraduate students at the University of north Carolina argued that the use of library resources by students increases in different years of their study. Therefore, on the bases of the above research outcome this study hypothesized that as students level of study increases use library information resources and services also increases.

Family economic status: refers to the level of economic condition of students' family. It is a continuous variable taking values (high=1, moderate =2, low=3). Martha (2009) revealed that families where the parents are advantaged socially, educationally and economically foster a high level of achievement in their students. Similarly, Eamon (2005) stated that low economic status negatively affects academic achievement of students because it prevents access to vital resources and creates additional stress at home. Students from high social economic backgrounds will perform better than their counter parts from low social economic backgrounds. Therefore, this study hypothesized that students whose family economic status high use the library information resources and services more than that of with low family economic status.

Location of the former school (urban or rural): refers to the type of school a student attends in the lower grades. It is a dummy variable taking value 1 if student former school is in the urban area, 0 otherwise. Students from high-class schools are likely to perform well due to the fact that they attended those schools (Martha, 2009). Lone (2011) in his study on reading

habits of rural and urban college students in the 21st century showed that the reading culture is more developed in urban students than rural counterparts. Therefore, this study hypothesized that a student whose former school is urban uses the library information resources and services more than that of rural.

Student satisfaction with his/her field of study: refers to level of happiness of students in their field of study. It is dummy variable taking the value 1 if a student is satisfied with the field of study, 0 otherwise. Satisfaction is a relevant measure because many studies have demonstrated that satisfied individuals are likely to be willing to exert more effort than unsatisfied individuals (Özgüngör, 2010). Students satisfied with their field of study are likely to exert more effort in their educational studies by taking actions such as regularly attending their classes and becoming more involved in their coursework and institution (Tessema *et al.*, 2012). Therefore, this study hypothesized that students satisfied with the field of study uses the library information resources and services more than that of unsatisfied.

Students level of information literacy: refers to level of use of information resources and services by students. Information literacy of students is a categorical variable taking the values (1, 2, 3 and 4) for excellent, very good, good and poor respectively. Information literacy is not just about reading and writing. While reading and writing provide the necessary foundation for learning, literacy is fundamentally about an individual's capacity to work in shaping the course of his or her own life. Literacy involves "reading the word and the world" in a variety of contexts. Individuals need literacy skills to obtain and use information effectively (Government of Alberta, 2009). Ranaweera (2007) in his study on importance of information literacy skills for an information literate society revealed that information literacy skills are of prime importance in order to achieve every body's academic goals. Therefore, this study hypothesized that students that have excellent information literacy level uses the library information resources and services more than that have poor information literacy level.

Favourite place for reading: refers to the place where students prefer for reading. It is a dummy variable taking the value 1 if students prefer the library for reading, 0 otherwise. Shafi and Loan (2010) stated that home is the dominating place of reading for majority of students

(75.44%) followed by library (10.95%) and park/field (8.14%). Tahir *et al.* (2008) in his study on information needs and information-seeking behaviour of arts and humanities teachers also found out that a majority of respondents do their information-seeking activities at home and very few use the university library. Therefore, this study hypothesized that students' favourite place for reading is dormitory.

Students' satisfaction in response from library staff: refers to the students' happiness in response from librarians to the question that students ask to get information. It is a dummy variable taking value 1 if respondents are satisfied with response from library staff, 0 otherwise. That is (Yes = 1, No = 0). Kumar (2012) in his study on user satisfaction and service quality of the university libraries in Kerala found out that the ability and attitude of the staff members in the university libraries in providing information services are well appreciated by most of the users. Moreover, Shah and Saleem (2010) in their study on factors conducive for the purposeful use of libraries among university's students in Pakistan, revealed that the main hindrance to library use is the unfriendly attitude of the librarian and the other library staff. This study also hypothesized that as students satisfaction with the response from library staff increases library use will increase.

Students' satisfaction with library collections: refers to level of satisfaction of students with the library collections. It is a dummy variable taking value 1 if respondents are satisfied with the library collection, 0 otherwise. Yusuf and Iwu (2010) in their study on use of academic library: a case study of Covenant University in Nigeria found out that most students are satisfied with the available library resources. This study also hypothesized that most students in the selected colleges for this study will be satisfied with the library collections.

II. Independent variables for instructors

Gender: refers to sex of a respondent. It is a dummy variable taking value 1 if the respondent is male, 0 otherwise. Bakare *et al.* (2013) in their study on factors affecting library use by academic staff and students of federal university of agriculture and Bouazza and Al-Mufaraji (2005) in their study on use of school libraries by teachers: the case of Oman revealed that

more male academics used the library than their female counterparts. Moreover, Funmilayo (2013) in his study on gender differences in the use of academic resources: the case of FUTA library revealed that more men used the library resources than women of the same age. Therefore, this study hypothesized that male instructors use the library information resources and services more than that of females.

Age: refers to the age of respondents in the selected sample size. It is a continuous variable measured in years. Age also plays an important role in usage of libraries; the younger the instructors are, the more they use electronic sources (Bar-Ilan *et al.*, 2003). Popoola (2008) in his study on the use of information sources and services and its effect on the research output of social scientists in Nigerian universities also revealed that as age increases, library use decreases. This study hypothesized that as age of individual's increases use library information resources and services will decrease.

Marital status: refers to respondents who is married or unmarried. It is a dummy variable taking value (Single = 0, Married = 1). Abosede and Ibikunle (2011) revealed that as marital status changes from single to married, library use increases. Therefore, on the bases of the above result outcome this study hypothesized that married individuals use library information resources and services than un-married individuals.

Instructor's satisfaction with curriculum: refers to level of happiness of instructors in the curriculum. It takes the value 1 if an instructor is satisfied with the curriculum, 0 otherwise. Satisfaction is a relevant measure because many studies have demonstrated that satisfied individuals are likely to be willing to exert more effort than unsatisfied individuals (Özgüngör, 2010). Therefore, this study hypothesized that instructors that are satisfied with the curriculum uses the library information resources and services more than that of the unsatisfied ones.

Information literacy level of instructors: refers to level of use of information resources and services by instructors. Information literacy of instructors is a categorical variable taking the values (1, 2, 3 and 4) for excellent, very good, good and poor respectively. Okiki and Mabawonku (2013) in their study on information literacy skills of academic staff in Nigerian

Federal Universities revealed that information literacy skills of academic staff was high. Etim and Nssien (2007) stated that information literacy forms the basis for lifelong learning. Therefore, this study hypothesized that instructors information literacy skill in the selected colleges for this study will be high.

Instructors' satisfaction with response from library staff: refers to the instructors' happiness in response from librarians to the question that they ask while they need information. It is a dummy variable taking value 1 if respondents are satisfied with response from library staff, 0 otherwise. That is (Yes = 1, No = 0). Adeniran (2011) in his study on user satisfaction with academic libraries services: academic staff and students perspectives revealed that user-satisfaction with services in libraries which are well-stocked and the materials properly arranged and managed by well-qualified experienced staff would be significantly higher than user satisfaction with libraries with less qualified and impolite staff. This study hypothesized that as instructors' satisfaction with the response from library staff increases use of library information resources and services also increases.

Instructors satisfaction with library collections: refers to instructors happiness with the existing library collections. It is a dummy variable taking value 1 if respondents are satisfied with the library collections, 0 otherwise. Yusuf and Iwu (2010) in their study on use of academic library: a case study of Covenant University in Nigeria found out that both staff and students are satisfied with the library resources available. Bhatti and Hanif (2013) also revealed that, majority of the respondents have described that they are satisfied about the collection of the library. This study hypothesized that most instructors will be satisfied with the existing library collections.

4. RESULTS AND DISCUSSIONS

This chapter deals with results and discussions of the study on determinants of library information resources and services use among instructors and students. To understand the existing relationship among instructors and students characteristics with respect to use of library information resources and services, the descriptive analysis is summarized and discussed under different sub-headings. Moreover, different demographics, information resources, information services and environmental variables that affect use of library information resources and services are discussed consecutively. The description was made using mean, percentage and standard deviation, t-test and chi-square test. In addition to these, an econometric model of binary logit was applied to identify major factors that affect use of library information resources and services using questionnaires collected from 198 (50 instructors and 148 students) representative samples from the study areas. Initially the number of students sample were 150, but the response of 2 respondents discarded as they were incorrect.

4.1.1 Demographic characteristics of respondents (instructors)

Age of the respondents: The independent samples t-test result showed that, the average age of respondents that did not use the library information resources and services was 26.41 years with standard deviation of 2.938, whereas the average age of respondents that use the library information resources and services was 28.18 years with standard deviation of 4.687, the minimum and maximum age of the total respondents being 22 years and 42 years respectively. According to the independent samples t-test result there is no statistically significant mean difference (t-value 1.416 at $p=0.163$) between male and female instructors in their age. This shows age of instructors do not affect use of library information resources and services. This is because most of the instructors age were between 24 to 27 years old which indicates they are almost in the same age group.

Gender of respondents: Out of the total respondents, male respondents were 37(74%), whereas female respondents were 13(26%). The Pearson chi-square test result indicated that

there was statistically significant difference ($\chi^2 = 5.937^{**}$) between male and female at less than 5% level of significance. Gender of respondents across library use also indicated that, out of the 37 male respondents, 28(75.7%) of them use library information resources and services in their respective college, while the rest 9(24.3%) do not. But, out of the total female respondents only 5(38.5%) of them use the library, while the rest 8(61.5%) do not (Table 5). This shows that male instructors use the library more than female instructors. This may be due to the reason that females' perception of the library as well as the difficulty in combining academic work with home chores. The result is consistent with the work of Funmilayo (2013) and Bakare *et al.* (2013), whereby men visit the library more frequently than the women. The result is also reliable with the result outcome of Bouazza and Al-Mufaraji (2005), whereby more male teachers used the library than female teachers. But, different from the result outcome of Andaleeb and Simmonds (2001) who found out that females use the library marginally more than males.

Marital status of respondents: As indicated in Table 5, greater majority of respondents were single. That is about 36(72%) of the respondents were single, while 14(28%) were married. The Chi-square result ($\chi^2 = 6.250^{**}$) for marital status was found to be statistically significant. Marital status of respondents across library use also indicated that out of the 36 single respondents, 20(55.6%) of them use the library, while 16(44.4%) do not. However, out of the 14 married respondents, 13(92.9%) of them use the library. This signifies, as marital status changes from single to married library use increases, meaning that married instructors tends to use library more than the un-married. This might be due to the reason that married individuals are expected to afford for the needs of the family and they require extra effort to increase additional credential that will ultimately attract higher pay. The result is consistent with the research outcome of Abosede and Ibikunle (2011).

4.1.2 Socio-economic variables (instructors)

Educational level of respondents: As it can be seen in Table 5, from the total respondents, 41 (82%) of them holds BSC/BA, whereas 9(18%) holds MSC/MA. This indicates, most of the instructors in the selected colleges have first degree. Out of the 41 first degree holders, 28 (68.3%) of them use the library, while 13(31.7%) not. Of the 9 second degree holder respondents, 5(55.6%) of them use the library, while 4(44.4%) do not. This shows there is slight difference in using library information resources and services between BSC/BA and MSC/MA holders. But, do not have considerable effect. The chi-square test ($\chi^2 = 0.534NS$) across educational level and library use also indicated that there was no statistically significant difference between educational level of instructors and library use. Thus, being BSC or MSC does not affect library use in the study areas. The result is similar to the study carried out by Awojobi (2004) who found out that educational status and academic qualification have no significant relationship with the frequency of library use.

Information literacy level of respondents: Information literacy is the set of skills needed to find, retrieve, analyse, and use information. As indicated in Table 5, out of the total respondents 23(46%) of them replied their information literacy as "excellent", 12(24%) of them replied "very good", 10(20%) of them replied "good" and the rest 5(10%) replied "poor". In addition, the Chi-square test result ($\chi^2 = 8.685^{**}$) for information literacy level of respondents was found to be statistically significant at 5% level of significance. This signifies that, information literacy level of most instructors is high. The result is consistent with the result outcome of Okiki and Mabawonku (2013), whereby information literacy skill of academic staff was high. Furthermore, information literacy level of respondents across library use indicated that, from the respondents whose information literacy level "excellent", 19(82.6%) of them were patrons of the library information resources and services. Out of the 12 respondents who respond their information literacy "very good", 8(66.7%) of them were patrons of the library. Out of the 10 respondents with their information literacy "good", 5(50%) of them were customers of the library. However, from those who respond their information literacy as "poor", only 1(20%) of them was patron of the library, while 4(80%) of them were not patrons of their respective library.

In line with this, respondents were asked how often they successful in finding information resources and services in their respective colleges' libraries. The result indicated that, from the total respondents, 21(42%) respond "always" and 15(30%) respond "sometimes". Besides, of the total respondents, 11(22%) respond "rarely" and the rest 3(6%) respond "not at all". Respondents success in finding information resources across library use also indicated that, from those that respond "always", 17(81%), from those that respond "sometimes", 11(73.3%), from those that respond "rarely", 36.4% and from those that respond "not at all", 33.3% were patrons of their respective colleges' libraries and $\chi^2 = 8.184^{**}$. This signifies that, as information literacy level of instructors increases library use also increases. Madu and Dike (2012) revealed that the more information literacy competencies possessed by the academic staff the high his academic productivity level is likely to be.

Table 5. Demographic and socio-economic variables of respondents (n=50)

	Gender		Marital status		Education al status		Information literacy level			Success to find resources in library				
	Male	Female	Single	Married	BSC/BA	MSC/MA	Excellent	Very good	Good	Poor	Always	Sometimes	Rarely	Not at all
Frequency	37	13	36	14	41	9	23	12	10	5	21	15	11	3
Percent	74	26	72	28	82	18	46	24	20	10	42	30	22	6

4.1.3 Information services and resources variables (for instructors)

Satisfaction with the response from library staff: Respondents were asked their satisfaction with the response from library staff while they use library information resources and services. Accordingly, out of the total respondents, 10(20%) of them respond "always", 18(36%) of them respond "sometimes", 13(26%) of them respond "rarely" and the rest 9(18%) respond "not at all". Besides, the Chi-square result ($\chi^2 = 11.637^{**}$) across satisfaction with the response from library staff and library use by instructors was found to be statistically

significant at 5% level of significance. Respondents satisfaction across library use also indicated that library use increases as satisfaction with the response from library staff increases. That is, from those that respond "always" 8(80%), from those that respond "sometimes" 16(88.9%) and from those that respond "rarely" 6(46.2%) of them were patrons of the library in their respective college. But, from those that respond "not at all", only 3(33.3%) of them were patrons the library in their respective college. Therefore, as satisfaction with response from library staff of instructors increases library use also increases as expected. The result corresponds with the work of Adeniran (2011), whereby positive response from library staff increases the probability of library use.

In line with this, respondents were asked their opinion about the efficiency of the library staff in answering their information needs. The result showed that from the total respondents 8(16%) of them respond "excellent", 10(20%) of them respond "very good", 9(18%) of them respond "good", 11(22%) of them respond "satisfactory" and the rest 12(24%) respond "poor". This indicates that, several respondents are not satisfied with the performance of the library staff. There are only three member of the library staff who have diploma in library science. The other staffs are from different fields and sometimes those who have problems in another office transferred to library as a punishment. In general there is a problem in quantity and quality of the library staff in both colleges. Zheng (2004) revealed that user satisfaction in relation to library facilities and services depends on quality of services offered by the library. The result is also consistent with the result outcome of Bogale (2010) who found out that lack of qualified (trained library staff) both in quantity and quality was one of the main problems in the study areas. The result is different from the study conducted by Kiran (2010) who found out that the library staff was considered quite helpful and able to inculcate confidence in library users.

Satisfaction with the curriculum: As shown in Table 6, out of the total respondents, 18(36%) of them were satisfied with the curriculum; but 32(64%) of them were not satisfied. The cross-tabulation between satisfaction with the curriculum along with library use by instructors as well indicated significant effect. Out of the 18 respondents who were satisfied with the curriculum, 16(88.9%) of them were patrons of their respective colleges' libraries. On the

other hand, out of the 32 respondents who were not satisfied with the curriculum, 17(53.1%) of them were clients of the library in their respective college. But, 15(46.9%) were not clients of the library in their respective college. The Chi-square test result ($\chi^2 = 6.566^{***}$) between satisfaction with curriculum along with library use by instructors also indicated statistically significant difference at 1% level of significance. Accordingly, as instructors satisfaction with the curriculum increases library use increases as hypothesized. The result is reliable with the result outcome of Özgüngör (2010).

Respondents satisfaction with library collections: As we can see from Table 6, 15(30%) of the total respondents were satisfied with the library collections, while 35(70%) were not satisfied with the collections of the library. This signifies, most of the respondents are not satisfied with the library collections. The result is similar with the result outcome of Bouazza and Al-Mufaraji (2005), whereby teachers expressed their dissatisfaction with library collections and services which appeared inadequately developed and tended to be traditional in nature. The result is also consistent with the result outcome of Bakare *et al.* (2013), whereby respondents were not satisfied with library resources. But, different from the work of Yusuf and Iwu (2010) who found out that both staff and students were satisfied with the library services rendered and the resources available.

However, the cross-tabulation between respondents satisfaction with the collections and use of library information resources and services indicated that, out of the respondents who were satisfied with the library collections, 14(93.3%) of them were patrons of the library in their respective college. Besides, from those that were not satisfied with the collections of their respective library, 19(54.3%) of them were patrons of the library information resources and services. But, the rest 16(45.7%) were not patronize the library. The Pearson chi-square test ($\chi^2 = 7.134^{**}$) also indicated significant effect between respondents satisfaction with library collections and use of library information resources and services by instructors. The implication is, as instructors satisfaction with the library collection increases library use also increases.

In line with this, respondents were asked the accessibility of information resources in their respective college's library. The result indicated that, 68% of the total respondents can access resources from their respective library, while the rest 32% cannot access information resources. Moreover, respondents were asked to averagely rate the relevance, quality, currency(up-to-date) and quantity of the library information resources. The result of the descriptive statistics showed that, for the relevance of information resources 8(16%) respond "excellent", 10(20%) respond "very good", 13(26%) respond "good" and the rest 19(38%) respond "poor", for the quality of information resources, 6(12%) respond "excellent", 11(22%) respond "very good", 14(28%) respond "good" and the rest 19(38%) respond "poor" and for the currency of information resources, 7(14%) respond "excellent", 5(10%) respond "very good", 17(34%) respond "good" and the rest 21(42%) respond "poor". For the quantity of information resources, 5(10%) respond "excellent", 8(16%) respond "very good", 15(30%) respond "good" and the rest 22(44%) respond "poor". This implies that, most of the respondents are not satisfied with the quantity, currency and relevance of information resources in their respective colleges' libraries.

Moreover, the Pearson chi-square test result ($\chi^2 = 12.029^{**}, 6.736^*, 10.724^{**}, 11.638^{**}$) indicated statistically significant effect for the quality, quantity, currency and relevance of information resources respectively. The result is similar with the result outcome of Obinyan *et al.* (2011) who found out that the available resources in the libraries were found to be inadequate and in most cases, inappropriate. The result is also consistent with the result outcome of Ugah (2011) who found out that information resources in the university library were inadequate in size, and was not of high quality in terms of the needs of users. Besides, there is no electronic format of information resources in the study areas as approved during site observation by the researcher, while most of the users of the library replied that they need electronic format of resources and services.

Table 6. Information service variables (n=50)

	Respondents opinion about efficiency of library staff					Satisfaction with response from library staff			
	Excellent	V.good	Good	Satisfactory	Poor	Always	Sometimes	Rarely	Not
Frequency	8	10	9	11	12	10	18	13	9
Percent	16	20	18	22	24	20	36	26	18

4.1.4 Environmental variables

Location of the library: Respondents were asked to respond whether the location of the library affects them to use library information resources and services or not. Out of the total respondents 62% respond that they were not affected by the location of the library to use library information resources and services in general. In particular, in Agarfa college 26(83.9%) respond that location of the library do not affect to use library information resources and services. But, in Ardaita college 16(84.2%) of the total respondents replied that the location of the library affects them to use the library information resources and services. The Pearson chi-square test ($\chi^2 = 22.414^{***}$) also indicated statistically significant effect across name of college and location library. This is because instructors dormitory/home in Ardaita college is somehow far away from the library.

In line with this, the location of library across library use indicated that out of the total respondents who were affected by the location (distance) of the library, 52.6% did not use the library information resources and services. However, out of the total respondents who were not affected by the location of the library, 77.4% use the library information resources and services. The Pearson chi-square test ($\chi^2 = 4.741^{**}$) also indicated statistically significant effect across location of the library and use of library information resources and services at 5% level of significance. This shows location of the library (distance from home) affects library use by instructors.

Furthermore, respondents were asked from what they prepare exam questions to their students. The result showed that, 38(76%) of the total respondents respond that they prepare from the handout that students use. Besides, 64% of the respondents do not give assignments/projects to their students that can be done from different resources of their respective library. Their main reason was that the current teaching learning system does not allow to do this as it is modular system and the content of the module is not proportional to the time given to cover. The implication is, the current teaching learning system of the Federal ATVET colleges is one factor that makes students not to use the library information resources and services.

In line with this, those instructors who do not use the library information resources and services were asked to give their reason why they do not use the library. Most of them respond that they are not satisfied with the library collection and with the continuously on and off light at the evening. Besides, most of the instructors visit the library two to three times in a week and their primary purpose to visit the library was to read news papers and magazines followed by for recreation purpose and to know the latest arrivals respectively.

4.1.5 Demographic characteristics of respondents (students)

Age of the respondents: The independent sample t-test indicated that the average age of respondents that use the library information resources and services was 21.91 years with standard deviation of 2.796, whereas the average age of respondents that do not use the library information resources and services was 22.64 years with standard deviation of 2.613, the minimum and maximum age of the total respondents being 18 years and 30 years respectively. According to the independent samples t-test result, there was no statistically significant mean difference (t-value 1.556NS at $p=0.122$) between users and non-users of the library information resources and services in their age. This is because there is no as such big difference in their ages. That is, most of the students are between 20 to 24 years old. This shows that age of students do not affect use of library information resources and services in the study areas. The result is different from the work of Abosede and Ibikunle (2011) and Popoola (2008) who found out that as age increases the probability of library use will decrease.

Gender of respondents: The descriptive statistics result for gender of respondents (Table 7) indicated that male respondents were 83(56.1%), whereas female respondents were 65(43.9%). The chi-square test result of male and female students across library use also indicated that there was statistically significant difference ($\chi^2 = 37.408^{***}$) at 1% level of significance. Accordingly, from the total male respondents, 70(84.3%) of them were patrons of the library in their respective college. But, 13(15.7%) of them were not utilize the library. However, from the total female respondents, 23(35.4%) of them were patrons of the library, while 42(64.6%) of them were not patronize the library. This implies that, male students use the library more than that of females. The result corresponds with the result outcome of Whitmire (2002), Oyesiku and Oduwole (2004) and Bakare *et al.* (2013).

Marital status of respondents: Marital status of respondents (Table 7) indicated that, 87.2% of the respondents were single, while the rest 12.8% were married. Out of the total single respondents, 59.7% of them were patrons of the library, but 40.3% of them do not patronize the library. Whereas, out of the total married respondents 84.2% of them were patrons of the library, but 15.8% were not. Pearson chi-square test also indicated that marital status of the students had significant effect ($\chi^2 = 4.264^{**}$) with the use of library information resources and services in the study areas. The result is compatible with the research outcome of Abosede and Ibikunle (2011).

4.1.6 Socio-economic variables (students)

Educational level (class year) of respondents: Educational level of students indicated that 56 (37.8%) of the total respondents were second year students and 92(62.2%) were third year students. Of the total second year respondents, 59.8% of them were patronize the library information resources and services in their respective colleges' libraries, but 40.2% of them were not patronize the library information resources and services. On the other hand, out of the total third year respondents, 67.9% of them were patrons the library information resources and services in their respective colleges' libraries, but 32.1% were not patrons of the library.

This shows that, use of library resources and services by students increases in different years of their study. The chi-square test result of the descriptive statistics also indicated significant difference between second year and third year students ($\chi^2 = 8.757^{**}$). The result corresponds with the work of Agboola and Bamigboye (2011) and Wolf (2005), whereby senior students were more likely to use the library. But, in contrast to the findings of Teoh and Tan (2011), whereby third year /final year students were less likely to use the library as compared to their counterparts in their second year students.

Family economic status of respondent: Family economic status of respondents in the study areas showed that, from the total respondents 14(9.5%) of them respond their family economic status "high" and 76(51.4%) respond "moderate". The rest 58(39.2%) were within the group of "low" economic status. Out of the respondents within the family economic status "high", 13 (92.9%) use the library and 1(7.1%) do not. From those with their family economic status "moderate", 76(51.4%) use the library, while 22(28.9%) do not use the library. On the other hand, from those with their family economic status "low", 26(44.8%) use the library, while 32(55.2%) do not use the library. Pearson chi-square test also indicated that family economic status of the students had significant effect ($\chi^2 = 15.655^{***}$) at 1% level of significance with the use of library information resources and services. The result is consistent with the result outcome of Eamon (2005) and Martha (2009).

Information literacy level of respondents: Information literacy skills are helpful to everybody, especially students, in order to succeed academically. Information literacy level of respondents as indicated in Table 7 out of the total respondents, 24(16.2%) of them were respond their information literacy as "excellent", 29(19.6%) "very good", 46(31.1%) "good" and 49(33.1%) "poor". The information literacy level of respondents across library use also indicated that, all of the respondents whose information literacy level respond as "excellent" were patrons of the library information resources and services. Out of the respondents who respond their information literacy "very good", 26 (89.7%) of them were patronize the library , but 3(10.3%) were not patronize their respective library. From the respondents whose information literacy level "good", 37(80.4%) of them were patrons of the library information resources and services, but 9(15.6%) were not patronize their respective library. Out of the

respondents whose information literacy "poor", only 6(12.2%) of them were patrons of the library. but 43(87.8%) of them were not patronize the library. This signifies that, information literacy level affects library use. The Chi-square result ($\chi^2=82.934^{***}$) for information literacy level of respondents was statistically significant at 1% level of significance. Thus, as information literacy level of students increases library use also increases in the study areas. Ranaweera (2007) revealed that information literacy skills are of prime importance in order to achieve every body's academic goals.

More to the point, students were asked whether they can access text books quickly in their respective library without the help of others or not. The result indicated that, 40(27%) of the total respondents replied "yes", but 108(73%) of the total respondents replied "No". This shows that most of the students information literacy level is at its early stage (infancy). The result is similar with the study done by Ilogho and Nkiko (2014) who found out that students in the study areas generally do not have good information literacy skills.

Table 7. Demographic and socio-economic variables of respondents (n=148)

	Gender		Marital status		Class year		Family economic status			Information literacy level			
	Male	Female	Single	Married	2 nd year	3 rd year	High	Moderat	Low	Excellent	Very good	Good	Poor
Frequency	83	65	129	19	92	56	14	76	60	24	29	46	49
Percent	56	44	87	13	62	38	10	51	41	16	20	31	33

4.1.7 Information services and resources variables (for students)

Satisfaction with the response from library staff: Respondents were asked their satisfaction with the response from library staff while they use library information resources and services. As a result, from the total respondents 24(16.2%) of them respond "always", 32(21.6%) respond "sometimes", 47(31.8%) respond "rarely" and 45(30.4%) respond "not at all". This

signifies that, most of the respondents are not satisfied with the response from library staff. However, respondents satisfaction with the response from library staff across library use showed that, from those that respond "always", 23(95.8%) use the library and from those that respond "sometimes", 31(96.9%) use the library. Plus from those that respond "rarely", 34 (72.3%) use the library. But, from those that were not satisfied with the response from library staff at all, only 5(11.1%) of them use the library, while 40(88.9%) do not. The Chi-square result ($\chi^2 = 80.443^{***}$) of satisfaction with response from library staff across library use also found to be statistically significant at 1% level of significance. Therefore, as satisfaction with response from library staff of students increases library use also increases and this coincides with the result outcome of Abosede and Ibikunle (2011), Adeniran (2011) and Shah and Saleem (2010), whereby positive response (friendly attitude) from library staff increases the probability of library use.

Satisfaction with field of study: From the total respondents, 86(58.1%) of them were satisfied with their field of study, while 62(41.9%) were not satisfied with their field of study. However, the cross-tabulation between satisfaction with field of study and library information resources and services use by students indicated that out of the students who were satisfied with their field of study, 80(93%) of them use the library. On the other hand, from those respondents that were not satisfied with their field of study, only 13(21%) use the library information resources and services, but 49(79%) do not. The Chi-square result ($\chi^2 = 80.102^{***}$) of satisfaction with field of study across library use was found to be statistically significant at 1% level of significance. This shows that as students level of satisfaction with their field of study increases library use increases. This might be due to the reason that students who are satisfied with their field of study tends to know more about their field of study from different resources. Tessema *et al.* (2012) also stated that students satisfied with their field of study are likely to exert more effort in their educational studies by taking actions such as regularly attending their classes and becoming more involved in their coursework and institution. The result is different from the findings of Teoh and Tan (2011) who found out that field of study do not affect library use in a statistically significant manner.

Respondents satisfaction with library collections: As indicated in Table 8, out of the total respondents, only 56(37.8%) were satisfied with the library collections, while the rest

92(62.2%) were not satisfied with the collections. Satisfaction of respondents with the library collections across library use also indicated that, from the total respondents who were satisfied with the library collections, 48(85.7%) of them use the library information resources and services. On the other hand out of the respondents who were not satisfied with the library collections, 44(47.8%) of them use the library, but 48(52.2%) of them were not patronize the library. The Pearson chi-square test($\chi^2=23.464^{***}$) also indicated statistically significant effect at 1% level of significance between respondents satisfaction with library collections and library use. This shows as students satisfaction with library collection increases use of library information resources and services also increase.

The result corresponds with the work of Wolf (2005), whereby the likelihood of library patronage is often influenced by students perception that arises from the reasoning that students with negative perceptions of the library are less likely to utilize it compared to those with positive outlooks. The result also corresponds with the work of Teoh and Tan (2011), in that students that have a positive impression with the library collections use library more as compared to those who do not have positive impression.

Moreover, respondents were asked about the quantity, currency and relevance of information resources and services in their respective colleges' libraries. The result of descriptive statistics indicated that, for the quantity of information resources 10(6.8%) respond "excellent", 12(8.1%) respond "very good", 32(21.6%) respond "good", 57(38.5%) respond "fair" and the rest 37(25%) respond "poor". For the currency of information resources, 4(2.7%) respond "excellent", 11(7.4%) respond "very good", 38(25.7%) respond "good", 64(43.2%) respond "fair" and 31(20.9%) respond "poor", for the relevance of the resources, 6(4.1%) respond "excellent", 16(10.8%) respond "very good", 35(23.6%) respond "good", 44(29.7%) respond "fair" and the rest 47(31.8%) respond "poor". The chi-square test result($\chi^2=10.264^{**}$, 10.789^{**} and 11.953^{**}) also indicated significant effect at 5% level of significance for the quantity, currency and relevance of information resources and services respectively. This implies, there is a problem in the study areas in both quantity and quality of information resources and services. This can be one reason why 62.2% of the total respondents became

unsatisfied with the library collections. Moreover, the result indicated that students satisfaction with the library collections was very low. The result is similar with the result outcome of Obinyan *et al.* (2011) who found out that the available resources in the libraries were found to be inadequate and in most cases, inappropriate. But, different from the study done by Kumar (2012) who found out that users were satisfied with the quality of collection, services and staff behaviour rendered by the university libraries. The result is also in contrast with the result outcome of Tella *et al.* (2009) and Gunasekera (2010) who revealed that students were satisfied with the library collections and services.

Table 8. Information service variables (n=148)

	Satisfaction with field of study		Satisfaction with library collections		Satisfaction with response from library staff			
	Yes	No	Yes	No	Always	sometimes	rarely	not
Frequency	86	62	56	92	24	32	47	45
Percent	58.1	41.9	37.8	62.2	16.2	21.6	31.8	30.4

4.1.8 Environmental variables (for students)

Birth place (location of former school) of respondents: Most of the respondents birth place were in rural areas of the country. That is, 73% of the students came from rural areas and the rest 27% from urban areas. Out of the students that came from urban areas, 29(72.5%) were patrons of the library but 11(27.5 %) not. On the other hand, from the respondents that came from rural areas 64 (59.3%) were patrons in their respective colleges' libraries, but 44(40.7%) were not patronize the library. This signifies that students that came from urban areas have in some way good reading habits than that of from rural areas. The result is similar with the work of Lone (2011), in that the reading habits of rural and urban college students of the 21st century showed that the reading culture was more developed in urban students than rural counterparts. However, there is no significant difference between students library use and their birth place. The chi-square test ($\chi^2 = 2.191NS$) across birth place and library use also indicated that there was no statistically significant difference between birth place of students on using

the library information resources and services. This indicates that, there is no as such significant difference between birth place and library usage of students in the study areas.

Respondents preferable place for reading: From the total respondents only 47(31.8%) of them prefer library as their favorite place for reading. The rest 101(68.2%) had no interest to read in their respective library. Respondents preferable place for reading across library use indicated that, out of the 47 respondents who prefer library as their favorite place of reading, 42(89.4%) of them were patrons of the library information resources and services. However, from those that prefer "dormitory", only 51(50.5%) of them patronize the library information resources and services. Pearson chi-square test($\chi^2 = 20.749^{***}$) also indicated significant effect at 1% level of significance between respondents preferable place for reading and library use. This signifies that, most of the students prefer dormitory as their preferable place for reading. The result is the same with the result outcome of Shafi and Loan (2010) and Tahir *et al.* (2008).

Moreover, students were asked from what their instructors prepare exam questions. The result indicated that, 108(72.3%) respond that all the questions directly from the students handout followed by 24(16.2%) most questions from handout and some from reference materials. Besides, students were asked if their instructors give them assignments/projects that can be done from different resources of the library. The result indicated that, 51(34.5%) respond "yes" and 97(65.5%) respond "no". This signifies that, the current teaching learning system by itself can be considered as one factor that makes students not to use the library information resources and services. This is because, the teaching learning system is modular system and the time for one module is very limited (most of the time 4 to 5 days). The result is similar to the result outcome of Shah and Saleem (2010) who found out that some of the problems that makes students not to use libraries are related to the education system, because the examination system is based on rote memorization and selective study.

Besides, those students who do not use the library information resources and services were asked to give their reason why they do not use the library. Most of them respond that they are not satisfied with the library collection. Some of them respond that library staffs are not

helpful; the continuously on and off light at the evening also another reason . Besides, most of the students visit the library ones in a week followed by two to three times in a week and their primary purpose to visit the library was to read for examination followed by to read news papers and magazines.

4.2 Regression Model Results

Description of the sample population and analysis of the relationship between the dependent and independent variables to identify determinants that affect use of library information resources and services by instructors and students was discussed in the previous sections. However, identification of these determinants alone is not enough unless the relative influence of each factor is known for priority based involvement. Therefore, Binary logit model was used to identify possible determinants of use of library information resources and services among instructors and students. Before running the model diagnosis test of multicollinearity was conducted. The method used to test the multicollinearity has been coefficient of contingency for all the discrete variables. The result indicated that there was no variable investigated that found to be highly correlated for both instructors and students model (as shown in the appendix).

4.2.1 Factors affecting the use of library information resources and services (instructors)

From the total explanatory variables included in the econometric model, 4 of them were found to be significant. These include, marital status, satisfaction with response from library staff (only for those who respond "sometimes"), satisfaction with library collections and satisfaction with curriculum. Estimates of the parameters of the variables expected to affect use of library information resources and services are presented in Table 10.

Table 9 Maximum likelihood estimates of the binomial logit model (N=50)

Variable	B	S.E.	Wald	Exp(B)
Gender	2.092	2.005	1.088	8.098
Marital status	3.466	1.881	3.394	32.017*
Information literacy			1.937	
1(Excellent)	6.340	5.598	1.283	566.569
2(Very good)	5.364	5.544	.936	213.650
3(Good)	7.468	6.026	1.536	1.751E3
SWRFLS			6.141	
1(Always)	3.203	2.687	1.421	24.598
2(Sometimes)	6.617	3.001	4.863	747.937**
3(Rarely)	.711	2.065	.118	2.035
Satisfaction with curriculum	3.157	1.735	3.312	23.511*
SWLC	5.002	2.053	5.938	148.713**
Age	-.057	.211	.074	.944
Constant	-11.027	9.253	1.420	.000
Chi-square value		42.853% ***	df =11	
-2 Log likelihood		21.251 ^a		
Prediction success		94.0%		
Over all prediction for non users		88.2%		
Over all prediction for users		97.0%		

Source: Model output (2014) ***, ** and * refers significant at 1%, 5% and 10% respectively, SWRFLS=Satisfaction with response from library staff, SWLC=satisfaction with library collection.

4.2.2 Explanation of the model results (for instructors)

The binary logit model result, the maximum likelihood estimates discloses that decision to use library information resources and services is determined by the interaction of different possible: demographics, information services and resources, and environmental variables. To test the measure of goodness of fit in logistic regression analysis, the likelihood ratio test that

says chi-square distribution with degree of freedom (df) equal to number of independent variables included in the model (Gujirati, 2003); therefore, the chi-square computed indicated, as the model was significant at 1% significance level.

The other measure of goodness-off-fit in the logistic regression model is by observing the value in the prediction table as the model correctly predicted it or not. The fit is said to be good if the overall correct prediction rate exceeds 50%. In line with this, the observation is categorized as user if the computed probability of user is greater than or equal to 50%, otherwise as non-user. Accordingly, the result indicated that 88.2% of the non-user and 97.0% of the users were correctly predicted at the cut value of 0.5; and overall, the model correctly predicted 94.0% of the sample cases (Table 10). Thus, the model predicted users and non-users groups of library information resources and services appropriately.

Marital status: As hypothesized, marital status of instructors showed significance and positive effect at less than 10% probability level in using library information resources and services in the study areas. This shows that as marital status changes from single to married, library use increases. The implication is, married instructors tends to use library more than the un-married. The value of odds ratio for marital status of instructors is 32.017. This indicates that other things being kept constant, use of library information resources and services increases by a factor of 32.017 as the number of married instructors increases by one. The result is consistent with the work of Abosede and Ibikunle (2011).

Satisfaction with response from library staff: Instructors satisfaction with response from library staff indicated positive and significant effect at less than 5% significance level for those who respond "sometimes". The odds-ratio in using library information resources and services for those who respond " sometimes " is 747.937. This shows that other things being kept constant, use of library information resources and services increases by a factor of 747.937 as the number of instructors who are satisfied "sometimes" with the library information resources and services increases by one. The result is similar with the result outcome of Adeniran (2011).

Satisfaction with curriculum: Satisfaction of instructors with curriculum indicated significance and positive effect at less than 10% probability level on use of library information resources and services. This shows, instructors who are satisfied with the curriculum use the library information resources and services more than that of unsatisfied ones. The value of odds ratio for satisfaction of instructors with the curriculum is 23.511. This indicates that other things being kept constant, use of library information resources and services increases by a factor of 23.511 as the number of instructors who are satisfied with the curriculum increases by one. The result matches with the study conducted by (Özgüngör, 2010).

Satisfaction with library collection: Instructors satisfaction with library collection indicated significance and positive effect at less than 5% probability level on the use of library information resources and services. This implies, instructors who are satisfied with the library collection use the library information resources and services more than that of unsatisfied ones. The model result showed that, the odds ratio of use of library information resources and services increase by a factor of 148.713 as the number of instructors who are satisfied with the library collection increases by one other things being kept constant. However, Most instructors were not satisfied with the collections The result is consistent with the result outcome of Bakare *et al.* (2013), whereby most respondents were not satisfied with library collections.

4.2.3 Factors affecting the use of library information resources and services (students)

From the total explanatory variables included in the econometric model, 4 of them were found to be significant. These include, gender, information literacy level, satisfaction with response from library staff and satisfaction with field of study. Estimates of the parameters of the variables expected to affect use of library information resources and services are presented in Table 11.

Table 10. Maximum likelihood estimates of the binomial logit model (N=148)

	B	S.E.	Wald	Exp(B)
Gender	3.387	1.409	5.778	29.570**
Class year	1.115	1.563	.509	3.048
Family economic status			.882	
1(High)	-3.946	4.252	.861	.019
2 (Moderate)	-.673	1.333	.255	.510
Birth place	-2.074	1.482	1.958	.126
Information literacy			7.636	
1(Excellent)	21.456	6.934E3	.000	2.082E9
2(Very good	5.097	2.001	6.490	163.485**
3(Good)	4.029	1.594	6.387	56.204**
SWRFLS			10.329	
1(Always)	6.938	4.396	2.490	1.031E3
2(Sometimes)	6.531	2.059	10.064	686.205**
3(Rarely)	4.963	1.884	6.942	143.025**
Satisfaction with field of study	3.155	1.278	6.093	23.453**
Favorite place for reading	.598	1.979	.091	1.818
SWLC	-.701	1.833	.146	.496
Age	-.067	.187	.129	.935
Constant	-5.370	5.104	1.107	.005
Chi-square value		162.478% ***	df =15	
-2 Log likelihood		32.827 ^a		
Prediction success		95.3%		
Over all prediction for non users		92.7%		
Over all prediction for users		96.8%		

Source: Model output (2014) *** and ** refers significant at 1% and 5% respectively, SWRFLS= satisfaction with response from library staff, SWLC =Satisfaction with library collection.

4.2.4 Explanation of the model results (for students)

The chi-square computed indicated, as the model was significant at 1% significance level similar to that of instructors model. Accordingly, the result indicated that 92.7% of the non-user and 96.8% of the users were correctly predicted at the cut value of 0.5; and overall, the model correctly predicted 95.3% of the sample cases (Table 11). Thus, the model predicted users and non-users groups of library information resources and services properly.

Gender: As hypothesized, the relationship between gender of students and use of library information resources and services was positive and significant at less than 5% significance level. The implication is that as the number of male student increases, the probability of use of library information resources and services increases. The value of odds ratio for gender of students is 29.570. This indicates that other things being kept constant, use of library information resources and services increases by a factor of 29.570 as the number of students increases by one male. This result is consistent with the work of Bakare *et al.* (2013).

Information literacy level : As hypothesized, information literacy level of students affects use of library information resources and services positively and significantly at less than 10% level of significance in general. Specially, it is significant at less than 5% significance level for those who respond their level of information literacy as "very good" and "good". The value of odds-ratio for those who respond "very good" is increased by a factor of 163.485 as the number of students with their level of information literacy "very good" increases by one from the total students. Also, the values of odds-ratio for those who respond "good" is 56.204. This shows that other things being kept constant, use of library information resources and services increases by a factor of 56.204 as the number of students with their level of information literacy "good" increases by one. This demonstrates that, as information literacy level of students increases use of library information resources and services also increases.

Students' satisfaction with response from library staff: As expected, the relationship between students' satisfaction with the response from library staff and use of library information resources and services was positive and significant at less than 5% significance

level in general. In particular, it was significant at less than 5% level of significance for those who are satisfied "sometimes" and "rarely". The model result showed that, the odds ratio of use of library information resources and services increase by a factor of 686.205 as the number of students who are satisfied with the response from library staff "sometimes" increases by one other things being kept constant. The value of odds ratio for those who respond "rarely" is 143.025. This indicates that other things being kept constant, use of library information resources and services increases by a factor of 143.025 as the number of students that respond "rarely" increases by one.

Students satisfaction with their field of study: The model result for students satisfaction with their field of study indicated positive and significant effect at less than 5% significance level in using library information resources and services. The value of odds ratio for students satisfaction with their field of study is 23.453. This implies that, use of library information resources and services increases by a factor of 23.453 as the number of students who are satisfied with their field of study increases by one. The result is different from the findings of Teoh and Tan (2011) in their study on determinants of library use amongst university students in Malaysia. They found out that field of study do not affect library use in a statistically significant manner.

5. SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1.1 Summary

This study was conducted in order to identify determinants of use of library information resources and services among students and instructors in Agarfa and Ardaita colleges. Different characteristics of the respondents were analysed among students and instructors in using library information resources and services. These characteristics were categorized as demographics, socioeconomic, information services and resources, and environmental variables. Result of descriptive statistics and chi-square tests indicated that most of the variables hypothesized to affect the respondents were significantly associated with the use of library information resources and services.

From instructors demographic variables, age was hypothesized to affect use of library information resources and services negatively. However, the descriptive statistics result showed that age had insignificant association with the use of library information resources and services. Besides, educational status of instructors was hypothesized to affect use of library information resources and services positively. But, the result of the descriptive statistics indicated that educational status had insignificant relationship with the use of library information resources and services. Moreover, instructor's marital status, gender and information literacy level were hypothesized to have positive association with the use of library information resources and service. The result at the same time showed they had statistically significant association with use library information resources and services.

Information services related variables such as satisfaction with the response from library staff, satisfaction with the library collections and satisfaction with the curriculum for instructors were hypothesized to have positive relationship with the use of library information resources and services. The results of descriptive statistics also indicated that they had significant association in using the library information resources and services. Additionally, from the environmental variables location of the library was hypothesized to affect use of library

information resources and services. The result of descriptive statistics also indicated significant association in using the library information resources and services by instructors.

In addition, the model result of marital status, satisfaction with the response from library staff (for those who respond "sometimes"), satisfaction with the curriculum and satisfaction with the library collection indicated positive and statistically significant for instructors relationship with use of library information resources and services.

From students demographic variables, age was hypothesized to affect use of library information resources and services negatively. However, the descriptive statistics result showed age had insignificant association with the use of library information resources and services. Students former school (birth place) was hypothesized to affect use of library information resources and services positively. But, the result of the descriptive statistics indicated students birth place had insignificant association with the use of library information resources and services. Moreover, student's marital status, gender, class year, family economic status and information literacy level were hypothesized to have positive association with use of library information resources and service. The result simultaneously showed they had statistically significant association with use of library information resources and service.

Information services related variables such as satisfaction with the response from library staff, satisfaction with the library collections and satisfaction with field of study for students were hypothesized to have positive relationship with the use of library information resources and services. The results of descriptive statistics also indicated that they had significant association in using the library information resources and services. As well, from the environmental variables students favourite place for reading was hypothesized to affect use of library information resources and services. The result of descriptive statistics also indicated significant association in using the library information resources and services. Moreover, the model result of gender, satisfaction with the response from library staff, satisfaction with field of study and information literacy level of students indicated positive and statistically significant relationship with use of library information resources and services.

5.1.2 Conclusion

An academic library is expected to provide the necessary information resources and services for the academic community and helps to support and enhance the teaching learning process of the institution. However, in realization process there are different determinants that affect users in using the library information resources and services. Hence, ensuring of information resources and services use process, identification of the challenges that happens for users of the library and taking measure to improve the use of information resources and services have to make on continual basis. Moreover, use of library information resources and services on the study areas is very low due to demographics, socio-economic, information resources and services, and environmental factors.

Thus, the result of the econometric model revealed that, instructors who are satisfied with the curriculum, library collection and with the response from library staff use the library information resources and services more than that of unsatisfied ones. Besides, married instructors use the library more than that of unmarried. Similarly, male students use the library more than that of females. As information literacy level of students increases, library use increases. As students satisfaction with response from library staff increases, library use also increases. Therefore, it is time for the Federal ATVET colleges to see the problems (determinants) of use of information resources and services in their respective colleges' libraries to realize the information needs of users of the library. Hence, if library information resources and services use among students and instructors is to be augmented, it is important that the ATVET colleges' libraries find ways to familiarize users with the library information resources and services.

5.1.3 Recommendations

The findings of the study identified many determinants that affect use of library information resources and services among instructors and students in the study areas. Based on the findings of this study, the following recommendations are forwarded.

Gender for both students and instructors by descriptive statistics indicated statistically significant relationship in using the library information resources and services. Out of the total female instructor respondents 61.5% and out of the total female student respondents 64.6% do not use the library information resources and services. Thus, the study recommends that the colleges (Agarfa and Ardaita) should give much emphasis for those females who do not use the library information resources and services by arranging different short term trainings and experience sharing with those who are users of the library to improve their attitude and awareness about the library information resources and services.

According to the result of the regression model (pages 50 and 53), satisfaction with the response from library staff for both instructors and students revealed positive and statistically significance at 5% level of significance in using the library information resources and services. This implies that, most users of the library are not happy with the response from the library staff. Hence, I suggested that the administrators of the colleges (Agarfa and Ardaita) should give much emphasis for the library by providing professional librarians if possible, as well as providing trainings and awareness creation for the library staff. Moreover, the study recommends that the librarian and library staff should be excited and helpful to users of the library. They need to realize that with their friendly attitude they can increase the number of library users.

Satisfaction with field of study by regression model for students (page 53) indicated significant association with the use of library information resources and services. Out of the total respondents who were not satisfied with their field of study, 79% did not use the library information resources and services. However, out of the students who were satisfied with their field of study 93% use the library information resources and services. Thus, the study recommends for the Federal TVET agency and other concerned bodies who select students from different regions of the country that students should be given chance to choose the field that they want to study.

Moreover, most of the respondents were not satisfied with the library collections. So, an effort must be made by management body of the ATVET colleges to allocate sufficient budget to

equip and provide their respective colleges' libraries with sufficient and relevant information resources and services that would enable the library to offer effective and efficient information resources and services to users of the library.

The model result for instructors satisfaction with the curriculum indicated positive and significant effect in using the library information resources and services. This is due to the reason that the set of courses (competencies) are very large in number and is difficult to finish the competencies within the given period of time and at the same time to assure quality education. In addition, there is redundancy among many competencies. Hence, the study recommends for the Federal TVET project that, it should be given ample attention to deal with the set of courses and its contents in all the Federal ATVET colleges.

The study also recommends that the Ministry of Agriculture as a climax body should follow the teaching learning process of the Federal ATVET colleges.

Finally, it is recommended that interested individuals can do such related studies in the country: A comparative study among Federal ATVET colleges and regional TVET colleges.

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7. APPENDICES

7.1 Appendix A. Contingency coefficients

Appendix Table 1 Contingency coefficient for dummy/discrete variables (for instructors)

	1	2	3	4	5	6
Gender	1	0.023	0.328	0.374	0.190	0.169
Marital status	0.023	1	0.397	0.178	0.041	0.277
Information literacy	0.328	0.397	1	0.672	0.307	0.152
SWRFLS	0.374	0.178	0.672	1	0.277	0.327
Satisfaction with curriculum	0.190	0.041	0.307	0.277	1	0.026
SWLC	0.169	0.277	0.152	0.327	0.026	1

Note: SWRFLS= satisfaction with response from library staff, SWLC= satisfaction with library collection

Appendix Table 2 Contingency coefficient for dummy/discrete variables (for students)

	1	2	3	4	5	6	7	8
Gender	1	0.017	0.013	0.419	0.361	0.354	0.218	0.250
Class year	0.017	1	0.159	0.052	0.202	0.076	0.096	0.092
Birth place	0.013	0.159	1	0.097	0.189	0.099	0.075	0.067
INLL	0.419	0.052	0.097	1	0.530	0.536	0.369	0.425
SWRFLS	0.361	0.202	0.189	0.530	1	0.512	0.419	0.370
SWFS	0.354	0.076	0.099	0.536	0.512	1	0.384	0.421
FPFR	0.218	0.096	0.075	0.369	0.419	0.384	1	0.506
SWLC	0.250	0.092	0.067	0.425	0.370	0.421	0.506	1

Note: INLL=information literacy level, SWRFLS=satisfaction with response from library staff
SWCC=satisfaction with curriculum, SWLC=satisfaction with library collection, FAMEST= family economic status, SWFS=satisfaction with field of study, FPFR=favourite place for reading.

Appendix Table 3 Variance Inflation Factor (VIF) for continuous explanatory variables

Variables	Collinearity Diagnosis	
	Tolerance	Variance Inflation Factor (VIF)
Family economic status (students)	0.757	1.320
Age (students)	0.803	1.107
Age (instructors)	0.775	1.291

7.2 Appendix B. Questionnaires

1. Questionnaires for Instructors

Part I: Demographic characteristics

1. What is the name of your college? 1. Agarfa 2. Ardaita
2. Specify your gender: 1. Male 2. Female
3. Your age? _____
4. What is your level of study/educational status? 1. BSC 2. MSC
5. Your marital status? 1. Single 2. Married

Part II information resources and services

1. Do you use information resources and services in your college's library?
 1. Yes 2. No
2. If your answer for question number 1 is **yes**, how often do you use information resources and services in your respective college library?
 - A. Every day B. 2 to 3 times in a week C. 4 to 5 times in a week D. Ones in a week.
3. If your answer for question number 1 is **No**, which of the following problem (s) is/ are the reason(s)? (You may tick more than one responses)
 - A. Poor lighting in the library
 - B. The continuously on and off of light at the evening

- C. Disturbances caused by noise from outside
 - D. Poor ventilation
 - E. Library staffs are not helpful
 - F. The library size is not enough as compared to number of users
 - G. Not satisfied with the library collections
4. How can you measure your level of information literacy ?
A. Excellent B. Very good C. Good D. Poor
 5. How often you successful in finding information resources in your college library?
A. Always B. Sometimes C. Rarely D. Not at all
 6. How often are you satisfied with the response from the library staff while you ask them for information? A. Always B. Sometimes C. Rarely D. Not at all
 7. What is your opinion about the library staff of your respective college with respect to their efficiency in answering your information needs?
A. Excellent B. Very good C. Good D. Satisfactory E. Poor
 8. Are you satisfied (happy) with the curriculum that is prepared for students in your respective college? A. Yes B. NO
 9. If your answer for question number 8 is No, What is your reason? _____
 10. Are you using E- information resources in your library? A. Yes B. No
 11. How can you measure (rate) the library in collecting most recent documents ?
A. Excellent B. Very good C. Good D. Poor
 12. How do you averagely rate the information resources and services you get from your respective college library in terms of their information quality (relevance/content, timeliness and quantity)? Mark “√” against the appropriate column of the table.

Criteria	Rank			
	Excellent	Very good	Good	Fair
Relevance				
Currency/up to datedness/				
Quantity				
Quality				

13. Are you satisfied with the library collections (resources)? A. Yes B. No

14. Can you access textbooks (resources) quickly in the library while you want?
A. Yes B. No
15. If your answer for question number 14 is No, what do you think is the reason?_____
16. While you prepare exam questions for your students, from what you prepare the questions?
A. All the questions directly from the handout that the students use
B. From different reference materials which are relevant to their text books
C. Most questions from the handout and some from other reference books
D. All the questions directly from reference books
17. Do you give assignments/projects to your students that can be done from different resources (books) in the library? A. yes B. No
18. If your answer for question number 17 is No , what is your reason? Mark “√” against the appropriate column of the table
A. The current teaching- learning system does not allow to do this
B, There is no enough time for students to do this
C. There is no enough time for Instructors to do this
D. Students have no interest to do this
19. What is your primary purpose in seeking information from your college library? (You may tick more than one responses)
A. To keep up with new knowledge
B. To prepare module/handout for students
C. To read news paper and magazines
E. To know the latest arrivals
F. For recreation purpose

Part III Environmental factor

Does the location (distance) of the library affect you to use library information resources and services? A. Yes B. No

2. Questionnaires for Students

Part I: Demographic characteristics

1. What is the name of your college? 1. Agarfa 2. Ardaita
2. Specify your gender: 1. Male 2. Female
3. Your age? _____
4. What is your class year? 1. 2nd year 2. 3rd year
5. Your marital status? 1. Single 2. Married
6. What is your department? A. Animal Science B. Plant Science C. Natural Resources
Cooperative accounting E. Cooperative management
7. What is the average annual income of your family in Ethiopian birr? _____.
8. Where is your former school/birth place? 1. Urban area 2. Rural area

Part II information services and resources

1. Do you use information resources and services in your college's library?
1. Yes 2. No
2. If your answer for question number 1 is **yes**, how often do you use information resources and services in your respective college library?
A. Every day B. 2 to 3 times in a week C. 4 to 5 times in a week D. Ones in a week.
3. If your answer for question number 1 is **No**, which of the following problem (s) is/ are the reason(s)? (You may tick more than one responses)
A. Poor lighting in the library
B. The continuously on and off of light
C. Disturbances caused by noise from outside
D. Poor ventilation
E. Library staffs are not helpful
F. The library size is not enough as compared to number of users
G. Not satisfied with the library collections
4. How can you measure your level of information literacy ?

- A. Excellent B. Very good C. Good D. Poor
5. How often you successful in finding information resources in your college library?
 - A. Always B. Sometimes C. Rarely D. Not at all
 6. How often are you satisfied with the response from the library staff while you ask them for information?
 - A. Always B. Sometimes C. Rarely D. Not at all
 7. What is your opinion about the library staff of your respective college with respect to their efficiency in answering your information needs?
 - A. Excellent B. Very good C. Good D. Satisfactory E. Poor
 8. Are you satisfied (happy) with your field of study?
 - A. Yes B. NO
 9. If your answer for question number 8 is No, What is your reason?_____
 10. Are you using E- information resources in your library?
 - A. Yes B. No
 11. How can you measure (rate) the library in collecting most recent documents ?
 - A. Excellent B. Very good C. Good D. Poor
 12. What is your primary purpose in seeking information from your college library? (You may tick more than one responses)
 - A. To keep up with new knowledge
 - B. To study for examination
 - C. To obtain materials that might be useful for my teaching-learning activities
 - D. To read news paper and magazines
 - E. To know the latest arrivals
 - D. For recreation purpose
 13. How do you averagely rate the information resources and services you get from your respective college library in terms of their information quality (relevance/content, timeliness and quantity)? Mark “√” against the appropriate column of the table.

Rank	Criteria			
	Excellent	Very good	Good	Poor
Relevance				
Currency/up-to--date				
Quantity				

14. Are you satisfied with the library collections (resources)? A. Yes B. No
15. If your answer for question number 14 is No, what is your reason?_____
16. Can you access textbooks quickly in the library without help of others?
A. Yes B. No
17. If your answer for question number 16 is No, what do you think is the reason?_____
18. From your experiences in the college, questions for your exam are prepared from what ?
A. All the questions are from the hangout that students use
B. From different reference materials which are related to text books
C. Most questions from the handout and some from other reference books
D. All the questions directly from reference books
19. Do your instructors give you assignments/projects that can be done from different resources (books) in the library? A. yes B. No
20. If your answer for question number 19 is No , what do you think is the reason? (You may tick more than one responses).
A. The current teaching- learning system does not allow to do this
B. There is no enough time for students to do this
C. There is no enough time for Instructors to do this
D. Students have no interest to do this

Part III Environmental factors

1. Does the location (distance) of the library affect you to use library information resources and services? A. Yes B. No
2. Which place you prefer for reading books/other materials?
A. Library B. Dormitory

Thank you again for your time and effort