INSTITUTIONAL CLIMATE PERCEPTION OF POST GRADUATE STUDENTS IN RELATION TO THEIR INFORMATION LITERACY

By

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ABSTRACT

In this paper the investigators focus on the relationship between 'Information Literacy' and 'Institutional Climate Perception' of post graduate students. The study was conducted on four hundred Post Graduate Students' from four districts of Kerala, India. Instruments used were; 'Information Literacy Inventory' and 'Institutional Climate Perception Questionnaire'. The study revealed that there exists positive and significant relationship between 'Information Literacy' and 'Institutional Climate Perception'. The study also proved that there is no significant difference in correlations between Institutional Climate Perception and Information Literacy for the comparable sub samples based on Gender and Locality of the Institution.

Keywords : Information Literacy, Institutional Climate Perception, Academic Climate Perception, Social Climate Perception, Physical Climate Perception, Administrative Climate Perception, Post Graduate Students.

INTRODUCTION

The increasingly complex world in which we live now contains an abundance of information choices-print, electronic, image, spatial, sound, visual, and numerical. Individuals are faced with diverse and abundant information choices in their studies, in the workplace, and in their personal lives. Information is available through libraries, community resources, special interest organizations, media and through the internet. Increasingly, information comes to individuals in unfiltered formats. There is so much information; so much of it is of doubtful quality. Information overload is looked upon as a problem of our time. The uncertain quality and expanding quantity of information pose great challenges for the society. This raises questions about authenticity, validity and reliability and these pose special challenges in evaluating, understanding and using information in an ethical and legal manner. Sheer abundance of information and technology will not in itself create more informed citizens without a complementary cluster of abilities necessary to use information effectively. Here comes the importance of Information Literacy. Information Literacy is the ability of an individual to locate, manage, evaluate and use the needed information effectively.

Information literacy is important for students because it helps them to identify appropriate information sources for their subject area, to confidently access print and electronic resources to produce better projects and assignments, to avoid plagiarism through proper citing and referencing, to develop independent transferable research skills, to acquire lifelong learning skills and make them discerning critical users of information.

Within the University or College environment it is very important for students to build up the foundation of information literacy by successfully transferring learning from course to course by understanding the critical and empowering role of information in a free and democratic society and demonstrating ethical behavior and academic integrity as consumers as well as producers of information. Information Literacy is a critical competency for a nation to compete successfully in an increasingly interdependent global economy which is bound together by interconnected information and communication technology infrastructure that seamlessly networks a variety of peoples, institutions and organizations in all sectors regardless of caste, creed, colour, age, gender or socio-economic status.

Education has rightly been regarded as a powerful

instrument for the fulfillment of national aspirations. Higher education plays a vital role in this regard. It supplies man power required by industry, agriculture, science and technology and services. Information literacy is important in higher education because the objectives of self reliant society can be achieved only when competent professionals, managers and technicians are available, to foresee, plan and execute research and development activities.

The need of the quality higher education is on constant increase in India. Universities and Colleges are the hub of higher learning. It is believed that these institutions have great role in shaping the future of our country. The institutions of higher education will have to keep learning about creation, dissemination and application of knowledge and provide access to knowledge technology. Most of the students are entering to the colleges and universities without adequate fundamental research and information competence skills. Many of them have not learned how to effectively locate, evaluate, organize, and integrate information. As more information becomes available in a variety of formats students needs to learn not only how to access resources but also needs how to evaluate, manage and use the information effectively. In a study Ray and Day (1998) found that many students in America are leaving the universities without necessary transferable skills to cope in the information based society. The situation is not different in India.

Are we equipped to meet these challenges of information overloaded society? Answer to this question points to the potential and capacity of our higher learning institutions. Institution in which one studies places an important role in his scholastic and co-scholastic development of students (Kumar, A.G, 2006). Institutional responsibility in shaping the student is vital in these days. Researches have proved that Institutional Climate has a vital role in developing positive academic outcomes of students.

This study was conducted in Kerala, the southern most state of India. The institutions providing post graduate courses in Kerala widely differ in their institutional climate. The institutions providing post graduate courses include University Departments, Government colleges, Aided colleges and Un-aided colleges and the climate prevailing in University Departments is entirely different from the climate prevailing in Government, Aided and Un-aided colleges. The climate in a rural college may have a totally different culture and climate compared to the climate of an institution in an urban area. The investigator was genuinely interested to study how these climate differences influence the information literacy of post graduate students. Since Institutional Climate Perception being a composite of many components, the investigator gave due importance to the components also. The major components of Institutional Climate Perception counted for the study includes Academic Climate Perception, Social Climate Perception, Physical Climate Perception and Administrative Climate Perception. It is believed that the findings of the study would be useful to the authorities in understanding the climate prevailing in their institutions and its contribution to the students' overall potential development.

Review of Related Literature

The term "Information Skill" was introduced by U.S educator Paul Zurkowski (1974) to refer the people who are able to solve their information problems by using relevant information sources and applying relevant technology. Within the literature we can see that there is a geographical division is made between the terms "Information Skills" and "Information Literacy". The United States and Australia favours the term Information literacy, whereas the term Information skill is used within the U.K. In many instances both terms are used to describe what essentially the same concept is. Other suggested terms are "Information Fluency" (Rader 1999) and "Information Competency" (Goetsch and Kanfman, 1998). In essence the concept describes the acquisition of a particular range or set of information handling skills. Horton (1983), Day (1987) and Kuhlthau (1987) defined Information Skill in terms of awareness of knowledge explosion and skills for using computer technology to identify, access and obtain data, documents and literature needed for problem solving and decision-making. The American Library Association Presidential Committee on Information Skill (1989), Tom Goad (2002) and Clyde A (1997) argues that information

literacy is essential for life in the information age. Demo, W (1986) emphasized that Information Skill must be taught to students. ERIC clearing house on Information Resources (1987) reported that library resource centres have become laboratories for learning the essential components of an information system and for interpreting information. Spitzer Kathleen.L; Eisenberg M.B and Lowe C.A (1998) examined the economic necessity of being information literate and trace the history and development of the term Information Skill. Hepworth, M (1999) found that students had limited skills in the area of Information Literacy. Katherine, B (2000), and Haycock, K (1991) emphasized the importance of information literacy and the integration of information seeking skills instruction between teachers and library media specialists. Takahira, M; Ando, R and Sakamoto, A (2008) made study on the relationship between internet use and Information Skill and the result of the analysis indicated that greater use of the internet led to higher Information Skill.

Institutional Climate is the sum total of the daily environment and central to the 'comfort factor' that students, faculty staff and administrators feel on campus. The phenomenon of school organizational climate was first identified by Halpin and Croft in 1960's (Halpin 1966). Organizational climate is a broad term that refers to member's shared perception of the work environment of the organization (Hoy and Miskel, 1987). The organizational climate of a school is often assumed to have a positive relation to academic achievement. This made the Institutional Climate of educational institutions a hot topic for educational researches. Kehra (1980) attempted a study on the relationship of principal's behaviour with academic results in Sainik schools in India. The study revealed that the Principal's behaviour might be directly related to the Organisational Climate. Shah (1981), White and Stevens (1988) found that school climate has an impact in the achievement of students. The result of the study conducted by Hoy.K and Woolfolk.E (1993) shows that a healthy school climate one with a strong academic emphasis and a principal who has influence with superiors and is willing to use it on behalf of teachers was conducive to the development of teachers' believes that they can influence student learning. Sharma, S (1982) found that the

leadership behaviour of the head master has direct impact in the school and on its functioning which makes for a good climate. Sipple.W and Riehl (1996) found organizational climate is significantly related to teachers' attitude and professional commitment. Dhanya, T. D (2006) found that there exist a significant positive relation between teaching competence and organisational climate perception among primary school teachers. Kumar, A.G and Devika, N.R (2006) revealed that professional aspirations and Institutional Climate Perception of teacher educators are significantly correlated. Kumar, A.G (2008) found that the institutional climate perception and teacher morale of teacher educators are significantly correlated.

The early researches related to Information Literacy were focused on examining some of the key characteristics which have been drawn up to describe an information literate person. The review shows that extensive works were carried out in the field of information literacy and reveals that its importance is not just confined to education but applies to the concept of lifelong learning and society as a whole. The studies prove that Institutional Climate is a prominent factor in determining the achievement of students. In this paper the investigators focus on the relationship between Information Literacy and Institutional Climate Perception of post graduate students.

Hypotheses

- The Mean Scores of 'Information Literacy' among three groups (High, Average and Low) of Post Graduate Students with different levels of 'Institutional Climate Perception' will differ significantly.

- There will be significant relationship between 'Information Literacy' and 'Institutional Climate Perception' for the total sample and sub samples based on Gender and Locality.

- The correlations obtained between 'Information Literacy' and 'Institutional Climate Perception' for the comparable sub samples based on Gender and Locality will not differ significantly.

Objectives

- To test whether the Mean Scores of 'Information Literacy' among three groups (High, Average and Low)

of Post Graduate Students with different levels of 'Institutional Climate Perception' differ significantly.

- To estimate the relationship between 'Information Literacy' and 'Institutional Climate Perception' for the total sample and for the relevant sub samples selected.

- To test whether the correlations obtained between 'Information Literacy' and 'Institutional Climate Perception' of Post Graduate Students' based on the sub samples differ significantly.

Procedure

Sample

Post Graduate Students from four districts of Kerala (there are 14 districts in Kerala) were covered for collecting data. As the study requires representation from different strata, the investigators followed stratified random sampling. The sample was drawn from ten randomly selected colleges of Palakkad, Thrissur, Malappuram and Kozhikode Districts of Kerala State. The sample selected for the study includes four hundred Post Graduate Students.

Instrumentation

The investigators used the following instruments for the research:

- Information Literacy Inventory

- Institutional Climate Perception Questionnaire

Of these two instruments the Information Literacy Inventory was developed and standardized by the investigators. The Information Literacy Inventory contains eighty items based on six major dimensions of information literacy.

The six major dimensions identified include ability to

- locate information,

- manage information,

- evaluate information,

- critical thinking,

- interpreting and

- application.

The tool was developed using the dimensions of Information literacy developed by Cuddy and Medeiros (2002). This helped the investigators to ensure the validity of

the tool. Reliability was established through split half method. The reliability coefficient for the tool was 0.6603. The whole test reliability also was established (0.795). For measuring Institutional Climate Perception of Post Graduate Students the investigators adopted a standardized tool "Institutional Climate Perception Questionnaire" (ICPQ) which was developed by Kumar, A.G and Raj, G.S (2004). The ICPQ measures Academic Climate Perception, Social Climate Perception, and Physical Climate Perception and Administrative Climate Perception of Post Graduate students.

Findings and Discussion

Test of Significance of Difference in Means of Information Literacy among the Three Groups of Post Graduate Students with Different Levels of Institutional Climate Perception.

The major purpose of this analysis is to test whether there exist any significant difference in mean scores of Information Literacy among three groups of Post Graduate Students with different levels of Institutional Climate Perception. This was done using the formula' $\mu \pm 1\sigma$' (μ=Mean and σ = Standard deviation). Those subjects who scored $\mu + 1\sigma$ for their ICPQ were considered as High group. Those who scored μ-1σ were considered as low group and the remaining as average group. These groupings indicate the perceptual differences of subjects with regard to their institutional climate. If the Information Literacy scores of subjects belonging to different groups (High, Average &Low) based on their ICPQ scores differ significantly, it is an indication for the relationship between the relationships between the variables considered under study. This prompted investigators to Test of significance of difference in means of Information Literacy among the three groups of post graduate students with different Levels of Institutional Climate Perception. This was done using

Source of Variation	Sum of Squares	d.f	Mean Square	F
Between Group	56245.763	2	28122.88	
Within Group	53311.914	397	134.287	209.424
Total	109557.7	399		

Table 1. The results of ANOVA of the total score of Information Literacy of Post Graduate Students with different levels of Institutional Climate Perception

Analysis of variance technique. The details of ANOVA is given in Table 1.

The significant F value (significant at 0.01 level) reveals that Institutional Climate Perception has a crucial role in deciding the Information Literacy of Post Graduate Students. The test of significance of difference in means of Information Literacy among the different groups of Post Graduate Students with different levels of Institutional Climate Perception shed light into the relationship between these two variables indirectly. This led the investigator to use the Correlation analysis to find out the relationship between these two variables.

Details of Relationship between Information Literacy and Institutional Climate Perception of Post Graduate Students

The details of correlation for the total sample and sub samples based on Gender and Locality of the institution were studied with correlation analysis, along with details of significance of relation between Institutional Climate Perception and Information Literacy, the 0.01 level of confidence interval for the total sample and relevant sub samples and percentage of overlap for the whole and relevant sub samples are given in Table 2.

Discussion - I

Table 2 shows that all r's are positive and significant. This shows that the relationship between Institutional Climate Perception and Information Literacy is significant for the total sample as well as for the sub samples based on Gender and Locality of the institution. The correlation obtained for the total sample and the sub samples are positive and the percentage of overlap is ranging from 54.9 to 66.09. From these findings it can be concluded that

there exist a significant positive relationship between the variables Institutional Climate Perception and Information Literacy of Post Graduate Students.

Comparison of Correlations Obtained for Comparable Sub samples

The correlation obtained for the comparable sub samples based on gender and locale of the institution were compared to check whether there is any significant relationship between the correlations obtained for male and female, institutions in rural and urban area.

Comparison of Correlations obtained between 'Information Literacy' and 'Institutional Climate Perception' for male and female post graduate students

Discussion - II

The obtained critical ratio of male and female students is less than 2.58 and hence the difference between male and female Post Graduate Students', with respect to their 'r' between 'Institutional Climate Perception' and 'Information Literacy' is not significant at 0.01 level. Hence it can be concluded from Table 3 that the relation between 'Institutional Climate Perception' and 'Information Literacy' is similar in both male and female Post Graduate Students'.

Comparison of Correlations obtained between 'Information Literacy' and 'Institutional Climate Perception' for students in rural and urban colleges

The result of comparison of r's between Institutional Climate Perception and Information Literacy for students studying in Rural and Urban areas is given in Table 4.

Sl. No	Sample	N	R	Critical Ratio
1.	Male	126	0.813	1.64
2.	Female	274	0.741	

Table 3. Significance of difference in r's between Information Literacy and Institutional Climate Perception of male and female Post Graduate Students

Sl. No	Sample	N	R	Critical Ratio
1.	Rural	136	0.769	0.45
2.	Urban	264	0.752	

Table 4. Significance of difference in 'r's between Institutional Climate Perception and Information Literacy of Post Graduate Students in rural and urban colleges

Sample	N	r	Confidence interval		Shared Variance
			Lower limit	Upper limit	
Total	400	0.758*	0.716	0.80	57.46
Male	126	0.813*	0.754	0.872	66.09
Female	274	0.741*	0.688	0.794	54.9
Rural	136	0.769*	0.701	0.837	56.55
Urban	264	0.752*	0.699	0.805	56.55

* indicate significant positive relationship

Table 2. Details of relationship between information literacy and institutional climate perception of post graduate students

Discussion - III

The obtained critical ratio is less than 2.58 and hence the difference between students in rural and urban colleges, with respect to their 'r' between 'Institutional Climate Perception' and 'Information Literacy' is not significant at 0.01 level. Hence it can be concluded that the relation between 'Institutional Climate Perception' and 'Information Literacy' is similar in both rural and urban areas.

Conclusion

The study revealed that there exist positive and significant relationship between Information Literacy and Institutional Climate Perception. When the correlations obtained between Institutional Climate Perception and Information Literacy for sub samples based on Gender and Locality of the institutions were compared, it is found that there is no significant difference in correlations between Institutional Climate Perception and Information Literacy for the comparable sub samples based on Gender and Locality of the Institution. Hence it can be concluded that the correlations obtained between the sub samples based on Gender and Locality of the institution have no influence on the degree of relationship between Institutional Climate Perception and Information Literacy. It is clear from the study that the climate of educational institutions is a decisive factor in determining the competitiveness and potential of the students. Without a concerted instructional effort information literacy will not be effectively developed. Education system and educational institutions must take seriously the challenges of the information age.

Suggestions for Improving the Current Practices

Based on the findings of the study, the investigators propose following suggestions for improving current practices in the higher education system.

- The study reveals that Institutional Climate Perception can play a major role in promoting Information Literacy among Post Graduate Students. This throws light on the need for maintenance of a wealthy and positive climate in the institutions. Academic climate should be conducive for the studies and students should be exposed to varied and challenging academic experiences. There should be a healthy social climate in the institution. This may help in promoting support,

communication and sharing of experiences among (teachers, students, parents and administers- both within and between) the members of the institution. Availability of infrastructure and access to facilities available in the institution contribute to the physical climate. Participatory decision making, well defined rules impartial rules and regulations and access to administrative system are vital in improving administrative climate. If the institutional authorities are keen in maintaining a high academic, social, administrative and physical climate of the institution it would certainly improve the individual institutional climate perceptions of the students.

- Post Graduate Students should be exposed to Information Literacy skills through proper training programmes organized at regular intervals. The training programme should focus on experience and training related to: (i) locating information, especially, using ICT devices, (ii) Managing the collected information from various sources, (iii) evaluating the authenticity and maintaining a critical view of collected information, and (iv) practical applicabity of information.

- Teachers also should be exposed to Information Literacy training programmes. So they can help in developing Information Literacy skills among their students.

- A key challenge of the information age is the need to develop an information literate population. One of the most comprehensive ways of achieving this is through the educational system. Information literacy practices should be integrated to the school curriculum and reinforced both within and outside of the educational setting.

Just an athlete needs sustained conditioning and practice before a big game and a musician needs to rehearse before a major performance, a student needs multiple experiences to practice and hone information literacy skills before pursuing advanced study and research or entering to workplace. It is the responsibility of the entire college or university to help their students to become information literate, an essential element for future success.

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