A Reflection on Kuhlthau's Model of Information Search Process from the Perspective of Library Anxiety
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ABSTRACT
Anxiety is common feeling that may occur at any uptight situation. The situation may get worst owing to physical atmosphere, social behaviour in addition to cognitive aspect. One such phenomenon is library anxiety. Since the Melon’s grounded theory on library anxiety, the term clutched the attention of library professionals and IL instructors. Library anxiety weakens self-belief. The person begins to think the task at hand to be tougher than it is, for students resulting in failure of academic venture. One colossal model that considered hideous sways of library anxiety through information process is that of Kuhlthau. The article pitches the light on the diverse stepladder of Kuhlthau’s information search process in view of library anxiety. The upshot of the discussion has been put in the form of areas which library professionals need to concentrate on to eliminate this negative feeling and improve the critical thinking of users so as to increase library usage in term of satisfaction.

KeyTerms: Anxiety, Library Anxiety, Kuhlthau’s Model of Information Search Process, Physical Environment of Library, IL Instruction

INTRODUCTION
Anxiety is mental state of a human being in a predicament. The feeling has been there since the time human came into existence. But it became more obvious when he became socially more active. It is pervasive phenomena showing its impact in almost all the fields where people are concerned. However, the concept of anxiety has developed in the twentieth century among both theologians and psychologists as a major topic for discussion and analysis. Much of the writing in the first half of this century was directed towards anxiety as a neurotic condition in itself, and psychotherapy had as its goal, at least ideally, the removal of anxiety as a criterion for establishing healthy equilibrium in the personality. At the same time, anxiety was seen as a natural part of the human predicament following the philosophical discussion. It was Constance A. Mellon who described student fear of the library as library anxiety in 1986. In her study she found that 75 to 85% of students in each class described their initial response to the library in terms of fear or anxiety. Their responses included the words ‘scary’, ‘overpowering’, ‘lost’, ‘helpless’, ‘confused’ and ‘fear of unknown’. Library anxiety is an unpleasant feeling or emotional state with physiological and behavioural concomitants, which comes to the fore in library settings. Typically, library-anxious students experience negative emotions, including ruminations, tension fear, and mental disorganization which prevent them from using the library effectively.

Kuhlthau’s Model
Kuhlthau’s has developed a model of library search process. In order to investigate the search process that successful students’ adopt, twenty six academically capable, college-bound high school seniors were selected. They were assigned two research papers. They were given freedom to select the papers of their choice. The students’ were asked to keep journals to describe their feeling, thought and action during the search process. During the second assignment, they were given search logs to record the sources they used, the procedure used for finding sources and their utility. They were also asked to write a paragraph during and after completion of their assignment. The model of library anxiety is inherent in it. After the analysis, Kuhlthau proposed the model consisting of six stages in information search process as task initiation, topic selection, prefocus exploration, focus formulation, information collection and search closure. He has narrated searcher’s thought, feelings, mental state and action during all these steps. The
feeling of anxiety and confusion were common at the initial stages, especially up to prefocus exploration. From the fourth stage of focus formulation students became more optimistic and gained confidence since proper direction was achieved. Kuhlthau regarded this to be a turning point in a search. This stage was strengthened by implying effective search strategy which took place in stage 5 e.g. information collection. The final stage ended with good bye to information search with a sense of relief or vice versa.

- **Discussion on the Model**

- **Task Initiation**

  At the initiation of task students are uncertain since they have no topic to work on. Often contemplation takes place on the possible topic to start with. This is the stage when students are informed about the assignment. The students talk with other students and go through library collection, however without much surety. It is well said ‘a well begun is half done’. It is the critical thinking of a person that keeps one on the right track leading to the final step when a searcher can reap the benefits on the basis of what he has done earlier. Critical thinking is systematic thinking and scientific thinking. It can be at its best when the person has the ability to explore the required domain. Such a person can initiate the task with maximum possibilities of being successful.

- **Topic Selection**

  In this stage, students’ select the topic. It might be too broad initially. Some can find it early while others take a little time. The latter think they are slower than the others. The feeling of confusion, apprehension and anxiety becomes pertinent over here until they select specific topic and contemplate over its possible outcome. At this stage, they have often discussion with their subject teachers, colleague and reference librarians. Library search becomes more narrowed but has depth in the concerned topic.

- **Prefocus Exploration**

  In this stage, the students further his search and come more closure to the topic to work on. Kuhlthau said, “as they found information on their topics they frequently become confused by the consistency and incompatibility they encountered, which is the reaction Kelly’s theory of personal constructs would anticipate”. The feeling of confusion, doubt, and uncertainty is at the height of this stage which converts into anxiety. First three stages exhibit a good deal of apprehension, anxiety and fear. They feel they are nearer to the topic due to the relevant reading, finding somewhat appropriate information, taking down notes, finding ways to go in-depth in subject. An attempt is often made to remove inconsistencies and incompatibility they encountered with.

- **Focus Formulation**

  This is the focus point of the search process wherein searchers become familiar with maximum subject component in the best possible way. This fact helps them to increase the self-efficacy considering the project on which they are working. They feel that they will be able to complete the project successfully. One is able to see the possible outcome of the endeavour. Confidence level is high owing to excessive optimism. Reading is extended towards pervasiveness. The subject matter collected/achieved at this stage helps to get the focus on the study and one feels inspired to further learn the subject. The sub-facet discovered through additional reading spurs to dive deeply in getting more information on them. This is equally worst situation if one fails to achieve focus. As a result he may give up the task in hand. Due to lower self-efficacy, one begins to think the task to be tougher than it is. It becomes impossible to have focus on any of the elements of the study as they have nothing to centre on. The feeling of defeated and lost is dominated by pessimism and high anxiety level.

- **Information Collection**

  The focus formulation is followed by pervasive reading on the subject as a result of developed interest in subject. Strong self-belief instigates to become successful in academic venture. The students begin to collect more information and figure out additional facet on the subject. They are also sure about their direction and feel comfortable what to do, how to do and how to finish. This is the stage when a student may finish the assignment even if he is a little bit interested in the topic under the study and vice versa. The searchers go on searching more and more material. The discussion on the subject becomes clearer with the teachers and librarians. The fullest utilization of library resources could be possible. Searching the information sources makes him no longer puzzled. He may have a very healthy discussion with reference librarian by which the latter may suggest pertinent information sources to the former. Here the students access the information ethically and legally.

- **Search Closure**

  Search Closure is the starting point of writing an assignment, research paper or project report. The stage is marked with ample of information which may be redundant. A student may feel that he has sufficient degree of information. By using this information, searchers might be in need of additional information. Sometimes the work to be accomplished needs additional input but time limit makes the task difficult for them. Those who feel very much inspired may additionally continue the work after finishing the task also. It offers them an additional avenue to explore more facets on the same subject. However, those who fed up with carrying all the steps may stop here permanently.

- **Significance of Kuhlthau’s Model**

  Through information search process model, Kuhlthau has become successful in explaining that information search is process consisting of scientific and systematic steps. It has well taken into account cognitive aspect of the searcher and its effect on information seeking behaviour. It is Kuhlthau’s contribution that emotion aspect has to be given thriving attention in information search and information literacy research. It is in consonant with social cognitive theory of Bandura which predicts that human functioning is the outcome of personal (cognitive, affective and biological events), behavioural and environmental influences. They affect peoples’ aspiration, self-efficacy belief, personal standards, emotional states and other self-regulatory influence. Kuhlthau’s grounded theory of the search process of searching emerged using the theoretical base of Kelly’s phases of construction, Taylor’s levels of information need and Belkin’s anomalous state of knowledge. Thus theories from psychology and information science served as a basis for this grounded theory. According to Kuhlthau (1988) himself the model has been successful in realizing the know-how of students in the library search process and ascertaining that there are sequence of stages to search an information. With this model to become successful, we need
to concentrate on following areas so that the students may feel less stressful and can successfully complete their information search with better comfort level.

**Fig. 1: Outward Factors Affecting During Information Search Process**

- **Physical Environment of the Library**
  Perceived threat in library’s physical environment is a major source of generating library anxiety. The large size of the library and lack of knowledge where things are kept make the students incapable to make use of the library. They do not understand how to begin and what to do which results in feeling of being lost. Reception counter, stack area, service areas, reading rooms, circulation section, organisation of materials all affect the positive learning abilities of the users. Even noise, light, temperature, design, structure, auditory, visual, tactile, kinaesthetic affect the learning modalities that can be regarded as antecedents of library anxiety.

  The goodness of any library is to be measured from perception of its patrons. The physical area of the library that consists of complex information population cannot be overlooked in this connection. Signs and graphics play a very pivotal role in guiding the users to the desired location. It eliminates library anxiety and in turn the feeling of being lost. It serves as effective pathfinder. One can design digital signage system which provides the library and the entire campus with a dynamic, centralised mechanism for communication. User-friendly point-of-use guides, handouts, online tutorials, podcasts, blogs, video posted on sites like you tube or on the library’s web site, and self-paced workbooks or exercises can also help people feel more comfortable about using a library and its resources.

  Space and layout is as important as effective signage in increasing the success of students’ information search process. Often the user faces difficulty in locating particular section, a desired person who might help, or any other document. The arrangement of furniture equally affects their behaviour. A person desiring in-depth study may not prefer sitting face to face or having eye contact with other person. While in newspaper reading area one may not have problem like this, Librarian needs to apply personal space psychology arranging library furniture user friendly. The interior layout should be in accordance with the needs of the clientele and information population. The floor plan should include details of physical arrangement of the library along with the names of persons concerning particular service. The students generally prefer spaces that are comfortable, spaces that facilitate interpersonal communication, spaces that can be controlled, and area that promote the integration of basic human needs and desires, such as eating, drinking, and enjoyment, with learning activities.

- **Joint participation of Librarian and Teaching Staff**
  Keith Stranger is right to point out that of the five ACRL information literacy standard, academic librarians are mostly concerned with the second as they are the mediator for the students to access the information effectively and efficiently and they generally include where to search, how to search and how to locate material. This does not mean that librarians have nothing to do with other four standards. In fact information professionals are playing a very key role to accomplish the five standards of ACRL. But the success of other standards depends upon the subject knowledge to be imparted by subject experts. It means satisfying all five standards of ACRL is a joint venture of librarian and teaching staff and that is desirably expected. This is because librarian may not be subject expert, though this opinion cannot be hold for specialised librarianship which is not rooted in India. When information specialist is unknown to any subject domain, subject specialists are the best to assist while the former has the ability to adapt to such circumstances to hone students’ skill in getting relevant document against their need. Kuhlthau found that at several point students were expected to have contact with their leader to discuss their topic and further themselves in the next stage of information literacy. It is thorough their teaching, guidance and feedback, the students improve their ability to read, grasp, critically think and communicate their subject knowledge. Hence the librarians’ role is befitting in improving critical thinking in respect of currency, relevance, authority, accuracy and purpose. It’s wrong to think information...
literacy to be only the librarians’ concern. The teaching community should join it to make it collaborative endeavour  

- Designing IL program for target population
- Deciding aims and objectives of the program
- Framing the syllabus and subject content
- The topic to be covered by both library professionals and teaching faculty
- Reciprocal co-operation during the implementation of program
- Evaluation and re-designing of the program

It has also been seen that students do not think librarians as equals of teaching faculty’. Hence they think it best not to approach them to solve their query. To some extent teaching faculty also think on this line. Nevertheless, implementing information literacy if becomes joint venture, such notions would not hold ground.

**Internal Staff of the Library: Their Attitude and Working**

Ranganathan has rightly called library as trinity of book, staff and reader. These three words have got larger connotation in today’s century. A ‘book’ comprises all information population while the word ‘reader’ is replaced with users who are expected to have quite well aware regarding their information need, have the knowledge about information sources, find out relevant information out of multitude information and getting maximum satisfaction from utilizing the information within social, ethical, legal jurisdiction. The staffs are supposed to be dynamic, amiable, devoted to their work in addition to just helping patron during their library use. They can make or mar the success of library. Ignorance, arrogance, sometimes unnecessary intimidation, un-cooperative behaviour of the staff, feeling of condescendingly treated may create hindrance in the mind of users increasing their anxiety. Gossiping among staff, using mobile phones, unwillingness to assist the users and lack of work culture make the user feel that they would not get all that they need from library people. They refrain from approaching for assistance and regard library people as unnecessary stuff. Following precautions can be taken to have better co-ordination between library staff and users.

- Librarian being the head should make realise the aims and objective of the library. A single meeting would not serve the purpose. He should forcefully repeat it as and when occasion demands.
- Training of the staff in achieving certain skills including soft skills should be arranged from time to time.
- Their dedication, devotion and involvement after being asked any query must be increased. Their behaviour must be pleasant, welcoming and friendly.
- It’s the liability of librarian to make out staff has achieved de rigueur skills with respect to work assigned to him. This is going to affect the service area.
- They need to be familiar with all the library resources. If the user found them to be incompetent, the users would never approach them.
- Loud talking, gossiping among staff, arrogant behaviour, loafing or idleness towards duties must be dealt seriously by the librarian.
- The level of services including selective dissemination information, document delivery service, and plagiarism check and e-resource access along with traditional services must be improved so as to make users feel how important library staff could be.

- Positive work culture should be developed and maintained.

**Information Literacy Instruction**

Users cannot have the knowledge about the available resources in library on his subject. Nor they can have sufficient skill to access the needed information. Even if one keeps awareness about the information population and way to access it, there is possibility to miss something which may have served the purpose. It is through IL instruction that librarians form a connection with user informing them what libraries have and how they can get it. It is the extension of traditional bibliographic instruction. There are number of models of IL delineating the scope. There are agreements on most of the aspects exhibiting the similarity. Eisenberg shows similarity by comparing the four models namely Carol Kuhlthau’s model of information search, the big6 approach, AASL/AECT IL standards and ACRL IL competency standard for higher education. All models are similar in as the focus is on user’s becoming aptly aware of his need, ability to articulate it, finding answers through appropriate information sources and accomplishing specific purpose within the jurisdiction of ethical and legal standards. All the models are nothing but a set of skills in the absence of which library anxiety is increased harmfully affecting the information search process. One strong way to eliminate library anxiety is to enhance information retrieval skills and competencies through IL instruction.

There might be controversy regarding the content of IL program. Priorities may differ organisation to organisation. Minimum following subjects must be covered in IL program.

- Library rules, regulation, procedures
- Study of information literacy models
- Information search process
- Information population available in the library with special emphasis on online database and e-journals and services provided
- Use of OPAC/Web OPAC and Internet
- Basic classification
- Using signage and symbols, social networking sites
- Search technique for accessing e-resources
- Citation study, Bibliographic management of citations
- Plagiarism and ethical issues

The traditional lecture demonstration method which almost resembles to one-shot group session is still largely been used for imparting IL instructions. However it is to be supplemented with other teaching methods as active learning, computer assisted instruction, learner-centred instruction and self-directed or independent leaning. One thing to be kept in mind is that the ultimate aim of library instruction is to enable the user to build their existing knowledge, skills and affective levels, instead of just focussing on generic skill which is largely the focus of many implementing professionals, it needs to switch over to make oneself competent enough to pass through all the stages of information process successfully.

**Conclusion**

With this information search process model, Kuhlthau has suggested new paradigm for information literacy instruction and designing of effective information retrieval system. The model can be nifty for teachers, learners, instructors provided that each in the chain understands respective character to
be played to take individual after everything else. Many students perceiving education do not possess sufficient knowledge, perceiving skill, confidence, and self-belief to use the library effectively. It is found that 30 minutes presentation of the Kuhlthau’s model increased the awareness of the students’ about affective states associated with research and reduced anxiety by a significant amount. The benefit of knowing likely outcome from the Kuhlthau’s replica would be useful to bring necessary changes for the students to make search most agreeable in terms of result. Mentors can design the triumphant plan to make the students act in view of that what is expected from them at each stage of the information search process.

Implementing information literacy with Kuhlthau’s model would create a user capable for lifelong learning in preference to just acquiring certain skill, abilities and competence. Since lifelong learning is the goal of IL, information specialists ideally are at the better position to achieve it against their limited relevance to satisfy academic assignments.

REFERENCES