INFORMATION PROVISION AND UTILIZATION FOR ACADEMIC MENTORING OF UNDERGRADUATE STUDENTS IN AHMADU BELLO UNIVERSITY, ZARIA

By

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DECLARATION

I, Andrew ISIBOR hereby declare that this thesis entitled “Information Provision and Utilization for Academic Mentoring of Undergraduate Students in Ahmadu Bello University, Zaria” has been written by me under the supervision of Professor Zakari Muhammed and Professor Tijjani Abubakar. This thesis is a record of my own research work. No part of the thesis was previously presented for the award of any degree in any other university. It is my original work. All literature cited are specifically acknowledged by means of references.

_____ _____

Andrew ISIBOR Date

CERTIFICATION

This thesis entitled "Information Provision and Utilization for Academic Mentoring of Undergraduate Students in Ahmadu Bello University, Zaria" by Andrew Isibor meets the regulation governing the award of the degree of Master of Library Science of Ahmadu Bello University, Zaria and is approved for its contribution to knowledge and literary presentation.

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DEDICATION

This research work is dedicated to Jehovah God, the Universal Sovereign in whose strength and wisdom the researcher relied on.

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I am most grateful to Jehovah God, the Almighty who granted me the life, wisdom, opportunity, strength and support to successfully complete this research work. I wish to express my profound gratitude to a foremost mentor and supervisor; Professor Zakari Mohammed and Professor Tijjani Abubakar who, in spite of their tight schedules made out time and took the stress of reading the original manuscript thoroughly; making needed corrections and giving necessary direction on the structure and quality of this research work. I am most sincerely appreciative for the level of commitment and intellectual contributions they exhibited while supervising this research. I am also humbled to have had the honor and privilege to be associated with an insightful mentor, Prof. Umar Ibrahim whose influence has contributed in no small measure to my career and the outcome of this research.

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ABSTRACT

The study titled Information Provision and Utilization for Academic Mentoring of Undergraduate Students in Ahmadu Bello University, Zaria was embarked upon to investigate what academic mentoring information provision and its subsequent utilization or lack of provision on information for mentoring can have on the mentoring culture of the institution. The objectives of the study were achieved by formulating and answering eight (8) research questions, and 2 hypotheses tested at α 0.05. The research questions sought to find out what academic mentoring style is utilized, sources of information on academic mentoring, types of information provided for the support of academic mentoring, who are responsible for the provision of information for academic mentoring, which category of users utilize the information provided for academic mentoring, the channels used to provide information on academic mentoring, what barriers hinder the provision of information for academic mentoring, and how the barriers can be removed to enhance the provision of information for academic mentoring. The population of the study comprises of the lecturers and undergraduate students in the twelve faculties of the University. Survey research design was adopted for this research. Simple random sampling was used to select a sample size of 30% from the population. The instrument used to collect data for the study was questionnaire, which was administered to Academics and Undergraduate Students. Data collected from the research questions were analyzed using frequencies count, pie chart and histogram, while Null Hypotheses formulated were analyzed and tested using One Way ANOVA. The research findings revealed among others that majority of the Academic staff and undergraduate students acknowledged that Traditional/informal mentoring was the most utilized mentoring style. Interpersonal communication among academics and their students was discovered to be the most reliable source of information for mentoring. Provision of information for academic mentoring is inadequate and this has a profound effect on the mentoring culture. Majority of academic staff who need information on academic mentoring do not actually have access to such information. The research concluded that non-implementation of formal academic mentoring program is mainly responsible for the inadequacy in the provision and utilization of academic mentoring information among academics and undergraduate students in Ahmadu Bello University, Zaria. Therefore, several recommendations were made, two of which are calling for the establishment and incorporation of academic mentoring programs for undergraduate students into the existing teaching and learning development initiatives; and the management of Ahmadu Bello University, Zaria across all levels should put in place strategic mechanisms to disseminate information to support, encourage and facilitate the participation of academics and undergraduate students in the mentoring process.

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CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Transition from secondary school to tertiary institution is one of the most challenging phases in the educational life of undergraduate students. The period is mostly characterized by loss of friends, inadequate filial attachment, peer pressure, misplaced priority, increased anxiety and feelings of isolation and depression. Academic mentoring programs have been developed in an effort to prevent the problems typically associated with the transition from secondary school to tertiary institutions. It facilitates the integration of a student into the fabric of the department, cultivation of essential professional and social networks in students, aids students in acquiring core research competencies, and paves the way for placement in the work force upon graduation. Information is critical to the success of academic mentoring. An important element of the mentoring relationship is access and utilization of information.

The world of today is widely acclaimed to be information-driven. Information is very important among all people and its indispensability is a fact that cannot be disputed. It is regarded as an essential part of a nation's resources and access to it is considered as one of the basic human rights. Information is not only a national resource vital for scientific and economic development but is also a medium for social communication. All human activities revolve around information. Today, it is widely recognized that most organizations need information to survive and succeed in the competitive business environment. Thus, as a powerful tool, information facilitates as well as guarantees personal, organizational and national developments. Consequently, information is one of the critical factors that defines the progress of advanced countries.

Womboh and Abba (2008) observed that information means many things to many people depending on the context. Similarly, Allard (2001) opined that information can be of several types and thus classified information into three types; namely descriptive, procedural and reasoning information. Descriptive information identifies the existing condition of a specific scenario. Procedural information refers to knowledge about a particular process in order to achieve a particular goal or mission. Reasoning information identifies why things happen the way they happen in a particular situation and emphasize on the conditions under which they take place. This classification of information suggests that information is pervasive and information seekers will require multiple fragmented bits of information to accomplish a single task.

There is a clear evidence to indicate that information influences the perception of the user and this buttresses the fact that the concept of information is subject to contextual use. Braman (1989) identifies four major views that influence perception and the definition of information. These are: Information as a resource, Information as a commodity, Information as a perception of pattern, and Information as a constructive force in society. In simple terms, information can be loosely defined as that which aids decision making. However, Bateson (1972) defines information as a difference that makes a difference. This definition suggests that information is 'a cause' and it is 'the effect'. Apparently, information is a cause in that it is the catalyst that codifies human activities. Information is the effect in the sense that it is the essential product of communication and on the basis of it knowledge is created.

Floridi (2002) identifies three broad categories intended to elucidate the predominant approaches to understanding the ambiguous phenomenon called information: information as reality (or ecological information), information for reality (instructional information), and information about reality (or semantic information). The emphasis laid on information

establishes it as one of the most important asset of an organization. In view of this, managing information strategically must be a priority for any organization that wants to compete and succeed in today's dynamic society.

1.1.1 Information Provision and Utilization

Providing information in a timely and targeted manner can be a huge benefit to communities if the information reaches the right people in a way they can understand and respond to. The provision of information is an essential element of the functioning of any society or community. Without a means to provide facts and data, citizens would not be able to make well-considered decisions about how their government should operate or other critical areas of their lives.

Information provision can be defined as any activity undertaken to make information available to satisfy users. Information provision fundamentally deals with communicating the who, what, when, where and how of an issue. This requires effective communication planning, where a deliberate effort is made to identify who the audiences are, and target the approach to those audiences. This may impact on the choice of language, the means of communication (written, visual, face-to-face, electronic, etc), the choice of presentation (formal or informal) and timing. According to the European Insurance and Occupational Pension Authority (2013) it is important to note, however, that information provision is not a panacea by itself: rather, it should be used in combination with other variables enshrined in the life cycle of information, which includes creation, management and use.

Information has little or no value whatsoever if it is not accessed and utilized. The backbone of every strategy is information; hence organizations must ascertain that relevant and important information is getting routed to the right people at the right time for effective

planning and decision making. Mohammed (2005) opined that for effective utilization, information must be made available in the right quantity and at the right time. In the light of this fact, Aliyu (2010) asserted that information access is mainly concerned with ensuring that information users have opportunity to get and use desired information.

Association for Information and Image Management (2011) indicated that information access is the find-ability of information regardless of format, channel, or location. This definition may well be based on the fact that the value of information is dependent on its access and utilization. As observed by Womboh and Abba (2008) providing information is the principal activity that guarantees information utilization. Consequently, information utilization is a function of access. Aguolu and Aguolu (2002) are of the view that the great importance attached to information springs from the fact that it can be exploited to advance mans' progress in all fields and that information access and dissemination encourages information utilization and cross-fertilization of ideas. Anderson and Morck (2011) suggested that information utilization is the transfer of information along series of pathways that connect groups and individuals in a variety of roles and settings. It is noteworthy to mention that, information utilization is most likely to occur when potential users are aware that they have a need for particular information.

Therefore, provision and utilization of requisite information by undergraduate students in tertiary institution is of utmost importance in adjusting to the university environment, facing and overcoming academic challenges, and the attainment of desired goals. This assumption points to the fundamental relevance of designing specific programs to address the information needs of undergraduate students with particular reference to successful academic development.

1.1.2 Transitional Programs for Undergraduate Students

Universities are complex institutions with distinctive culture, where students face several challenges at the early stages to adapt to a new environment. From the perspective of a secondary school learning system, tertiary education is very dissimilar. Educators have long recognized the need to introduce transitional programs designed to assist new students acclimatize to their new environment. Orientation of new students, delegation of a faculty as course advisor, establishment of Guidance and Counseling Office and mentoring programs are examples.

Orientation programs usually planned and executed by the Student Affairs offices afford new students an opportunity to get acquainted with the campus environment (Idogho, 2011). Orientation of new students usually takes place at the beginning of the academic year at a university or other tertiary institution during which a variety of events are held to formally introduce and welcome new students. This period affords students the opportunity to acquaint themselves with student life, learn about the university, representatives of their student union etc.

Academic advising is a key to success at any institution of higher learning. It is initiated to address the concerns of students throughout their undergraduate careers. According to the University of Texas (2011), academic advisers assist students in understanding the requirements necessary to complete their chosen major, inform them about appropriate course sequence and course content, and provide information about graduate school and career opportunities.

Guidance and counseling of students is an integral component of the educational mission of an institution. Guidance and counseling services promote the personal, social, educational, and career developments of all students. This initiative is aimed at preventing

students from participating in gang-type activities, dropping out of school, becoming a teenage parent, using drugs, and participating in or becoming victims of acts of violence. Ideally, guidance and counseling is to help promote the efficient and happy lives of students by aiding them adjust to social realities. However, as observed in Gale Encyclopedia of Education (2002), it is not uncommon for counselors to have interactions with students only after some crisis had occurred. Due to the dynamic nature of tertiary education and its inherent challenges, there is an underlying need to create an informal environment in which undergraduate students feel encouraged to discuss their challenges and needs openly and in confidence with a mentor who is in a position to be of positive help to them.

1.1.3 Information for Academic Mentoring

Faculty members and students desirous of engaging in a mentoring process will require the following types of information: (a) the mentoring styles, (b) the model of matching mentees with mentors, (c) the benefits of a mentoring exercise and its challenges etc.

- √ **Mentoring Styles**

Different styles of mentoring relationship have grown out of different approaches to education and the individuals involved. Some of the most popular mentoring styles include: informal mentoring, formal mentoring, professional mentoring, traditional mentoring, peer mentoring, step-ahead mentoring, non-facilitated mentoring, facilitated mentoring, group mentoring, e-mentoring, and one-on-one mentoring etc.

Traditional mentoring is usually referred to as the "godfather" approach, in which an older, more experienced adult takes a younger, less experienced individual under his or her wing. Informal mentoring is when a person forms a spontaneous relationship with another person, which in most cases is a new employee or student without any specific rules or strict commitment. In this casual relationship, the new person seeks guidance and support from the

more experienced person. Formal mentoring on the other hand is a structured mentoring program. In this form of mentoring, an experienced person is appointed to train and support an inexperienced newcomer as they work toward their goals. Whereas Peer mentoring is a mentoring style that assigns mentees to someone with experience who is in their age group. Peer mentoring usually occur in educational settings, either consisting of one-on-one relationship or group mentoring. Group mentoring as the name implies is a mentoring style that consists of a mixture of experienced and new people working together to support one another. Groups meet face to face and/or via electronic conference at a designated time to discuss issues.

√ **Models for Matching Mentors with Mentees**

Each mentoring program requires a model for matching mentors and mentees. In a mentoring process, much emphasis is laid on the method of matching mentors with mentees because therein lies the secret of a successful relationship. The matching process provides answers to questions like; which faculty member best suits this student? Which students require urgent attention? Every mentoring program should consider not only the chemistry, but also interests and other elements, such as race, ethnicity, language, gender, hobbies etc when matching mentees with mentors. This is necessary because a good matching model is sensitive to demographic variables as well as common professional interests (Insala, 2012). There are four basic models of matching mentors and mentees in a mentoring process. These are: (1) Based on request, (2) based on a formal mentoring structure, (3) based on personality induced attraction and (4) Web-based mentoring tools.

A mentoring matching model based on request is more often than not a mentee-driven approach. Potential mentees search for experienced, successful individuals whom they admire and perceive as good role models and initiate a relationship by directly or indirectly asking for

the experienced individual to become their mentor. Usually, the mentees are desirous of guidance, advice, support. More often than not, their choice of a mentor is influenced by the mentor's accomplishments and what others say about the individual.

In a formal mentoring structure, the matching process is controlled. The mentoring program coordinators assigns mentees to mentors based on character, skills, need and other criteria. The coordinator may provide mentors with mentees profile. In this case, mentors may review the profile and select their mentees. The coordinator may also present the bio-data of mentors to mentees. The mentees reviews this information and indicate their choices. The program coordinator will then match the mentee with one of their choices. Regardless of the method, a good formal matching process would require both parties to explore the relationship and evaluate the appropriateness of the mentor-mentee match.

A personality induced attraction matching process occurs through professional or social interactions between potential mentors and mentees. Potential mentees identify and are attracted to experienced individuals they consider their role models. Potential mentors identify and attract talented people who have admirable qualities and are coachable. The individuals make a connection without external help or direction. This model is characterized by an important stage known as the proof stage. This stage is usually described as a period when potential mentees prove they are worthy of the mentor’s attention. Afterwards, both parties seek a positive, enjoyable relationship that will justify the extra time and effort required in mentoring.

Finally, a web-based matching model is an electronic matching process. Individuals hoping to be mentees apply to the program using an online form available on the website. Online mentoring software is often used to match mentees with mentors based on similarity in their profile. In other cases, the mentoring system coordinator(s) or a group of mentoring

administrators assesses all applications on the basis of the strength of the application, the degree to which the prospective candidates match with the pool of available mentors.

√ **Benefits of Mentoring**

As observed from the discussion above, mentoring is a systematic pairing of a more experienced person with a lesser skilled or experienced individual with the agreed-upon goal of having the lesser skilled person grow and develop specific abilities to reach long-term objectives. This relationship brings immeasurable benefits to both the mentor and the mentee on the one hand and the organization on the other hand.

- **For the Mentor:**

Enrichment in Nurturing and Seeing Someone Else Grow and Succeed. A great deal of satisfaction accrues to mentors as they see the development of their mentees. Just as a loving mother is delighted at the sight of seeing her crawling baby begin to take the first wobbling steps, a mentor derives great satisfaction at the development of his/her mentee. Human development theory holds that among persons reaching mid-life there is a need to develop the next generation. Investing in the success of one or more persons earlier in their life and career development provides opportunity to fill that need.

Creativity Generated Through Interchange of Perspectives. Mentoring affords the mentor an opportunity to see through the eyes of a youth or a new employee. When someone in an organization is attached to an older experienced individual, questions generate new ideas, and creativity is stimulated. Similarly, pairing a senior faculty member with a student could provide stimulus for the senior faculty member's ongoing creativity.

Friendship Initiated. While the basic value of mentoring may be either an organizational or personal benefit to the mentor, the possibility exists that the relationship may

develop into a friendship that lasts a lifetime. Friendship cultivated between mentors and mentees are usually characterized by loyalty, strong admiration and profound respect. Scholars advocates that mentoring relationships be considered lifelong relationships.

- **For the Mentee:**

Speedier Adaptation to a New Role and/or Organization and Reduced Likelihood of Frustration and Failure. One of the values a more experienced mentor brings is access to information and suggestions for success. Through orientation and appropriate guidance, the mentoring relationship speeds up the adaptation process and reduce the chances of making organizational gaffes by mentees. This holds true for either new faculty or students.

Increased Exposure to Ideas and Connections. By definition, one of the contributions of a mentor is to offer the mentee helpful information, suggestions, and even introduction to others who can be helpful to the mentee. The mentor's network forms part and parcel of the mentees connections. Through the mentoring process, the mentor paves the way and introduces the mentee to the profession as a groomed achiever.

Friendship Cultivated. Initially, a mentee may not expect friendship to ensue from the relationship. However, it may well be an outcome and long-term benefit of the mentoring exercise. More often than not, admiration, accomplishments, and feedbacks are essential ingredients that spice up the friendship.

- **For the Organization:**

Stronger Individuals Offering Higher Quality Performance. Since one of the goals of a mentoring relationship is professional success, to the extent mentoring is operational in an institution, on the overall teaching quality is expected to rise. Mentoring also is positively linked to student retention.

Increased Connectivity and Improved Productivity. Mentoring is about creating a

network of good relationships among faculty which raises the general relational climate in an organization and is of overall benefit to employees welfare and productivity. People naturally enjoy working in caring and connected workplace.

Support to Formal Employee Orientation and Development Programs. Mentoring programs are generally not seen as substitutes for orientation and training. These still need to be in place. However, the mentoring relationship can be a wonderful reinforcement for the training and orientation received at the time of entry.

√ **Mentoring Challenges**

Research on the professional development and success of academics has consistently shown the important and crucial role of mentoring. Despite the prominent role that the mentoring process plays in the academic development of mentees, Center For Creative Leadership (1997), opined that there are few problems that threaten the success of a mentoring relationship which include unrealistic expectations, problems with supervisors feeling that their authority is undermined, resentment from nonparticipants, poor matches, poor information passed on to protégés by mentors, exploitation of mentors or protégés in poor mentoring relationships, unrealistically high expectations on the organization's part regarding the program's impact on deep-seated company problems, shortages of potential mentors, and gender issues. Some of the most frequent problems associated with mentoring relationships are discussed below:

- **Mismatch between Mentor and Mentees**

A mismatch between mentor and the mentee can be a cause of failure in the relationship. One or both members of the relationship may feel uneasy with the other, or they may not be able to achieve the level of friendship necessary for rich communication. Various authors have argued that the key to a successful mentoring process hinges on communication.

Bernier, Larose and Soucy, (2005), and Knox and McGovern (1988) proposed that both mentors and mentees personal characteristics are key to understanding mentoring effectiveness. Teachers who have most impact on students are primarily not characterized by professional trait such as knowledge, experience, or position in the institution, but rather by personal characteristics such as friendliness and flexibility, accessibility and availability, empathy and respect, as well as honesty and tolerance. When mentors are matched with mentees solely on the basis of educational qualification, a mismatch is likely to occur.

- **Unrealistic Expectations**

Problems in the relationship can also occur if the mentee expects or demands too much from the mentor. It will be quite erroneous for the mentee to expect the relationship to meet every need, or for it to continue indefinitely. More so, the mentor is expected to be considerate of his/her expectations of the mentee. While it is true that the mentee may well exhibit great potential, time is of essence in gaining experience. A mentee is not expected to be a clone of his mentor.

- **Heavy Workload**

Penner (2001) posited that, the most common hindrances to mentoring identified by faculty were heavy teaching loads, large classes, student contact load, committee work, high performance expectations by the institution, and family responsibilities. Beyond these six, the next most often identified factors were an absence of an intentional faculty orientation and development program, and low value placed on mentoring by institutions.

- **Lack of Information**

According to Deakin University (2009) lack of information on the mentoring scheme or its possible benefits to mentors as well as mentees presents a peculiar challenge in mentoring relationship. When the concept of mentoring is not one that individuals are familiar

with, much of the process will be based on trial and error or a hit or miss approach.

- **Personal Aptitude**

Not everyone is suited to being a mentor or a protégé. An ideal mentoring relationship is powered by a willingness to share, self-sacrifice, flexibility and a desire to learn. These qualities are not a possession of all men. They are cultivated and adequately nurtured. Differences in background, orientation, and level of understanding may threaten the relationship.

In summary, the Center for Creative Leadership (1997) observed that pitfalls or negative consequences that may occur in the mentoring process can be avoided with careful planning. Regarding structure and requirements of the mentoring program, the Center for Creative Leadership (1997) emphasized the importance of voluntary participation, careful selection and matching of protégés and mentors, and an orientation session to clarify roles and responsibilities.

1.2 Statement of the Problem

Interest in mentoring has varied over time and has been affected by many factors. Mentoring has gained attention and popularity as a powerful means that facilitates the careers of those advancing through the ranks in all types of organizations. In many tertiary institutions in developed countries, mentorship programs are offered to support students in transitioning from high (secondary) school to tertiary institution, program completion, confidence building and introduction into the workforce. Demand for higher education is booming around the world. In Nigeria, the number of youths enrolling as university students increases every year. According to PUNCH NIGERIA LIMITED (2014), the Registrar of JAMB, disclosed that

1,503,931 candidates wrote the Unified Tertiary Matriculation Examination (UTME) in 2012.

Upon entry into university, first year students are often confronted with new personal and interpersonal challenges that revolve around the need to establish new relationships, develop new study skills and modify existing relationships with families and friends. The experience of attending university is complex and pregnant with challenges that impinge on new students' academic success and these include inadequate high school preparation, a sense of feeling disconnected and an increase in personal responsibility. To buttress this, Mudhovozi (2012) corroborated that for most students, the transition to university classroom requires an adjustment of academic habits and expectations. Undergraduate students find that at university, competition is more acute, classes are larger, there is a lot of work, lecturers use different teaching styles, the volume and frequency of written work are higher and standards are higher.

For these students to succeed, it is imperative that undergraduate students respond to the demands by studying harder, change their study habits and rearrange their priorities. Failure to meet the wider challenges faced by undergraduate students during the transition from secondary to tertiary education impacts on learning outcomes. This is consistent with Adler et al.'s (2008) assertion that adjustment to university is critical for academic success. Bernier, Larose and Soucy, (2005) asserted that faculty members who represent the institution's rules and values, and who are willing to mentor students, are especially determinants in student adjustment to the institution. According to American Speech-Language-Hearing Associates, (2011), a mentoring relationship is the third most powerful relationship for influencing human behavior (after the family and couple relationship).

Despite its importance, academic mentoring has not been accorded due priority in most Nigerian universities as there are generally very few scholarly works relating to the important role of mentoring relationship in the academic development of undergraduate students in

Nigeria. More so, there is a dearth of literature on information provision and utilization for mentoring. This is indeed a matter of great concern considering the accelerated rate of poor academic performance and social vices prevalent among undergraduate students in Nigerian universities. As pointed out by Chikwem (2006), when students find it difficult to maintain their academic grades, more often than not, these students indulge in cultism, prostitution and armed robbery as a means of remaining on campus. Nevertheless, Thompson and Kelly-Vance (2001) noted that planned mentoring programs have flourished as one possible solution to the problems affecting youths, such as increased drug and alcohol abuse, teenage pregnancy, poor academic performance, low self-esteem, and increase in juvenile crime.

It is against this background that this research was conceived to investigate information provision and utilization for academic mentoring of undergraduate students in Ahmadu Bello University, Zaria can help in establishing a climate where developing undergraduate students is recognized as a valued activity wherein academics strive to inculcate in these students skills and competencies required to meet performance expectations.

1.3 Research Questions

The following research questions guided the study:

1. What academic mentoring styles are used by academic staff to mentor undergraduate students in Ahmadu Bello University, Zaria?

2. What are the sources of information for academic mentoring of undergraduate students in Ahmadu Bello University, Zaria?

3. What type of information is provided for the support of academic mentoring of undergraduate students in Ahmadu Bello University, Zaria?

4. Who are the information providers for academic mentoring of undergraduate students in

Ahmadu Bello University, Zaria?

5. Who are the users of the information provided for academic mentoring of undergraduate students in Ahmadu Bello University, Zaria?

6. What channels are used to provide information for academic mentoring of undergraduate students in Ahmadu Bello University, Zaria?

7. What are the barriers to information provision for academic mentoring of undergraduate students in Ahmadu Bello University, Zaria?

8. How could the barriers to information provision for academic mentoring of undergraduate students in Ahmadu Bello University, Zaria be ameliorated?

1.4 Hypotheses

Two null hypotheses were formulated for this study.

1. There is no significant difference in the mentoring styles used by academics for mentoring undergraduate students among the selected faculties in Ahmadu Bello University, Zaria.
2. There is no significant difference in the type of information provided for academics in mentoring undergraduate students among the selected faculties in Ahmadu Bello University, Zaria.

1.5 Objectives of the Study

The general objective of this study is to create awareness on the role of academic mentoring in ameliorating the academic development of undergraduate students in Nigerian tertiary institutions. In line with this, the study was guided by the following eight specific objectives:

1. To find out the academic mentoring styles used by the academic staff in Ahmadu Bello University, Zaria in mentoring undergraduate students in the University.

2. To discover the sources of information for academic mentoring of undergraduate students in Ahmadu Bello University, Zaria.
3. To determine the type of information provided for the support of academic mentoring of undergraduate students in Ahmadu Bello University, Zaria.
4. To find out the information providers on academic mentoring of undergraduate students in Ahmadu Bello University, Zaria.
5. To determine the users of the information provided for academic mentoring of undergraduate students in Ahmadu Bello University, Zaria.
6. To ascertain the channels used to provide information on academic mentoring of undergraduate students in Ahmadu Bello University, Zaria.
7. To discover the barriers to information provision for academic mentoring of undergraduate students in Ahmadu Bello University, Zaria.
8. To determine how the barriers to information provision for academic mentoring of undergraduate students in Ahmadu Bello University, Zaria can be ameliorated.

1.6 Significance of the Study

The definitive value of any information is assessed not only in terms of its accessibility and utilization but primarily from the subsequent impact it has on the users. A study of the information provision and utilization for academic mentoring would bring to light the type of information required for successful formal mentoring program in Ahmadu Bello University, Zaria.

In the last two decades, mentoring has gained unprecedented attention in education and in particular institutions of higher learning in developed countries. Mentoring programs have been developed for undergraduate and postgraduate students as well as new faculty members.

In Nigeria and indeed other developing countries, mentoring has not been accorded its rightful place in the educational process. The falling standard of education is persistent and inimical to most laudable development efforts of the state. This study is timely as it comes when the menace of an easy-way-out philosophy is eating deep into the fabrics of our educational system due to the inability of most students to adjust to new academic challenges. The study would bring to the fore the effect of these challenges on academic development as well as establishing the role of a mentoring relationship in ameliorating the academic development of undergraduate students.

It is expected that this study would provide an insight into the benefits of mentoring undergraduate students and how this relationship enhances academic development. This study would, therefore, enable policy formulators as well as university management to effectively design and implement a mentoring program that would successfully tackle the problem of low academic performance by undergraduate students. It suffices to say here that, this study would add to the fast growing literature on the importance of mentoring in education. This study would be found useful by future researchers interested in this particular area of investigation.

1.7 Scope of the Study

This study is limited to the main campus of Ahmadu Bello University, Zaria. It covered Academics and undergraduate students in the four faculties of the University, namely Education, Engineering, Medicine and Social Sciences. The scope was to enable the researcher carry to out a thorough study on information provision and utilization for academic mentoring in Ahmadu Bello University, Zaria.

1.8 Delimitation of the Study

Like in any other social phenomenon, some constraints envisaged to be encountered in the course of this research include, the sheer size of the entire university population, unforeseen circumstances and insufficient funds to adequately carter for the entire university population.

1.9 Operational Definition of Terms

The following are the operational definition of the key terms used within the context of this study:

Academic Mentoring – Academic mentoring is concerned with conveying and interpreting information about rules, requirements, and policies of the university by a faculty member to facilitate the development of a student.

- ✓ **Formal Mentoring –** A structured mentoring program established, monitored and evaluated by the management of an organization for the development of members of the organization.
- ✓ **Informal Mentoring –** A natural component of all human relationship that exists between a more experienced individual and an individual with lesser or no experience.

Information Access – The find-ability of information regardless of format, channel, or location.

Information Provision - Any activity undertaken to make information available to satisfy users.

Information Utilization – The act of using information.

Mentee/Protégé/Protégée/Apprentice – This refers to the undergraduate student in receipt of the mentorship. The student may be referred to as the mentee, protégé (male), a protégée

(female) or an apprentice.

Mentor/Faculty/Academic – This can simply be defined as a Lecturer who has achieved professional success, acquired self confidence, experienced professional satisfaction, and wish to share his/her experience with a less experienced undergraduate student.

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CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

The objective of this chapter is to review the sources of information relevant to the study. The literature review is organized under the following subheadings: The concept of information; the concept of academic mentoring; Mentoring relationship; the rationale of academic mentoring; Academic mentoring styles; Availability of information for academic mentoring; Method used to make information accessible to stakeholders in universities, Barriers against utilization of information; and Summary of the review.

2.2.1 The Concept of Information

Information can rightly be described as data that has been verified to be accurate and timely, specially organized for a purpose and presented within a context that gives it meaning and relevance, on the basis of which increased understanding can be guaranteed. The value of information lies solely in its ability to effect a change in behavior, decision, or outcome. Thus access and utilization of information for academic mentoring should consequently lead to a structural change in the manner in which knowledge is transferred within an institution of learning.

Aina (2004) opined that information is the meaningful communication of symbols transferred between any two points in human communication or machine networks. This opinion suggests that information is a stimulus that has meaning in some context for its receiver. In another dimension, Burch and Starter (1994) indicated that information has the capacity to increase knowledge when the recipient matches proper data elements to the variables of a problem.

In the opinion of Burch (1999) when data is generated, it should be put into meaningful context and effectively communicated, and on the basis of this, solutions to problems can be proffered.

Information indicating the need for the establishment of academic mentoring programs in tertiary institutions can be generated from the statistics of students' admission and academic performance, the institutions' academic goals and commitment to academic development. A mentoring program is expected to particularly give special attention to female students, at-risk students, low academic performing students, etc since members of these groups may be subjected to more than one form of subtle discrimination.

The American Political Science Association (2012) justified the need for academic mentoring program in tertiary institutions by stating that, it is meant to provide the scaffolding for effective career development and professional integration. Mentoring programs link more experienced scholars with students at early career stages. A faculty mentoring program at universities structures these linkages and networks. Broder-Singer (2011) suggests that mentoring program is very crucial in tertiary institutions because, mentoring is an extremely effective way for students to develop new skills, navigate diverse terrains and understand the culture of academics. But, especially for the mentees, mentoring predicts career success.

Bozeman (1987) believed that it is in the context of information's capacity to bring significant structural change within a society that makes it so critical in the development process. Conversely, it is in the capacity of mentoring to bring about a structural change in tertiary institutions that makes it so critical in academic development of scholars.

2.2.2 The Concept of Academic Mentoring

Mentoring is a professional relationship in which a more experienced individual train, assist and guide an inexperienced person develop specific skills and knowledge that will

enhance the less-experienced person's professional and personal growth. Mentoring is a process that involves communication and cordial relationship between the mentor and mentee.

Bozeman and Feeney (2007) observed that a mentoring relationship involves the informal transmission of knowledge, social capital and the psychological support perceived by the recipient as relevant to work, career, or professional development. Mentoring entails informal communication, usually face to face and during a sustained period of time between a person who is perceived to have greater relevant knowledge, wisdom or experience (the mentor) and a person perceived as a novice (the mentee).

Triple Creek Associates (2007) suggested that a mentoring relationship is a valuable asset in any organization, because it is a personal enhancement strategy through which one person facilitates the development of another by sharing known resources, expertise, value, skills, perspectives, attitudes and proficiencies. Mentoring allows the mentee to build skills and knowledge while attaining goals for career development. Mentoring also provides the opportunity for the experienced individual to further enhance his/her skills and acquire knowledge by continuously reassessing and building upon each individual mentee.

The need for mentoring in an organization could be said to have arisen due to the emphasis placed on maintaining standard, cohesion and productivity. According to MENTOR (2005) youth development experts now agree that mentoring is a critical element in any child's social, emotional and cognitive development. It builds a sense of industry and competency, boosts academic performance and broadens horizons. Without doubt, young people who have the benefit of caring adult mentors navigate the path to adulthood more successfully. Clark (2011) observed that mentoring has been shown to have positive effect on one's career. For example, students clearly need support from effective academic advisors to negotiate the challenging and sometimes confusing process of educational planning and decision-making. Faculty career

development is recognized as an important factor in maintaining faculty vitality. In line with this, Eastman (1993) opined that a major function of a mentoring relationship is to facilitate a person's career growth and success.

As pointed out by Eastman (1993) career development and advancement are believed to be influenced by a variety of personal characteristics, however, evidence suggests that environmental and organizational factors also play a significant part in the academic career development process. Roche (1979) reported that of the 63.5 percent of the 1,250 respondents who had a mentor were on the average better paid, reached their positions faster and were more satisfied with their work and careers than their non-mentored counterparts. Kram (1986) discovered that mentoring facilitates the socialization of new employees into the organization, reduce turnover, minimize mid-career adjustments, enhance transfer of knowledge and values, and facilitates the adjustment of retirement.

While most mentoring programs in organizations seemed to be aimed at the best and brightest employee, Delong and Vijayaraghavan (2003) reported that it makes more sense to mentor the large middle-base employees' with average academic qualification as they make up the great majority of employees (80%) as opposed to the top 10% of highly qualified employees, and the bottom 10% of fairly qualified employees. However, in tertiary institutions, Salinitri (2005) is of the opinion that most students, including academically achieving students, enter the university unprepared for the required level of work and often need assistance to acclimatize to their new environment. This implies that, for inexperienced individuals – whether employees or students – to reach the zenith of their career, they will require some form of mentoring especially at an early stage of their career.

Convincingly, MENTOR (2005) reported that research shows that youth who participate in mentoring relationships experience a number of positive benefits. These benefits

include better attendance and attitude toward school, less drug and alcohol use, improved social attitudes and relationships, more trusting relationships and better communication with parents and a better chance of going on to higher education. Bierema and Merriam (2002) suggested that the benefits of mentoring to one's academic success, career aspirations, and personal development are widely acknowledged.

2.2.3 Mentoring Relationship

Mentoring is a relationship between an individual with potentials and an individual with expertise. As social beings, this relationship is fundamentally an essential component of our existence. Mentoring ensures that knowledge, experience and organizational perspective are shared candidly within the context of mutual respect and trust. A mentoring relationship is ideally beneficial because everyone have need for insight that is outside of their normal life and educational experience. Wai-Packard (n:d) observed that mentoring is a term generally used to describe a relationship between a less experience individual, called a mentee or protégé and a more experienced individual know as a mentor. Traditionally, mentoring is viewed as a dyadic, face-to-face, long-term relationship between a supervisory adult and a novice student that fosters the student's professional, academic, or personal development. It is important to acknowledge that the term "'mentor" is borrowed from the male guide, Mentor, best friend of Odysseus, king of Ithaca, in Greek mythology, and this historical context has informed traditional manifestations of mentoring. Since then mentoring has had a long and reputable history.

Tripe Creek Associates (2007) maintained that mentoring as a personal enhancement strategy through which one person facilitates the development of another by sharing known resources, expertise, value, skills, perspectives, attitudes and proficiencies. In this personal enhancement strategy, one person (mentor) helps another person (mentee) to reach his or her

goals, through coaching, counseling, guidance, sponsoring, and the parlaying off knowledge. In sharing known resources, expertise and value, the mentor becomes a reservoir of information and knowledge, a dependable source of inspiration, and a reliable motivating figure. As indicated above, mentoring also involves interchange of skills, perspectives, attitudes and proficiencies. This signifies that mentors have many vital roles and responsibilities: they are teachers, role models, agents, networkers, and counselors. From the foregoing, mentoring is a most critical factor in the career success of a mentee. Colley (2000) reported that research in both educational settings and in the workplace indicates that students and employees alike are more likely to succeed if they have had a mentor. While mentoring is useful for everyone, some organizations specifically implement mentoring programs to support particular parts of their populations, often newer candidates.

The power of mentoring is that it creates a one-of-a-kind opportunity for collaboration, goal achievement and problem solving. The mentoring relationship has been described as an individual learning activity for beginners as well as experienced practitioner such as teachers, administrators and other professionals (Ehrich and Hansford 1999).

Colley (2000) observed that mentoring has become highly popular in the last decade. Colley argued that mentoring is moving center stage in many United Kingdom government's initiatives in the both compulsory and post-compulsory education. The United State Congress named 2001 as the "year of the mentor" and strongly encouraged cities and towns to organize volunteer programs to match adults with teens to help put them on a career track. Mentoring, as observed by Cullingford (2006) has become a hot topic in a number of professional spheres in recent years, but its most important and longest-established location is in education.

Academic mentoring is concerned with conveying and interpreting information about rules, requirements, and policies of the university by a faculty member to facilitate the

development of a student. It focuses on the career goals and educational plan of the student. Academic mentoring help students create and facilitate educational, social, and career networks as a basis for optimum integration within and outside the university environment. Academic mentoring requires a willingness to share, listen and provide advice in a flexible relationship shaped by the needs of the mentee.

OTIS College of Arts and Design (2011) reported that academic mentoring is a developmental academic support program that provides sequential, guided discussion that fosters student reflection about educational and career path issues. This definition underscores academic mentoring as a process that is intended to assist students in the articulation of their career goals. It is a decision-making activity which aids student in realizing their maximum educational potential through communication and information exchange with a mentor. Consequently, academic mentoring is a critical component of career development and success. Students involved in the mentoring program may be going through a challenging situation, a period of life in which they need extra support, or they may simply need to have another significant adult present in their life. The goal of student mentoring is to help students involved in the mentoring program to gain the skills and confidence to be responsible for their own futures.

The need to facilitate the development of academic skills as well as imbibe positive attitude toward schooling emphasizes the indispensible role of the academic mentoring process in tertiary institutions. Academic mentoring is a unique, control-enhancing process that is organized around a set of questions relating to educational milestones, and build upon answers considered in previous terms to help students acquire skills and attitudes that promote their intellectual and personal development.

Ideally, the academic mentoring process involves a faculty (mentor) and the student

(mentee). The faculty member is an experienced person who provides information, advice, support and encouragement to the inexperienced student, often leading and guiding by example of his/her success in an area. Seattle Pacific University (2009) observed that, academic mentors are role models who inculcate interest in course content and learning, offer resources regarding learning strategies, build mentoring relationships with class members, and refers students to other campus services as appropriate. Thus, a mentor inspires, counsels and encourages the mentee in developing their vision for the future and skills needed to advance on a career path. A mentee therefore gains insight and access to new skills and knowledge through the mentor's example and support.

The mentee is the student in receipt of the mentorship. The mentee may be referred to as the protégé (male), a protégée (female) or an apprentice. Typically, this individual is interested in furthering his/her career development; receiving guidance, building a network of professional contacts within the university; and learning how to reach appropriate channels and develop new skills from an experienced mentor.

From the aforementioned, it can be concluded that an academic mentoring process involves giving help and support in a non-threatening way, in a manner that students (mentees) will appreciate and value and that will empower them to move forward with confidence towards achieving their goals. Students confer with academic mentors on key questions and challenges that shape their educational experiences, from adjusting to college life to choosing a major, defining and fulfilling educational goal, and transitioning toward graduate education or professional practice.

2.2.4 The Rationale for Mentoring Undergraduate Students

Mentoring of undergraduate students is a complex and multi-dimensional process of guiding, teaching, influencing and supporting students. This relationship between the faculty

and student is very critical to the development of the student considering the fact that these students have little or no experience in academia. As observed by Bernier, et al. (2005), a fundamental fact that is often overlooked by stakeholders in the educational system is that a most challenging time of late adolescence is the transition from secondary school to university. It is around this period of transition most youths experience their lowest ebb in life, psychologically speaking. This period is mostly characterized by loss of friends, inadequate filial attachment, loneliness, increased peer pressure, loss of identity and heightened anxiety.

According to the National Institute of Mental Health (2010) this period of transition from secondary school to university is stressful for many students. Some students seem a bit overwhelmed by the rigor of academic activities; while some on the other hand are afraid of the menace of cultism and related social vices; the feeling of homesickness interferes with their level of concentration as well. Thus the eagerness and euphoria of gaining admission into tertiary institution is quickly replaced by the realization that they are now on their own. Some students are panicked because their lecturers have already assigned incredible reading and there is no one to direct and monitor how they spend all their unstructured time. The common lament for this category of students is that they wished they never had to further their education.

As reported by Cuseo (2011) the number of colleges offering mentoring programs as a tool for promoting student retention is on the rise, particularly the retention of first-year students. The sole reason for this as Cuseo (2011) observed is that the transition to college is not a normal or routine rite of passage for first generation students, consequently, mentoring has the potential to reduce students' feelings of marginality, increasing their sense of personal significance and can provide an important validation experience for first-generation students.

According to Redmond (1990), the use of mentor/protégé relationships is one of the most effective strategies that university can use in attracting, retaining, and graduating

students. This suggests that a formal mentoring program be designed, implemented and meticulously evaluated to ensure the effectiveness of the program. In a subsequent study, Aloia and Smith (1992) assert that the use of the mentor/protégé relationship is an effective approach in supporting students in their first year, with low income or from underrepresented groups. What this implies is that these groups of students have a peculiar need for support and guidance. It is obvious that if left unassisted, these students may not be able to discover their full potential.

In the opinion of Caruso, (as cited in American Speech-Language Hearing Associates, 1997) a mentoring relationship is the third most powerful relationship for influencing behavior after the family and couple relationships. Bernier, Larose and Soucy (2005) reported that, it is increasingly recognized that relationship with extra-familiar adults are beneficial to adolescents. Adolescents who best overcome life hurdles (e.g. parental divorce, poverty, violence, etc.) and successfully negotiate the transition to adulthood are often guided by strong and supportive adults. Specifically, informed contacts with adults who openly approve of societies rules and standards may help reduce drug use, delinquency and gang activities and facilitate the development of academic skills and positive attitudes toward school. Tinto (1987) suggested that faculty members, who represent the institution's rules and values, are especially determinants in student adjustment to the institution. As reported by Bernier, Larose, and Soucy, (2005) empirical study support these claim. Informal contacts (outside the classroom) between student and faculty have a positive impact on students' academic performance, satisfaction with campus life, retention, and educational and career goals.

Academic mentoring programs have been developed in an effort to prevent the problems typically associated with the transition from secondary school to tertiary institutions. It fosters and supports students in scholarly research endeavors to help them achieve their personal and

professional goals as undergraduate and to prepare them for their next challenge. Davidson and Foster-Johnson (2001) argued that academic mentoring relationships serve to (a) integrate a student into the fabric of the department, (b) cultivate essential professional and social networks, (c) aid students in acquiring core research competencies, and (d) pave the way for placement in the work force upon graduation.

2.3 Academic Mentoring Styles

There are different approaches to mentoring that can be used to meet mentee-mentor interests in pursuit of developmental outcomes. An academic mentoring style refers to the manner in which the mentoring relationship is characterized. Mentoring styles may vary greatly depending on the individuals involved, and the setting in which the mentoring occurs.

It is important to note that some literature tends to use the categories of 'informal' and 'formal' mentoring arrangements (e.g. Chao, Walz & Gardner, 1992; Fagan, 1988; Zey, 1991). However, Byrne (1991) observed that the concept of informal mentoring is synonymous with traditional mentoring. Ehrich and Hansford (1999) observed that a simple yet clear categorization of the different types of mentoring arrangements is provided by Byrne (1991). She identifies three main categories which are traditional mentoring, professional mentoring and formal mentoring and these are discussed as follows.

- **Traditional/informal mentoring**

Traditional mentorship (Byrne, 1991) is the oldest form of mentoring and has been a common source of patronage in the arts and sciences throughout history. The Treasury Board of Canada Secretariat (2008) opined that, fundamentally, traditional/informal mentoring is a one-to-one relationship based on encouragement, constructive comments, openness, mutual trust, respect, and a willingness to learn and share. It exists between a more experienced

employee (sometimes, but not necessarily, a supervisor) and a less experienced employee (e.g. a student). This assumption suggests that traditional mentoring is critical to human development. As noted by Inzer and Crawford (2005) informal mentoring is a natural component of relationships that occurs throughout the society, in the workplace, as well as in social, professional, and family activities. According to the Australian Institute of Building Surveyors (2011) informal mentoring is initiated and maintained solely by the mentoring partners. There is no mentoring agreement. The mentoring partners are matched by chance or serendipity, often with the mentor choosing the mentee. A primary criterion for accepting the mentor is a feeling of liking and respect. Aims of the relationship may be non-specific, non-existent or suggested by the mentor. The relationship may not be called or recognized as "mentoring". In an earlier study, Ehrich and Hansford (1999) observed that in an informal mentoring arrangement, it is usually the senior member in the organization who elects to initiate a relationship with a younger member who is recognized as having potential or talent. This position is corroborated by Management Mentors (2013) which observed that an informal mentoring program in an organization is characterized by unspecified goals, unknown outcomes, self selection of mentors and mentees, no expert training or support from the organization. However, as Inzer and Crawford (2005) observed, many within the organization may not have the opportunity to develop a mentoring relationship in an informal way.

- **Professional Mentoring**

As observed by Enrich and Hansford (1999) unlike traditional mentorship which is an individual and idiosyncratic process, with selection dependent on the personal choice of the individual mentor, professional mentorship is a process which is promoted and encouraged by top leadership as part of mainstream staff development. According to Byrne (1991)

professional mentoring is a tool which management encourages in and both professional and formal mentorship programs are more prominent in the United States. Consequently, Enrich and Hansford (1999) opined one of the major advantages of a professional mentoring scheme, is that it contributes to the mandate of affirmative action legislation, since it attempts to dismantle barriers which prevent mentorship from being accessible to underachieving students, women and other minority groups. City University London (2012) observed that one of the main functions of the professional mentoring scheme is to match mentees with experienced professionals to develop their skills, confidence and future employability.

- **Formal Mentoring**

While professional mentorship indicates a shift in the way mentorship is consciously used and encouraged by management, formal or institutionalized mentorship goes one step further by making mentorship a systemic policy issue and a standard part of management practice (Enrich and Hansford, 1999). According to Inzer and Crawford (2005) the rationale for developing and operating formal mentoring programs in an organization is based on the fact that many within the organization may not have the opportunity to develop a mentoring relationship in an informal way. Since the organization has an investment in all its members, it has the fundamental responsibility to develop each individual to the greatest extent possible. Lawrie (1987) as cited in Inzer and Crawford (2005) promoted mentoring for organizations by noting that it is in the organization's best interest to foster high-quality mentor-apprentice relationships when the shaping of the learner's attitudes is important. The benefits of formal mentoring to the organization are both tangible and intangible. An observation by William (2000) as cited in Inzer and Crawford (2005) indicated that mentoring creates enthusiasm, camaraderie, and professionalism, and impacts positively the entire culture of the organization,

promoting organizational values, norms, and standards. Similarly, Perrone (2003) states that mentoring should be seen as a critical element in helping the organization achieve its strategic goals.

Conclusively, formal mentoring programs are pervasive. Lawrie (1987) as cited in Inzer and Crawford (2005) promoted mentoring for organizations by noting that it is in the organization's best interest to foster high-quality mentor-apprentice relationships when the shaping of the learner's attitudes is important. Benabou and Benabou (2000) reported that rigorous analysis of mentoring programs in national organizations indicates that, like informal mentorship, formal mentoring is effective in integrating new employees and enhancing their career success and work satisfaction. Inzer and Crawford (2005) argued that mentoring is too beneficial for it not to be formally implemented in an organization. Informal mentoring will always occur. The goal is for formal mentoring to promote mentoring in an informal way throughout the organization. Consequently, Inzer and Crawford (2005) believe that formal mentoring can change the culture of the organization into a mentoring culture.

2.4 Sources of Information on Academic Mentoring

Information can come from virtually anywhere — personal experiences, books, journal and magazine articles, newspapers, expert opinions, encyclopedias, and web pages — however, the type of information need will determine which source of information will best satisfy that need. Hence, Driscoll and Brizee (2013) asserted that evaluating sources of information is an important step in any research activity.

There are substantial literatures on the types of information sources, rather than attempt to review all the sources as outlined in the body of literatures consulted, which is beyond the scope and intensions of this research, focus will be placed on information sources that are available, accessible, useful when researching on the subject of mentoring.

The most prevalent source of information is interpersonal communication where personal contacts (either face to face or by telephone) both in formal and informal setting facilitates the dissemination of information of contemporary issues, major trends and personal concerns. According to Dhawan (n: d) this is one of the sources of information for discovering latest trends or understanding the impact of new measures in a given area. Similarly, the University of Buffalo (2012) opined that individuals who are perceived as change agents give credence to value of interpersonal communication as a reliable source of information. These individuals facilitate communication about the needs and problems of a specific group. Because they take direct, personal responsibility for getting the information to the right people, its reception has great impact.

According to Virginia Polytechnic Institute and State University (2013) magazine provide information about diverse topics of popular interest and current events. Magazines are a collection of articles and images. Success Magazine, TheMentor Magazine, SheMentor Magazine, etc are a reliable source of information on mentoring. Usually the magazines bring together experts in the areas of Business, Corporate and Wealth Creation, and the articles are written by journalists or scholars and are geared toward both men and women from a business and/or professional background.

A Journal is a collection of articles usually written by scholars in an academic or professional field. An editorial board reviews articles to decide whether they should be accepted. Virginia Polytechnic Institute and State University (2013) opined that Journals are published regularly and cover very topical issues, the latest research, reviews of current literature. Examples of mentoring journals include; International Journal of Mentoring and Coaching in Education, Journal of Management, and Mentoring Journal etc. For example, The International Journal of Mentoring and Coaching in Education (IJMCE) publishes cutting edge

research and substantial in-process reports and theoretical accounts of mentoring and coaching in educational contexts, including schools, colleges and universities. IJMCE provides overviews of how mentoring and coaching are evolving as well as circulating critical engagement with theoretical and practical issues.

Books are usually authoritative sources of information, providing in-depth coverage of a subject. They are not as current as journal articles. However, they usually contain citations and a bibliography which can be used to identify other useful references. Examples of popular books on mentoring include, Mentoring 101 by Maxwell, John 2008, The Elements of Mentoring, Revised Edition by W. Brad Johnson and Charles R. Ridley 2008, Power Mentoring: How Successful Mentoring and Protégés Get the Most Out of Their Relationships by Ensher, Ellen A. and Murphy, Susan E. 2005 etc.

The Web allows you to access various types of information on the Internet through a browser. One of the main features of the Web is the ability to quickly link to other related information. The Web contains information beyond plain text, including sounds, images, and video. In the last decade, webinar are becoming a viable source of authoritative information on topical issues. The term "*webinar*" is a portmanteau of web and seminar, meaning a presentation, lecture, or workshop that is transmitted over the Web. Examples of groups, institutes and associations that organize webinars on mentoring include, Hi-Impact Mentoring Thought Leaders Club (this is a Group on LinkedIn), 2013 Collaborative Mentoring Webinar Series is organized by The Mentoring Partnership of Minnesota, Friends for Youth, Inc., Mentoring Partnership of Southwestern Pennsylvania, National Mentoring Center (NMC) at Education Northwest, Oregon Mentors and supported by MENTOR. The 2013 Collaborative Mentoring Webinar Series is a monthly series which features webinars focused on sharing ideas for mentoring practice, mentoring research, and highlights of innovation in the mentoring

field.

A library catalog is an organized and searchable collection of records of every item in a library and can be accessed electronically through the Online Public Access Catalog (OPAC). The catalog is a pointer to the location of a particular source, or group of sources, that the library owns on a given topic.

2.5 Information for the Development of Academic Mentoring

There is substantial literature that comments on information for the development and implementation of mentoring programs. Rather than endeavor to review all this literature, since it is beyond the scope and intention of this research, focus on three critical components of the mentoring process that are perceived as important elements in the designing of a formal mentoring program will suffice. These are the organization, the mentors and the mentee.

2.5.1 Information for Organization

Several factors, such as growing competition for qualified entry-level employees and affirmative-action mandates, have stimulated the development of formal mentoring programs in the public sector, in private organizations, and in education (Center for Creative Leadership, 1997).

Williams (2000) as cited in Inzer and Crawford (2005) asserted that mentoring creates enthusiasm, camaraderie, and professionalism, and impacts positively the entire culture of the organization, promoting organizational values, norms, and standards. Similarly, Perrone (2003) states that mentoring should be seen as a critical element in helping the organization achieve its strategic goals. The reasons for establishing a mentoring program must be linked to an organization's strategic goals. Benabou & Benabou (2000) as cited in Inzer and Crawford (2005) suggested that a benefit for the organization is that it gets a leadership team ready to

accomplish its objectives. Mentoring improves employee performance, increases commitment to the organization, improves flow of organizational information, and supports leadership and management development.

Center for Creative Leadership (1997) suggested that for organizations interested in formal mentoring, there are two basic steps to be considered in the development stage of the program: (1) define the organization's need for mentoring and (2) design the program. In defining the mentoring needs, program developers need to identify the future needs and skills of the organization, assess organizational capabilities, and define values for employee development. Center for Creative Leadership (1997) further stated that, in designing the program, there is the need to draw up a mentoring plan. There are four steps to designing a mentoring plan: (1) identify proposals for learning certain skills; (2) identify the barriers to and positive influences on achieving these proposals; (3) identify required actions and resources; and (4) develop a monitoring and evaluation process.

Various scholars, as reported by Center for Creative Leadership (1997) outline eight basic steps in the development of an effective mentoring program: (1) Identify the purpose of the program and obtain top-management support. (2) Allocate responsibilities and identify a program coordinator. (3) Allocate resources to cover selection, training, and monitoring costs. (4) Introduce the program to potential participants and relevant individuals, making the purpose of the relationship clear to the participants. (5) Carefully select and match participants. (6) Train participants—training would cover topics such as communication skills, interpersonal skills, various learning styles, and an understanding of the phases of a typical mentoring relationship. (7) Develop a structure for the program by establishing a timetable, providing facilities, installing some recognition and reward systems, and providing support mechanisms for mentors. (8) Monitor the program and make improvements.

Lawrie (1987) as cited in Inzer and Crawford (2005) promoted mentoring for organizations by noting that it is in the organization's best interest to foster high-quality mentor-apprentice relationships when the shaping of the learner's attitudes is important. Skills, of course, can be learned from one's mentor. But perhaps more importantly sometimes a frame of mind or set of attitudes can be learned most powerfully when one is an apprentice. Rigorous analysis of mentoring programs in national organizations indicates that, like informal mentorship, structured mentoring is effective in integrating new employees and enhancing their career success and work satisfaction (Benabou and Benabou, 2000).

In summary, in terms of formal mentoring program development, Center for Creative Leadership (1997) opined that critical elements of this process include careful selection of protégés and mentors (selection criteria need to be developed), training (separate training sessions for mentors and protégés in order to clarify roles and objectives. Orientation programs and skill development workshops for mentors is highly recommended), and matching up of participants (linkages need to be based on important commonalities between protégés and mentors). In terms of program implementation, participants should be encouraged to meet at their own discretion. Finally, mentoring programs should be continually evaluated and modified when necessary (follow-up activities, including meetings with participants and past participants, visible recognition of the program with rewards provided to participants by top management).

2.5.2 Information for Mentors

Mentors share and take pride in their protégé's accomplishments, mentoring invigorates and renews their commitment to their job and their profession, and a legacy of the mentor is left. According to the U.S. Department of Transportation Mentoring Handbook (2004), a successful mentor is characterized as supportive, patient, and respected, a person who wants to

share their experiences, and who facilitates personal and professional growth in the mentee.

As observed by Ehrich and Hansford (1999) there are many potential concerns regarding mentors. For instance, do they have the capacities required? Are they to be rewarded? How will they be selected? Will they be trained? What criteria will be used to match them with a mentee? Will they create an elite patronage system that excludes the socially different? It is questions such as these that must be addressed when a mentoring program is being considered. Possibly one of the most complex issue regarding mentors is stated by Long (1997) who observed that those that do qualify, are already overburdened with organizational matters and professional responsibilities as such, to become engaged in another or possibly two or three time-consuming mentor-mentee relationships is very demanding. Long (1997) believes that there is a strong risk of overloading the few available mentors.

Despite these views, it is believed that some, and hopefully many, of the negative outcomes associated with mentoring can be minimized. Center for Creative Leadership (1997) argued that developing and managing effective mentoring programs requires much effort in terms of the structures and systems that should govern the mentoring process. More specifically, structure should govern how and when participants are recruited to the program, how mentoring relationships will operate, and qualifications for mentors. In addition, there should be a structured process to oversee how management will coordinate the supervision, training, and marketing needed to support the program.

2.5.3 Information for Mentees

Literatures reviewed indicate that clarity is the foundation upon which a successful relationship is built between mentors and mentees. Inzer and Crawford (2005) believe that mentees can be disappointed in a poorly planned and implemented mentoring program. Murray and Owen (1991) reported that unrealistic expectations of mentees can be forestalled when the

roles and responsibilities are properly communicated to mentees. Therefore, Inzer and Crawford (2005) are of the view that mentees be informed about what the program does not imply. According to the US Department of Education (2006) a mentor is not a social worker, source of money, babysitter, parent or disciplinarian, rather, a mentor is a role model, friend, coach, companion, and source for new ideas and opportunities. Long (1997) also stressed the importance of communicating to mentors the nature, if any, of the link between a specific mentoring program and career advancement.

However, it is noteworthy to mention that Center for Creative Leadership (1997) reported that successful protégés are focused on their goals, people-oriented, and motivated to learn. Though mentors and protégés may have different perceptions and expectations of the mentoring relationship, these differences need to be considered by encouraging participants to clarify expectations, define goals, and evaluate progress.

Literatures reviewed indicate that mentoring inculcates in the minds of mentees (a) politics of the organization, (b) norms, (c) standards, (d) values, (e) ideology, and (f) history of the organization. This leads to increased level of satisfaction with the organization.

In conclusion, the Center for Creative Leadership (1997) reported scholars argue that mentoring relationships can have positive implications for organizations, mentors, and protégés. Although mentoring relationships are most successful when developed informally within an organization, these relationships are too infrequent and most managers spend their careers without the guidance of a mentor. Formal mentoring programs and initiatives can bridge this gap by providing structured mechanisms for forming developmental relationships between organizational members. However, it is important that such programs be developed with careful planning and forethought.

2.6 Responsibility for the Provision of Information for Academic Mentoring

The sole responsibility for the provision of information on formal mentoring within an organization lies with the management of the organization. The Center for Creative Leadership (1997) emphasizes the importance of communicating and promoting the mentoring program within the organization, stressing that, organizations implementing mentoring programs also need to serve as an information resource. Effective mentoring programs require continuous training, monitoring and evaluation as observed by The Center for Creative Leadership (1997); these activities can only be sustained through constant information provision.

For decision-makers in an organization, there are fundamental issues that arise from provision of information on mentoring that might deter the implementation of a formal program. However, these potential concerns need to be perceived in relation to what Murray and Owen (1991) describe as the benefits of mentoring, namely, 'superior performance and high productivity' and 'making a positive difference in the lives of others'.

Ehrich and Hansford (1999) suggested that for management of organizations there seem to be two fundamental concerns that must be resolved that foster an awareness of mentoring and its role in career development and structural changes that will support the initiative. The first is a cost-benefit question that relates to whether the costs associated with program design, implementation and awareness creation can be covered by the anticipated outcomes. As cited in Ehrich and Hansford (1999) this issue of costs is highlighted by Holt (1982) who contends that organizations rarely make a precise assessment of costs during the implementation stage of a program and the consequence of this is the eventual undermining of the mentoring program. The second question relates to a whether there is a willingness to demonstrate ongoing support for the program. Cameron and Jesser (1992) and Garrett (1990) have argued that a lack of commitment can totally destroy a mentoring program. Organization

can demonstrate ongoing support by designing an information dissemination plan that addresses areas of concern in the mentoring process. It would appear that careful planning would minimize what are perceived as organizational concerns about formal mentoring.

Inzer and Crawford (2005) argue that management of organization is not to enter into the privacy of the mentoring relationship; rather it should develop mentors and protégés through training and education. In line with this, Byrne (1991) noted that, the question arises, then, should mentors in formal mentoring arrangements receive financial rewards or should the experience of being a mentor be reward enough? As observed by Ehrich and Hansford (1999) a number of authors (Byrne, 1991; Jacobi, 1991) argue that mentors in formal mentoring programs should be rewarded for their involvement (e.g. increases to pay, bonuses, promotion or other incentives), and some formal programs do have financial incentives for mentors (see Fagan, 1989, in Murray and Owen, 1991).

Thus, management of organization should provide the time and resources necessary for the personnel to participate. The organization should, through coordinators and committees, constantly evaluate the processes, be available for intervention, help, and correction. The organization must have the mentoring program high on the priority list, with adequate resources and training, or not enter into a formal mentoring program.

2.6.1 Responsibilities of /Institutes/Centers/Faculties/Departments

Ideally, the Directors of centers and Institutes, Deans of Faculties, and Heads of Departments are responsible for the implementation and general overview of processes within their purview to ensure the educational progress and welfare of students registered within their jurisdiction. Inzer and Crawford (2005) opined that, it seems reasonable to assume that for a successful implementation of a mentoring program within the organization, a cross-section of all the stratum and focus groups is involved in the mentoring process.

According to the University of Michigan (2012) effective mentoring cannot be done in a vacuum. A successful relationship between a student and mentor is built upon a foundation of commitment at the institutional as well as at the program level. The institution must be committed to ensuring that its programs are of the highest quality, producing professionals who are both ethical and accomplished. The department in turn is responsible for setting clear expectations and supervising progress. Each department should be responsible for creating an environment in which mentoring is valued and both students and faculty have access to resources that promote student success. The following are examples of practices known to reinforce the efforts of faculty as they work with their students.

Develop a set of core expectations for faculty to discuss with their advisees. Departments can affirm that mentoring is a core component of the educational experience for graduate students by developing a compact or agreement, relevant to the discipline or field of study, for use by faculty and the students with whom they work. Such a document would list the essential commitments and responsibilities of both parties, set within the context of the department's fundamental values. This could be included in the departmental handbook and reviewed—or even signed—by both parties to acknowledge the mentoring relationship (University of Michigan, 2012).

Provide an annual review of student progress. The objective of a periodic review—annual, at least—is to identify ways in which faculty can more effectively help students make progress in their graduate studies by routinely documenting and sharing with each student a constructive critique of that individual's efforts across the entire spectrum of mastery that the student is expected to achieve.

Support professional socialization is likewise suggested by University of Michigan (2012). Departments can make it easier for mentors to nurture the professional development of

their graduate students by instituting certain policies and programs. For instance, a number of departments invite student participation on departmental committees, including those focusing on hiring and/or admissions. Some departments offer a special course for their graduate students who are working as graduate student instructors (GSI). Departments can require each student to make a presentation at a seminar or brown bag, with one or two faculty assigned to provide a critique. Graduate programs can encourage students to present their work at professional meetings.

Perrone (2003) as cited in Inzer and Crawford (2005) stated that a well-defined mentoring vision has the capacity to serve as a guiding mechanism for future mentoring efforts. Thus, senior management as well as others responsible for the mentoring system must come together to design strategy, define objectives, and plan the implementation of such programs.

2.7 Users of the Information Provided for Academic Mentoring in Universities

Literature reviewed indicated that magazines, journals, books, the World Wide Web, are reliable sources of information for academic mentoring that can be acquired or accessed by members of the university community. However, the question arises as to who are the users of this information in tertiary institutions? Tertiary institutions constitute what is commonly described as the knowledge industry. The major stakeholders in the industry are the academic staff, students and non-academic staff.

There is no doubt about the fact that the position of the academic staff in the university is an important one as they are involved in the primary activities of teaching, research, and knowledge and manpower production (Ola and Osagie, 2011). The University of Wisconsin (2010) suggested that the life of an academic institution is dependent on its academic staff. This is based on its report on “the role of Academic Staff” which states that academic staff

members are a significant part of the modern research university, and they are critical to effectively run a university. Similarly, Samad (n: d) argued that in most countries, academics are what give universities their prestige and status. They are individuals who are learned in a particular area or academic discipline who highly impacts on the student experience at the University. Given their unique responsibilities as teachers, role models and character molders, academic staff members are better positioned to mentor their students and therefore will greatly benefit from information provision on academic mentoring

Non-Academic staff members are professional employees who contribute very significantly to the success of the institution. According to McGill University (2013) non-academic staff members bring to the University an important repertoire of professional skills, possess a wealth of institutional knowledge, provide essential resources, and work alongside of faculty and Administration in realizing the University's mission.

According to Singh and Weligamage (2010) the contribution of non-academic staff highly impacts the student experience at the University. While faculty support our students academically and in research, non-academic staff make equally important contributions toward the success of students' through many critical support and operational services. For instance, non-academic staff members, serving in academic departments or in student service units, are usually the first point of contact for numerous students who need assistance in one form or another. They guide new students through admission and registration processes, issue scholarship and awards, orient them to the University, facilitate accommodation process, often develop close friendship with students and monitor their progress, deliver innumerable nonacademic learning opportunities and help prepare them for their next career stage. It goes without saying that there are perhaps very few students whose positive experience at the university did not include the contributions of one or more members of the non-academic staff.

It is therefore safe to conclude that, non-academic staff of the university will greatly benefit from using information for academic mentoring.

However, it is noteworthy to observe that, these groups of staff (academic and non-academic play complementary roles. As Singh and Weligamage (2010) observed institutions stakeholders can be groups or individuals who can affect, or are affected by, the institutional activities such as academic activities (academic staff and students), administrative (academic and non academic staff), research work (academic and non academic staff and students), students activities (students, academic and non-academic staff and alumina) etc. Therefore, the quality and relevance of education and stakeholder satisfaction can be taken as the most important concerns.

In promoting the relevance of tertiary education, academic mentoring provides the best platform to satisfying the desires of stakeholders in the university. Students desire quality education, academic guidance, and an appropriate academic environment, which can make them more responsible, adequately equipped to handle life's challenges and fully competent to integrate into society as employable graduates. Academic staff desire better teaching and working environment, achievements, academic support, and improvement in the developmental opportunities of their students. Non-academic staff aspiration includes achievements and recognition.

2.8 Channels Used to Provide Information to Members of the University Community

Universities are complex educational institutions of higher learning providing facilities for teaching, learning and research. These institutions are made up of an undergraduate division which confers bachelor's degrees and a graduate division which comprises a graduate school and professional schools each of which may confer master's degrees and doctorates. In order to drive innovative ideas in tertiary institutions, the media used to convey information

must be considered at the earliest stage of project planning. The rationale for this is because effective information dissemination can support staff and student development in academic practice, enhance quality services delivery and implement innovation. The university management has a variety of ways of disseminating information to the students, staff and faculty community.

According to University of West Indies (2011) different information media have different strengths, weaknesses, drawbacks, advantages and costs. However, an effective communication strategy usually uses a mix of at least 2 or 3 different types. Usually the choice of media and format depends on: 1. The audience(s) 2. The budget 3. The communication channels best for the specific audience(s) 4. How long the communication intervention will continue 5. and how critical it is to encourage genuine participation for social change communication. Some of these media as posited by the University of West Indies (2011) include: 1. Television spots 2. Radio spots 3. Radio call-in shows 4. Newspaper features/pages 5. News paper advertorials 6. Websites/internet and blogs 7. Mobile phones and text messages 8. Posters 9. Brochures 10. Fact sheets and flyers 11. Newsletters 12. Instructional video 13. Drama 14. Public presentations and community meetings, service clubs, etc. 15. Bumper stickers 16. Billboards 17. Diaries, Calendars and Almanacs 18. Promotional items such as T-Shirts, cups, aprons, caps, shopping bags, etc. 19. Campaign Slogan competition 20. Logo and/or branding competition 21. Goodwill ambassadors (sports figures, singers/celebrities, beauty queens, personalities) 22. Murals

Similarly, Bradley et al (2010) observed that distribution of educational materials; Educational meetings; Conferences, Seminars, Educational outreach visits; Local opinion leaders; Audit and feedback; Reminders are strategies that can be adopted by tertiary institutions to disseminate information on innovative programs. Focusing on internal

communication within an organization, Ola and Osagie (2011) suggested the following methods of information dissemination: E-mail, Weekly letters or newsletters, Personal letters, Billboards, Intranet, Magazines or papers, Sms, and Social media. This position is confirmed by Makoy (2012) who posited that four of the most common types of workplace communication mediums are: [1] memos, [2] reports, [3] bulletins, and [4] newsletters.

The benefits of mentoring to one's academic success, career aspirations, and personal development are widely acknowledged. So, too, are some of the components necessary to a rewarding mentoring relationship - one being the availability, ease of access and frequency of use of information on academic mentoring. Mentoring is communication based. Communication mediums such as e-mails, websites and blogs, Posters, Brochures, Fact sheets, flyers, sms, bulletins, newsletters, bumper stickers, billboards, facts sheets and flyers, instructional video, educational meetings, conferences, and seminars are at the disposal of tertiary institutions for information dissemination.

From the foregoing, it becomes imperative that if management of universities, faculties and departments are to implement essential support program for undergraduate students, and stimulate a mentoring culture, help improve educational and social skills, further reading habits, information literacy and promote education, public awareness and training, it must come up with effective information dissemination strategies to drive academic development.

2.9 Barriers to Utilization of Information

In a study conducted by Marama and Ogunrombi (1996) as cited in Ugah (2008) high unavailability of information sources in most Nigerian university libraries had a negative effect on the use of information sources in the libraries studied. Unavailability of information sources has a counter-productive effect on the information seeking behavior of library users. Ajayi and

Akinniyi (2004) reported a high level of frustration among information seekers due to the non-availability of sources.

Utilization of information is a function of information accessibility. Availability of information does not translate to its accessibility hence the need for creating awareness cannot be overemphasized. Unless an information source can be accessed, ideas cannot be created; neither can knowledge be generated nor shared. Ola and Osagie (2011) opined that accessibility of information sources is an important recurring theme in the literature. According to UNESCO (2012) information accessibility encompasses the many issues surrounding availability, accessibility and affordability of information, such as multilingualism, metadata, interoperability, open source software, open content, Creative Commons licenses as well as addressing the special needs of people with disabilities.

Ugah (2008) identifies accessibility as one of the prerequisites of information use while Kuhlthau (1991) argues that the choice of information seeking depends on their needs, the perceived accessibility, sources, and information seeking habits. Therefore the more accessible information sources are, the more likely they are to be used. This position is supported by researchers such as Slater (1963), Allen (1968), and Rosenberg (1967) as reported by Ola and Osagie (2011). These researchers had validated through empirical studies the observations that information seekers tend to use information sources that require the least effort to access.

More often than not, an information seeker may encounter five possible types of inaccessibility. They are conceptual, linguistic, critical, bibliographic, and physical inaccessibility (Ola and Osagie, 2011). This assumption is corroborated by Aguolu and Aguolu, (2002), they noted that availability of an information source does not necessarily imply its accessibility, because the source may be available but access to it is prevented for one reason or the other.

Studies suggest that utilization of information may be hinder by: unavailability of information sources, lack of its awareness, and difficulty in accessing desired information. Osundina (1974) studied the relationship between information accessibility and library use by undergraduates in Nigeria and noted that the problem of Nigerian students is not the question of wanting to use the library, but whether or not the university library can provide for the information needs of students, and whether there is access to what is provided. Ajayi and Akinniyi (2004) found frustration among information seekers due to the non-availability of sources. In a study of information needs of library users, Oyediran-Tidings (2004) attributed low use of library to the expressed unavailability of desired information resources.

Another major constraint to access of relevant information for academic mentoring in tertiary institutions in Nigeria can be traced to information literacy inadequacy. According to Lorenzo (2003) the term information literacy, is generally conceptualize as the ability to access, evaluate, organize, and use information from a variety of sources. Mentoring thrives in institutions where the level of information literacy is high. Because becoming information literate is an active process, requiring the seeking out of knowledge from multiple sources rather than passively receiving and repeating known facts, the management of tertiary institutions in Nigeria interested in mentoring must seek the relevant information required to establish a mentoring program. More so, teacher's role must evolve from the giver of knowledge into being more of a coach or guide (Lorenzo, 2003).

2.10 Strategies to Provision of Information for Academic Mentoring

Access to information is critical for enabling individuals to exercise their intellectual capacity and effectively monitor and demand for accountability when the need calls for and to enter into informed dialogue about decisions which affect their lives. Similarly, Lemu (2013)

opined that accessibility is an important concept in knowledge management as it relates to timely response to information requests and service delivery. Therefore, to guarantee accessibility to information considerations must be given to availability of the information and closeness to the information source giving the information to users as well as ease of use of the information source and barriers against access to the information.

Creating awareness on the need for academic mentoring is a convenient strategy to overcome the barrier of non-information utilization. In tertiary institutions, the best results can be obtained through collaboration involving the university management, the library and the various faculties. Darch et al (as cited by Lorenzo, 2003) opined that information literacy requires an awareness of the way in which a system works (in this case mentoring) and the dynamic link between a particular information need and the sources and channels required to satisfy that need.

The fundamental mission of any library is the provision of excellent information services to its users. In an academic mentoring process, the major stakeholders are the academic staff and students. Ajidahun (2004) as cited in Ola and Osagie (2011) posited that a library is adjudged to have achieved its mandate only when its users are satisfied with the services offered to them. Any library that cannot meet the information needs of its users is a moribund and anemic information system because it has lost its vitality, honor and attraction. This position highlights the critical role libraries play in a mentoring process. In order to justify their continual existence and relevance, Ola and Osagie (2011) argued that academic libraries must identify, acquire, and process relevant reading materials for their patrons. On the subject of academic mentoring, libraries must strive hard to assuage the intellectual and information thirst and curiosity of academic staff and students by acquiring and processing relevant information resources for their use. This position is supported by Aguolu and Aguolu (2002) who submitted that, for the libraries to assist in the promotion of access to knowledge, they

must help to identify, locate and deliver information or document sought by the researcher.

Management of tertiary institutions can play a very critical role in instituting a mentoring culture in their organization. Inzer and Crawford (2005) argued that management of organization is in the best position to develop mentors and protégés through training and education. With institutional support, time, resources, and the enabling environment necessary for the personnel to participate can be guaranteed. Thus, through coordinators and committees, the management of an organization can design a mentoring policy domiciled in their institution to constantly evaluate the processes.

2.11 Summary of the Review

The chapter reviewed literature that outlined the fundamental issues related to the area of study. Academic mentoring program is essentially a critical determinant in successful transmission of knowledge from faculty to students to ensure continuity and sustainable development in any educational system. From the review, it was discovered that it is only on the basis of information that knowledge can be generated and on the basis of such knowledge, society is integrated.

The concept of academic mentoring as deduced from the review entails a mutual process of informal transmission of knowledge between a mentor and a mentee designed to assist in the development of the mentee. Mentoring has been shown to have positive effect on an individual’s career. Most scholars are of the view that mentoring has the potential to reduce students' feelings of marginality, increasing their sense of personal significance and satisfaction with school. In promoting the relevance of tertiary education, academic mentoring provides the best platform to satisfying the desires of stakeholders in the university.

From the review it was established that various methods can be adopted in

disseminating information on academic mentoring in tertiary institutions. However, an effective communication strategy usually uses a mix of at least 2 or 3 different types of communication media.

In the light of the above, adequate provision of the requisite information on academic mentoring and its subsequent utilization should translate into the design and implementation of formal mentoring program in Nigerian tertiary institutions. Though the role of mentoring relationship in the transition process is well established from the review, however, there is a dearth of literature on information provision and utilization for academic mentoring in Nigerian tertiary institution. It is this gap that this research seeks to breach.

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CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the research method adopted for the study. The outline of the chapter includes: research method adopted for the study, population of the study, sample and sampling procedure, instrument for data collection, procedure for validation of the instrument, procedure for data collection, procedure for data analysis and discussion.

3.2 Research Method Adopted For the Study

The study employed survey research method. Survey research method has been variously defined by renowned scholars. Afolabi (1993) defined survey research as a study in which a random sample is taken from a well defined population, data is collected from the sample, statistics are calculated from the data and the statistics are used to estimate the true value (parameter) of the population. According to Kerlinger (1973) and Afolabi (1993), it is the study of large and small population by selecting and studying samples drawn from the population to discover the relative incidence, distribution and interaction of sociological and physiological variables. The survey method is adopted because survey research is one of the most important areas of measurement in applied social research. The broad area of survey research encompasses any measurement procedures that involve asking the respondents questions. Since the researcher is concerned with people's opinions about access and use of information for academic mentoring for undergraduate students, this method is appropriate.

3.3 Population of the Study

The population of the study comprises of the lecturers and undergraduate students in the twelve faculties of the Ahmadu Bello University, Zaria; namely Faculty of Administration, Faculty of Agriculture, Faculty of Arts, Faculty of Education, Faculty of Engineering, Faculty of Environmental Design, Faculty of Law, Faculty of Medicine, Faculty of Pharmaceutical Sciences, Faculty of Sciences, Faculty of Social Sciences and Faculty of Veterinary Medicine. The choice of this population is based on the fact that lecturers are supposed to be involved in productive relationship with their undergraduate students, which translates into transfer of knowledge, skills and competence etc. Hence they are better suited as subjects in an academic mentoring relationship. In addition, they form the major group who would provide the information required for the study. Records from the Ahmadu Bello University, Management Information System (MIS) showed that there are 1,405 lecturers and 27,798 undergraduate students in the twelve faculties. The tabulation is presented on Table 3.1.

Table 3.1 Distribution of Academics and Undergraduate Students Across Faculties

s/no	Faculty	No. of Academics	No. of Undergraduate students
1	Administration	95	3616
2	Agricultural Sciences	109	342
3	Arts	107	2635
4	Education	118	4004
5	Engineering	131	2676
6	Environmental Design	115	1996
7	Law	43	1041
8	Medicine	209	1139
9	Pharmaceutical Sciences	70	557
10	Sciences	222	6220
11	Social Sciences	81	3242
12	Veterinary Medicine	93	330
	Total	**1405**	**27798**

SOURCE: MIS ABU ZARIA (as at 9TH April 2013)

3.4 Sample and Sampling Procedure

This study adopted the use of simple random sampling to arrive at the needed sample. A sample size is an important feature of any empirical study in which the goal is to make inferences about a population from a sample. Notable scholars recognized that the determination of sample size is a major problem for researchers. For example, Rossi (1983) and Hernon (1994) in recognition of this challenge postulated a theory that a research should seek the empirical approach that uses sample sizes as a way of solving problem. 30% of the faculties were randomly sampled by assigning a consecutive number from 1 to 12 to each of the faculties, then using a computer program known as Research Randomizer that generates random numbers, 4 faculties representing 30% (by approximation) of the 12 faculties were randomly selected; namely Faculties of Education, Engineering, Medicine and Social Sciences. Furthermore, 30% of the departments within these faculties were randomly selected using the same procedure and the subjects of the study were drawn from this sample size. The sampled departments are; Education (Library and Information Science and Physical and Health Education), Engineering (Agric., Civil and Mechanical Engineering), Medicine (Human Anatomy and Medicine), and Social Sciences (Sociology). Thus, a total of 919 undergraduate students and 37 Academics were selected.

This sample size of 30% is considered sufficiently large enough to be a representative of the study population in order to arrive at a more reasonable, realistic and acceptable conclusion that would apply to others which the study could not cover. This position is supported by Roscoe (1969) who posited that a sample size of 30% is quite adequate for a behavioral research. Likewise, Afolabi (1993) stated that the sample of 30% from the population is enough to ensure representation of the population.

Table 3.2 Sample Distribution of Subjects Across Faculties

S/no	30% of Dept from Faculties	30% of Academics	30% of UG Students	Total
1	**Education**			
	Library and Information Science	4	231	**271**
	Physical & Health Education	7	62	**69**
	Total	**11**	**293**	**304**
2	**Engineering**			
	Agricultural Engineering	3	54	**57**
	Civil Engineering	5	128	**133**
	Mechanical Engineering	6	119	**125**
	Total	**14**	**301**	**315**
3	**Medicine**			
	Human Anatomy	5	92	**97**
	Medicine	3	71	**74**
	Total	**8**	**163**	**171**
4	**Social Sciences**			
	Sociology	4	162	
	Total	**4**	**162**	**166**
	Grand Total	**37**	**919**	**956**

3.5 Instrument for Data Collection

The researcher utilized questionnaire for data collection. A structured questionnaire was administered to the respondents for the purpose of data collection. The questionnaire was divided into three sections. Section A: dealt with Personal data, while Section B and C dealt with data relating to the issue under study. Section (B) addressed research questions on academic mentoring in Ahmadu Bello University, Zaria, and Section (C) addressed research questions on information provision and utilization for academic mentoring in Ahmadu Bello University, Zaria.

The choice of this instrument was based on the fact that the respondents were literate and capable of completing the questionnaire without further assistance from the researcher. Secondly, the questionnaire method enjoys prominence in educational research. According to Nworgu (1991), questionnaire is by far the most frequently used instrument in educational

research. Its popularity is demonstrated by the number of published studies and students projects in education that employed this instrument for data collection.

3.6 Validation of the Instrument

In order to ensure that the questionnaire was capable of eliciting the required information from the respondents, the instrument was subjected to face validation. This means that the instrument was first presented to experts to check and make necessary observations, corrections and amendments to strengthen the instrument. The items in the questionnaire were checked to ensure that they reflected the research objectives and hypothesis formulated. The decision by the researcher to adopt face validation was based on the remark by Kerlinger (1973) that validation by others is an effective method for face validation of research instrument.

3.7 Reliability of the Instrument

The reliability of the instruments was established by conducting a pilot study within one week at Bayero University, Kano. Ten academics and undergraduate students each were issued the research instrument. Mohammed (2005) stated that an instrument for data collection is said to be valid when it is able to produce correct responses from the subject that constitute the sample of the study. It is on the basis of this that twenty copies of the questionnaire were administered at Bayero University, Kano in order to determine the reliability coefficient. The reliability of the questionnaire was determined using a Guttman split half technique and a reliability coefficient of 0.87 was observed. Consequently, the instrument for this study was considered reliable on the basis that the observed reliability coefficient is high.

3.8 Procedure for Data Collection

The questionnaire was distributed by the researcher to academics and undergraduate students in the selected faculties. Lecture halls were used as a venue for undergraduate

students, while for the academics; their offices were the venue for distribution. During the process of administering the instrument, the researcher was assisted by three research assistants (Faculty/Departmental Library staff). Two weeks were used to distribute the questionnaires and an addition of one week was given to complete the questionnaire. The researcher got back to the respondents to collect the completed questionnaires.

3.9 Procedure for Data Analysis

The study made use of descriptive statistics to answer the research questions raised. Frequencies and percentages were used to compute and present results descriptively. This is in order to present and analyze the data collected effectively. One way Analysis of Variance (ANOVA) was used to test the hypotheses raised. The use of ANOVA was informed by the more than two groups of the independent variables (faculties) involved in the test.

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CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 Introduction

This chapter presented the data collected for the study. It was analyzed and discussed in relation to the research questions raised and hypotheses formulated. The findings were presented as below.

4.2 Response Rate

37 copies of the questionnaire were distributed to the academic staff, out of which 31 (83.7%) copies were duly completed, returned and found useful. 919 copies of the questionnaire were distributed to the undergraduate students, of this number, 774 (84.3%) copies were duly completed, returned and found useful.

This high response rate may be attributed to the fact that the research assistants used were the librarians in the respective departmental libraries studied. More so, the researcher actively participated in the distribution process and frequently visited the assistants to spur them to meet up to expectation. Below is Table 4.1 showing the response rate of the respondents according to their faculties.

Table 4.1 Response Rate

Type of Respondent							
s/no	**Faculty**	**Academic Staff**			**Undergraduate Students**		
		No. of Quest. Distributed	**No. of Quest. Returned**	**%**	**No. of Quest. Distributed**	**No. of Quest. Returned**	**%**
1	Education	11	9	24.3	293	259	28.2
2	Engineering	14	11	29.7	301	247	26.9
3	Medicine	8	8	21.6	168	145	15.8
4	Social Sciences	4	3	8.1	162	123	13.4
	Total	**37**	**31**	**83.7**	**919**	**774**	**84.3**

Table 4.1 showed the variation in the response rate of the respondents. This variation is a reflection of the sample size from which the respondents were drawn proportionately for each of the faculties involved in the study. The Table revealed that the Faculty of Engineering with 29.7% for Academic staff and 26.9% for undergraduate students and the faculty of Education with 24.3% for Academic staff and 28.2% for undergraduate students recorded the highest response rate for both the Academic staff and the Undergraduate students with an average of 28.3% and 26.3 respondents respectively. The Faculty of Social Sciences with 8.1% for Academic staff and 13.4% for undergraduate students recorded the least response rate for both the Academic staff and the undergraduate students with an average of 10.6% respondents. A closer examination of the response rate of each Faculty revealed that both groups of respondents (Academic staff and Undergraduate students) recorded very high response rate with Medicine recording the highest score. The least response rate in this category was the Social Sciences Faculty. The implication of this is that all the faculties participated fully in the study and provided adequate response that would enable the results to be generalized.

4.3 Data Analysis and Discussion

The data collected for the study in this section were analyzed and discussed using descriptive statistical tool. The descriptive statistical tool employed was to analyze and discuss the research questions raised.

4.3.1.1 Academic Mentoring Styles Used by the Academics

One of the fundamental objectives of the study was to find out the academic mentoring styles used by the academics in Ahmadu Bello University, Zaria to mentor the undergraduate students. In order to achieve this, adequate explanations and clarifications were provided on types of mentoring available universally. Subsequently, list of various mentoring styles were provided for the respondents to tick appropriately the type of mentoring style used for their undergraduate

students in their respective faculties. Their responses are presented in Table 4.2.

Table 4.2 Academic Mentoring Styles Used

s/no	Academic Mentoring Styles	Category of Respondents			
		Academic Staff		Students	
		F	%	F	%
1	Traditional/informal mentoring	31	56.4	714	59.2
2	Professional mentoring	24	43.6	302	25.0
3	Formal/institutionalized mentoring	0	0	190	15.8
	Total	***55**	**100.0**	***1206**	**100.0**

*** Responses recorded were more than the number of respondents due to multiple choices of respondents.**

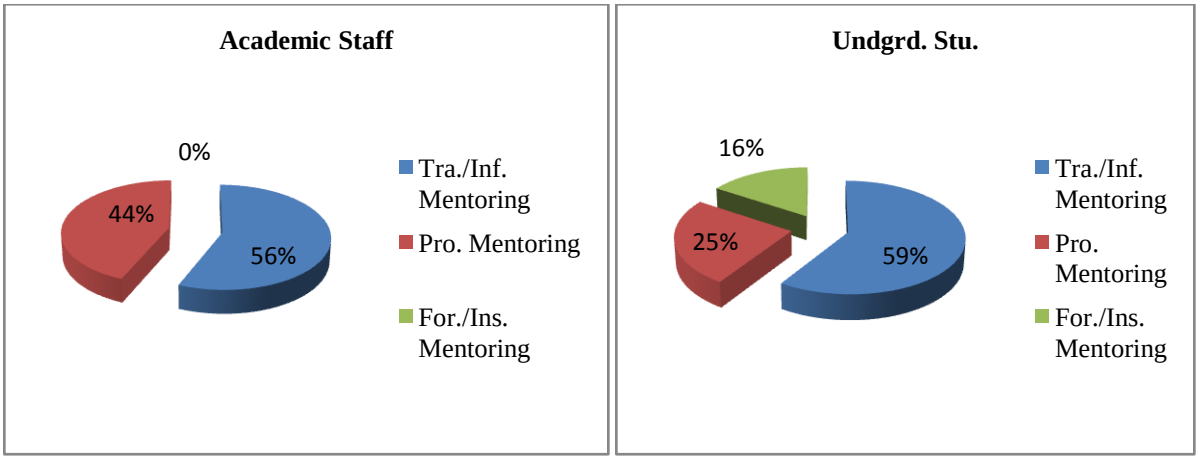


Figure 4.1: Academic Mentoring Styles Used

Table 4.2 and Figure 4.1 revealed that traditional/informal mentoring was the most utilized mentoring style in Ahmadu Bello University as indicated in all the faculties studied with 56.4% and 59.2% responses by Academics and undergraduate students respectively. The average score of these responses was 57.5%. It was also discovered that the respondents in all the four faculties acknowledged the use of Professional mentoring. This, however, recorded an average score of 34.5%. The predominance of traditional/informal mentoring style was because it is an integral ingredient of human development. This confirmed Enrich and Hansford (1999) and Inzer and Crawford (2005) statements that informal mentoring is a natural component of relationships and has been a common source of patronage in the arts and sciences throughout history. Furthermore, this finding corroborated a number of important studies which acted as catalysts for

subsequent research and interest in the area of mentoring in education as cited in Chao, Walz and Gardner (1992); and Inzer and Crawford (2005). In these studies, the authors proposed that access to a 'mentor' was advantageous to a mentee's career outcomes.

The implication of the above finding is that traditional/informal mentoring relationships develop because undergraduate students and their lecturers readily identify with each other. Because it is a relationship that is voluntarily formed by both mentors and mentees without specific goals, commitment, or regulations, this form of relationship is exposed to premature termination.

4.3.1.2 Sources of Information for Academic Mentoring

In order to discover the sources of information for academic mentoring in the selected faculties of Ahmadu Bello University, Zaria, a list of information sources was provided for the respondents to indicate which information source they relied on for information on academic mentoring. Below is the table showing their responses.

Table 4.3 Sources of Information for Academic Mentoring

s/no	Sources of Information for Mentoring	Category of Respondents			
		Academic Staff		Students	
		f	%	F	%
1	Books	3	7.1	490	19.4
2	Journals	0	0	124	4.9
3	Magazines	0	0	101	4.0
4	World Wide Web	4	9.5	670	26.5
5	Management of A. B. U.	0	0	187	7.4
6	Personal Experience	7	16.7	222	8.8
7	Colleagues	17	40.5	0	0
8	Results/academic performance	11	26.2	0	0
9	Lecturers	0	0	732	29.0
	Total	***42**	**100.0**	***2526**	**100.0**

*** Responses recorded were more than the number of respondents due to multiple choices of respondents.**

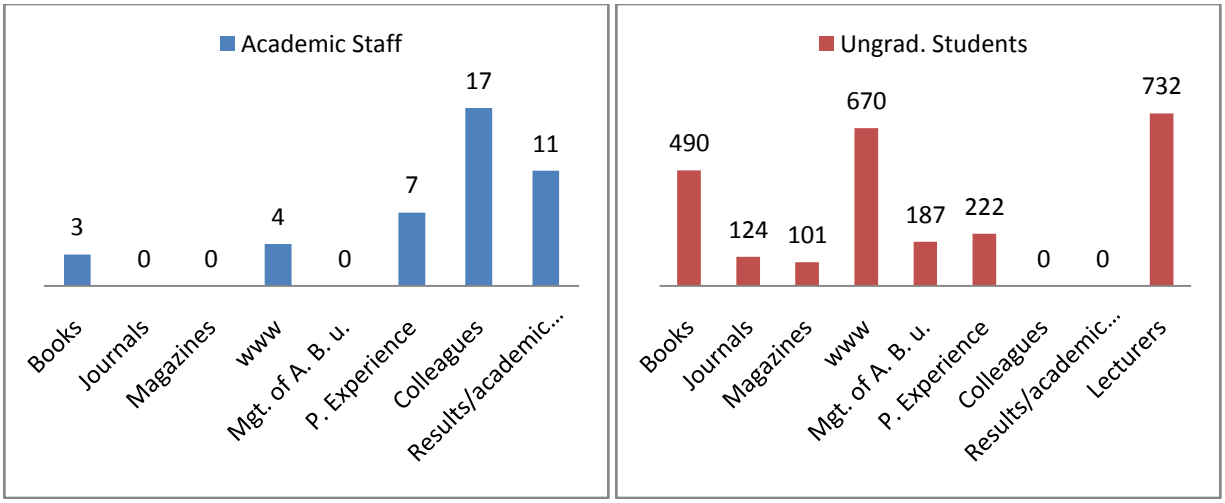


Figure 4.2: Sources of Information on Academic Mentoring

Table 4.3 and Figure 4.2 showed that among Academic staff, 3(7.1%) relied on books; 4(9.5%) relied on the World Wide Web, 7(16.7%) relied on personal experience. However, majority of the Academic staff 17(40.5%) who engaged in academic mentoring of undergraduate students from the selected faculties relied on colleagues as a reliable source of information for mentoring. Similarly, 732(29.0%) undergraduate students relied on their lecturers as sources of information on academic mentoring. This discovery points the predominance of informal mentoring culture in the selected faculty and likelihood that only a handful of the academics engaged in mentoring undergraduate students. The study revealed that the respondents in the selected faculties relied predominantly on interpersonal communication as a reliable source of information for mentoring undergraduate students in Ahmadu Bello University, Zaria.

The implication of this finding is a matter of concern. Strategic sources of information on academic mentoring should be adopted in Ahmadu Bello University, Zaria. Sources of information such as; State, Religious, Students Associations, Social Clubs, Orientation programs, etc could be further exploited to instill in undergraduate students, that element of caring about their general welfare as they seek to advancement in knowledge.

4.3.1.3 Type of Information Provided for the Support of Academic Mentoring

The research set out to determine the type of information provided to support academic mentoring of the undergraduate students in Ahmadu Bello University, Zaria. In an attempt to achieve this, the respondents were asked to indicate which type of information was provided from the options listed in Table 4.4.

Table 4.4 Type of Information Provided for the Support of Academic Mentoring

s/no	Type of Information Provided	Category of Respondents			
		Academic Staff		Students	
		f	%	f	%
1	The need to mentor students.	2	6.5	234	14.3
2	How to mentor students.	0	0	112	6.8
3	Benefits of mentoring students.	7	22.6	711	43.3
4	Availability of information resources on mentoring.	0	0	420	25.6
5	Training for mentors and mentees.	3	9.6	164	10.0
6	No information is provided/Information from colleagues.	19	61.3	0	0
	Total	**31**	**100.0**	*** 1641**	**100.0**

*** Responses recorded were more than the number of respondents due to multiple choices of respondents.**

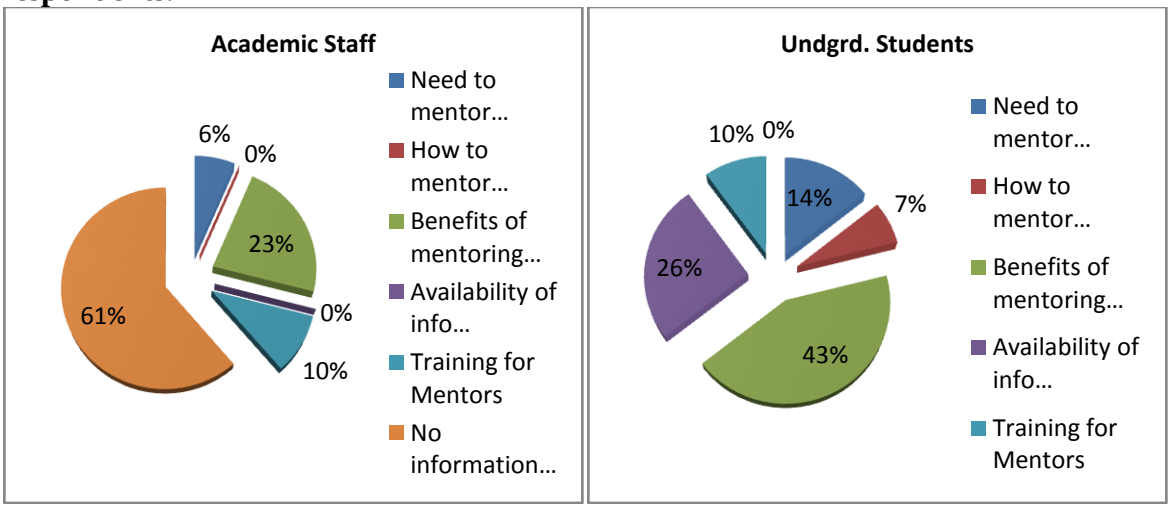


Figure 4.3: Type of Information Provided for Academic Mentoring.

Table 4.4 and figure 4.3 revealed that only few academic staff acknowledged that they were provided with information for academic mentoring. On "the need to mentor students" 2(6.5%); on "benefits of mentoring students" the score was 7(22.6%). However, a larger

proportion of the Academic staff responses from the list of options provided opted for the option "others please specify". The option solicited for personal opinions from the respondents. 19(61.3%) of the academic staff endeavored to comment on the issue at stake. The general trend of the comments can be categorized into two; 1) little information is provided on mentoring at the university management/faculty/departmental levels - for example, Table 4.7 revealed that only 7(15.6%) academics indicated that they obtained information on academic mentoring from the Bulletin published by the Public Affairs Office of the Registrar's Office of the Institution - and 2) the presence of senior colleagues is majorly why mentoring takes place. This finding reveals that the level of awareness and availability of information resources in the area of academic mentoring in Nigeria is low.

The implication of this finding is that the low provision of information for the support of academic mentoring in Ahmadu Bello University, Zaria, has a profound effect on the mentoring culture. Mentoring cannot thrive without adequate information and training. This discovery is worrisome given that, the University of Wisconsin (2010) affirmed that the life and quality of an academic institution is dependent on the willingness of its academic staff who are involved in the primary activities of teaching, research, and knowledge and manpower production to groom successive academics through mentoring. More so, reports from the Center for Creative Leadership (2007) and the International Mentoring Association (2012) emphasized the critical role of on-the-job relationships in career development of the academics and students alike. It may then be concluded that informal developmental relationships such as mentoring has not been fully utilized in the faculties studied and by extension all the faculties in Ahmadu Bello University, Zaria due to inadequate information on the need to mentor, how to mentor, benefits of mentoring and training on academic mentoring.

4.3.1.4 Providers of Information for Academic Mentoring

In order to find out who are the Providers of information on academic mentoring in Ahmadu Bello University, Zaria, a list of information providers within the institution was provided for the respondents to indicate their opinions. Below is Table 4.5 showing the responses.

Table 4.5: Providers of Information on Academic Mentoring

s/no	Providers of Information on academic mentoring	Category of Respondents			
		Academic Staff		Students	
		f	%	f	%
1	University Management level	1	3.3	43	5.4
2	Faculty level	3	10.0	86	10.8
3	Department level	3	10.0	121	15.2
4	Individual lecturers	14	46.7	392	49.1
5	Library	0	0	91	11.4
6	None of the above	9	30.0	65	8.1
	Total	**30**	**100.0**	**798**	**100.0**

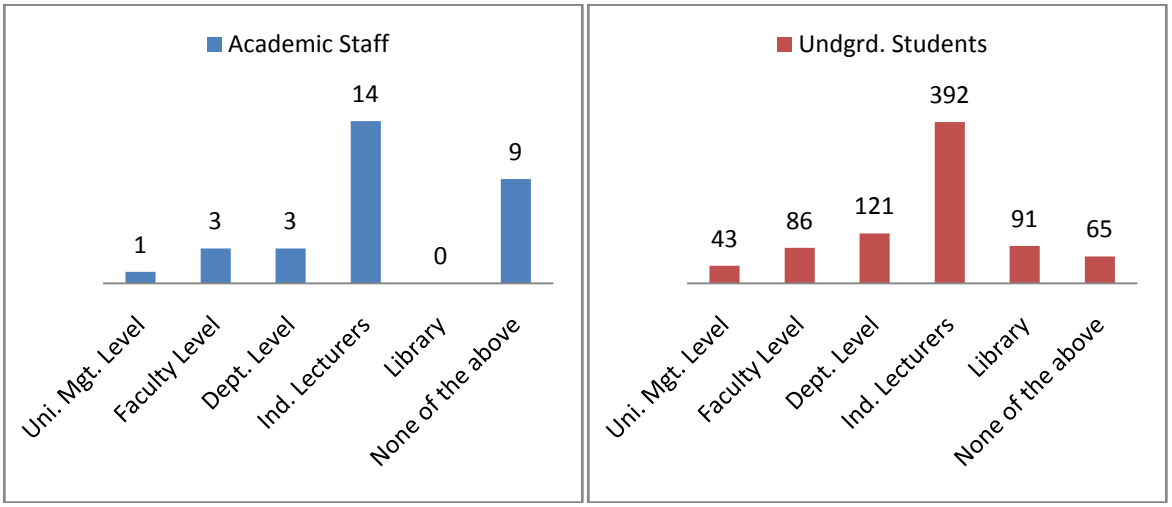


Figure 4.4: Providers of Information for Academic Mentoring.

Table 4.5 and Figure 4.4 revealed that majority of the respondents, 14 (46.7%) academic staff and 392 (49.1%) undergraduate students in the faculties studied indicated that individual lecturers were the primary providers of information on academic mentoring. The Table also revealed that the University management, faculty and department scored low as providers of information of academic mentoring. This could be attributed to none availability of formal

mentoring programs in most tertiary institutions in Nigeria. This finding is directly contrary to Inzer and Crawford (2005) who stated that management of organization is not to enter into the privacy of the mentoring relationships; rather it should develop mentors and protégés through training and education. For successful implementation of a mentoring program, a cross-section of all the strata and focus groups must be involved in the mentoring process. This finding points to the fact that much work still needs to be done in developing, promoting and maintaining a thriving mentoring culture in Ahmadu Bello University, Zaria.

The implication of this finding is that where informal mentoring takes place in an organization, information provision is deficient because there is no specific policy, unit or agent saddled with that responsibility promoting and sustaining mentoring.

4.3.1.5 Users of Information Provided for Academic Mentoring

This section set out to ascertain the category of individuals within Ahmadu Bello University, Zaria that utilizes the information provided for academic mentoring. The Academic staff, Non-academic staff, Students and others who may constitute part of the institution's community, especially through its outreach and community services were listed for the respondents to tick appropriately. Their response is reflected in Table 4.6.

Table 4.6: Users of Information Provided for Academic Mentoring

s/no	Users of Information provided	Category of Respondents			
		Academic Staff		Students	
		Response Rate	%	Response Rate	%
1	Academic Staff	28	90.3	687	88.8
2	Non-academic staff	0	0	0	0
3	Students	0	0	87	11.2
4	Researchers	3	9.7	0	0
	Total	**31**	**100.0**	**774**	**100.0**

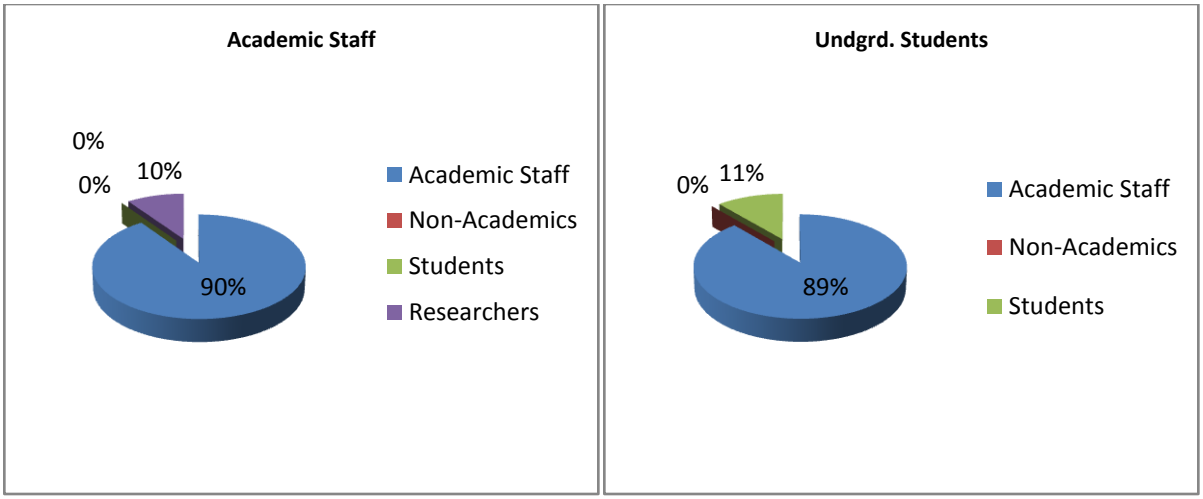


Figure 4.5: Users of Information Provided for Academic Mentoring

Table 4.6 and Figure 4.5 showed that the 28(90.3%) academics and 687(89%) undergraduate students who responded to this section identified academics as the predominant users of information on academic mentoring. While it is true that the major stakeholders in an institution of higher learning like university are the academic staff, students and non-academic staff, when it comes to the business of teaching, learning and research, there is no contending the fact that the academics play critical roles in the life of students. Hence, it is not surprising that they constitute the major users of information on mentoring in an academic institution. These findings further confirmed the position of Ola and Osagie (2011) who reported that academics are primarily involved in the activities of teaching, research, and knowledge and manpower production. As such, there is no doubt about the fact that the position of the academic staff in the university is an important one.

The implication of this finding is that academics who acquire the right training and information on academic mentoring are better suited to mentor undergraduate students in universities.

4.3.1.6 Channels Used to Provide Information for Academic Mentoring

The Research went further to ascertain which channels of communication are used in Ahmadu Bello University Zaria to provide the academics and the undergraduate students with information on academic mentoring. The respondents were asked to score each source appropriately so as to quantitatively determine their relevance. Table 4.7 below provides a representation of their responses.

Table 4.7 Channels Used to Provide Information for Academic Mentoring

s/no	Channels Used to Provide Information for Mentoring	Category of Respondents			
		Academic Staff		Students	
		f	%	f	%
1	Emails	2	4.4	0	0
2	A.B.U.'s Website and Blogs	6	13.3	71	9.7
3	Posters	0	0	15	2.0
4	Bulletins	7	15.6	401	54.9
5	Notice/Digital Bill Boards	3	6.7	57	7.8
6	Instructional videos	1	2.2	0	0
7	Educational meetings, conferences and seminars	9	20.0	187	25.6
8	Interpersonal communication	10	22.2	0	0
9	Informal contacts	7	15.6		
	Total	***45**	**100**	**731**	**100**

*** Responses recorded were more than the number of respondents due to multiple choices of responses.**

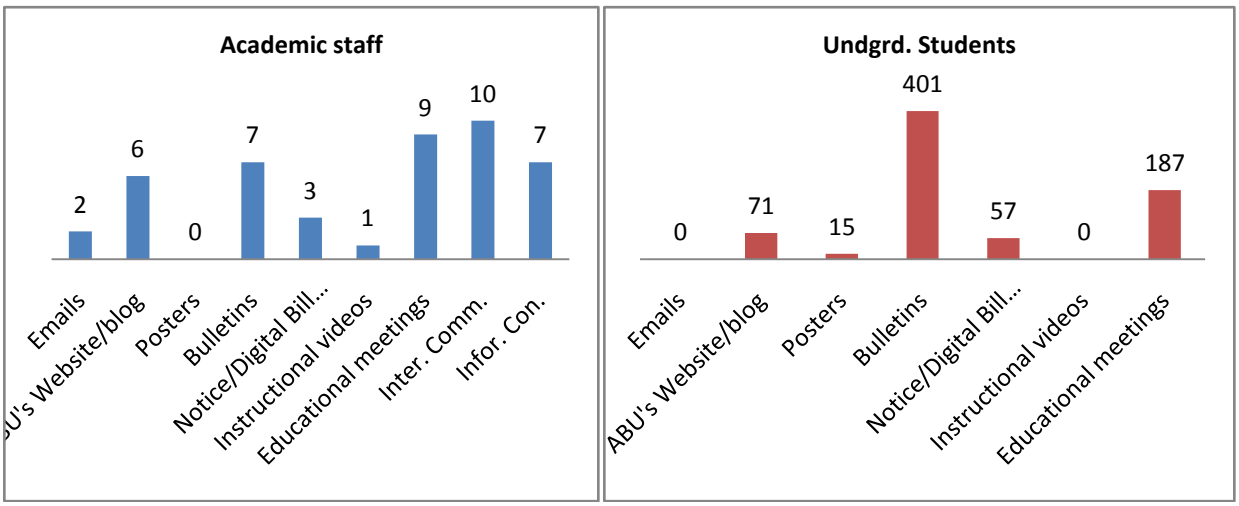


Figure 4.6: Channels Used to Provide Information for Academic Mentoring

Different information channels have different strengths, weaknesses, drawbacks, advantages and costs. Table 4.7 and Figure 4.6 above revealed that 7(15.6%) academics and

401(54.9%) undergraduate students indicated that they obtained information on academic mentoring from the Bulletin published by the Public Affairs Office of the Registrar's Office of the Institution. The use of other channels of communication scored very low as can be noted from the table. However, the option "others" which solicited for comments not captured in the list provided from the academic staff category recorded the highest response rate with 17(37.8%) respondents leaving comments which can be classified into two; 1. Interpersonal communication with colleagues; 2. Informal contacts with students.

This finding suggests that more than half of the academic staff who need information on academic mentoring do not actually have access to such information. This outcome is not different from data analyzed in the previous tables. E.g. Table 4.3 on "Sources of Information for academic mentoring" where 17 (40.5%) of the respondents received information on academic mentoring from colleagues. Similarly, in Table 4.4 on "Types of information provided on academic mentoring 19(61.3%) of the respondents revealed that no formal provision of information on academic mentoring was made available. In the same vein, in Table 4.5 which dealt with "Providers of information on academic mentoring" 14(46.7%) of the respondent indicated that individual lecturers were the providers of information on academic mentoring. Lack of formal mentoring program and general awareness on the benefit of mentoring undergraduate students may likely be responsible for the low level of availability of information for such responses especially through the identified channels.

The implication of this finding is that academic mentoring is not likely recognized and widely utilized in Ahmadu Bello University, Zaria. This finding is not in harmony with the findings of Bozeman and Feeney (2007) who reported that, the benefits of mentoring to one's academic success, career aspirations, and personal development are widely acknowledged. So, also, are some of the components necessary to a rewarding mentoring relationship - one being the

availability, ease of access and frequency of use of information on academic mentoring. Similarly, a study by Roche (1979) found out that, of the 63.5 percent of the 1,250 respondents who had a mentor were on the average better paid, reached their positions faster and were more satisfied with their work and careers than their non-mentored counterparts. It is justifiable to argue that providing the desired information in the right format and through most suitable channel/medium will strengthen academic mentoring culture and yield manifold benefits in Ahmadu Bello University, Zaria.

4.3.1.7 Barriers to Provision of Information for Academic Mentoring

The seventh objective of this study is to discover what barriers hinder effective provision of information for academic mentoring of the undergraduate students in Ahmadu Bello University, Zaria. In order to investigate and achieve this objective, a list of some of possible barriers were identified, and the respondents were urged to tick appropriately the responses. Their responses were tabulated below so as to comprehensively address the objective of the study and provide answer to the research question raised.

Table 4.8: Barriers to Provision of Information for Academic Mentoring

s/no	Barriers to Information Provision	Category of Respondents			
		Academic Staff		Students	
		f	%	f	%
1	Non-implementation of formal academic mentoring program.	22	42.3	601	40.7
2	Lack of interest in mentoring of undergraduate students.	11	21.2	218	14.7
3	Unavailability of information resources on academic mentoring.	8	15.4	311	21.1
4	Lack of awareness by faculty members and students on sources of information on mentoring	4	7.7	187	12.7
5	Information literacy inadequacy.	6	11.5	45	3.0
6	Difficulty in accessing desired sources of information on academic mentoring by faculty members and students.	1	1.9	115	7.8
	Total	***52**	**100**	***1477**	**100**

*** Responses recorded were more than the number of respondents due to multiple choices of responses**

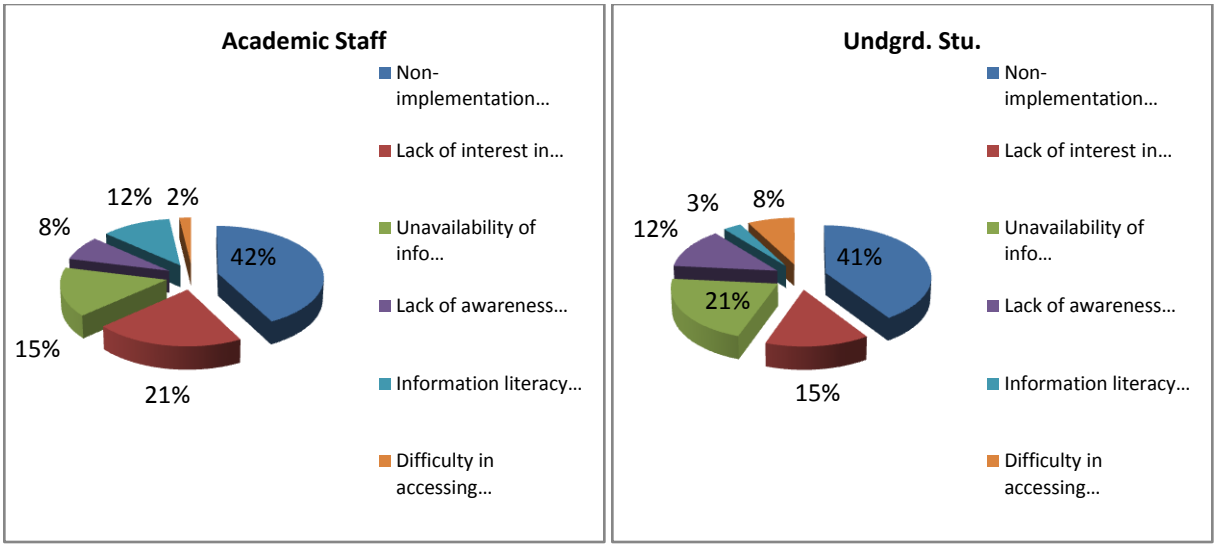


Figure 4.7: Barriers to Provision of Information for Academic Mentoring

Table 4.8 and Figure 4.7 have shown that the inadequacy of information on academic mentoring for the use of the academic staff and undergraduate students in Ahmadu Bello University, Zaria can be attributed to problems associated with low level of awareness of the role of academic mentoring in the academic development of undergraduate students. The 22 (42.3%) responses from academic staff and 601(40.7%) from undergraduate students suggested that non-implementation of formal academic mentoring program was the major challenge hindering the development of an academic mentoring culture in the institution. Lack of interest in academic mentoring of undergraduate students recorded the next highest responses from the academic staff with 11(21.2%) score. The 311(21.1%) responses was the second highest recorded from the undergraduate students, which suggested that if information resources on academic mentoring was available, mentoring would have been a mainstay in the academic process of the institution. Difficulty in accessing desired sources of information on academic mentoring was the least response from academic staff with 1(1.9%), while information literacy inadequacy was the least response from undergraduate students with 45(3.0%) scores.

4.3.1.8 Strategies for Information Provision for Academic Mentoring

In this section, the researcher's intension was to determine the strategies that can be adopted to improve information provision for academic mentoring. The opinions of the respondents' are tabulated below.

Table 4.8: Strategies for Information Provision for Academic Mentoring

s/no	Strategies	Category of Respondents			
		Academic Staff		Students	
		f	%	f	%
1	The University Management should design and implement formal academic mentoring program for undergraduate students.	29	44.6	599	37.0
2	The University Management should provide and sponsor training on academic mentoring.	8	12.3	197	12.2
3	The University Library Complex should acquire and disseminate information resources on academic mentoring.	10	15.4	418	25.9
4	Academics should be encouraged to acquire training in ICT to ensure they are information literacy competent.	7	10.8	98	6.0
5	The University through its various levels of Management should actively create awareness on academic mentoring.	11	16.9	305	18.9
	Total	**65**	**100**	**1617**	**100**

*** Responses recorded were more than the number of respondents due to multiple choices of responses.**

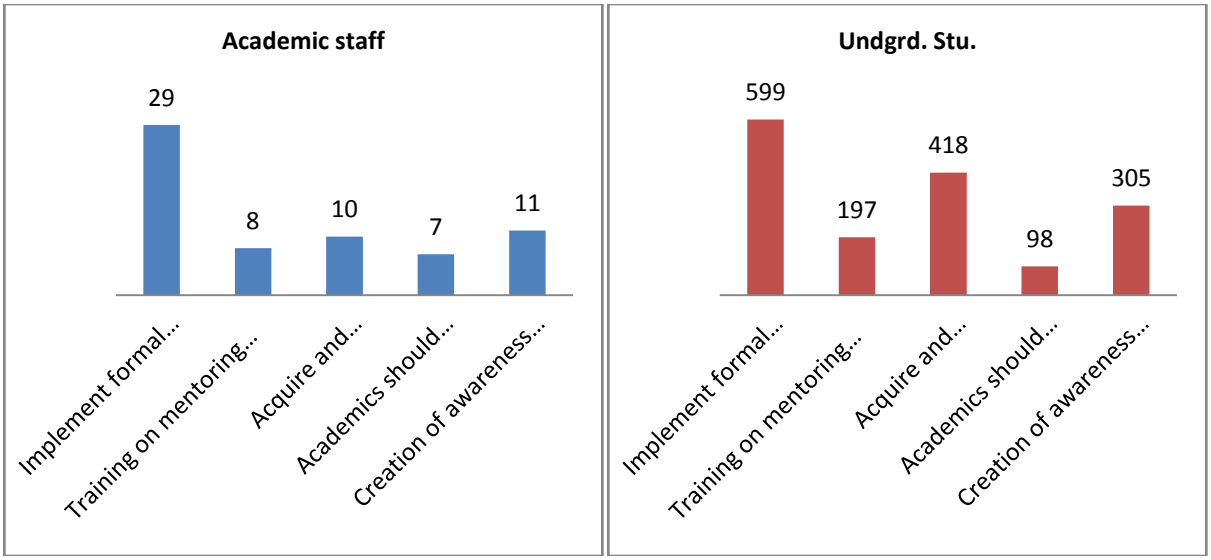


Figure 4.8: Strategies for Provision of Information for Academic Mentoring

As it can be noted from the Table 4.9 and Figure 4.8, the majority of the respondents indicated that the most reliable way of overcoming the barrier to information provision and utilization for academic mentoring is the design and implementation of a formal mentoring program in Ahmadu Bello University, Zaria. The responses from 29(44.6%) academics and 599(37.0%) undergraduate students were the basis of this assertion. It can therefore be concluded that, implementing a formal mentoring program will eliminate the constraints that hinder information provision on academic mentoring. This is in harmony with the doctrine of law, "res ispa loquitur" which literally means "the fact speaks for itself". This implies that those responsible for providing information on academic mentoring in Ahmadu Bello University, Zaria, that is, University Management, faculties, departments and the Library have not demonstrated adequate commitment and resources toward developing, promoting, and sustaining a sound mentoring culture in the institution. Cameron and Jesser (1992) submitted that, organization can demonstrate ongoing support by designing an information dissemination plan that addresses areas of concern in the mentoring process.

4.4 Inferential Statistical Analysis

This section deals with the outcome of the inferential analysis employed to test the null hypotheses generated for the study. They were tested using Analysis of Variance (ANOVA). The research used 0.05 as the level of significance for testing the hypotheses. This is because behavioral sciences researches involve human beings and the 0.05 level of significance is generally accepted. Two (2) null hypotheses were raised and tested. A post hoc test was performed on the mean score and Scheffe procedure was used. The findings are presented as follows:

4.4.1 Test of Hypotheses

In pursuance of the objectives of the investigation into information provision and utilization for academic mentoring of undergraduate students in the University, and to provide statistical solutions to the question raised, two null hypotheses were formulated in the study to determine possible significant difference between the opinions of lecturers on the issues. The hypotheses are tested as follows:

Hypothesis I: There is no significant difference in the styles of mentoring used by Academics for undergraduate students among the selected faculties in Ahmadu Bello University, Zaria.

The opinions of Academics from the different faculties on the mentoring styles used for students were the dependent variable used in this test. The styles included traditional/informal mentoring, professional mentoring and the formal or institutionalized mentoring. The items used in the measurement of the expressed opinions were on a five point interval scale. This necessitated the use of parametric procedure. The hypothesis was therefore tested with one way analysis of variance (ANOVA). The use of the ANOVA was informed by the more than two groups of the independent variable (faculties) involved in the test. In Table 4.10a, a summary of

the ANOVA model is presented.

Table 4.10a: Analysis of Variance on Academic Mentoring Styles Used by Lecturers for Undergraduate Students Among the Selected Faculties

Source	Sum of Squares	DF	Mean Square	F-calc.	Sig.
Between Groups	12.540	3	4.180	7.642	.001
Within Groups	15.864	29	.547		
Total	28.404	32			

($P<0.05$)

The result revealed that the lecturers differed significantly in the styles of mentoring adopted in the different faculties. Observed F-value (7.642) is higher than the critical value at the 2.93 Degree of Freedom and the level of significance for the test is 0.001 ($P < 0.05$). These indications provide enough evidence to reject the null hypothesis. Therefore, the null hypothesis that there is no significant difference in the mentoring styles used by lecturers for undergraduate students among the selected faculties is hereby rejected. The mean scores of the different faculties' respondents on the styles of mentoring are presented in Table 4.10b.

Table 4.10b: Mean Scores on Academic Mentoring Styles by the Different Faculties

Faculties	N	Mean	Std. Deviation	Std. Error
Education	9	4.5556	.55277	.18426
Engineering	13	3.1538	.86726	.24053
Human Medicine	8	4.0417	.67700	.23936
Social Sciences	3	4.5556	.76980	.44444
Total	33	3.8788	.94214	.16401

The mean scores in the Table showed that lecturers from Engineering had the least score of 3.15 while Education and faculty of Social sciences have the highest scores. However a post hoc test was performed on the mean score to determine the faculty lecturers that were significantly different from the others in their opinion on the mentoring styles. The Scheffe procedure was used for the mean separation test and the result is summarized in Table 4.10c.

Table 4.10c: Result of Scheffe Procedure on the Mean Scores by the Different Lecturers

(I) Faculty	(J) Faculty	Mean Difference (I-J)	Std. Error	Sig.
Education	Engineering	1.40171(*)	.32072	.002
	Human Medicine	.51389	.35939	.571
	Social Sciences	.00000	.49307	1.000
Engineering	Education	-1.40171(*)	.32072	.002
	Human Medicine	-.88782	.33235	.090
	Social Sciences	-1.40171(*)	.47373	.051
Human Medicine	Education	-.51389	.35939	.571
	Engineering	.88782	.33235	.090
	Social Sciences	-.51389	.50072	.789
Social Sciences	Education	.00000	.49307	1.000
	Engineering	1.40171(*)	.47373	.051
	Human Medicine	.51389	.50072	.789

* The mean difference is significant at the .05 level.

The result revealed that the observed significant difference between the lecturers was among those from the Faculties of Education, Social Sciences and those from Engineering. Between lecturers from Social Sciences and Human Medicine, no significant difference was observed and between the Faculties of Human medicine and Engineering, no significant difference was observed.

Hypothesis II: There is no significant difference in the type of information provided for academics in mentoring undergraduate students among the selected faculties in Ahmadu Bello University, Zaria.

The types of information on academic mentoring by the lecturers of the different faculties selected for investigation was computed into aggregate mean that was used for this test. The means of the different faculties were then compared for possible significant differences using the one way analysis of variance. The result of the analysis of variance procedure is summarized in Table 4.11a.

Table 4.11a: Analysis of Variance on the Type of Information Provided on Academic Mentoring for Lecturers in Mentoring Undergraduate Students Among the Selected Faculties

Source	Sum of Squares	DF	Mean Square	F-calc.	Sig.
Between Groups	33.765	3	11.255	31.457	.000
Within Groups	10.376	29	.358		
Total	44.141	32			

(P<0.05)

The result in the Table revealed significant difference between the lecturers from the different faculties on the type of information on academic mentoring for the undergraduate students. This is indicated in the Table by an observed F-value of 31.457 and with a probability level of significance of 0.0000 (P < 0.05). Therefore, the null hypothesis that there is no significant difference in the type of information on academic mentoring of undergraduate students among the selected faculties in Ahmadu Bello University, Zaria is thus rejected. The mean score of the lecturers from the different faculties are tabulated in Table 4.11b.

Table 4.11b: Mean Scores of the Different Faculties on the Type of Information on Academic Mentoring of the Undergraduate Students by the Faculties

Faculties	N	Mean	Std. Deviation	Std. Error
Education	9	2.0000	.61644	.20548
Engineering	13	1.7077	.52035	.14432
Human medicine	8	4.1500	.69898	.24713
Social sciences	3	1.6667	.57735	.33333
Total	33	2.3758	1.17448	.20445

The mean scores in the table showed that the Faculties of Social Sciences and Engineering had the least scores respectively. The highest score was by the Faculty of Human Medicine with 4.150 and was followed by the Faculty of Education. To determine the statistical significance of this variability in the mean a post hoc test was conducted with the Scheffe procedure. The result of the Scheffe procedure is summarized in Table 4.11c.

Table 4.11c: Result of Scheffe Procedure on the Mean Scores by the Different Faculties

(I) Faculty	(J) Faculty	Mean Difference (I-J)	Std. Error	Sig.
Education	Engineering	.29231	.25938	.738
	Human medicine	-2.15000(*)	.29065	.000
	Social sciences	.33333	.39877	.873
Engineering	Education	-.29231	.25938	.738
	Human medicine	-2.44231(*)	.26879	.000
	Social sciences	.04103	.38313	1.000
Human medicine	Education	2.15000(*)	.29065	.000
	Engineering	2.44231(*)	.26879	.000
	Social sciences	2.48333(*)	.40495	.000
Arts and social sciences	Education	-.33333	.39877	.873
	Engineering	-.04103	.38313	1.000
	Human medicine	-2.48333(*)	.40495	.000

* The mean difference is significant at the .05 level.

The result revealed that only the lecturers in the Faculty of Human Medicine that were significantly different from the others in the type of academic information provided for the mentoring of the undergraduate students. Between the lecturers from Faculties of Education, Social sciences and Engineering, no significance difference was observed.

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CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the study and findings. Conclusion was drawn and recommendations made on how to provide information on academic mentoring for the academic development and confidence building of academic staff and undergraduate students in the area under study.

5.2 Summary of the Study

This study was set out to investigate information provision and utilization for academic mentoring of undergraduate students in Ahmadu Bello University, Zaria. In order to achieve this, eight (8) research questions and two null hypotheses were drawn up. Open and closed-ended questionnaires were designed and utilized for the study. The research questions sought to find: the academic mentoring styles used by the academic staff to mentor the undergraduate students; the sources of information for academic mentoring; the types of information provided for support of academic mentoring; those responsible for the provision of information for academic mentoring; the category of users that utilize information provided for academic mentoring; the channels used to provide information on academic mentoring; the barriers to provision of information for academic mentoring; and how the barriers could be removed to enhance the provision of information for academic mentoring. The Null hypotheses sought to ascertain the difference in the type of academic mentoring style used and information provided for academics in mentoring undergraduate students among the selected faculties in Ahmadu Bello University, Zaria.

The population of the study was made up of all the Academic staff and undergraduate

students in the 12 faculties in Ahmadu Bello University, Zaria. The total number of Academic staff is 1405, while the undergraduate students are 27798. Simple random sampling was used to select a sample of 956 (30%); that is 37 academic staff and 919 undergraduate students.

The data collected were analyzed using descriptive and statistical analysis. The data that relate to the research questions were analyzed using frequency count, pie chart and histogram.

5.3 Summary of the Major Findings

1. Majority of the Academic staff and undergraduate students in Ahmadu Bello University, Zaria acknowledged that Traditional/informal mentoring was the most utilized mentoring style. It was noticed that there was predominance of traditional/informal mentoring styles in the institution because it is an integral ingredient of human development. That is because it is a relationship that is voluntarily formed by the academics and undergraduate students involved with friendship first, learning and career second and third, it is the most widely utilized and effective mentoring style in the institution.
2. In terms of sources of information, interpersonal communication among academics and their students was discovered as the most reliable source of information for mentoring undergraduate students in Ahmadu Bello University, Zaria. This discovery suggests the predominance of informal mentoring culture in the faculties studied may likely suggests that only a hand full of the academics engaged in mentoring undergraduate students. The implication of this is that senior colleagues who are perceived role models are pioneers of academic mentoring in Ahmadu Bello University, Zaria. This may be why majority of the undergraduate students relied on their lecturers as sources of information for mentoring.
3. Information provision for support of academic mentoring in Ahmadu Bello University, Zaria, is inadequate. This has a profound effect on the academic mentoring culture in the institution. This may be attributed to the dearth of published materials in the area of

academic mentoring in Nigeria. It is therefore logical to expect a weak academic mentoring culture in Ahmadu Bello University, Zaria, given that inadequate information is available and provided to support and promote academic mentoring. Mentoring cannot thrive without relevant and adequate information and training.

4. It was discovered the University management, faculties and departments provide little or no specific information tailored toward supporting academic mentoring of undergraduate students. Individual lecturers were the primary providers of information on academic mentoring. Due to the unlikely commitment in developing, promoting and maintaining a mentoring culture in Ahmadu Bello University, Zaria, there is a perceived inconsistency in the quality and practice of academic mentoring in the institution.
5. Academics are the predominant users of information on academic mentoring. They play a critical role in the business of teaching, learning and research. As such, they are better suited to mentor undergraduate students within the university.
6. The use of channels of communication for academic mentoring was low. This means that majority of the academic staff who need information on academic mentoring do not actually have access to such information. Thus they rely on interpersonal communication with colleagues and informal contacts with their students.
7. The major barrier to provision of information on academic mentoring noticed was non-implementation of formal academic mentoring program. This is responsible for inadequate provision and utilization of academic mentoring information by the academic staff and undergraduate students in Ahmadu Bello University, Zaria. More so, lack of interest in academic mentoring of undergraduate students was noted as another barrier to academic mentoring in the institution. This may likely account for the low level of awareness of the role of academic mentoring in the academic development of the undergraduate students.

8. Majority of the Academics and undergraduate students in Ahmadu Bello University, Zaria believed that the design and implementation of formal mentoring program in the institution across all faculties and departments will eliminate the barriers that hinder information provision and utilization on academic mentoring in the institution.
9. That the Academics from the different faculties are significantly different in the academic mentoring styles they use in their mentoring of undergraduate students.
10. There is significant difference in the type of information provided for academics from the different faculties in their mentoring of undergraduate students.

5.4 Conclusion

From the analysis and summary of findings, it could be said that traditional/informal mentoring style is predominantly employed in Ahmadu Bello University, Zaria because it is an integral ingredient of human development. Since academic mentoring is a relationship that is voluntarily formed between the academics and undergraduate students primarily on the basis of mutual consent and friendship as key elements, it has wider appeal as an effective mentoring style that can be adapted for undergraduate students. However, information provision and utilization by Academics in mentoring of undergraduate students in Ahmadu Bello University, Zaria is inadequate. This is attributed to the fact that no formal mentoring program is in place in the institution. More so, the low level of awareness of the role of academic mentoring in the academic development of undergraduate students has resulted in a weak academic mentoring culture in Ahmadu Bello University, Zaria.

Interpersonal communication among academics and their students remains the most reliable source of information for mentoring undergraduate students in Ahmadu Bello University, Zaria. However, this source of information on academic mentoring is insufficient to promote, support and sustain an effective mentoring culture as oral sources of information cannot be

evaluated to determine whether they present information that is accurate and consistent or conforms to international mentoring standard. The non-implementation of formal academic mentoring program in Ahmadu Bello University, Zaria is majorly responsible for inadequate provision and utilization of academic mentoring information among the academics and undergraduate students in the institution. Thus, the design and implementation of formal mentoring program across all the faculties and departments will sensitize, motivate and instill a mentoring culture among the academics and undergraduate students in Ahmadu Bello University, Zaria.

5.5 Recommendations

The success and effectiveness of academic mentoring is dependent on the provision of relevant and adequate information on academic mentoring; its utilization by the academics and undergraduate students; the availability of adequate information resources on mentoring; and the channels used to disseminate relevant information. In this light, information provision on academic mentoring to the academics and undergraduate students in Ahmadu Bello University, Zaria needs urgent attention for such an exercise to be successful and effective in the institution. In the light of the findings of the study, it is therefore recommended that:

1. Formal academic mentoring program for undergraduate students should be designed and incorporated into the existing teaching and learning process in Ahmadu Bello University, Zaria as well as performance management requirements in the institution and other Nigerian Universities. It is also important that, academic mentoring program should be aligned with the institution's corporate needs, objectives, and core values.
2. The management of Ahmadu Bello University, Zaria and that of other Universities in Nigeria should adopt strategic sources of information such as: 1) establishment of an academic mentoring office under the oversight of the Directorate of Academic Planning

office, 2) design and publication of Academic Mentoring Magazine, 3) Training and designation of at least one Academic Mentoring Officer in each faculty.

3. In order to tackle the problem of inadequate provision of information in Ahmadu Bello University, Zaria, it is imperative that the University Management, faculties and departments provide relevant and adequate information and training tailored toward equipping the Academics and undergraduate students on 1) the need to mentor undergraduate students, 2) how to mentor these students, 3) benefits of mentoring these students, etc.

4. While the University Management and faculties have a part to play as providers of information on academic mentoring, most of the responsibilities lay with the departments. Departments are better suited to affirm that academic mentoring is a core component of the educational experience for undergraduate students by developing a compact or agreement, relevant to the discipline and providing periodic reviews. Through coordinators and committees, faculties and departments can constantly evaluate the mentoring processes.

5. Since Academics are primarily involved in teaching, research and manpower production, they are best suited to mentor undergraduate students. It is therefore recommended that academics engaging in the mentoring process should be given adequate information and training to better equip them as seasoned mentor. To that end workshops on the latest trend in academic mentoring practice should regularly be organized.

6. Different channels of information have different strengths, weaknesses, drawbacks, advantages and costs. However, an effective communication strategy usually uses a mix of at least 2 or more channels. On the basis of this, four of the most common types of workplace communication channels are hereby recommended, they include; [1] memos,

[2] reports, [3] bulletins, and [4] newsletters.

7. In order to tackle the lack of interest in academic mentoring of undergraduate students in Ahmadu Bello University, Zaria, it is therefore recommended that academics involved in the mentoring process should be given adequate incentives vis-à-vis proper sanctions. The incentive could be financial or some form of recognition or award. To address the issue of low awareness by academics on the role of academic mentoring in the development of undergraduate students, the university management can institute a "mentoring week every session." This will go a long way to sensitize the academics and undergraduate students to appreciate the value of academic mentoring in teaching, learning and research.

8. It is not enough to design and implement a formal academic mentoring program in Ahmadu Bello University, Zaria, the university management should demonstrate ongoing support by making funds available for acquisition of information resources on academic mentoring; training of academics to be effective mentors; and to regularly create awareness on academic mentoring.

9. Research on academic mentoring supported by government (through the Ministry of Education and The National Universities Commission), university management, academic libraries and the private sector are required to identify long term academic and social gains of mentoring based learning programs, develop institutional mentoring policy, and suitable channels of communication where requisite information resources and information are specifically provided to support a mentoring culture.

5.6 Suggestions for Further Research

No research seems to be comprehensive; some silent areas must be left out for further investigation. In the light of the findings and conclusions of the study, it recommends conduct of

research on the following:

1. A Comparative study on mentored and non-mentored graduates of Library and Information Science students in Nigerian universities.
2. Assessing the role of Mentorship programs in transitioning from secondary school to tertiary institution among first year students in Nigerian Universities.
3. Assessment of the effects of academic mentoring on Academics in Nigerian Federal Universities.

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APPENDIX I

QUESTIONNAIRE ON INFORMATION PROVISION AND UTILIZATION FOR ACADEMIC MENTORING OF UNDERGRADUATE STUDENTS IN AHMADU BELLO UNIVERSITY, ZARIA.

Department of Library and Information Science,
Faculty of Education,
Ahmadu Bello University,
Zaria.

Dear Respondent,

I am a Postgraduate Student in the aforementioned department conducting a research titled "Information Provision and Utilization for Academic Mentoring of Undergraduate Students in Ahmadu Bello University, Zaria".

Please, kindly respond to questions in this questionnaire. The research is basically for academic purpose. Therefore, all the information provided will be used strictly for the said purpose.

Thank you for your cooperation.

Yours faithfully,

Isibor Andrew
Researcher
5/6/2013

APPENDIX II

Instruction: Please tick appropriately

SECTION A: Background Information

1. Indicate your gender Male [ ] Female [ ]
2. Indicate your department
    1. Library & Information Science [ ]
    2. Physical & Health Education [ ]
    3. Agricultural Engineering [ ]
    4. Civil Engineering [ ]
    5. Mechanical Engineering [ ]
    6. Human Anatomy [ ]
    7. Medicine [ ]
    8. Sociology [ ]

3. What is your highest educational qualification? (Staff) (B) Which level are you

	1. Staff		2. Students	
1.	First Degree	[ ]	100level	[ ]
2.	Postgraduate Diploma	[ ]	200level	[ ]
3.	Masters Degree	[ ]	300level	[ ]
4.	PhD	[ ]	400level	[ ]
5.	Others please specify …….		500level	[ ]

4. How long have you been working/schooling in Ahmadu Bello University, Zaria?
    1. 0-4yrs [ ]
    2. 5-9yrs [ ]
    3. 10-14yrs [ ]
    4. 15-20yrs [ ]
    5. 20yrs and above [ ]

5. What is your age range?

	(Academic Staff)	[ ]	(Students)	[ ]
1.	18-29yrs	[ ]		[ ]
2.	30-39yrs	[ ]		[ ]
3.	40-49yrs	[ ]		[ ]
4.	50-59yrs	[ ]		[ ]
5.	60yrs and above	[ ]		[ ]

SECTION B: Academic Mentoring in Ahmadu Bello University, Zaria.

6. Which of the following academic mentoring styles is used by Academics in Ahmadu Bello University in mentoring undergraduate students? (*Please tick appropriately*).

s/n	Academic mentoring styles used	Tick
1	**Traditional/informal mentoring** is a process in which an experienced lecturer elects to initiate a mentoring relationship with an undergraduate student who is recognized as having potential or talent. The relationship is spontaneous, may not have clearly defined goals.	
2	**Professional mentorship** is a process of selecting and grooming undergraduate students which is promoted and encouraged by top leadership (senior academics) as part of mainstream staff development. This form of mentoring relationship is selective in nature.	
3	**Formal or institutionalized mentorship** is a centrally coordinated mentoring process that involves students and their lecturers. This form of structured mentoring relationship is all inclusive.	

Others, please specify

……
……
……

SECTION C: Information provision and utilization for Academic Mentoring in Ahmadu Bello University, Zaria.

7. Which of the following information sources do you rely on for information on academic mentoring in Ahmadu Bello University, Zaria?
    1. Books ( )
    2. Journals ( )
    3. Magazines ( )
    4. World Wide Web ( )
    5. Management of Ahmadu Bello University ( )
    6. Personal Experience ( )
    7. Others please specify……

8. Please indicate which type of information on academic mentoring is provided in Ahmadu Bello University, Zaria.
    1. Information on the **need to mentor** undergraduate students ( )
    2. Information on **how to mentor** undergraduate students ( )
    3. Information on the **benefits of mentoring** undergraduate students ( )
    4. Information on the **availability of adequate information resources** on academic mentoring ( )
    5. Information on **training on academic mentoring** ( )
    6. Others, please specify……

9. Please indicate the Providers of information on academic mentoring in Ahmadu Bello University, Zaria.
    1. University Management level ( )
    2. Faculty level ( )
    3. Department level ( )
    4. Individual lecturers ( )
    5. Library ( )
    6. None of the above ( )
    7. Others please specify……..

10. Who are the users of the information provided on academic mentoring in Ahmadu Bello University, Zaria?
    1. Academic staff ( )
    2. Non-academic staff ( )
    3. Students ( )
    4. Others, please specify…….

11. What channels are used to provide information on academic mentoring in Ahmadu Bello University, Zaria?
    1. Emails ( )
    2. websites and blogs ( )
    3. Posters ( )
    4. Flyers ( )
    5. Brochures ( )
    6. Fact sheets ( )
    7. Bulletins ( )
    8. Sms ( )
    9. Newsletters ( )
    10. Notice boards/Billboards ( )
    11. Stickers ( )
    12. Instructional video ( )
    13. Educational meetings, conferences and seminars ( )
    14. Others, please specify……..

12. Please indicate what are some of the barriers to the provision and utilization of information for academic mentoring in Ahmadu Bello University, Zaria.
    1. Non-implementation of formal academic mentoring program. ( )
    2. Lack of interest in academic mentoring of undergraduate students. ( )
    3. Unavailability of information resources on academic mentoring. ( )
    4. Lack of awareness by faculty members and students on sources of information on academic mentoring. ( )
    5. Information literacy inadequacy. ( )
    6. Difficulty in accessing desired sources of information on academic mentoring by faculty members and students. ( )
    7. Others, please specify……

13. What strategies can be used to ameliorate these barriers to improve information provision and utilization for academic mentoring of undergraduate students in Ahmadu Bello University, Zaria?

s/n	**Strategies to improve information provision and utilization for academic mentoring**	**Tick**
1	The University Management should design and implement formal academic mentoring program for undergraduate students.	
2	The University Management should provide and sponsor training on academic mentoring.	
3	The University Library Complex should acquire and disseminate information resources on academic mentoring.	
4	Academics should be encouraged to acquire training in ICT to ensure they are information literacy competent.	
5	The University through its various levels of Management should actively create awareness on academic mentoring.	

Others, please specify

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