INFORMATION SEEKING BEHAVIOR AND AFFECTIVE STATES: A CASE OF NURSING MOTHERS SEEKING INFORMATION IN THE CONTEXT OF FORMAL SETTINGS WITHOUT A CRÈCHE FACILITY AT DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE A.B.U. ZARIA

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Abstract:

The study examines the affective state of nursing mothers without access to crèche facilities in Nigeria context. This is because studies have indicated that 60% of student nursing mothers experience serious challenges which resulted to low academic performance and high student dropout. The objective of this study was to uncovered the thought, feeling and actions of student nursing mothers without access to crèche facilities in relations to how they seek, receive and share information during a formal face to face classroom learning activities. To achieve this objective, two principal questions was asked which are how do affective states of student nursing mothers without access to crèche facilities impact the way they seek information, receive information and share information in a formal face to face classroom learning activities? And what are the challenges of students nursing mothers during information seeking and receptions in classroom learning activities? Method: This study adopted interpretative research paradigm using grounded theory methodology, a qualitative case study design approach to investigate the phenomena. Analysis: The data were analyzed and discussed in relation to the research questions raised in line with the thematic qualitative data analysis. **Results**: The finding of the study revealed domestic tasks, distraction from reading and lack of time like other students are the challenges of student nursing mothers that lead to dropout. Also the study understands that participants are uncomfortable as a result of feeling frustrated and uneasy during information seeking and receiving which have impact on their academic performance. Conclusions: for student nursing mothers to perform effectively and minimize gender inequality in academics, the study recommended that the university should provide a lactation room or day care centre in the department

Keywords: Affective State, Nursing Mothers, Information, Information seeking

Introduction

There is a strong correlation between information behavior and affective states ((James &Nahl, 1986; Kuhlthua, 2005; Godbold, 2013; Fourie, & Julien 2014; Savolainen, 2015). However, while many studies have examined the affective states of people and information behaviors in variety of contexts, unfortunately there is little or no studies that examines the affective states of nursing mothers without access to crèche facilities and their corresponding information behavior in formal classroom context.

Therefore, examining the affective states of nursing mothers and their corresponding information behavior is critical especially in the context of formal classroom setting because a classroom is a hub for not only information seeking but also information receiving. Students enroll in class to seek and receive information from peers and facilitators. However, three correlates are at work for effective information seeking and information reception: feeling, thoughts, and actions (Savolainen, 2015). A bad feeling, and bad thought for instance, may result to poor understanding and retention of information during information seeking and reception.

However, examining affective state of nursing mother is critical especially in the context of formal classroom because over the last decade, there is a significant increase in female enrollment in higher education. Despite the increase in enrollment of females in higher education, there is the challenge of female dropouts in higher education especially the nursing mothers. Similarly, a lot of literature has indicated the challenges of nursing mothers in Nigerian higher institutions of learning Akande (2003), Okeke (2004) and Bolarin (2004). The challenges are social, physical, emotional and financial which result in anxiety, stress, indecision, frustration, fear, conflict and confusion. The consequences of the challenge is that some of the student nursing mothers graduate with low grade, some stay longer than necessary while others drop out of school (Nwajiuba, 2011:Potokri 2013), in spite, of these programs targeted at reducing the challenges of Student Nursing Mothers, the high rate of dropout still persists. To reduce the dropout rate of Student Nursing Mothers, which is one of the cardinal objectives of millennium development goals of gender disparity in education (Igbuzor, 2006) it has become imperative to adopt a fresh approach to address this challenge. A promising approach is to adopt a social cognitive approach for surmounting the problem of female drop out in high education. For decades, scholars have stressed the role of social and cognitive factors in the context of learning and information seeking activities (Kulthau, 2006; Julien 2014; Savolainen, 2015).

Statement of the Problem

A dropout is a person who stops going to a school, college, university etc. One group that is affected the most in higher education dropout is student nursing mothers (Berg & Mamhute, 2013). The dropout rate of student nursing mothers in higher education is reaching an alarming rate worldwide. For instance, there had been 70% dropout rates of student nursing mothers across American schools (Hearing Testimony, 2010). Also, out of 4.1 million female students enrolled in tertiary education worldwide, less than 40% graduate with a college degree. 60% of these students that failed to earn their degrees are student nursing mothers (U.N, 2012). This trend is on a steady increase across Asia, Africa and the Americas (Hearing Testimony, 2010). Unfortunately, the researcher observed that undergraduate nursing mothers in the department of Library and information science, Ahmadu Bello University, Zaria may be facing numerous challenges in their academic pursuit which pose serious threat to their educational ambitions. These challenges may range from economic hardship, lack of facilities, societal stereotype that portray girl - child as average achiever with limited opportunities in life compared to their male counterpart which could lead to dropout. This paper reports the findings of an empirical inquiry that investigates the socio-cognitive factors in the learning process. Specifically, the paper uncovers the affective states of students nursing mothers during learning activities. Precisely, it reports the affective states of Student Nursing mothers during information seeking and reception in the classroom.

RESEARCH OUESTIONS

- 1. What are the affective states of student nursing mothers during information seeking and reception in the classroom learning activities?
- 2. What are the challenges of student nursing mothers during information seeking and reception in the classroom learning activities that may lead to dropout?

Literature Review

Information

Information is conceptualized as data value in planning, decision making and evaluation of any programme (Uttor (1999), while Belkin (1977) cited by Eskola, (1998) defined information as associated with a text which is the generator's modified by (purpose,

intent, knowledge of recipient's state of knowledge) conceptual structure which underlines the surface structure (e.g. language) of that text. Ingwersen (1995, 1998) subsequently elaborated by defining information as being the result of transformation of the generator's cognitive structures (by intentionality, model of the recipients' state of knowledge, and in the form of signs), and on the other way round information is something, a structure, which when perceived may affect and transform the recipient's state of knowledge (Eskola, 1998). To Dervin and Nilan (1986), information is seen as something constructed by human beings. In the context of this study, information will be conceived based on the definition of (Eskola, 1998) as something which students need during their studies when they construct meaning about the subjects in the process of learning. From the definitions, information means facts or knowledge that helps in solving a problem. It is anything that removes a person or persons from state of confusion to state of understanding or clearness. Therefore, in this study, information means what students need during studies in order to construct meaning from the learning process.

Information Seeking

Information seeking can be defined as "the interactions between people, the various forms of data, information, knowledge, and wisdom that fall under the rubric of information, and the diverse contexts in which they interact" (Todd, 2003). Liao, Finn, and Lu (2007) divide information seeking into three broad categories: initiating, searching, and locating. Others have argued that information seeking should not be seen in such rigid and linear frames. Instead, they suggest that the process of finding information should be viewed as subjective and influenced by previous experiences, knowledge, and opinions (Weiler, 2005).

From these definitions, information seeking is a process of generating or acquiring information for knowledge upgrade, solving problem or development. However, one approaches the concept of information seeking, it is clear that this is an important skill for students to possess. Those individuals who are deficient in information seeking skills have difficulty in knowing when information is needed, the value of libraries in finding information, and how to evaluate the sources they do find (Gross, 2005). Without these skills, students will perform poorly in the classroom, making the professor's job more difficult and ultimately reflecting poorly upon the university. The problems, however, extend beyond the classroom. In this study, information seeking is the process of acquiring information through listening, attending lectures and visiting the library when necessary.

Information Seeking Behaviour

Information seeking behaviour is described as an individual's way and manner of gathering and sourcing for information for personal use, knowledge updating and development (Majid, Hayat, Phiroze&Srivatson, 2012). Various factors are likely to shape the Information Seeking Behaviour of an individual or a group of individuals. These factors are thought, feeling and actions. Feelings interplay with thoughts and actions, engaging the whole person in a complete experience of learning. Lack of consideration of any of the three offers not only an incomplete but inaccurate picture of information seeking. It is therefore desirable to understand the purpose for which information is required, the environment in which the user operates, skills required for identifying the needed information, as well as the channels and sources preferred for acquiring the needed information. Information seeking is more human-oriented and more like the natural phenomenal need in humans to satisfy their taste to be informed or fill a gap in knowledge (Kuhlthau& Tama, 2001). In this study, information seeking behaviour is the ways and manners student nursing mothers search for information by attending classes for their personal development.

Information Seeking: Affective State

Affective state refers to one's mood or mental state which can influence or alter an individual's thought processes and actions (Frederickson, 2001). People often exhibit greater commonality in affective reactions towards stimuli (Pharm et al, 2001). Fredrickson's (2001) in expatiating her Broaden and Build Theory states that "different affective states predispose people to have certain thoughts or take certain actions". However, there are a number of competing approaches to affective phenomena and no consensus has been reached among researchers about their nature (Cowie et al., 2011). This is partly due to the various denotations and connotations of the terms affect, emotion, and feeling, as well as a host of other terms such as preference, emotional attitude, and mood (Mulligan and Scherer, 2012).

In information seeking, an affective state has a significant effect on information seeker (Kulthau, 1993). It has been noted that affect acts more strongly on those needing to absorb new information as opposed to those in possession of useful information (Levin et al, 2010). To perform effectively and efficiently, affective selves must be discarded. Individual has to be clear-headed and focused to be able to receive and retain new information (Brave & Nass, 2002). Activity or task carried out in a state of negative affects such as confusion and uncertainty often time yields negative results (Kuhlthau, 1993). To a great extent, affective symptoms of anxiety and lack of confidence negatively influence information seeking process (Kalbach, 2003). Thus, information access and acquisition is impaired when the seeker is in a negative affective state as opposed to a positive affective state (Levin et al, 2010). In this study, an affective state is referred to the feelings of student nursing mothers in during information seeking activities.

Grounded Theory

Grounded theory was originally developed in 1967 by two sociologists, Barney Glaser and Anselm Strauss. They were unhappy about the way in which existing theories dominated sociological research. They argued that researchers needed a method that would allow them to move from data to the theory so that new theories could emerge. Such theories would be specific to the context in which they had been developed. They would be 'grounded' in the data from which they had emerged rather than rely on analytical constructs, categories or variables from pre-existing theories. Grounded theory, therefore, was designed to open up a space for the development of new, contextualized theories (Charmaz, 2006).

In line with Charmaz and Henwood (2008), the process of grounded theory is as follows: We gather data, compare them, remain open to all possible theoretical understandings of the data, and develop tentative interpretations about these data through our codes and nascent categories. Then we go back to the field and gather more data to check and refine our categories. Therefore, this study examines the affective state of student nursing mothers during information seeking, receiving and using information in learning context following grounded theory methodology.

Previous Studies: Information, Information Seeking Behaviour, and Affective State of Information Seeking

Studies have been conducted by various scholars on information, information seeking, and affective state of information seeking. For example, Gonzalez – Ibanez (2013) conducted a study of positive and negative affective states in collaborative information seeking. The study research questions sought to uncover how initial affective conditions influence information practices, what affective processes are typically expressed and experienced in information search, how initial affective conditions and those derived from social interactions during the

collaborations process influence term performance, and what are the positivity ratios in collaborative search and their relation to term performance. In order to address these research questions, a mixed- method approach was used. The findings of the study suggested that initial affective states may define and/or shape information processing strategies. Additionally, in collaborative settings, it was found that the interplay of similar or different affective processes could change the way searchers interact with each other, their frustration levels, affective load, and the quality of their work. The findings presented a theoretical implication in the study of collaborative and individual information seeking. Specifically, it gave the affective dimension a central role that could define the way people search, evaluate, and make sense of information.

Similarly, Moshfeghi (2012) conducted a study on the role of emotion in information retrieval. The study explained emotion as the principal factor in the system of needs of a search and information retrieval system. The research questions were: (1) what is the current information retrieval and seeking views on the role of emotion in information retrieval and information seeking behaviour? (2) What is the text-based emotion extraction technique use? In order to guide the research, a qualitative research approach was used. The research findings showed that emotional representation of news gave a novel view over news articles, complementary to the standard text representation used in information retrieval; also emotion need is the central need in the searchers need system. The results revealed that the diversification of the retrieved results improved the effectiveness of the system.

Nahl (2004) in his research study titled measuring the affective information environment of web searchers, the study had two purposes first, was to test the stability of prior findings from an affective load theory. Second, was to attempt to demonstrate a key element of affective load theory that interacts dynamically with cognitive information behaviours. It was clear from the findings that the affective dynamics encountered in information-intensive environments are measurable, stable and significant. The results also showed that higher affective coping skills such as self-efficacy and optimism, afford an advantage in information situations for people with lower cognitive skills.

Methodology

This study adopted an interpretive research paradigm. Scholars adopting an interpretative research paradigm assume that reality is socially constructed through shared meanings. Interpretative research aims to uncover phenomena through the meanings that people assign to them. This study's research paradigm sought to understand the affective behaviours of student nursing mothers in learning context during classroom information seeking, receiving and giving. Because this study adopted the interpretative research paradigm aimed at uncovering the affective state of student nursing mothers in information seeking in the learning context, a qualitative research methodology and method was adopted.

Qualitative research is an inquiry that explores a social or human problem (Creswell, 2009); it builds a holistic picture and reports detailed views of the informants in their natural settings. It is also useful in collecting specific information about the values, opinions, behaviours, and social contexts of particular populations.

Research design: Study location and Selection criteria

The study location is the Department of Library and Information Science, Ahmadu Bello University, Zaria, Kaduna state. To be eligible to participate, a person must be a student nursing mother in the department and must be having a child or children between 0 to 2 years. The participant must be an undergraduate student between 100 level to 400 level.

Sample

Purposive sampling was used for this study. The objective of purposive sampling is to focus on particular characteristics of a population that is of interest, and that will best enable the participants to answer the research questions. The targeted populations of this study are those undergraduate nursing mothers who meet up with the criteria for participation, while the access population comprises those undergraduate nursing mothers who are willing and ready to participate in the study. Data saturation was reached at the tenth (10th) participant selected purposively for this study based on the above criteria.

Data collection

Data were collected through semi-structured in-depth interview. Semi-structured in-depth Interviews are used to gather focused, qualitative textual data. It clarifies specific research questions. This method uncovers rich descriptive data on the personal experiences of participants. Information gathered during semi-structured interviews can move the innovation process from general topics (domains) to more specific insights (factors and variables) (McCammon, nd).

Semi-structured in-depth interviews identify insights into an issue from the perspective of participants. This method also offers a balance between the flexibility of an open-ended interview and the focus of it. In addition, it is used during both the early and late stages of exploring the research domain. For instance, it can be used to develop a preliminary hypothesis, explain relationships and create a foundation for further research (McCammon, nd). In this study, semi-structured in-depth interview allowed respondents to provide detailed insights into the feelings of student mothers during information seeking for a period of 25 to 30 minutes each. The domains of the interview were framed by two research questions.

Procedure for Data Collection/Gaining Access

Two people participated in collecting data. In all, 10 interview sessions were conducted. A total of 10 interviews were transcribed, coded, and analyzed. To uncover the challenges of student nursing mothers, respondents were asked to describe the problems they encounter in the school that affect their class activities as student nursing mothers. To uncover the affective behaviours of nursing mothers during information seeking in the class, respondents were asked to describe their feelings in the classroom when receiving lectures and what triggers such feelings while they are receiving lectures in class. Interviews took place until saturation was reached. Saturation is the point when, during qualitative data collection and analysis, there are no new data emerging (Given, 2008 in Abdullahi, 2016).

The study protocol was approved by the Institutional Review Board of the Ahmadu Bello University Zaria, Nigeria, ensuring that the rights and welfare of all study participants were protected. The interviews took place between February 07 to February 19, 2017. It was an individual in-depth interview that lasted between 25 to 30 minutes. With the consent of the respondents, each interview was recorded using cell phone devices. The interviews took place in the Faculty of Education Mosque premises of Ahmadu Bello University, Zaria – Kaduna State.

Data Analyzing, Findings and Discussion

The audiotaped interviews were transcribed verbatim. The researchers, with a research assistant from Ahmadu Bello University, Zaria analyzed the data. Analysis of the transcribed data involved identifying statements and narratives that define or represent the challenges and affective behaviours of student mothers during information seeking in the class. The

researchers manually selected words, sentences, and phrases that described respondent's challenges and feelings during information seeking process in the class. The selected narratives passages from the transcribed interviews—sample presented were then analyzed and sorted into categories based on similarities identified among the significant statements based on a methodology outlined by Krippendorff (1980), Krathwohl (1998), and Kitchin and Tate (2000): open coding, axial coding, and selective coding.

Interview Analysis

Each of the 10 interviews was transcribed, read, examined, and re-examined using an analytic inductive process described by Creswell (2013) where the "researchers work back and forth between the themes and the database until the researchers have established a comprehensive set of themes. The researchers highlighted and recorded into the coding sheet 75 narratives explaining challenges and the role of affect in information seeking behaviours of student nursing mothers in the class. To code the highlighted narratives, the researchers used an iterative analysis method with a series of steps informed by Krathwohl (1998). We followed these steps and read through the data looking for variances and similarities in the narratives.

Findings and Analysis

The major findings are explained in accordance with the research questions

Challenges of student nursing mothers during information seeking and reception behaviours

This question sought to identify the challenges of student nursing mothers during information seeking process in the classroom. Three (3) major categories emerge in response to the question, which are domestic tasks, the distraction from reading, and insufficient time.

Domestic tasks: This category discusses the challenges faced by student-mothers while combining domestic tasks with information seeking activities. Domestic tasks in this sense refer to all the responsibilities or chores required of a woman to perform around her home. The finding indicated that student mothers lack helper at home which makes them do everything "...you don't even have time for your themselves. One of the respondents reported that: reading and everything, activities of the school. You have time in cooking, taking care of the children, one problem or the other. This one will come with his own problem, this one will come with his own problems; all putting attention on them. You don't even have time to study your books or do the school activities". However, in the university, it is expected of students to be active-learners (i.e. participatory learning). For students to become an active/participatory members of the class in which they belong, it is necessary to be prepared before the class commences (MacHemer and Crawford, 2007). Such preparation requires extensive time for background readings. From the findings of this study, the extensive time needed for these background readings is insufficient for the student-mothers in the department, as domestic functions eat-deep into their time. This burden is further hyped with the absence or lack of helper which otherwise would have lessened the number of tasks they ought to take.

Distraction during reading: This category discusses things that distract the student nursing mothers during their information seeking activities which are somewhat a challenge to their overall goal of getting educated. These are lack of concentration and distraction from children as a result of the absence of university baby care centre. Some of the respondents noted that: "...when you are carrying the baby, the lecture is going on, the baby is crying and all these things. Your attention is divided, you don't know which one to face. Is it to take care of the baby, or to face the class? You are confused, so your mind is divided into two in the class".

The responses obtained from participants showed a lack of concentration or difficulty in concentration during information seeking and reception which impacts negatively on student nursing mothers academic progress. For effective information seeking and reception, student nursing mothers need to concentrate and be active participants in the classroom.

The implication of this is that student nursing mothers are often left in the balance of choosing between dropping out of school or staying to face consistent poor performances in classes and by extension in the examinations. This trend if not curbed, will hinder the progress made in the global efforts on girl-child or female education.

Time: This category discusses challenges student nursing mothers encounter during active information seeking process brought about as a result of time constraint. Many of the respondents reported having challenges meeting up with events they are supposed to partake in or undertake due to time factor like lack of enough reading time and unfavourable lectures time. Some of the respondents noted "I don't have time. When the baby is with me I don't have time to do one or two things in the class, especially when you are carrying the baby, the lecture is going on".

The above finding revealed that student nursing mothers have limited study time during information seeking and reception. However, in any university, it is expected of students to be active learners. For students to become an active member of any class, it is necessary to be prepared before the commencement of the class (MacHemer and Crawford, 2007). From the finding of this study, the extensive time needed for these backgrounds reading is insufficient for the student nursing mothers in the department, as baby disturbance and other things eat-deep into their time.

This above burden is further hyped with the absence of or lack of helper which otherwise would have lessened the number of tasks they ought to take. When this is harmonized, the resultant effect is narrowed mindset if it is to be beamed from the perspective of Frederickson's Broaden and Build Theory (1998). Narrowed mindset, as is discussed in Frederickson's Broaden and Build Theory (1998), states that negative affects create a narrowed mindset. An individual experiencing negative affects develop anxiety and uncertainty which will narrow the thoughtaction repertoires limited to two options of attack or flee (Frederickson, 2004).

Categories Sub –		
	Domestic tasks	Student mothers Lack helper
	Distraction during reading	Absent of university baby care centre, Baby disturbing, Lack of concentration, Lateness to lectures hall.
	Time	Lack of enough reading time, Unfavourable lecture time.

Table 1: Description of three emergent category and subcategories for challenges of student nursing mothers in the department of library and information science, Ahmadu Bello University, Zaria - Kaduna State, Nigeria

Affective behaviours of student mothers during information seeking and reception in the classroom

This question sought to determined affective behaviours of student nursing mothers during information seeking process in the classroom. Two (2) major categories emerge in response to the question; positive feeling and negative feeling.

Positive feelings: This category discusses positive (affect) feelings experienced by student mothers during lectures, such as feeling normal. This involves being oneself while in the classroom without any noticeable changes in personality. Some of the student-mothers reported being at their normal self while receiving lectures; this is evident in the following responses: "I feel normal if the baby is not crying, maybe he is asleep, so I feel normal". Similarly, another student-mother reported that: "Well, is okay because my mind is in one place. At least, I kept someone with my baby. So, I do receive lectures confidently".

Negative feelings: This category explains Negative feelings which refer to feelings of sadness, moodiness or boredom at a given moment. Some of the student-mothers interviewed reported that they experience negative feelings while receiving lectures. It has four subcategories; such feeling as a mood swing, annoyance, anxiety and homesickness. This is evident in some of their comments highlighted below: "Sometimes you will be out... your mind will be out of the class, you might... you will not even have the full concentration in that class... One feels... sad in that situation". The responses obtained from participants showed that affective dispositions like feeling frustrated, uneasy and uncomfortable during information seeking and reception impact negatively on student nursing mothers academic progress. However, most respondents felt frustrated and overwhelmed by their situation.

Categories Categories	Sub –
Positive feelings	Student mothers have normal feelings
Negative feelings	Student mother experience Mood swing Student mothers have feelings of Annoyance Student mothers feel Anxiety Student mothers feel Homesick

Table 2. Description of two emergent categories and subcategories for the role of affect in information seeking behaviour of student nursing mothers in the Department of Library and Information Science, Ahmadu Bello University, Zaria - Kaduna State, Nigeria.

Discussions of findings

Challenges of Student Nursing Mothers

The problem of lack of facilities featured as an important issue that prevent student nursing mothers from concentrating on their studies as they have to think about their babies that they have left somewhere. The university authorities should consider accommodation of student nursing mothers at the university or by introducing daycare centres at the university premises so as to cater for those with young babies (Najjuma and Kyarugah, 2006). From the findings of this study, the absence of university baby care centre and lack of house help are

issues that hamper effective information seeking and reception that requires not just knowing but information retention as its desired end goals in the case of classroom information seeking and reception. The implication of the above is that, lack of a safe place to keep their babies results in difficulty in concentration during information seeking and reception which leads to low performance. It also has implication on the lectures because the student mothers do not listen or pay attention to the lectures which can have a negative effect on their performance.

However, when student nursing mothers are provided with an enabling environment in which their babies can thrive, they will acquire an aura of positive affective disposition during information seeking process in the classroom.

The Affective State of Student Nursing Mothers

From the findings of this study, student nursing mothers are distracted with thoughts which are external to the classroom. This leads them to have divided attention while in the classroom. Divided attention, when viewed from the perspective of Affective load theory is contrary to the effects of positive affective dispositions because it is sure baiting to confusion. Confusion in learning leads to frustrations on the part of the learner. The overall implication of the above is that at the end of the information seeking process, the objective of knowledge acquisition will be obscured. Without mincing words, what this spells out is that at the end of a complete information seeking process established for a minimum of four (4) years, the aim of acquiring knowledge to better oneself and the larger society will not be attainable and by extension hampering the societal development efforts of integrating the female population into the core of the societal workings and when a student places more value on external events to classroom learning, they will fail to be motivated to learn. As evident in the findings of this study, student nursing mothers see themselves first as caregivers and by taking that stance very firmly as evident in their responses during the interview, they do not hesitate to forego their educational pursuit over the welfare of their subordinates. The implication of this is that successful classroom information seeking process among student nursing mothers is directly proportional to the good state of their subordinates. As such, effective learning will be impaired with any negative occurrence affecting the immediate relatives of these students. This trend if not curbed will hinder the progress made in the global efforts on girl-child or female education.

Conclusion

The affective states of student nursing mothers in the Department of Library and Information science, Ahmadu Bello University, Zaria were examined. It was discovered that student nursing mothers experience divided attention during information seeking and reception as a result of the lack of a safe place to keep their babies. Also, the affective states of student nursing mothers during information seeking and reception swing between negative and positive feelings depending on the situation.

Recommendations

Regarding the challenges of student nursing mothers, they should send their babies to daycare centres, employ the service of the domestic workers or baby sitters, or they should be able to manage their time effectively by studying their books in the night when their children are asleep. All these will help them in coping with their challenges. It is also recommended that efforts should be made by the Department of Library and Information Science, Ahmadu Bello University, Zaria administrators to provide counselling services specifically to student mothers in order to manage better the hassless brought about by the challenges they face. Availing of forum by the University, for mothers to share their experiences can also be helpful to them to identify steps that can improve their learning.

Regarding the affective behaviours of student nursing mothers during information seeking and reception, tape recording should be used during lectures so that nursing mothers that are not in the class or have babies disturbing during lectures can make use of it when they are less busy.

References

- Berg, G.V. and Mamhute, R. (2013). Socio-educational of challenges of pregnant students and students mothers. *Anthropologist* 15(3), pp. 305-311.
- Blumer, H., and TJ. Morrione. (2004). *George Herbert Mead and human conduct*. Walnut Creek: AltaMira Press.
- Cooper, D. (2007). Knowledge and use of emergency contraception among women in the Western Cape province of South Africa: a cross-sectional study. *BMC Women's Health* 7(14).
- Dervin, B. &. Nilan. (1986). Information needs and users. *Annual Review of Information Science and Technology*, 21: 3-33.
- Eskola, E.L. (1998). University students; information seeking in a changing learning environment-How are students' information needs, seeking and use affected by new Teaching methods? *InformationResearch4(2)*. Available at: http://www.shef.ac.uk/is/publication/infres/isic/eeskolahtml (accessed 10th February, 2006).
- Fourie, I. & Julien H. (2014). Ending the dance: a research agenda for affect and emotion in studies of information behaviour; In Proceedings of ISIC, the Information Behaviour Conference, Leeds, 2-5 September 2014: Part 1, (paper isic09). Retrieved from http://InformationR.net/ir/19-4/isic/isic09.html (Archived by WebCite® at http://www.webcitation.org/...)
- Gross, M. (2005). "The Impact of Low-Level Skills on Information-Seeking Behavior." Reference & User Services Quarterly 45.2 (155-62).
- Liao, Yan, Mary Finn, and Jun Lu. (2008). "Information-Seeking Behavior of International Graduate Students Vs. American Graduate Students: A User Study at Virginia Tech 2005." College & Research Libraries 68.1 (Jan. 2007): 5-25.
- Godbold, N. (2013). An information need for emotional cues: unpacking the role of emotions in sensemaking. Information Research, **18**(1) paper 561. [Available at http://InformationR.net/ir/18-1/paper561.html]
- Igbuzor, O. (2006). The Millennium Development Goals: Can Nigeria meet the goals in 2015?: A paper presented at a symposium on millennium development goals and Nigeria: issues, challenges and prospects organized by the Institute of Chartered Accountants of Nigeria (ICAN), Abuja District on 27TH July 2006 at Sheraton Hotel and Towers, Abuja.
- James, L. &Nalh, D. (1996) Achieving focus, engagement, and acceptance: three phases of Adopting to Internet use. *Electronic Journal of Virtual culture, Vol. 4*(1).
- Kuhlthua, C. C. (2005). "Towards collaboration between information seeking and information retrieval" Information Research, 10(2) paper 225 [Available at http://InformationR.net/ir/10-2/paper225.html

- N.U.S. (2008). Meet the parents: the experience of students with children in further and higher education. London: NUS Press.
- Tuladhar, H. and Marahatta, R. (2008). Awareness and practice of family Planning methods in women attending Gyne OPD at Nepal Medical College Teaching Hospital. *l* 10(3) Pp.184-191.
- Mamhute R. (2011). The educational challenges of pregnant and nursing adult learners: a Case Study of Morgenstern teachers' college: A master thesis submitted with specialization indult education at the University of South Africa.
- McCammon, B. (nd). Semi-Structured Interviews. Retrieved from http://designre Search techniques .com/ casestudies/semi-structured-interviews/
- Sun, H. & Zhang, P. (2015). The role of affect in information systems research: A critical survey and research model.
- Savolainen, R. (2015). Approaching the affective factors of information seeking: the viewpoint of the information search process model. In Proceedings of ISIC, the Information Behaviour Conference, Leeds, 2-5 September 2014: Part 2, (paper isic28). Retrieved from http://InformationR.net/ir/20-1/isic2/isic28.html (Archived by WebCite® athttp://www.webcitation.org/6WxIqkthS
- Uttor, J. (1999). The role of law libraries in a democratic culture. A paper presented at The 1999 NLA National Conference and AGM.Aug.15th-20th
- Todd, R. (2003): "Adolescents of the Information Age: Patterns of Information Seeking and Use, and Implications for Information Professionals." *School Libraries Worldwide* 9.2.27-46.
- Weiler, A (2005). "Information-Seeking Behavior in Generation Y Students: Motivation, Critical Thinking, and Learning Theory." *Journal of Academic Librarianship 31*.1 46-53.