CHAPTER - 1
CHAPTER I

1.1 PREAMBLE

Information is essentially a basic need of every human being especially in the past few hundred years in addition to air, water, food and shelter. Information becomes an important ingredient in each and every walk of life. To reduce the hardship in the acquisition of information, users adopt numerous ways and means to access the various channels of communication of information.

Again the use of information is so complex that there cannot be a single system to cope with the task of effective retrieval without assessing their specific needs. This situation has paved the way to concepts of information search and the manner of determining the pattern of the search has been considered as Information Seeking Behaviour.

The aim of this study is to widen our understanding of information seeking behaviour by linking patterns of information seeking to personality. It is supposed that research into psychological characteristics can shed light on unpredictability and patterns in information seeking behaviour.

The importance of psychological research into information seeking has widely reported by Wilson (1981, 1997, 2000)\textsuperscript{1,2} and 3 and few studies have connected to information seeking to personality (Webrek, Fine, and Woolls, 1985)\textsuperscript{4}, although personality may be assumed to be one of the most important psychological mechanisms that guide behaviour, including information seeking behaviour.

The tradition of research in information studies has become more user-centered since the beginning of the 1980's (Kuhlthu, 1991\textsuperscript{5}; Wilson, 2000\textsuperscript{6}). Instead of studying the safe and stable information systems, the focus has now shifted to the users. It has moreover been acknowledged that information seeking is something quite different to a mechanical and predictable problem solving process.
Previous research has shown that personality traits may influence study behaviour either directly or indirectly through learning styles (Schouwenburg and Kossowska, 1999)\(^7\) and particularly the disciplines are influential on formal information seeking behaviour. In the present study the role of personality is related to the information seeking behaviour by the university faculty members.

1.2 INFORMATION NEEDS AND INFORMATION SEEKING BEHAVIOUR: AN OVERVIEW

1.2.1 Information Needs

The concept of ‘Information Need’ has proved to be elusive and difficult to define. What initiates seeking-need has received more attention from researchers than definition of information itself? The topic, unfortunately, is also approached from such a variety of perspectives that no single definition (or conceptual construct) exists. In general, the literature falls into two broad categories: some studies attempt to determine the nature of the need, while others attempt to distinguish between levels of perception.

Researchers have used the term in a variety of ways. Needs, demands and wants have been used interchangeably, although they may not be identical. Need is further complicated by the necessity to disguise among expressed, unexpressed or unfelt needs. The later being the most difficult to identify.

1.2.1.1 Definitions and Meaning

The term Information Need has been defined by number of authors as follows:

Dervin and Nilan (1986)\(^8\) described Information Need as a gap in individual’s knowledge in sense-making situations.

According to Dervin (1989)\(^9\) “an Information Need is an impediment preventing an individual from moving forward in cognitive time and space. The person is faced with a gap
that must be bridged by ‘asking questions, creating ideas, and/or obtaining resources’ such
gaps do not occur in the abstract but arise out of particular critical events and situations”.

Kuhlthau (1993)\textsuperscript{10} described information need is often understood in information
science, “as evolving from a vague awareness of something missing and as culminating in
locating information that contributes to understanding and meaning”.

From the above definitions the following inferences could be derived:

- Information need is often a vague concept.
- It is a question asked for more information provider.
- It is a subjective, a relative concept existing in the minds of the experienced
  individuals.
- It changes over a period of time and varies from person to person, profession to
  profession, and from institution to institution and so on.

1.2.1.2 Types of Information Needs

The concept of information need has been divided by Psychologists (1972) into
following categories:

i. Physiological needs, such as the need for food, water, shelter etc.
ii. Affective needs (sometimes called psychological or emotional needs) such as
the need for attainment, for domination etc.

iii. Cognitive needs, such as the need to plan, to learn a skill etc.

Tague (1976)\textsuperscript{11} has presented the following types of information needs most of which
are self-explanatory.

i. Social pragmatic information needs required for coping with day-to-day life.
ii. Recreation information needs.
iii. Professional information needs.
iv. Educational information needs.
1.2.2 Information Seeking Behaviour

Information Seeking Behaviour is human behaviour with respect to searching various sources, channels including the use of that information. The terms, 'Information Seeking Behaviour', 'Information Searching Behaviour' and 'Information Using Behaviour' are synonymous terms.

1.2.2.1 Definitions and Meaning

Different authors have defined the concept of “Information seeking behaviour” variously.

Taylor (1991)^12 defines information behaviour as the product of certain elements of the “information use environment”. The elements are:

“The assumption formally learned or not, made by a defined set of people concerning the nature of their work.

The kinds and structure of the problem deemed important and typical by this set of people. The constraints and opportunities of typical environments within which, any group or subgroup of this set of people operates and works.

The conscious, and perhaps unconscious, assumptions made as to what constitute a solution, or, better said, a resolution of problems, and what makes information useful and valuable in their contexts”.

Wilson (1999)^13 defines “Information behaviour” as “those activities a person may engage in which identifying his or her own needs for information, searching for such information in any way, and using or transferring that information”.

In this context, information is viewed as any stimulus that reduces uncertainty, need is defined as a recognition of the existence of this uncertainty in the personal or work related
life of an individual. The approach follows Atkin's (1973)\textsuperscript{14} works in which information need is defined as "a function of extrinsic uncertainty produced by a perceived discrepancy between the individual's current level of certainty about important environmental objects and a criterion state he seeks to achieve. In other words, information seeking begins when someone perceives that the current state of possessed knowledge is less than that needed to deal with some issue (or problem). The process ends when that perception no longer exists".

1.2.2.2 Information seeking behaviour models

Researchers have been interested in information behaviour for over 40 years, although in the beginning the concept was mostly connected with information centers. Wilson (1981)\textsuperscript{15} was probably the first researcher to present the concept of information seeking behaviour (Fig.1.1).

![Diagram: Wilson's 1981 Model of Information Seeking Behaviour]

Fig. 1.1 Wilson's 1981 Model of Information Seeking Behaviour
The model suggests that information seeking behaviour arises as a consequence of a need perceived by an information user, who in order to satisfy that need, makes demands upon formal or informal information sources or services, which results in success or failure to find relevant information. If successful, the individual then makes use of the information found and may either fully or partially satisfy the perceived need - if he fails to satisfy the need, he will have to start searching again. The model also shows that part of the information seeking behaviour may involve other people through information exchange and the information perceived as useful may be passed to other people as well as being used by the person himself or herself.

Wilson and Walsh (1996)\textsuperscript{16} revised his earlier model after drawing upon research from a variety of fields other than information science, including decision making, psychology, innovation, health communication and consumer research. While the basic framework of the 1981 model remains, the revised model had a few additions in figure 1.2.

The terms used in the new model (Fig.1.2) are explained as follows: 'intervening variables' represent the 'barriers' whose impact may be supportive of information use as well as preventive; 'information seeking behaviour' is shown to consist of more types than previously, information processing and use is shown to be necessary part of the feedback loop if information needs are to be satisfied; the stress/coping theory tries to explain why some needs do not invoke information seeking behaviour; the risk/reward theory tries to explain which sources of information may be used more than others by a given individual; and the social learning theory embodies the concept of 'self-efficacy' i.e. the conviction that one can successfully execute the behaviour required to produce the [desired] outcome.
Fig. 1.2 Wilson’s 1996 Model of Information Behaviour

According to Wilson (1997)\textsuperscript{17} a general model of information behaviour needs to include at least the following three elements.

i) “an information need and its drives, i.e., the factors that give rise to an individual’s perception of need;

ii) the factors that affect the individual’s response to the perception of need; and

iii) the processes or actions involved in that response”.

Wilson (1999)\textsuperscript{18} stated the following other models of information seeking behaviours

i) Dervin’ Sense-Making frame work

ii) Ingwersen’s Model

iii) Saracevic’s Model

iv) Spink’s Model

v) Problem Solving Model
Although scholarly communication has been recognized as a field of research in the recent years, yet the interest on which the scholar’s information and how they discover from channels goes back to many decades. Therefore, the information seeking behaviour is a human activity for all scholars. It is as aspect of scholarly work. The ways in which people access and use the information to meet their work related information needs has become an important area of research in Library and Information Science.

A large number of studies have been conducted and examined on the ways in which individuals belonging to various occupations and professions have gathered and used information in their day to day life of academic or research professional endeavors.

1.3 PERSONALITY-CONCEPTS, THEORIES AND MODELS

1.3.1 Concept of Personality

“Personality is that pattern of characteristic thoughts, feelings, and behaviours that distinguishes one person from another and that persists over time and situation” (Phares, 1991)\textsuperscript{19}.

It is the sum of biologically based and learnt behaviour which forms the person’s unique responses to environmental stimuli (Ryckman, 1982)\textsuperscript{20}.

The unique combination of these trait-levels forms the unique individual. The personality is fairly stable and predictable throughout different situations and time. Dependent on the situation, however, personality traits may be more or less visible and a person may also change his personality over time (Pharès, 1991)\textsuperscript{21}.

1.3.2 Definition of Personality

Personality refers to an individual’s characteristic patterns of thought, emotion, and behaviour, together with the psychological mechanisms – hidden or not – behind those patterns. (Funder 2004)\textsuperscript{22}.
Personality is the set of psychological traits and mechanisms within the individual that are organized and relatively enduring and that influence his or her interactions with, and adaptations to, the intrapsychic, physical, and social environments (Larson and Buss, 2005)\textsuperscript{23}.

Personality psychology is the scientific study of the whole person...psychology is about many things: perception and attention, cognition and memory, neurons and brain circuitry...We try to understand the individual human being as a complex whole...[and] to construct a scientifically credible account of human individuality (McAdams, 2006)\textsuperscript{24}.

Personality is the organized, developing system within the individual that represents the collective action of that individual's major psychological subsystems (Mayer, 2005)\textsuperscript{25}.

Personality refers to those characteristics of the person that account for consistent patterns of feelings, thinking, and behaving (Pervin, Cervone and John, 2005)\textsuperscript{26}.

1.3.3 Personality theories

Freud's (1996)\textsuperscript{27} personality theory, was developed from reflections of human behaviour based on the founder's own experience as a therapist into generalizations to all mankind.

According to Jung, the personality structure consists of 3 basic dimensions; extraversion-introversion, sensing-intuition and thinking-feeling, which can be combined to describe 16 different personality types. The extraversion dimension describes outgoingness against withdrawnness. Sensing and intuition are ways to experience the world through senses or hunches. Thinking and feeling are rational judgments of the experiences in terms of thoughts or emotions (Jung, 1941)\textsuperscript{28}.

Cattell distinguished between ability traits, temperament traits and dynamic traits. Ability traits refer to the effectiveness of a response, temperament traits to the style of the response and dynamic traits to the trigger of behaviour. Ability traits, such as intelligence,
can be described as capacities and skills, whereas temperamental traits can be related to emotions, as in, for example, a generally calm or excited nature. Dynamic traits relate to motivation and goals that are important to the person. Traits can furthermore be grouped into surface or source traits. A surface trait can be a taught behaviour, like polite habits, traits is factor-analysis of trait descriptors. By analysis of traits through factor-analysis, Cattell could conclude that personality could be described as possessing 16 core traits (Cattell, 1950)\textsuperscript{29}.

Eysenck concentrated on notably fewer core traits in his three-factor theory of personality. According to Eysenck, the three central dimensions of personality are extraversion-introversion, neuroticism and psychoticism. These dimensions are neurophysiologically based and develop both according to genetic disposition as well as environmental influence. The dimension of extraversion-introversion is more neurophysiologically based, whereas the neuroticism dimension is more strongly influenced by upbringing (Eysenck, 1952)\textsuperscript{30}.

In recent years Trait theory has become more and more popular. The theory often relates the base of personality to genetics and neurological processes. Researches based on studies of twins raised apart have shown that 50% of the central personality traits can be related to genes. Although personality is formed based on experiences, experiences are self-selected to a large degree and in this often guided by genetic disposition (Bouchard, 1997)\textsuperscript{31}.

Social learning theory sees the consistency in behaviour as a consequence of similar situations instead of stable individual traits. The cognitive representation and interpretation of the environment is particularly influential on behaviour (Cantor and Zirkel, 1990)\textsuperscript{32}.

Personality is a social creation which is formed in the interaction between behaviour and the social meaning attached to these behaviours. When we describe a person in terms of personality traits, we observe his/her behaviour and interpret it from our own point of view. This may explain why people his/her behaviour are described differently dependent on who gives the description (Hampson, 1989)\textsuperscript{33}.
1.3.4 The five-factor model of personality

The following five traits are said to form the core of our personality: extraversion, neuroticism, agreeableness, conscientiousness and openness to experience. These dimensions are stable across a lifespan and seem to have a physiological base (Revelle and Lifitus, 1992)\textsuperscript{34}.

**Table 1.1**

Personality dimensions and the poles of traits they form.

Based on Costa and McCrae (1992)\textsuperscript{35}.

<table>
<thead>
<tr>
<th>Personality Dimension</th>
<th>High Level</th>
<th>Low Level</th>
</tr>
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<tbody>
<tr>
<td>Neuroticism</td>
<td>Sensitive, Nervous</td>
<td>Secure, Confident</td>
</tr>
<tr>
<td>Extraversion</td>
<td>Outgoing, Energetic</td>
<td>Shy, Withdrawn</td>
</tr>
<tr>
<td>Openness to experience</td>
<td>Inventive, Curious</td>
<td>Cautious, Conservative</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>Friendly, Compassionate</td>
<td>Competitive, Outspoken</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>Efficient, Organized</td>
<td>Easy-Going, Careless</td>
</tr>
</tbody>
</table>

1.3.4.1 Neuroticism

Emotional stability is related to calm, stable and relaxed persons, whereas neuroticism is linked to anger, anxiousness and depression (Costa and McCrae, 1992)\textsuperscript{36}. The term neuroticism does not necessarily refer to any psychiatric defect. A more proper term could be negative affectivity or nervousness (McCrae and John, 1992)\textsuperscript{37}.

1.3.4.2 Extraversion

Extraversion contrasts an outgoing character with a withdrawn nature. Extraverts tend to be more physically and verbally active whereas Introverts are independent, reserved, steady and like being alone. The person in the middle of the dimension likes a mix between social situations and solitude (Howard and Howard, 1998)\textsuperscript{38}. Extraverts are adventurous,
assertive, frank, sociable and talkative. Introverts are quiet, reserved, shy and unsociable (Costa and McCrae, 1992)\textsuperscript{39}.

1.3.4.3 Openness to experience

Openness to experience is a measure of depth, breadth and variability in a person’s imagination and urge for experiences (Pervin and John, 2001)\textsuperscript{40}. In particular much controversy has surrounded the third factor of the five-factor model; Openness to experience (Costa and McCrae, 1997)\textsuperscript{41}.

1.3.4.4 Agreeableness

The agreeableness scale is linked to altruism, nurturance, caring and emotional support versus hostility, indifference, self-centeredness, spitefulness and jealousy. The adapter tends to follow the group instead of his own personal belief, while the challenger likes power and wants his own views to be the determining ones (Howard and Howard, 1998)\textsuperscript{42}. Agreeable people are altruistic, gentle, kind, sympathetic and warm (Costa and McCrae, 1992)\textsuperscript{43}.

1.3.4.5 Conscientiousness

Conscientiousness is a measure of goal-directed behaviour and amount of control over impulses (Pervin and John, 2001)\textsuperscript{44}. Conscientiousness has been linked to educational achievement and particularly to the will to achieve. The focused person concentrates on a limited number of goals but strives hard to reach them. He is career-oriented, while the flexible person is more impulsive and easier to persuade from one task to another (Howard and Howard, 1998)\textsuperscript{45}. The more conscientious a person is, the more competent, dutiful, orderly, responsible and through (Costa and McCrae, 1992)\textsuperscript{46}. This scale could be a measure of constraint (McCrae and John, 1992)\textsuperscript{47}.
1.4 NEED FOR THE STUDY

A number of studies have been carried out on Information Seeking Behaviour and Information Needs of the library users. A few attempts have been made to describe the role of personality on information seeking behaviour of students. In this direction faculty members in the universities have been taken as sample for this study, as there is no much survey on the personality of the teaching faculty.

It is seen that many psychological mechanisms come to work in the process of information seeking behaviour, and one of the important psychological mechanisms is personality which determines behaviour. Everyone has their unique pattern of feelings, thoughts and behaviours which are formed by a fairly stable combination of personality traits. As personality forms an inclination towards certain characteristic reactions in any given situation, personality traits are likely to influence the attitudes and also behaviour in an information seeking context.

It seems that information seeking behaviour could be connected to the personality dimensions like neuroticism, extraversion, and openness to experience, competitiveness and conscientiousness. In this direction, it is thought that, there is a need to know the personality traits of the individual and how it influences the Information Seeking Behaviour of the faculty member.

1.5 STATEMENT OF THE PROBLEM

The research problem has been stated as, “Role of Personality on Information Seeking Behaviour: A Survey of Faculties in Universities of Andhra Pradesh”. This study is undertaken to examine the personality and information seeking behaviour of the university faculty members working in the universities of Andhra Pradesh. This research study mainly focuses on the sources (formal and informal), services, search tools, internet used, nature and types of information required, motives in seeking information, problems faced while seeking information and how the personality plays the role on information seeking behaviour.
1.5.1 Explanation of the concepts in the title

1.5.1.1 Personality

Personality is the total differentiation which the individual makes by incorporating the inherited and acquired powers to stimulate and to activate the imagination of others in art, science and public affairs and also to live in and partake of a super-individual and supertemporal world of values.

In this study the personality traits of the faculty members were accessed using the adapted questionnaire NEO FIVE FACTOR INVENTORY.

1.5.1.2. Information Seeking Behaviour

Information seeking behaviour is the purposive seeking for information as a consequence of a need to satisfy some goal. In the course of seeking, the individual may interact with manual information systems (such as a newspaper or a library), or with computer-based systems (such as the World Wide Web) (Wilson, 2000).28

In this study Information seeking behaviour of the faculty members were examined through a questionnaire containing sources (formal and informal) used and dependence, nature and type of information required, motives in seeking, collecting information, library services, and internet used and the opinion about IT applications in the libraries and etc.

1.5.1.3 University Faculties

In this study the term university faculties refer to the faculty members working in the universities of Andhra Pradesh. In this study 680 faculty members have been considered from six universities located in Rayalaseema region of Andhra Pradesh.
1.5.1.4 Andhra Pradesh

Andhra Pradesh is one of the states in South India. The state comprises of 23 Revenue Districts.

1.6 OBJECTIVES OF THE STUDY

The following are the objectives of the present study:

1. To study information seeking behaviour of the faculty members of universities in Andhra Pradesh,
2. To survey the existing information sources available in the university libraries under study,
3. To examine the nature and types of information required by the faculty members,
4. To study the motivational factors seeking and collecting information by the faculty members in universities under study,
5. To assess the extent of library services used and problems faced by the faculty under study,
6. To assess the role of personality of the faculty on the information seeking behaviour of the universities in Andhra Pradesh and
7. To suggest proper solutions for the development of personality of the faculty based on information seeking behaviour

1.7 HYPOTHESES

The following are the hypotheses formulated based on the objectives of the study:

1. Information seeking behaviour of the respondents is more or less similar to each other.
2. The sources of the information utilized by the faculty members are satisfactory.
3. The services availed by the faculty members in university libraries are satisfactory.
4. There exists heterogeneity in the motives of information seeking behaviour of the faculty.
5. There exists a positive relation of personality traits of the faculty under study with regard to sources of information used, motives in seeking information, utilize of library services and other.

1.8 LIMITATIONS

1. This study has been limited to the universities of Rayalaseema Region in Andhra Pradesh.
2. Further it has been confined to regular faculty members of Arts, Science and Humanities working in six selected universities started on or before 2007.

1.9 SIGNIFICANCE OF THE STUDY

1. This study provides the growth and development of universities in India.
2. This study presents the status of the university libraries in Andhra Pradesh.
3. It highlights the role of personality on information seeking by the faculty members of the universities.

1.10 METHODOLOGY

The investigator has adopted the following methods in this study:

Step 1: Review of Literature

The literature on Information Seeking Behaviour (ISB) has been studied and reviewed to facilitate the construction of questionnaire and assess the personality trait based on NEO FIVE FACTOR INVENTORY.
Step 2: Questionnaire Construction

Step 2.1: Questionnaire for Faculty

Based on the review of literature, a structured questionnaire (Appendix A) has been designed to collect data from the target university faculty drawn from various universities in Andhra Pradesh. The questionnaire covers information in the following sections.

Section I General Information about the Respondents

Elicits information pertaining to the respondent’s university, designation, age, sex, department, and educational qualifications.

Section II Library Use

Covers information about the respondent’s frequency of visits to the university library, and quantum of time spent in the library.

Section III Search Tools

Tools used to search information in the library have been covered.

Section IV Nature and type of information required

Seeks information with regard to the nature and type of information sources required such as formal and documentary sources and informal and inter personal sources.

Section V Motivating factors for information seeking behaviour

Identifies the motives that influence information seeking behaviour.

Section VI Use of library services

Deals with the extent of use of library services by the respondents.

Section VII Opinion and Use of Internet

Covers various methods and means adopted by the respondents in the using the internet.
Section VIII Problems in Seeking Information

It covers the problems faced by the users in the libraries.

Section IX Neo Five Factor Inventory

This questionnaire has been adopted for assessing the personality traits.

Step 3: Pilot Study

A Pilot study was conducted with a sample of 50 respondents from various universities and the results were tested. Based on the study, the questionnaire was further modified and developed to suit the stated objectives. Accordingly, revised version of the questionnaire was finally administered.

Step 4: Sampling method

There are 838 regular faculty members in Arts, Science and Humanities in the six universities under the study. 838 questionnaires were distributed to the sample units who were selected through convenient sampling method from six universities, out of which 680 (81.0%) were received. The structured questionnaires were distributed personally to the sample selected.

Step 5: Administration of Questionnaire

The revised and adapted questionnaire was administered to all the regular faculty members of the Universities. Out of 838 faculty members in the selected six Universities of Andhra Pradesh, 680 have responded and the response rate is 81%.

1.11 DATA ANALYSIS

The data collected from the questionnaire has been analysed to test the hypotheses framed and to fulfil the stated objectives. For this purpose, SPSS software package has been used for the analysis of data. Statistical analysis techniques such as Frequency Distribution, Percentage Analysis, Weighted Arithmetic Mean, ANOVA (Analysis of Variance), Discriminant Analysis, Likert-type Scale Analysis, Cluster Analysis, and Chi-square test etc., have been employed depending on the nature of the data collected from the respondents.
1.12 CONSPECTUS

The thesis has been presented in five chapters.

Chapter 1: Introduces the concept of personality and information seeking behaviour and emphasizes the need for the proposed research. Further, it highlights the objectives, hypotheses, limitations and significance of the study and the methodology adopted in the data collection and analysis.

Chapter 2: Presents the review of the related literature.

Chapter 3: University and University Libraries in Information era: A special reference to universities in Andhra Pradesh.

Chapter 4: Describes the samples and the various statistical tools and techniques such as Weighted Arithmetic Mean, Discriminant Analysis, ANOVA (Analysis of Variance), Chi-square Test, Cluster Analysis, Likert-type Scale, Hierarchical Cluster Analysis etc., employed in the data analysis. Discusses the results of the analysis and interpretations of the data collected through a questionnaire on personality and information seeking behaviour of university faculty members in Andhra Pradesh.

Chapter 5: Provides the summary of the major findings and observations in the study and enumerates the resulting by-products of the study. Provides suggestions and recommendations and provides direction for further research.

The thesis concludes with a list of bibliographical references and Appendices.
REFERENCES


