

Beyond the search process: Exploring the affective stages in developing a research proposal

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Abstract

This research aims to investigate the affective stages developed in the Information Search Process (ISP) model developed by Carol Kuhlthau. The purpose of this study was to understand how feelings relate to the six stages of conducting a research proposal. Feelings experienced by information seekers include optimism, clarity, confidence and satisfaction or uncertainty, confusion, frustration, and disappointment. This work specifies how feelings affect the various phases of the research process. A qualitative methodology was used for this study. Twenty Information Studies (IS) graduate students from the Social Science department at Kuwait University, who had taken the Research Methods course, were selected for the study using purposive sampling. Face-to-face interviews were conducted in order to collect feelings, perceptions, and views of the participants. Data collected were analysed using the narrative approach of the interviews. The results showed that the feelings of students changed during the different stages of Kuhlthau's ISP model. The study indicates significant implications for research on information behaviour. It may help students and teachers to be aware of the affective

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role at different stages of their research proposal writing. It also assesses the possible contribution of intermediaries in helping students during the research writing process.

Introduction

In the current information environment, students have become significant consumers of information. Many theoretical studies have been developed in the field of information-seeking behaviour about this group of consumers. The field of information-seeking behaviour is increasingly focusing on the affective role in the information seekers' experiences. Information researchers have recognised the importance of the affective factors since the 1980s. Wilson (1981) acknowledged the concept of affective need as one of the drivers of information seeking. Kuhlthau (1991) developed theories explaining users' perspectives on information seeking. Her Information Seeking Process (ISP) model describes the feelings, thoughts, and actions of user experiences at each phase of the construction process. She proposed that information seeking is a user's constructive effort to acquire appropriate meaning from information for the purpose of clarity and development of knowledge on a particular issue or topic.

Emotions play a vital role for the individual in the determination of information-seeking behaviour. Kuhlthau (1991) identified specific feelings associated with the process of searching for information. The model of the information search process outlined users' experience in the process of information seeking as a series of feelings, thoughts, and actions in six stages: (1) the stage of initiation, when a person was aware of a lack of knowledge, and feelings of uncertainty occur; (2) the selection stage, when the general topic is identified, and the person is optimistic and ready to begin the search; (3) the exploration stage, as people become confused and frustrated with searching; (4) the formulation stage, when a focused view is formed and

confidence occurs; (5) the collection stage, where gathering of information gives a feeling of clarity; and (6) the last stage, presentation, when the search is complete, and satisfaction or disappointment is felt when presenting the results of the search. Kuhlthau's model led her to conclude that anxiety is predictable at some stages of research. The affective role has a high impact on students' information search process.

Purpose

The purpose of this study was to explore the feelings amongst graduate Information Studies (IS) students located in Kuwait University, which is the only public university in Kuwait. The IS students were enrolled in the Research Methods course in which they were required to develop and write a research proposal. This study focused on the feelings derived from Kuhlthau's ISP model. The positive feelings are optimism, clarity, confidence, and satisfaction. The negative feelings are uncertainty, confusion, and disappointment. This paper aims to report both positive and negative feelings. This research tests the primary hypothesis that the six stages of Kuhlthau's ISP model are compatible with the stages students experienced in the development of a research proposal as a requirement for the core course of Research Methods as part of their Master's in Information Studies (MIS).

Hypotheses

The main hypothesis of the study is:
Students used six affective stages of Kuhlthau's model in the process of developing a proposal when they were enrolled in the course of Research Methods.
The main hypothesis was further examined using H1 to H6:

H1: The first stage of initiation was witnessed as is stated in Kuhlthau's model when the students developed a research proposal in the Research Methods course;

H2: The second stage of selection was validated as stated in Kuhlthau's model when the students developed a research proposal in the Research Methods course;

H3: The third stage of exploration was validated as stated in Kuhlthau's model when the students developed a research proposal in the Research Methods course;

H4: The fourth stage of formulation was validated as stated in Kuhlthau's model when the students developed a research proposal in the Research Methods course;

H5: The fifth stage of collection was validated as stated in Kuhlthau's model when the students developed a research proposal in the Research Methods course;

H6: The sixth stage of presentation was validated as is stated in Kuhlthau's model when the students developed a research proposal in the Research Methods course.

Theoretical Framework and Literature Review

Information-seeking behaviour has been treated as a major field of study in information science, and the discipline has been developed during the second half of the 20th century.

Information behavior is defined as the activities carried out by a person for identifying the needs of information, and searching, using and evaluating information (Savolainen, 2007). In the conceptual paper of Kundu (2017), Wilson described information-seeking behaviour as a targeted seeking information of a need in order to satisfy some goal.

Emotions play a crucial role in the determination of the information-seeking behaviour of an individual. Savolainen (2015, p. 3) defined emotions as “a relatively brief episode of coordinated brain, autonomic and behavioural changes that facilitate a response to an external or

internal event of significance for the organism.” When the emotions are represented, these become feelings. Feelings can express part of the emotions. The emotions change through the research process from negative to positive, although the first two stages may also involve optimism. In addition, the model of the researcher changes during the research process.

Savolainen (2014) noted that positive and negative feelings served as motivators in information searching. The researcher explained that positive feelings like joy and thrill, or negative feelings such as anxiety and fear could limit or expand the information-seeking activities. Anxiety and uncertainty characterise the initial phases of the process of searching for information. The affective gestures of uncertainty, frustration, and confusion lead to vague and imprecise thoughts regarding a problem or topic.

The models of information-seeking behaviour are diverse. They are considered as statements that express information-seeking activity, the elements and importance of that activity, or the relationships among levels of information-seeking behaviours. The first model of information-seeking behaviour was developed by James Krikelas in 1983. This model suggested that there are steps of information-seeking behaviour as follows: perceive a need, search, find, and use the information, which results in satisfaction or dissatisfaction. Another model is Kuhlthau’s ISP model which identified six stages of her analysis of information-seeking behaviour as described in the Introduction (Kuhlthau, 1991).

Kundu (2017) identified that each model is different, but also similar in their overall treatment of information-seeking behaviour. Common factors in all models are that the use of information is a process involving multiple stages. The paper will focus on the ISP model designed by Kuhlthau.

Development of Kuhlthau's Information Search Process Model

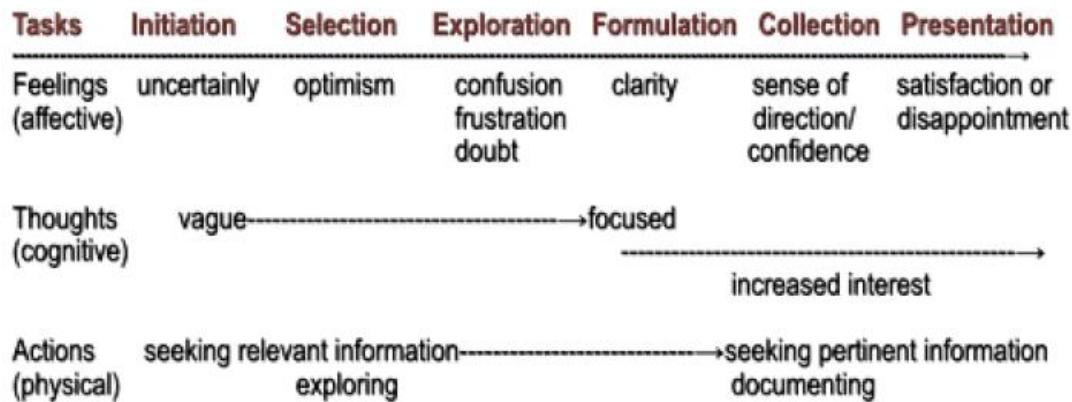
Kuhlthau's ISP model was developed in the 1980s and then improved in the 1990s. This model was used as a framework to understand people's information search experience.

Kuhlthau's first study was on secondary school students. The study identified a series of stages of thoughts, feelings, and actions in the process of a complicated research assignment. It showed that students were involved in the complex process of construction rather than merely collecting and reporting on found information. From 1988, these findings were verified and refined in larger, different studies across information environments, applying both quantitative and in-depth qualitative analyses. This user-centred research included the emotional experience of the information being searched, in addition to the cognitive and physical dimensions. Kuhlthau found that in more complex information seeking tasks, the feelings of uncertainty usually increased in the process of searching for information. This rise in uncertainty was frequently unexpected and confused in some searchers to the point of obstructing the task. From these results, Kuhlthau developed the principle of uncertainty (Kuhlthau, Heinström, & Todd, 2008).

Kuhlthau's studies show that the ISP occurs in six stages: initiation, selection, exploration, formulation, collection, and presentation as shown in Figure 1. Kuhlthau explained the first stage, initiation, as the stage when a person realises the information needed to finish the task. This phase of the search for information is filled with feelings of fear and uncertainty. The next stage is the selection, when the searcher has chosen an idea or a topic. At this point, the person is now less uncertain as the seeker feels optimistic and ready to start the information search process. The third stage, the exploration process, is when information seekers become confused when they encounter inconsistencies. At this stage, information seekers may become

frustrated and doubtful, and they may abandon their search. Kuhlthau considers this stage as the most challenging stage. The fourth stage, named formulation, is regarded as a critical point, stating that a focused perspective is formed, uncertainty gradually decreases, and clarity is achieved. Information seekers start to evaluate the collected information. At this point, a well-developed view starts to form, and there is less confusion and uncertainty than in the previous stages.

Figure 1: Kuhlthau’s Information Search Process Model.



The formulation is considered to be the most crucial stage of the process. The information seeker here will formulate a personal construction of the subject from the general information collected in the exploration phase. The fifth stage is the collection stage where information seekers collect the information which is relevant to the topic. At this point the information seeker performs the task with confidence. Consequently, the information seeker's uncertainty starts to decrease and they become interested and involved in the search process deeply. At this point, confidence grows in the search process. In the sixth stage, presentation, the individual has completed the information search and information seekers prepare to present or use their findings

that were found through the process. They feel comfortable and satisfied if the search process is successful or disappointed if they feel that the search was a failure. Kuhlthau states that these stages of the ISP encompass three aspects which are the affective cognitive for the physical aspects mentioned in Kundu (2017).

Kuhlthau's Information Search Process Applications

The model of the ISP has been applied in many different fields. Kuhlthau's ISP model is considered to be one of the most mentioned models in both the academic and work environment. The model has been applied in many studies. These are discussed below.

Several studies have supported the idea of looking for information as a process of knowledge development with different cognitive and affective stages. Lawal, Stilwell, Kuhn and Underwood (2014) examined Kuhlthau's search processes in their information literacy instruction in Nigeria. It showed how the model influenced information literacy research and curriculum development in the workplace. Their findings confirmed that emotions are directly linked to learning; each task has complexity that needs to be managed, considering the information needed in the workplace.

Kuhlthau, Heinström and Todd (2008) showed that the model has also been useful for adult information-seeking in work and everyday life. It is manifest in the stages of feelings, construction, problem formulation and solving, for example, when women needed health information. In everyday life, information seekers also experience uncertainty in their search process, particularly when they want information and need the help of brokers. The model is considered as a diagnostic tool where interference becomes more user-centred. Gender differences were studied as the students proceeded through the process of seeking information.

Burdick (1996) found that males tended to collect and complete while females preferred to investigate and formulate. Females were more likely to be optimistic in the early phase of their projects but were uncertain at the end. Conversely, males tended to be more confident when they had finished their projects.

Using Kuhlthau's model, Mohammad, Amini, Ali and Ahmadi (2018) explored the uncertainty in the information-seeking behaviour amongst the students at Kerman University of Medical Sciences. The students had similar emotions as reported in the model. The age and gender affected certain stages and the performance of students. Factors such as age, gender, level of education and previous experience were significantly related to uncertainty.

Krubu, Zinn and Hart (2017) studied the information-seeking behaviour of undergraduate students and noted the significance of ICT on their performance. It was found that students felt stressed at certain stages, as they lacked the skills for information processing. However, later in the process, they felt relief and confidence, but also overwhelmed when they experienced information overload. This study confirmed the cognitive and affective stages of the model.

Wu, Dang, He and Bi (2016) studied the information behaviour of Chinese undergraduate students during their thesis project. It was found that the ISP model provided reasonable guidelines for identifying basic stages and multiple aspects of students' information behaviour. It showed that students' feelings and thoughts changed as they proceeded through different stages of the process. It was found that the ISP model was relevant and beneficial as students experienced each stage during the thesis-writing process. The students appreciated the existence and availability of databases in the library and viewed these sources as helpful information sources whilst writing their thesis.

Krubu et al. (2017) studied the information behaviour of undergraduate students and observed that students behaved differently from faculty to faculty. Levels of uncertainty, optimism, and confusion were common in the initiation, selection, and exploration phases of the ISP model. They did not report a lack of confidence, therefore, Kuhlthau's ISP model was not found to be fully applicable in this instance as indigenous conditions may have had an effect.

It is widely recognised that the emotions of searchers are similar in the digital environment. Ma, Cao and Gu (2016) proposed an approach to evaluate the Chinese National Knowledge Infrastructure, particularly in the digital environment. It was found that user interactions were consistent with task stages in the ISP model.

The library plays a vital role in the process of information seeking research. Due to resource sharing amongst libraries for both e-resources and e-services, the expectations and behaviour of library users are changing. The librarians find ways to guide students, facilitating a better understanding of the emotions of library users during the ISP. This guidance is vital for those novice students who suffer from search anxiety and confusion (Clark, 2014).

Dyckman (2005) examined the feelings of graduate students when they were working on their dissertations. The study claimed that Kuhlthau's model could be reduced to three stages only. The topic or pre-focus phase, which includes the first and the second stage. The focus phase which includes the third and fourth stages, followed by the development or post-focus phase. The respondents in this study experienced negative feelings more than positive ones. Frustration, anxiety, stress, and discouragement were common among respondents. The positive feelings were mainly excitement and satisfaction.

Fitzgerald (2018) explored the emotions of faculty members whilst doing research. It was found that scholars experienced positive feelings like confidence, ambition, and interest in their work. These feelings also affected the research productivity of scholars. The author argued that although scholars are more familiar with information seeking than students, they also feel uncertainty and worry about the research process. Scholars experienced a sense of pressure because they wanted to ensure publication of their work. This pressure may influence their information-seeking behaviour. He showed that choosing a topic which the researcher found interesting, brought better results than being forced to write about a specific topic. However, a feeling of anxiety may return during the exploration stage if scholars find information that is not consistent with their previous knowledge. They might feel bored if they encounter the same information in different research papers. Scholars usually evaluate and criticise the information they find. This helped them to feel more satisfied and secure. Scholars feel confident when the topic is clear and focused. When the work is ready for presentation, scholars feel either satisfied or disappointed. If the research is accepted to be published, this encourages faculty members to write additional papers. Thus, the scholar is curious and excited to do research. Positive support from family members, colleagues, and professors helps students to overcome the difficulties of the research process.

Lawal et al. (2014) studied the information-seeking behaviour of lawyers claiming that uncertainty existed when people tried to make any decision. The uncertainty usually came with mixed feelings of confusion, fear, stress, and irritation. Haley and Clough (2017) investigated the affective experiences of native and international students at the University of Sheffield. The study claimed that Kuhlthau's theory could be applied to both international and native students.

It expressed that each stage of the research process had a unique feeling, and apprehension was felt until the focus of the topic was determined. When the research process was completed, a feeling of satisfaction prevailed. The study highlighted the importance of emotions in information-seeking behaviour and the feelings the researcher experienced would affect their information-seeking behaviour.

Kobe (2006) explored if Kuhlthau's model was useful when searching for a job. The study claimed that when people search for jobs, they experience the same feelings as shown in academic research. It showed that in the second stage, the participants were excited to have a new job opportunity. In the third stage, job seekers were both excited and nervous as they had to make a professional decision. The exploration stage did not take place until the collection stage. In the collection stage job seekers had doubts. They thought that a new job might not give them the needed salary. In the last stage, job seekers decided to choose one job and felt relief and satisfaction.

Krubu et al. (2017) examined the feelings of undergraduate students in a university in Nigeria whilst completing a group assignment. Surprisingly, they did not experience confusion or uncertainty in the initiation, selection, and exploration phases. The nature of the assignment changed the usual feelings which people have based on Kuhlthau's ISP model. The assignment did not require critical thinking which helped the students not to feel confused. It showed that the type and nature of the assignment might have affected the experienced feelings.

Orlu, Ilo and Tochukwu (2017) used the case study of Manchester Metropolitan University students to understand their emotions while doing research. Students followed Kuhlthau's model. They all felt uncertain about their topic in the beginning. Kim (2015a) found

that the students found difficulties in searching for vocabulary and selecting accurate information. This was mainly in the final stages of the research process. Lacking knowledge on a particular topic made it difficult to search for information on that topic. However, the students did not find a problem in evaluating information as their teacher helped them. When the teacher selected the topic, students did not find difficulties in the initial stages. The study highlighted the importance of having information literacy.

Based on various studies using Kuhlthau's model, the purpose of this paper is to explore the affective stages that students faced during their development of a research proposal.

Methodology

This study used a qualitative approach of open-ended interviews for data collection. The researchers conducted interviews with a selected number of participants who indicated their willingness to be interviewed. This method aimed to provide an in-depth understanding of the feelings these students had when they were developing a research proposal as a requirement of Course 1331509 entitled Research Methods in Information Studies. The interview was used as it is a useful instrument for clarifying issues and generating rich and embedded data.

The participants of the study took a research methods course during 2017-19 as a required component in the coursework of the MIST. The targeted students were from both genders and the total number of interviewed students was 20. This constituted purposive sampling. An interview took around 20-30 minutes, and was conducted within a two-week period.

A face-to-face interview was developed for this study to collect data about student feelings in each of their research writing stages. The interview questions were direct about their changing feelings in each stage of proposal development. The interview contained open-ended

questions. Appropriate supplementary probes encouraged participants to provide detailed input about their emotions at different stages of the proposal development. A narrative approach was used to analyse the given data.

The data collected were analysed qualitatively in the form of concept coding. The concepts were organised into appropriate constructs and categories around six developmental stages. These narratives have been meaningfully organised around the six stages of the model. This exercise has facilitated the resolution of six hypotheses.

Findings

This study aimed to explore the feelings that students experienced during different stages of developing a research proposal as part of their course requirement of 1330509 in Semester 2, 2018-19. The six stages that the students go through in their research proposal were derived from Kuhlthau's ISP model.

Initial Stage: Initiating the Research Proposal

The Research Method course required the student to develop a research proposal. The initial stage was when the students knew that they had to submit a research proposal, but they lacked an understanding of what might be involved in the process. When asked if they conducted research before taking this course, 16 of the 20 respondents mentioned that they had done some research earlier, but it was not as systematic and comprehensive as was required in this course. The research they had done was basic and rudimentary. As Kuhlthau explained, the feelings of uncertainty prevail during this phase. The participants showed mixed feelings of both uncertainty and excitement.

Uncertainty/Confusion

Thirteen out of the 20 participants had some idea about what the course was about from alumni who had gone through a similar experience in the preceding sessions, but they did not know the details of the steps of the research proposal requirements. Twelve out of the 20 participants were confused when they figured out that they had to develop a research proposal and not engage in actual research. All participants began by choosing a topic they were interested in. At this point, 13 out of the 20 participants showed some kind of confusion and anxiety, knowing little at that point, and feeling as if they did not have the ability to complete the task. Taking the first step appeared to be a difficult task for these participants. Participants were somehow uncertain and disillusioned in the beginning; they did not know how to start and what to pick.

All participants wanted to select a topic they liked, or that was related to their academic major in undergraduate studies or their professional affiliation. Eleven of them mentioned that they had to change the topic multiple times, as the instructor noted deficiencies in their proposal, and eight of them noted acute frustration as their suggested topics underwent frequent changes.

Excitement

Seventeen of the 20 participants were excited about taking this course as they wanted to learn how to develop a research proposal. The remaining three were not excited to take this course because they had learned that it was going to be a hard course, so they were scared of it even before starting. Nevertheless, they had to take it because it is a requirement of the course. Six of the participants showed mixed feelings at this stage; they were excited but at the same time nervous and afraid of taking this course for different reasons, for example, one had taken

the course earlier compared to their classmates. Others were afraid as they perceived it to be a hard course, but at the same time felt excited to learn something new. Some participants showed mixed feelings at this stage.

Selection Stage: Selecting the Research Proposal Topic

The second stage, according to Kuhlthau's ISP, is the selection stage. At this stage, students are expected to consider potential topics for choosing an idea. At this point, the person is now less uncertain and feels a sense of optimism and readiness to start the information search process. This is the stage where all the participants select one topic after getting an instructor's approval. At this point, students may not get approval to go ahead with their chosen proposal.

It was found that 11 of the 20 participants changed their topics once; four of them admitted that they changed it several times until it got accepted. They were confused whilst going back and forth from the initial to the selection phase. They thought they had found a topic, but the instructor showed reservations and demanded changes. The other nine participants did not change their topics, while four of them picked a topic related to one of their other courses.

Optimism

Once all the participants chose topics and got them approved, all students felt as if they liked their topics, and they had a good understanding of the conceptual and operational aspects. Some found certain areas of resemblance with their undergraduate studies, a point of solace and delight. They felt joyous and motivated to continue working on a proposal and started searching for relevant documents and literature. Only one of the participants said they did not like their topic, but since the instructor approved it they continued working on it.

Exploration Stage: Pre-focus on the Research Proposal

This stage included feelings of confusion, frustration, and doubt. Kuhlthau considered this stage as the most challenging stage. This pre-focus stage is a challenging stage for most participants. This required a focus on a more specific topic or problem. In this stage, participants tend to dig and search for the information needed.

It was found that after the students' topics were approved, they started reading about the topic to be more specific and focused. They wished to understand what exactly they wanted to study about their topic. This stage can be linked to searching for aspects of the study, related works, and pertinent methods for collecting data to have a clear focus on a research proposal.

Anxiety and Frustration

It was found that 19 of the 20 participants faced many challenges during this stage, as all of them mentioned that they searched Google Scholar and Kuwait University databases to locate resources. However, the challenging part was to specify which sources to pick, which are approved by the instructor. Seventeen of the 20 participants mentioned that they could not locate what they wanted in their first attempt. "Sometimes searching for the first time would lead me to new things that made me change a lot of things," exclaimed a participant. Eighteen of the 20 participants found it difficult to identify variables for their research proposal. Since they did not understand it very well, they had to try several variables until it got accepted even though some of them were asking colleagues and their instructor. This made them feel lost. Nineteen of the 20 participants expressed negative feelings such as frustration, anger, and anxiety as they found too many sources without feeling confident about their relevance and usefulness. The participants were unclear about finding credible resources that might help in providing a clear focus. One

participant asserted, “lack of reliable, up-to-date and direct resources was a challenge along with lack of communication between student/professor along with my lack of knowledge about the correct scientific means and methods.”

On the other hand, only one participant did not face any difficulty at this stage, explaining that he sought help from other instructors in the department and his instructor, which made him relaxed and relieved. He took the advice from instructors on how to narrow the search down.

Formulation Stage: Focused Research Proposal

This stage indicates that information seekers pursue identifying and selecting sources that satisfy information needs with clarity and commitment. This stage has feelings of optimism in information seekers’ confidence in completing the task. The information seeker starts to evaluate gathered information and literature. The information seeker then formulates a personalised identity and alignment for the topic from the general information gathered in the exploration phase (Kundu, 2017).

The findings of this study are compatible with the provisions of this stage. After the students had identified a focus on their topic, they felt relieved and relaxed. Then they started working on variables and reviewing the literature. They felt they had reached the point where they could work on the proposal without reservation. Nevertheless, they understood exactly what they had to pursue in the development of the proposal.

Clarity

Participants showed positive feelings at this stage as they felt satisfied, especially after reading many related articles. The participants understood what their topic was about and had a sense of relief that motivated them to complete their research proposal. Eighteen of the 20

students were satisfied with their literature review experience, two of them were not satisfied with the work they submitted, and they believed that they would do better if they were capable of writing a useful literature review.

When deciding about the methodology for their proposed research, most of the participants had mixed feelings as they pondered over details of procedures they wished to propose, keeping in view specifics of their proposal. This was a new experience for them; they felt happy about the guidance they received from the instructor, other faculty members, and alumni of the past few years. Seventeen of them did not remember how many sources they had chosen for their literature review, but most of them had in the range of 13-15 articles.

Collection Stage: Finalising the Research Proposal

At this point, the information seekers understood the direction of their research, and confidence grows in the search process (Kundu, 2017). During this stage, more clarity and sense of direction prevailed, as stated in the Kuhlthau's model. The students had a sense of clarity, and they understood their topics well as they were able to put the pieces together.

Confidence and Relief

All 20 participants could now explain their topics with clarity. They had a good understanding of their selection of information sources for their topics. All participants felt relieved at this stage when they had accessed all the information and sources they needed. All of them were excited about their accomplishment and felt they had achieved success in this process, which had prepared them for the following stage.

Presentation Stage: Presenting the Research Proposal

The participants had completed the process and now they were ready to present the finished product. They experienced relief and satisfaction as they had finally achieved their target. They had successfully concluded the process with a sense of accomplishment. The participants were satisfied to see the end result of their intellectual effort. The participants would be disappointed if they had been unable to reach this point of success (Kundu, 2017). This stage was considered the last stage of the model. All students felt accomplished as they had gone through this process with success.

Satisfaction

It was found that 17 of the 20 participants showed positive feelings toward the presentation of the research proposal. One participant expressed that her confidence had increased when she presented her proposal. Another participant expressed that she felt motivated that she had pursued it all the way through. Some were keen to pursue further research. One of the participants did not get a good grade in the course, but was happy with their overall experience of conducting research. Another participant expressed that the only downside was the grammar mistakes that had caused a deduction in his marks, but he felt happy with his proposal. Another participant felt like applying the proposal in future research. One of the participants made the following comment: “Unfortunately, I still feel anxious and overwhelmed when I have to do research, but it all turns to be positive after submitting the proposal.” They showed excitement for doing further research after taking this course, as two of them wished they had known all the details or steps at the beginning of the class.

The participants wished the instructor had given better support at the beginning of the course, which might have helped them in their search and selection of topics. “I felt pressured at the start because I did not know what I was doing. But the more and more I kept reading I slowly felt more comfortable and less pressured. So, I started loving what I do. But at the start it was troubling me.”

Reasons for Lack of Satisfaction

Only two participants mentioned they were not satisfied at all with this experience. One was disappointed about the grade, stating that they did not get the guidance that might have helped for making better choices. Another participant was disappointed as they wanted to do things their own way, but felt they did not have autonomy for that.

Discussion

This study was intended to investigate the affective stages developed in the ISP model developed by Kuhlthau (1991). The findings of this study aimed to clarify if graduate students would feel the same as school students to whom the model was originally applied to.

At the first stage of the research proposal, the findings showed students had mixed feelings of both confusion and excitement. Kuhlthau’s model however, found only the feeling of uncertainty. Orlu (2016) showed that Master’s students expressed uncertainty and frustration in their initial search for information. Fitzgerald (2018), however, used scholars who had specific knowledge in doing research. They faced some uncertainties and worries in their research process. Kim (2015a) found that the students did not find any difficulties in selecting topics as it was predetermined by their instructor. Kobe (2006) found that at the first stage, job seekers were

anxious and they experienced uncertainty. Anderson (2006), conversely, claimed that uncertainty could motivate people to find suitable information sources.

Testing of H1

During the first stage, students generally felt perplexed and confused indicating a high degree of uncertainty and confusion, but some of them showed excitement. Based on this, H1 is partially supported. For the selection stage, a sense of optimism occurred, which is related to the model. Also, a related study showed that students had a sense of optimism when they selected their topics as some had sought assistance from their instructor. They thought the selected topic was essential to read and write about (Kim, 2015b).

Testing of H2

During the second stage, all the students showed motivation in making a clear choice to work on the proposal. Based on this evidence H2 is supported. In the exploration stage a sense of anxiety occurred. Lawal et al. (2014) showed that in this exploration stage the more complicated the task, the more the level of uncertainty increased. This confirms Kuhlthau's observation about the exploration stage of a need, which was consistent with H3.

Testing of H3

During the third stage, all students were generally confused and anxious, indicating a high degree of frustration. Based on this H3 is supported. In the formulation stage, students explained that they had a good understanding and could relate to their topic. This is in agreement with a study that showed that respondents had increased the feeling of confidence from updating literature and knowing exactly what their focused topics were (Orlu, 2016). Lawal et al. (2014) showed that after the exploration stage, feelings changed from anxiety to confidence.

Testing of H4

During stage four, all students were generally clear about their research proposal, indicating a high degree of understanding of their topic. Based on this H4 is supported. At the point of finalising the research proposal, a sense of direction continued. During this stage, more clarity and a sense of direction prevailed, as stated in Kuhlthau's model.

Testing of H5

All students were generally happy and relieved about their research proposal, indicating a high degree of confidence. Based on this H5 is supported. In the presentation stage, most students felt satisfied. In another study, it was noted that English Language Learners (ELL) students were significantly more relieved and less frustrated or confused as they progressed through their research project (Kim, 2015b)

Testing of H6

During stage six, students were generally satisfied and happy about the submission of their research proposal, indicating a high degree of satisfaction and sense of accomplishment. A couple of students were disappointed with their research proposal. Based on this H6 is supported.

This study has implications for teachers and teaching. Teachers need to adopt appropriate strategies for addressing the affective conditions the students experience at different stages in the conduct of assignments, engagements for counselling, and satisfaction of the course requirements. The instructors need to consider the emotions and feelings of students at various stages. This should make the teaching experience more rewarding and enriching.

This study has demonstrated its compatibility with Kuhlthau's ISP model. The students felt lost when they were trying to conceive a problem for their proposal. Intensive consultation with

the instructor or other faculty members may help students in readdressing their anxiety at this critical point (Orlu, Ilo, and Tochukwu, 2017). Developing a search strategy helped respondents to feel more confident and satisfied. Librarians may help students in the search process to make it meaningful and productive.

Academic counselling has a significant role in guiding novices about their initiatives in selecting ideas for research. There are specific points in the academic background of students that may provide useful cues. Majors of students in their undergraduate study need to be considered. Every student has taken 5-8 courses in their Master`s studies from the core and elective streams. If a student targets a particular area for specialisation, it may guide them in selecting a problem from that area. Since research proposals are diverse in content and thrust, these are rooted in various academic, professional, and institutional domains, and students may not be aware of different information sources, systems, and outlets. When the students are advised to search databases, they need to be coached about different subject sources pertinent to their areas of interest.

Students need to transition from one phase to the next smoothly in a logical and systematic manner. Teachers need to be alert to the specific requirements of each stage. The model stipulates differences in the nature of each phase. The teachers need to attend to the specifics of each phase in order to facilitate their students.

All students go through a number of different emotions throughout the process. Being cognisant of the emotional states should help and guide both the teacher and the taught. Teachers have an obligation that the state of mind of a student is understood and translated into meaningful engagement and well-articulated discourse.

Each student is unique in intellect, capabilities, and attitude of assiduousness. At this level a teacher needs to behave more like a coach or mentor than being a mere supervisor or grader. The task is intricate and complex. The teacher needs to be a strategic counsellor for the student. It is challenging and cumbersome to ensure that each student's situation and needs are befittingly comprehended.

In this Gulf Cooperation Council region, there are six other Master's programmes. Kuwait University's Master's programme has a few distinctions; English-medium instruction, course-work structure, required courses in basic and applied research, and an optional thesis-track. These findings are quite relevant in the current institutional context in understanding the information needs of the student body.

Specific sources contain suggestions for further research. Theses, at both the levels of Master's and PhD, have sections in the last chapter outlining these ideas. Published articles may also contain similar sections enumerating ideas or themes that might be suitable propositions for doing research. Students need to be alerted to these sources of information.

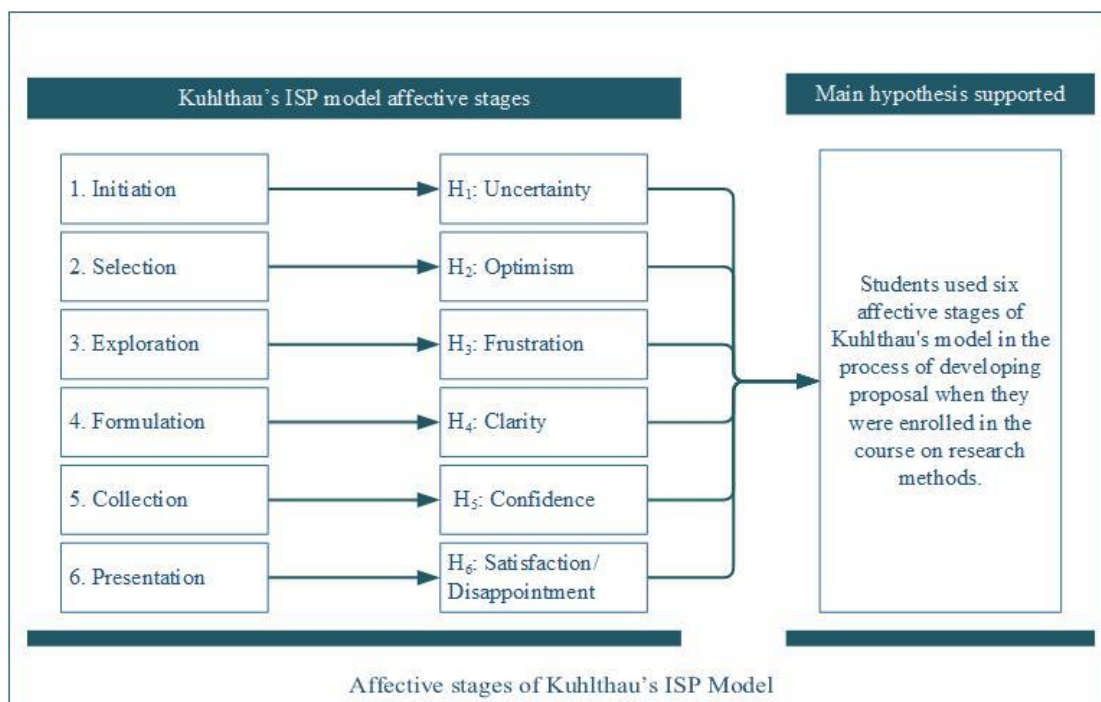
This study has certain limitations. Other methods might have enhanced results. Using various disciplinary and institutional settings may add further credibility to these findings. A more significant number of participants might bring forth richness and validity to the results. Further studies about this and similar behavioural models may strengthen relevant theoretical dimensions.

Conclusion

This study was based on Kuhlthau's ISP model (Kuhlthau, 1991) that showed how students experience various affective stages of information dynamics in their process of developing a

research proposal. The application of the model validates the different feelings reported in Kuhlthau's model, as is evident from Figure 2. The primary hypothesis of the study was supported. H1 to H6 have all been supported, noting similar affective sentiments of the students. We noted negligible variation in H1. The model appears to be reflecting the proposed changes in the affective conditions of participant students.

Figure 2: Affective stages of hypothesis supported.



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