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Multiple Intelligence Skills among Library and Information Science Professionals of Government and Private Universities in Tamil Nadu, India: An Exploratory Study

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0.   ABSTRACT

The study analyse the multiple intelligence skills of LIS professionals in working government and private universities in Tamil Nadu. Data were collected through questionnaire method. Totally 441 questionnaire were collected from 114 in traditional, 291 in Professional and 36 in Multi-discipline subjects. The study reveals that the private universities LIS professionals are more compare than government universities. The respondents from Government Universities are better skilled than their counterparts from private universities in all the 17 linguistic intelligence skills. Both government and private ranked first in the statement better stock verification. It is also clearly understand the respondents of Government universities are better skilled than their counterparts at private universities in respect of their bodily-kinaesthetic intelligence. The study found that in the statement "I enjoy working with other LIS professionals" ranked with first both government and private universities in the Interpersonal Intelligence skills. A well equipped library professional good at many skills is an asset any institution he/she works in. His/her multiple intelligence skills may bring drastic changes and positive impacts both in the library landscape and library services.   The study suggested that professional bodies / learned societies in the field of library and information science may join hands with universities and other non-governmental organizations to organize various soft skills / multiple intelligence skills training programmes taking a survey beforehand. A well groomed library professional good at many skills is an asset any institution he/she works in. His/her multiple intelligence skills may bring drastic changes and positive impacts both in the library landscape and library services.

Keywords: *Universities in Tamil Nadu, Library Professionals, Government Universities, Private Universities, linguistic intelligence, logical-mathematical intelligence, spatial intelligence, bodily-kinaesthetic intelligence, musical intelligence, interpersonal intelligence, intrapersonal intelligence, naturalistic intelligence and emotional intelligence.*

1. INTRODUCTION

Our everyday life is changing rapidly due to the technological innovations in all fields. These new technological changes are affecting the field of library science and information systems just like any other field. It is shifting the role of a librarian from simply being a book keeper to a dynamic agent that brings together information from different sources and makes it available for the users. Librarians in the new era are required to play different roles that demand the presence of various skills ranging from the traditional roles of user education, facilitation and evaluation to being a professional who is able to manage the digital information system within a library (Bin Hashim and Mokhtar 2012).

The personal skills listed as vital requirements for young adults librarians are: analytical, creative, flexible, reflective, detective-like, adaptable, responsive to needs, enthusiastic, self- motivated, interactive and engaging, tolerant, networking skills, practices self- evaluation, multidisciplinary reader, confident, accepting of individual differences and respectful of cultural diversity.

The professional skills listed as essential are: information literacy, communication, critical thinking, team work, ethics and social responsibility, maintain professional attitude with youth, problem solving, leadership, time management, self-learning and professional development, ability to advocate and promote service, maintains confidentiality, working knowledge of English, possess clear vision of integrating technology into library programs.

The discipline-specific knowledge required is: knowledge of development theories, understanding interests and needs, identify technological equipment, collection awareness, ability to evaluate content, well informed on using different digital devices, technology awareness, aware of reliable online resources, confident using different emerging technologies, ability to develop, implement and evaluate programs, and continual change & update of website interface.

The above mentioned skills are the most important skills that would reflect the librarians' willingness and comfort level to work in a world of technology. In addition to those skills, the knowledge of web 2.0 seems to be essential for librarians to be on track

with the huge movement of social networking that appears to be a major attraction for young adults nowadays. This would also facilitate having an interactive website where information about the library services and collection could be exploited by the young users (Hamada and Stavridi, 2014).

2. NEED FOR THE STUDY

As information technology (IT) has become part of everyday life, Dolan & Schumacher (1997) emphasized that the influx of the internet and innovative technologies impacted the LIS professionals that they enable to be qualified in a new variety of technological career.Apart from these ICT skills, the LIS professionals should possess personal skills like being analytical, creative, technical, flexible, reflective, able to deal with a range of users, detective-like, adaptable, responsive to others' needs, enthusiastic and self- motivated. In addition, the LIS professionals should possess generic skills like information literacy, communication, critical thinking, teamwork, ethics and social responsibility and leadership traits. Above all, when we talk in practical terms, the LIS professionals

Intelligence: According to Gardner, an intelligence is "a biopsychological potential to process information that can be activated in a cultural setting to solve problems or create products that are of value in a culture." Gardner defined (http://www.intelltheory. com/gardner.shtml) intelligence as "the ability to solve problems, or to fashion products, that are valued in one or more cultural or community settings."

Theory of Multiple Intelligences: The theory of multiple intelligences is a theory of intelligence that differentiates it into specific (primarily sensory) 'modalities', rather than seeing intelligence as dominated by a single general ability. This model was proposed by Howard Gardner in his 1983 book *Frames of Mind: The Theory of Multiple Intelligences*.

Multiple Intelligences: Gardner chose eight abilities that he held to meet these criteria: musical-rhythmic, visual-spatial, verbal-linguistic, logical-mathematical, bodily-kinesthetic, interpersonal, intrapersonal, and naturalistic.

a) Need to be linguistically sound enough to communicate orally and verbally both with the management and the users; know how to prepare library reports ; how to excel in user education programmes with informative and motivating oratory

b) Need to be logically and mathematically strong enough so as to be able to execute better library budgeting ; do cost benefit analysis and bibliometric studies; handle user statistics with softwares

c) Need to be spatially conscious so as to select colours for library building, assist the architect; do interior decoration, design library layout/sketch.

d) Need to be kinaesthetically knowledgeable and physically strong so as to replace books, arrange computers and furniture, arrange books for exhibitions, do shelf rectification etc.

e) Need to be musically resourceful so as to deal with music related information sources available in the library – collecting, classifying, preserving and uploading musical pieces, do thing rhythmically, play music etc.

f) Need to possess interpersonal skills so as to deal with superiors, colleagues and subordinates efficiently, share knowledge, listen to others, befriend others, participate in LIS forums, appreciate others etc.

g) Need to have intrapersonal skills so as to work alone, use personal experience, know one's capacities and limitations learn from errors, understand readers' mind etc.

h) Need to be nature lover so as to launch green library initiatives, keep indoor plants, maintain garden, do rainwater harvesting, install water fountain etc., and

i) Need to be emotionally strong enough to handle queries, share novel ideas, respect others' feelings, tackle typical situations, touch the feelings of authorities, control anger, share happiness, keep one's cool etc.

The above listed skills or aptitudes or intelligences are very much required in the present day library management. The library professionals need to be multi-faceted, multi-talented and multi-tasking. They should be able to thrive in all spheres of modern library organization. They need to be linguistically, mathematically, spatially, nature-loving, interpersonally, intrapersonally, emotionally, technologically, managerially, communicatively and kinaesthetically strong enough to lead a modern techno-driven 21st century library and information centres.

3. REVIEW OF LITERATURE

Ashcroft (2004) indicated that the LIS professionals need to change because of the IT trends, thus their roles, characteristics and skills are set to adjust to the changes. **Fourie (2004)** indicated that IT has impacted on the future of librarians' work activities and responsibilities. She described how librarians are in the cyberspace world and their roles have to be changed according to the new IT developments.

Baskaran, Tamizhchelvan and Gopalakrishnan (2005) undertook a study to identify the multiple intelligence of 255 library science students undergoing BLISc and MLIS course in the Centre for Distance Education, University of Madras. Three different multiple intelligences i.e. verbal/linguistic intelligence, intrapersonal intelligence and interpersonal intelligence were studied. It is found out that all the LIS students have equal amount of multiple intelligence; PG students have more multiple intelligences than UG students and Female LIS students have more multiple intelligences than male students.

Regha & Rani (2006) conducted the important for the library and information science professionals to live up to the expectations of the users. To meet the user expectations, certain basic qualities have to be developed. Job psychograph is used to measure an individual's qualities and fitness for the job. The found that importance of certain traits as identified by library professionals employed in higher educational institutions of Tamil Nadu. The study showed that sincerity, clarity of thought; good interpersonal relationship and honesty are considered more important and teaching ability and emotional stability are considered less important by LIS professionals.

RashmiKumbar (2006) conducted a study on Multiple Intelligences with 142 school libraries and effective use of library resources. Questions in the study are: How can school libraries and librarians be a part of the culture of promoting books and reading? Can we go beyond organizing author talks book fairs book presentation and so on? Can we target the Kinder-gardeners and the primary school students and do some experiment to inculcate this virtue called Reading? An effort has been made in this direction and be considered successful to a great extent by the author in her school.

Baskaran and Gopalakrishnan (2006) emphasized that in the present digital environment theoretical knowledge is not sufficient for the library and information scientists so practical exposure is must to cope up with this environment. It is essential to have knowledge on some of the Multiple Intelligences such as general verbal intelligence logical-mathematical intelligence and spatial intelligence. This paper has made an attempt to know the intelligence among the younger professionals in the field of LIS who are studying library science.

Carol (2006) reviewed the theory of Howard Gardner multiple intelligences theory as one potential framework for exploring cross-cultural digital library usability. Each component of Gardner's theory is placed in a cultural context and then briefly reviewed in terms of its potential application to digital libraries.

Chau (2006) designed an online tutorial to integrate students' learning styles and their unique blend of intelligences in the library research process. The goal was to encourage higher-order thinking so that learners can make meaningful associations among information acquired during research. He had integrated Dunn's learning styles and Gardner's multiple intelligences theories in a sequenced learning strategies. This tool-kit provided a favourable environment so that participants can learn the styles in which they learn best and intuitively apply their own blend of intelligences.

Jeyshankar (2015) analysed professionals working in present day university libraries need continuous grooming by acquiring core competencies and new skills so that they never become obsolete in this fast changing environment. The study explored the multiple intelligence skills of randomly selected 441 LIS professionals working in 47 universities of Tamilnadu using questionnaires designed on eight intelligences expounded by Gardner. The study found that: 114 respondents (25.9%) strongly agree that they can prepare informative abstracts and official communications effectively; 112 (25.4%) respondents strongly agree that they can work with Unicode to enter regional language details in software; 38.8 % (171) of the respondents agree that they have working knowledge of metric studies. The Male LIS professionals and those working in government universities are better than female LIS professionals and those working in private universities in respect of almost all the multiple intelligence skills.

4. OBJECTIVES

As far as multiple intelligence skills of the government and private universities LIS professionals are concerned, the present study has the following specific objectives.

- To measure the linguistic, logical-mathematical, spatial, bodily-kinaesthetic, musical, interpersonal, intrapersonal, naturalistic and emotional intelligences.

5. HYPOTHESES

- There is no significant association between government and private universities LIS professionals of the respondents and their multiple intelligence skills.

6. METHODOLOGY

The study has built a well-structured questionnaire to elicit the opinion of the respondents to fulfil the objectives of the study. The study adopted simple random sampling to select the respondents from these 47 universities. 441 respondents are selected from these 47 universities.188 government university and 253 private university respondents form the sample for the present study. SPSS Ver. 23 was used for performing necessary statistical analysis percentile, WAM and Standard Deviation on the collected data to draw necessary inferences.

7. DATA ANALYSIS AND INTERPRETATION

Table 1: *Distribution of the Respondents*

Sl. no	Universities	Frequency	Percent
1	Government	188	42.6
2	Private	253	57.4
Total		**441**	**100.0**

Note. Source: Primary Data

Table 1 and Fig. 1 emit that 57.4 % (253) of the respondents are working in private sector universities in Tamilnadu while 42.6 % (188) of the respondents are working in government universities in Tamilnadu. Thus, private university LIS professionals have outnumbered their counterparts at government universities Tamilnadu.

Sector-wise Distribution of Respondents

Government Sector 43%

Private Sector 57%
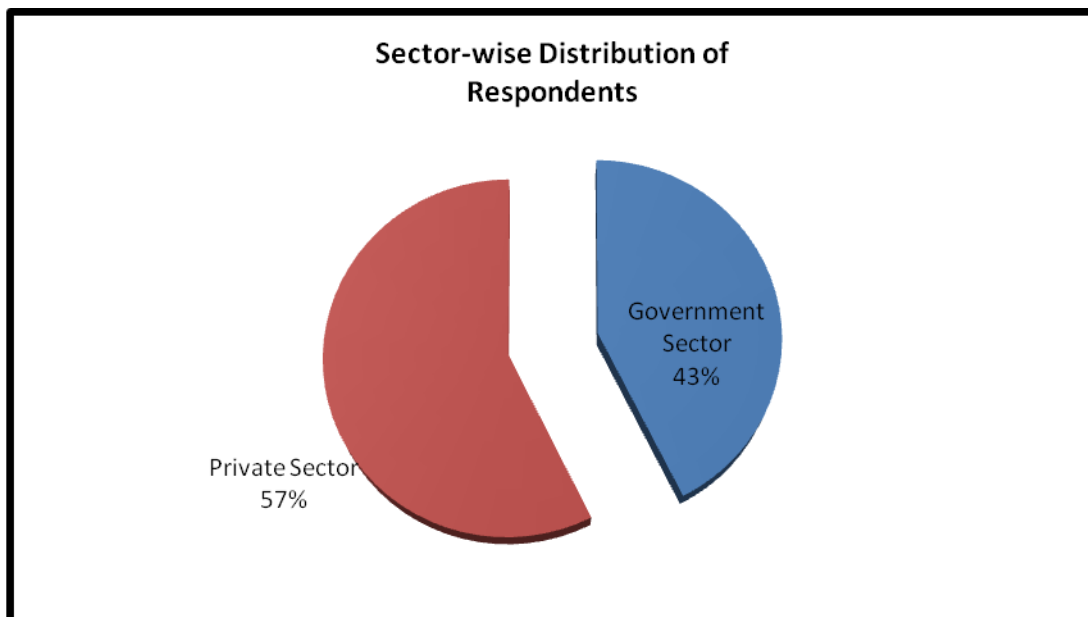
Table-2: *Nature of Institution Vs. Respondents*

| Nature of the Institution	Frequency	Percent
Traditional Universities	114	25.9
Professional Universities	291	66.0
Multi-disciplined Universities	36	8.2
Total	**441**	**100.0**

Note. Source: Primary Data

Table 2 and Fig. 2 show the institutional type and the distribution of the respondents. A majority of 291 (66 %) respondents are hailed from professional universities. While 25.9 % (114) of the respondents are from traditional universities, just 8.2 % (36) of them are from multi-disciplined universities. Thus, most of the respondents of the present study are hailed from professional universities of Tamilnadu.
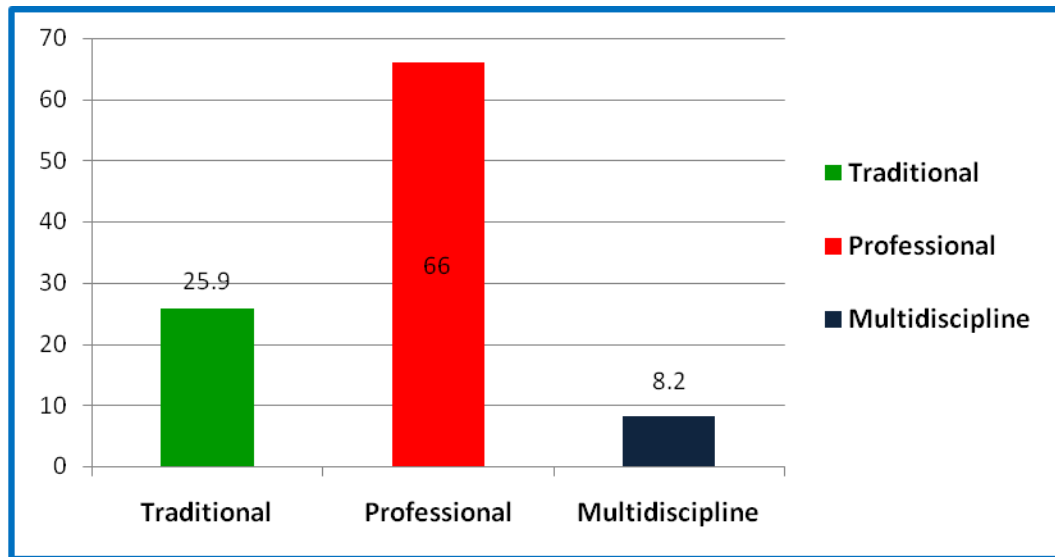
Figure 2: **Nature of working University of the Respondents**

Table-3: *Linguistic Intelligence among the Respondents of Government and Private Universities*

Statements / Variables	Govt		Rank	Private		Rank
	WAM	**SD**		**WAM**	**SD**	
I can compile index for books	3.55	.82	XIII	3.28	.59	XIII

	3.72	.92	IV	3.50	.82	IV
I can prepare informative abstract	3.72	.92	IV	3.50	.82	IV
I can prepare brochure/ newsletter/ flyers for library	3.72	.92	IV	3.52	.81	III
I can find suitable words from thesaurus and dictionaries for subject headings	3.56	.88	XII	3.31	.65	XII
I know the alternative words for searching any classification schedule	3.61	.89	XI	3.38	.77	XI
I can give suitable key words for retrieving information	3.73	.90	III	3.49	.78	V
I know the meaning of connecting symbols in CC & UDC	4.27	.44	I	4.18	.38	I
I can identify the BT / NT / RT for a subject heading	3.84	.86	II	3.66	.76	II
I can prepare official communications effectively	3.69	.93	V	3.44	.82	VI
I can read/ prepare catalogues in more than one language, excluding my mother tongue	3.65	.82	VII	3.42	.67	VII
I do work with Unicode to enter regional language details in Software	3.69	.93	V	3.44	.81	VI
I translate text from English to Tamil and vice versa	3.64	.84	VIII	3.41	.67	VIII
I can deliver talks in library orientation programmes both in Tamil and English	3.62	.87	X	3.39	.74	X
I can handle / process books in various languages other than my mother tongue	3.66	.79	VI	3.40	.64	IX
I attend to the reference queries posed in two/three languages other than my mother tongue	3.61	.89	XI	3.40	.78	IX
I do write for library blogs, Tweets & other SNS	3.52	.78	XIV	3.26	.54	XIV
I remember various CC/DDC/UDC numbers & bibliographic elements in AACR / ISBD/CCF	3.63	.91	IX	3.40	.79	IX

Table 3 reveals the linguistic intelligence skills of government and private university respondents.

Respondents from Government University (GU): GU respondents are best in their knowledge of connecting symbols used in CC and UDC (WAM, 4.27) followed by the identification of BT, NT and RT terms for a subject heading (3.84) and providing suitable

keywords for retrieving information (3.73). The WAM ranges from 3.52 to 4.27. The WAM is more than 3.5 and less than 4.0 for 16 linguistic intelligence skills.

Respondents from Private Universities (PU): PU respondents are best in their 'knowledge of connecting symbols used in CC and UDC' (WAM of 4.18) followed by the identification of BT, NT and RT terms for a subject heading (3.66) and preparation of library brochures and newsletters (3.52). The WAM ranges from 3.26 to 4.18. The WAM is more than 3.5 and less than 4.0 for two skills and it is less than or equal to 3.5 for 14 skills.

Respondents of Government *Vs.* Private Universities: Both the GU respondents and PU respondents are most skilled at using the 'connecting symbols in CC and UDC' and 'identification BT, NT and RT for a subject heading'.

The respondents from Government Universities are better skilled than their counterparts from private universities in all the 17 linguistic intelligence skills. While the WAM of GU respondents is more than 3.50 and less than 4.0 for 16 linguistic intelligence skills, it is so for only two skills among PU respondents. The WAM of GU respondents is less than 3.50 for not even a single skill but it is so for 14 skills among PU respondents.

All the 17 sub-scales have got 14 varying ranks among both the GU and PU respondents.

Table 4: *Logical-Mathematical Intelligence Skills of the respondents of Government and Private Universities*

Statements / Variables	Govt.			Private		
	M	**SD**	**Rank**	**M**	**SD**	**Rank**
I clearly perceive cost effect analysis of each section of the library	3.10	1.30	X	2.73	1.11	XI
I follow systematic/ logical approach in library management	3.82	.85	III	3.72	.78	II
Introspect about better stock verification methods	3.88	.88	I	3.77	.77	I
I prefer to solve problems related to library administration	3.84	.84	II	3.63	.80	III

I have working knowledge on Librametry, Bibliometric, Informetrics, Scientometric & Webometric analysis techniques	3.82	.79	III	3.62	.67	IV
I have better experience in IRS (Field search, Boolean, using field term & truncation etc..)	3.77	.91	IV	3.57	.82	V
I have experience in the preparation of library annual report	3.58	.78	IX	3.38	.65	X
I have experience in handling qualitative and quantitative information in the library	3.66	.94	V	3.42	.82	VII
I can use SPSS & MSEXCEL software for the statistical analysis of library usage and Information seeking behaviour studies	3.65	.89	VI	3.43	.81	VI
I can conduct user studies and draw inferences using various tools	3.63	.91	VII	3.39	.77	IX

Logical Mathematical Intelligence Skills Vs. Working Sector: WAM
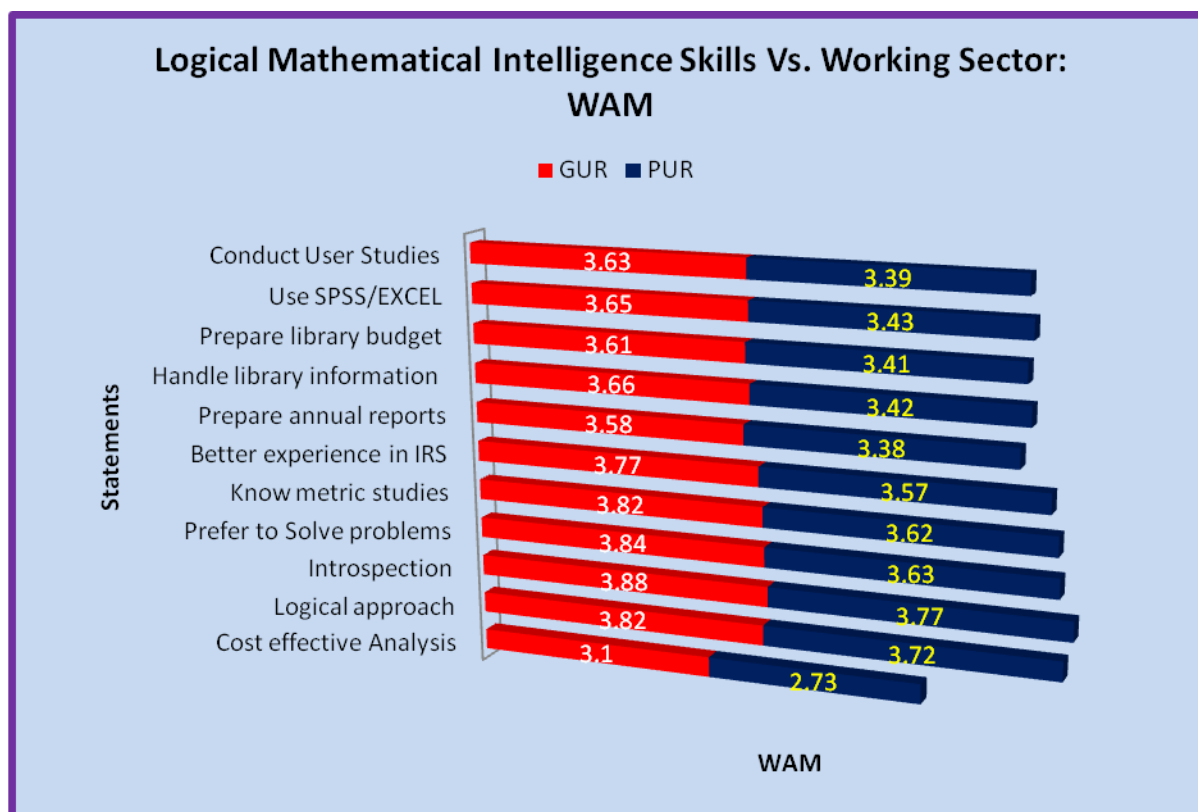
_Figure_4: Sector-wise Distribution of logical and mathematical intelligence skills of the Respondents

Table 4 and Fig.4 show the university sector-wise distribution of logical and mathematical intelligence skills of the respondents.
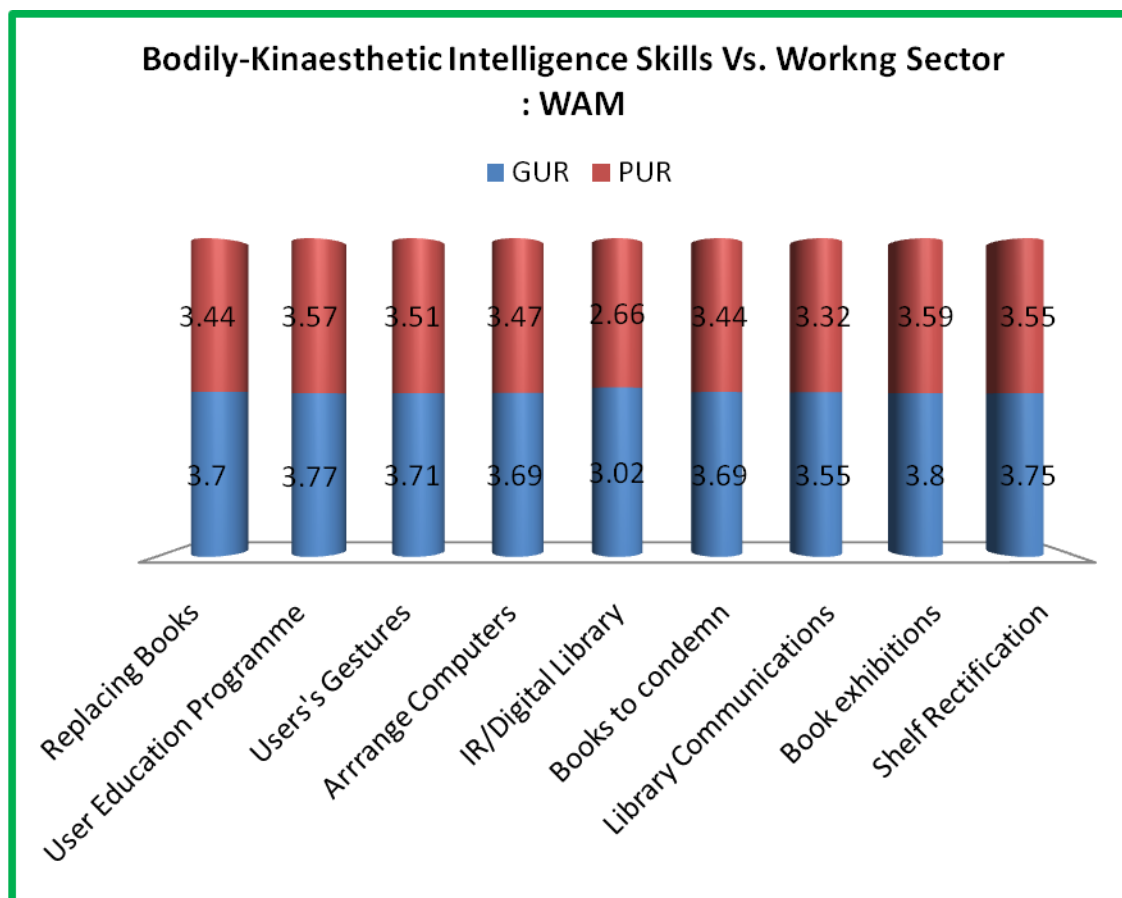
Respondents from Government Universities: The GU respondents are best at 'introspecting better stock verification methods' (WAM of 3.88), 'preferring to solve problems related to library administration' (WAM of 3.84), 'following systematic approach in library management' and 'possessing knowledge of metric studies' (WAM of 3.82). They are least skilled in the 'preparation of library annual report' (WAM of 3.58) and 'perceiving cost effect analysis of each section of the library' (WAM of 3.10). The WAM ranges from 3.10 to 3.88. They have WAM of 3.50+ for 10 skills and WAM of less than 3.50 for only one skill.

Respondents from Private Universities: The PU respondents are best at 'introspecting better stock verification methods' (WAM of 3.77), 'following systematic approach in library management' (WAM of 3.72) and 'preferring to solve problems related to library administration' (WAM of 3.63). The WAM ranges from 2.73 to 3.77. The WAM of one skill is less than 3.0. While WAM is more than 3.50 for five skills, it is less than 3.50 for five skills. The female respondents are least skilled at 'perceiving cost effect analysis of each section of the library' as its WAM is just 2.73.

Respondents from Government _Vs_. Private Universities: The respondents of both government and private universities are equally good at skills like 'introspection of stock verification methods', 'following systematic approach in library management' and 'preferring to solve problems related to library administration'. The WAM of GU respondents is more than that of PU respondents in all the eleven skills of logical-mathematical intelligence. Thus, GU respondents are better skilled than PU respondents in their logical-mathematical intelligence. While GU respondents have WAM of 3.50+ for 10 skills, the PU respondents have so only for five skills. The PU respondents have WAM of less than 3.50 for five skills but the GU respondents have so only for one skill.

Table 5: _Bodily-Kinaesthetic Intelligence Skills Vs. Government and Private University Respondents_

Statements / Variables	Govt.			Private		
	WAM	SD	Rank	WAM	SD	Rank
I prefer to work in replacing the books in the library racks	3.70	.94	V	3.44	.82	VI
I conduct library orientation / user education programmes	3.77	.93	II	3.57	.87	II
I am good at imbibing users' gestures	3.71	.87	IV	3.51	.80	IV
I enjoy arranging computers/ racks/ furniture etc ..	3.69	.90	VI	3.47	.78	V
I can scan/upload the documents in the IR/digital library	3.02	1.26	VIII	2.66	1.07	VIII
I prepare list of books to be bound / condemned / mended	3.69	.93	VI	3.44	.82	VI
I prepare library communications in computer systems	3.55	.79	VII	3.32	.63	VII
I arrange books for displays / exhibitions	3.80	.95	I	3.59	.89	I
I do shelf rectification regularly	3.75	.91	III	3.55	.85	III

Bodily-Kinaesthetic Intelligence Skills Vs. Workng Sector : WAM

Figure 5: Sector-wise distribution of Bodily-Kinaesthetic Intelligence of the Respondents

Table 5.29 and Fig.5.12 reveal the university sector-wise distribution of bodily-kinaesthetic intelligence skills of the respondents.

Government University Respondents (GUR): The GUR are greatly skilled at arranging books for displays or exhibitions (WAM=3.80), conducting library orientation or user education programmes (WAM=3.77), doing shelf rectification regularly (WAM =3.75) and imbibing users' gestures (WAM = 3.71). They have minimum skills at preparing library communications in computer system (WAM = 3.55) and scanning and uploading the documents in the IR or the digital library (WAM = 3.02).

Private University Respondents (PUR): The PUR are highly skilled at arranging books for displays or exhibitions (WAM=3.59), conducting library orientation or user education programmes (WAM=3.57), doing shelf rectification regularly (WAM= 3.55) and imbibing users' gestures (WAM= 3.51). They are least skilled at preparing library communications in computer system (WAM = 3.32) and scanning and uploading the documents in the IR or the digital library (WAM = 2.66).

Government *Vs.* Private University Respondents: Both government and private university respondents are most and least skilled in the same set of five skills of their bodily-kinesthetic intelligence. But when we compare the WAM of the skills, it is clearly understood that the respondents of Government universities are better skilled than their counterparts at private universities in respect of their bodily-kinesthetic intelligence. There is a great deal of difference in the magnitude of their bodily-kinesthetic intelligence.

While GUR have WAM of more than 3.50 for 8 skills (out of 9), the PUR have WAM of more than 3.50 for just 4 skills. The GUR have WAM of less than 3.50 for just one skill but the PUR have WAM of less than 3.50 for five skills.

Table 6: *Musical Intelligence Skills Vs. Government and Private University Respondents*

Statements	Government			Private		
	M	SD	Rank	M	SD	Rank
I can classify music materials into classic, folk & modern / western	3.43	.55	VI	3.29	.45	VI
I collect, preserve, disseminate (both print & electronic) music records	3.51	.68	IV	3.33	.55	IV
I can upload the music materials in the IR/digital library	3.47	.57	V	3.31	.46	V
I like doing things in rhythmic way	3.54	.73	III	3.43	.73	II
I can group/ remix the music scores and repeat wherever required	2.95	1.13	VII	2.64	.95	VII
I play light music in the reference hall	3.56	.72	II	3.44	.71	I
I know the biographies on musical composers	3.57	.77	I	3.40	.69	III

Government University Respondents (GUR): The GUR are greatly skilled at their knowledge on musical composers (3.57), playing light music in the reference hall (3.56) and doing things in rhythmic way (3.54). They are least skilled at classifying music materials into classic, folk, modern/western (3.43) and grouping/remixing the music scored and repeats wherever required. Their skills are moderate at collecting, preserving and disseminating music records (3.51).

Private University Respondents (PUR): The PUR are highly skilled at playing light music in the reference hall (3.44), doing things in rhythmic way (3.43) and knowing the biographies of musical composers (3.40). They are least skilled in classifying music materials into classic, folk, modern/western (3.29) and grouping/remixing the music scored and repeat wherever required (2.64). They have moderate skills at collecting, preserving and disseminating music records (3.33).
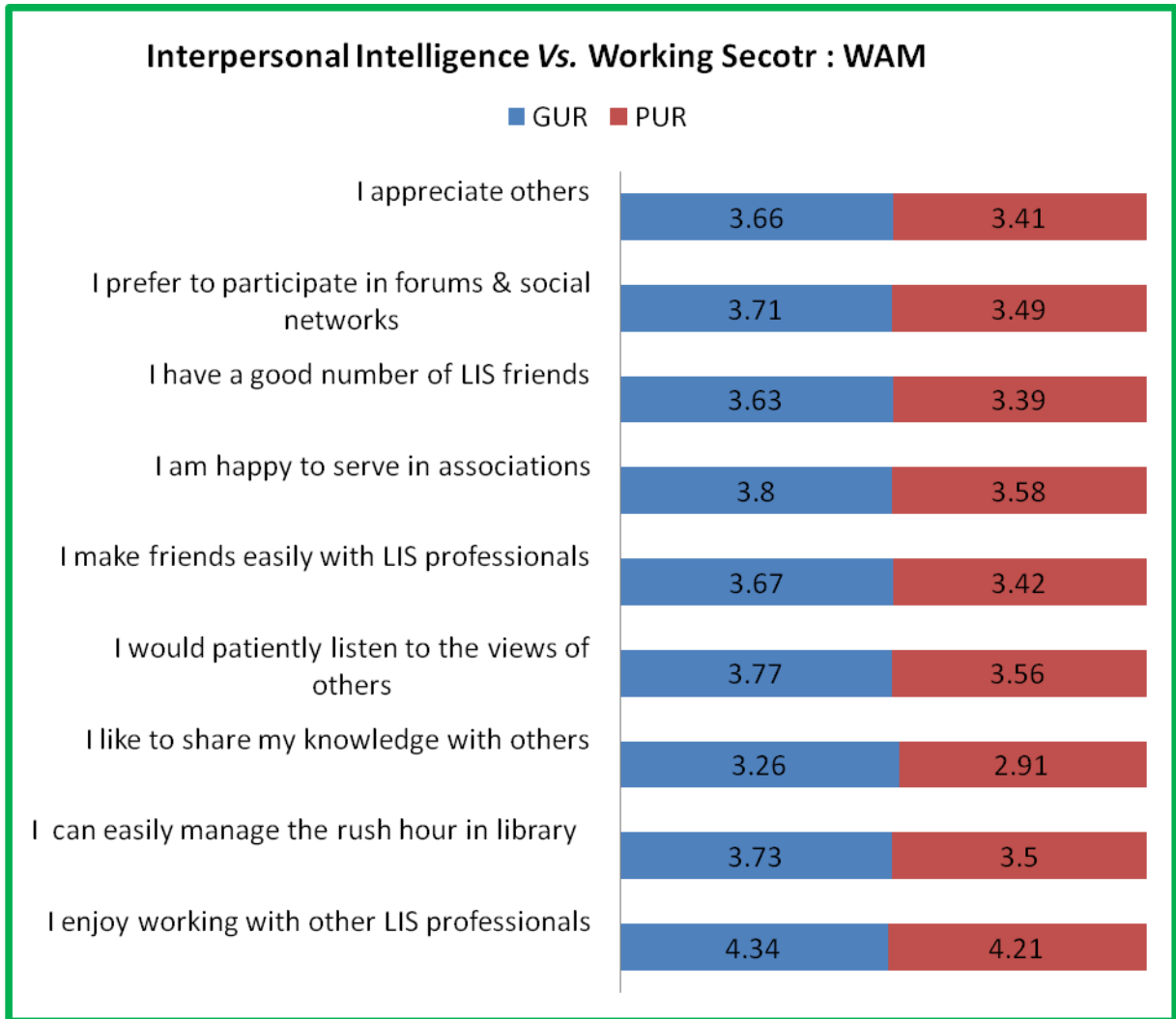
Government *Vs*. Private University Respondents: The highest mean value for GUR is 3.57 while it is just 3.44 for PUR. The mean value ranges between 3.57 and 2.95 for GUR and it ranges from 3.44 to 2.64 for PUR. The GUR have mean value of 3.5 and above for 4 skills while the PUR have so for none of their musical scores. The GUR have the mean value between 3.0 and < 3.50 for two values while PUR have so for six values. Thus, the GUR are better skilled than their counterparts at PUR with regard to their musical skills.

Both GUR and PUR are least skilled and moderately skilled in the same set of musical skills, though the mean valued vary greatly.

Table 7: *Interpersonal Intelligence Vs. Government and Private University of the Respondents*

Statements	Government			Private		
	WAM	**SD**	**Rank**	**WAM**	**SD**	**Rank**
I enjoy working with other LIS professionals	4.34	.47	I	4.21	.41	I
I can easily manage the rush hour in library	3.73	.93	IV	3.50	.82	IV
I like to share my knowledge with others through conference, seminars & workshops.	3.26	1.46	IX	2.91	1.37	IX
I would patiently listen to the views of my fellow LIS professionals & library users	3.77	.96	III	3.56	.89	III
I make friends easily with LIS professionals	3.67	.95	VI	3.42	.82	VI
I am happy to serve as a member, secretary, president in the LIS Association and/or working place	3.80	.98	II	3.58	.91	II
I have a good number of LIS professionals friends and a circle of close contacts	3.63	.84	VIII	3.39	.67	VIII
I prefer to participate in LIS forum, e-groups, face book, twitter etc.. and other social networks	3.71	.91	V	3.49	.81	V
I appreciate other LIS professional's attitudes / views / aptitudes / achievements	3.66	.83	VII	3.41	.66	VII

Figure **3: Distribution of Interpersonal Intelligence Skills of the *Government and Private University* Respondents**

Table 7 and Fig. 3shows the sector-wise distribution of interpersonal intelligence skills of the respondents.

Government University Respondents (GUR): The GUR are highly skilled at enjoying working with other LIS professionals (4.34) and serving happily as a member or secretary of LIS association or working places (3.80). They are least skilled at having good number of LIS professional friends (3.63) and sharing their knowledge with others through conferences and seminars (3.26). Their skills are moderate at participating in LIS forums and social networking networks (3.71) and making friends easily with LIS professionals (3.67).

Private University Respondents (PUR): The PUR are highly skilled at enjoying working with other LIS professionals (4.21) and serving happily as a member or secretary of LIS association or working places (3.58). They are least skilled at having good number of LIS professional friends (3.39) and sharing their knowledge with others through conferences and seminars (2.91). Their skills are moderate at participating in LIS forums and social networking networks (3.49) and making friends easily with LIS professionals (3.42).

Government *Vs.* Private University Respondents: Both Government and Private University respondents have ranked their interpersonal intelligence skills same i.e. both have given same ranking to all the nine different interpersonal intelligence skills. But the magnitude of skills varies. The respondents of Government universities are better skilled than their counterparts at Private universities in all the interpersonal intelligence skills.

While the WAM of one skill is more than 4.0 for both GUR and PUR, the WAM of 7 skills are between 3.5 and 4.0 for GUR and it is so only for 3 skills in the case of PUR. Only PUR have the WAM of less than 3.0 for a skill. The WAM is between 3.0 and 3.49 for just one skill in the case of GUR but it is so for 5 skills in the case of PUR.

Table 8 reveals the intrapersonal intelligence skills of government and private university respondents.

Government University Respondents: The GUR are highly skilled at four intrapersonal intelligence skills whose WAM is more than 4.0. They are : 'I maintain a daily record about my LIS activities' (4.36) ; 'I use my personal experience to solve problems/ issues in library' (4.26); 'I can set vision & mission for the development of library' (4.24) and 'I wish to be honest and frank in my feelings, thoughts and actions' (4.21). They have moderate skills at working alone and getting things done in the library (3.80) and learning from their errors and mistakes committed (3.79). They are least skilled at having clear notion about themselves and their objectives (3.08).

Private University Respondents: The GUR are highly skilled at four intrapersonal intelligence skills whose WAM is more than 4.0. They are : 'I maintain a daily record about my LIS activities' (4.26) ; 'I use my personal experience to solve problems/ issues

in library' (4.15); 'I can set vision & mission for the development of library' (4.17) and 'I wish to be honest and frank in my feelings, thoughts and actions' (4.12). They have moderate skills at working alone and getting things done in the library (3.57) and learning from their errors and mistakes committed (3.57). They are least skilled at having clear notion about themselves and their objectives (2.74).

Table 8: *Intrapersonal Intelligence among Government and Private University Respondents*

Statements	Government			Private		
	WAM	**SD**	**Rank**	**WAM**	**SD**	**Rank**
I can set vision & mission for the development of library	4.24	.43	III	4.17	.38	II
I can work alone & get things done in the library	3.80	.95	V	3.57	.87	V
I use my personal experience to solve problems/ issues in library	4.26	.44	II	4.15	.36	III
I am aware of my capacities/limitations in LIS knowledge	3.77	.92	VII	3.51	.81	VI
I wish to be honest and frank in my feelings, thoughts and actions	4.21	.41	IV	4.12	.32	IV
I have clear notion about myself and my objectives	3.08	1.29	XI	2.74	1.13	IX
I learn from my errors and mistakes committed	3.79	.94	VI	3.57	.87	V
I maintain a daily record about my LIS activities	4.36	.48	I	4.26	.44	I
I put conscious efforts in satisfying my users	3.72	.88	VIII	3.49	.78	VII
I can understand readers' mind and act suitably	3.57	.73	X	3.37	.59	VIII
I let readers express / share (conversation, suggestion box etc)	3.72	.89	VIII	3.49	.78	VII
I employ various methods (survey, observation etc) to know my readers	3.69	.85	IX	3.49	.77	VII

Government *Vs*. Private University Respondents: Both GUR and PUR have the WAM of more than 4.0 for four skills. While the WAM is between 3.50 and 4.00 for seven intrapersonal intelligence skills of GUR, it is so only for 3 skills in the case of PUR. The

WAM of PUR lies between 3.00 and 3.49 for 4 skills; it is so for just one skill in the case of GUR.

Both GUR and PUR have ranked their intrapersonal intelligence skills almost same. But, the GUR are better skilled that their counterparts at Private Universities in all the 12 intrapersonal intelligence skills with slight variation.

Table 9: *Naturalistic Intelligence Skills among Government and Private University Respondents*

Statements	Government			Private		
	WAM	SD	Rank	WAM	SD	Rank
I am good at perceiving nature with all its diversity in the library	3.79	.94	II	3.57	.87	III
I spread awareness about the conducive environment	3.85	.98	I	3.62	.92	I
I have capability to transform the conventional library	3.18	1.39	IX	2.86	1.30	IX
I like to allow the natural breeze & ventilation enter into the library	3.85	.98	I	3.62	.92	I
I like to keep Indoor plants in the library for pleasant atmosphere	3.70	.87	VI	3.50	.79	VI
I like to have a beautiful garden in library premises	3.26	1.46	VIII	2.91	1.37	VII
I would like to focus on environmental awarenessprogrammes on TV	3.78	.94	III	3.59	.90	II
I like to display the new arrivals of books & journals in a beautiful / decorative and creative manner	3.23	1.44	VII	2.86	1.30	VIII
I have installed rainwater harvesting in my library	3.72	.88	V	3.51	.81	V
I keep the library neat and tidy to avoid pollutants	3.18	1.39	IX	2.88	1.33	VIII
I like to have a water fountain in the library	3.75	.91	IV	3.52	.81	IV

Table 5.49 and Fig.5.16 reveal the naturalistic intelligence skills of government and private university respondents.

Government University Respondents (GUR): The GUR are most skilled at arranging natural breeze and ventilation enter the library and spreading awareness about the conducive environment (3.85) followed by perceiving nature with all its diversity in the library (3.79) and focussing on environmental awareness programme on TV (3.78). Their skills are moderate at having installed rainwater harvesting in the library (3.72) and keeping indoor plants in the library for pleasant atmosphere (3.70). Their skills are least at transforming the conventional library (3.18) and keeping the library neat and tidy to avoid pollutants (3.18).
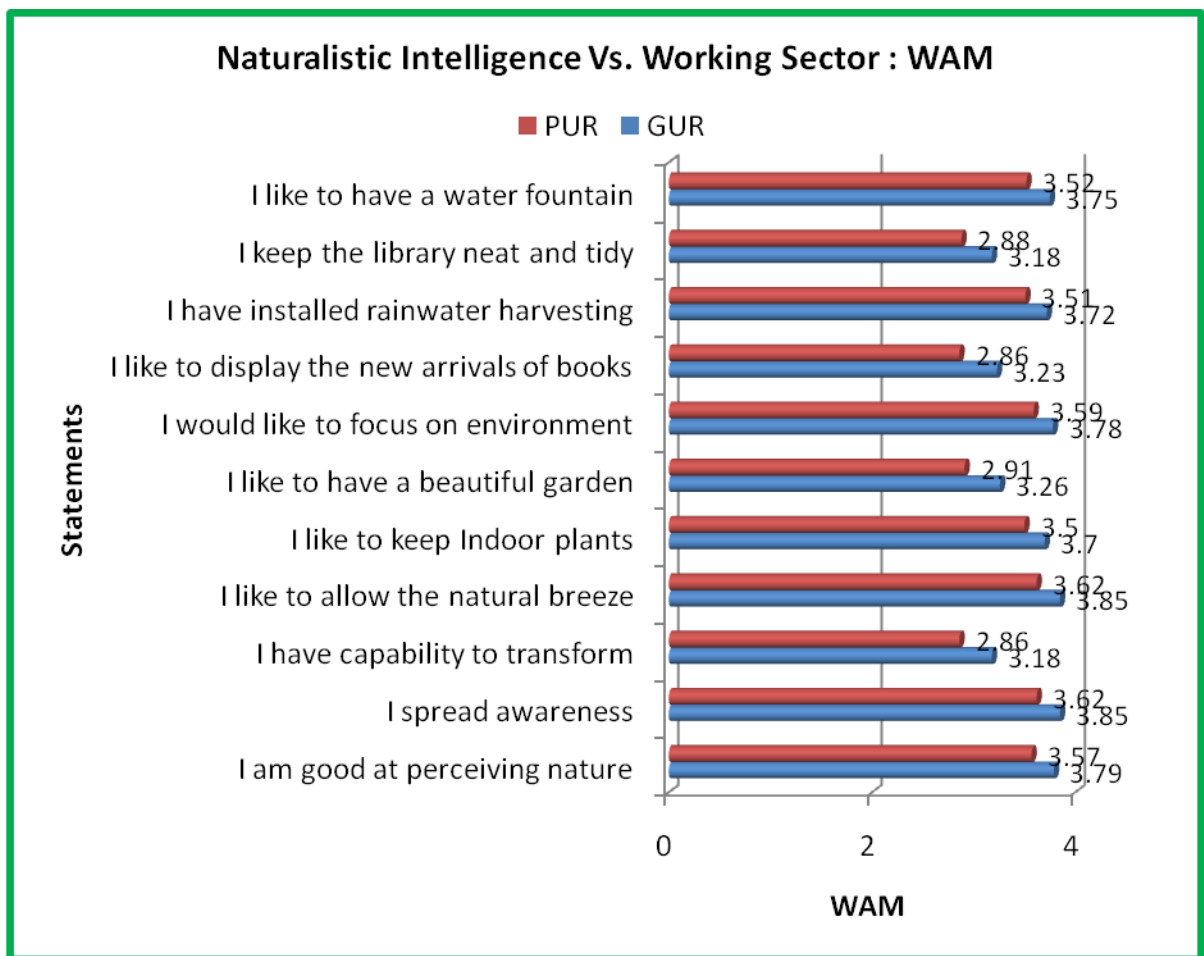
Figure 4: *Distribution of Naturalistic Intelligence Skills of the Government and Private University Respondents*

Private University Respondents (PUR) : The PUR are highly skilled at arranging natural breeze and ventilation enter the library and spreading awareness about the conducive environment (3.62) followed by focussing on environmental awareness programme on

TV (3.59) and perceiving nature will all its diversity in the library (3.57). They have moderate skills at keeping indoor plants in the library for pleasant atmosphere (3.50) and having installed rainwater harvesting in the library (3.51). They have lesser skills at keeping the library neat and tidy to avoid pollutants (2.88) and transforming the conventional library (2.86).

Government *Vs.* Private University Respondents: Both GUR and PUR have given almost same ranking to their naturalistic intelligence skills. But the magnitude varies. While WAM of GUR ranges from 3.85 to 3.18, the WAM of PUR ranges from 3.62 to 2.86. WAM is 3.50 and more for 7 skills for both GUR and PUR. While GUR have WAM of less than 3.0 for no skill, PUR have so for 4 skills.

The overall picture shows that the GUR are better than PUR in respect of their naturalistic intelligence skills.

Table 9: *Emotional Intelligence Vs. University-Sector of the Respondents*

Statements	Government			Private		
	WAM	SD	Rank	WAM	SD	Rank
I am able to handle queries by the users/clientele	3.75	0.91	IX	3.52	.81	VIII
I am comfortable in sharing novel ideas and new information with the library users/ clientele	4.37	0.48	I	4.23	.42	I
I feel helpless while managing library activities	3.80	0.95	VI	3.55	.85	VI
Many of the works assigned by superiors are difficult to understand	4.35	0.48	II	4.23	.42	I
I get mostly negative comments to my individual activities	3.75	0.91	IX	3.52	.81	VIII
I don't get appreciation of my works in the Library	3.77	0.92	VIII	3.55	.85	VI
I respect the feelings of library staff and users	3.65	0.82	XII	3.47	.75	X
What about weapon conflicts?	3.74	0.90	X	3.52	.81	VIII
I tackle the typical, uncomfortable situations taking place in the library	3.78	0.93	VII	3.57	.87	V

I know how to touch the feelings of library committee / authorities	4.26	0.44	III	4.17	.38	III
I control my anger in dealing with tough / rough users	3.40	1.20	XIV	3.13	1.09	XI
I escape from complicated situations by leaving the place then	4.18	0.39	V	4.06	.24	IV
I attend to users' queries without hurting their feelings	3.69	0.86	XIII	3.51	.80	IX
I share my joy / happiness with colleagues and users	3.72	0.89	XI	3.53	.83	VII
When books are lost, orders were misplaced, OPAC gets crashed ..., I keep myself cool and think about solving the issue	4.20	0.40	IV	4.16	.37	II

Government University Respondents: I am comfortable in sharing novel ideas and new information with the library users/ clientele (4.37) ; Many of the works assigned by superiors are difficult to understand (4.35); I know how to touch the feelings of library committee / authorities (4.26); When books are lost, orders were misplaced, OPAC gets crashed ..., I keep myself cool and think about solving the issue (4.20) and I escape from complicated situations by leaving the place then (4.18) are the five emotional intelligence skills the GUR are very good at. They have WAM of 3.5 o 3.9 for 9 skills. They have the least WAM of 3.40 for the skill 'I control my anger in dealing with tough / rough users'.

Private University Respondents: 'I am comfortable in sharing novel ideas and new information with the library users/ clientele' (4.23) ; ' Many of the works assigned by superiors are difficult to understand' (4.23); 'When books are lost, orders were misplaced, OPAC gets crashed ..., I keep myself cool and think about solving the issue' (4.16); 'I know how to touch the feelings of library committee / authorities' (4.17) and 'I escape from complicated situations by leaving the place then' (4.06)... are the five emotional intelligence skills the PUR are very good at. They have WAM of 3.5 to 3.9 for 8 skills. They have the least WAM of 3.13 for the skill 'I control my anger in dealing with tough / rough users'.

Government *Vs*. Private University Respondents: Both GUR and PUR have WAM of more than 4.0 for five of their emotional intelligence skills. The GUR are better skilled than their counterparts in PUR in respect of all the fifteen emotional intelligence skills. While GUR have WAM of 3.5 to 3.9 for 9 skills, it is so for 8 skills in the case of PUR. While GUR have assigned 14 ranks to the emotional intelligence skills, PUR have assigned 11 ranks.

8. MAJOR FINDINGS

The respondents from government universities are better than those from private universities in all of their multiple intelligence skills. So, special lectures, workshops, tutorials or seminars may be arranged for the LIS professionals of private universities. In to exclusive need based training or workshops, courses etc., may be arranged for the women LIS professionals working in private universities. The LIS professionals of government universities need to be well trained in spatial and music intelligence skills. Except intrapersonal and interpersonal skills, all other multiple intelligence skills need to be imparted to female LIS professionals and those working in private universities.

Table 10: *Findings-Specific Suggestions*

S.No	Multiple Intelligence	Sector (Overall Mean)		
		GUR	PUR	Diff.
1	Linguistic	**3.69**	3.46	0.23
2	Logical Mathematical	**3.67**	3.46	0.21
3	Spatial	**3.49**	3.23	0.26
4	Bodily Kinesthetic	**3.63**	3.39	0.24
5	Music	**3.43**	3.26	0.17
6	Interpersonal	**3.73**	3.50	0.23
7	Intrapersonal	**3.85**	3.66	0.19
8	Naturalistic	**3.57**	3.31	0.26
9	Emotional	**3.89**	3.71	0.18
Total		1.97	32.95	30.98
Overall Mean (for all 9 MI skills taken together)		**0.22**	**3.66**	**3.44**

It is noticed that 57.4 % (253) of the respondents are working in private sector universities in Tamilnadu while 42.6 % (188) of the respondents are working in government universities in Tamilnadu (Table 1). A majority of 291 (66 %) respondents are hailed from professional universities. While 25.9 % (114) of the respondents are from traditional universities, just 8.2 % (36) of them are from multi-disciplined universities (Table 2).

It is found that GU respondents are best in their knowledge of connecting symbols used in CC and UDC (WAM, 4.27) followed by the identification of BT, NT and RT terms for a subject heading (3.84) and providing suitable keywords for retrieving information (3.73). PU respondents are best in their 'knowledge of connecting symbols used in CC and UDC' (WAM of 4.18) followed by the identification of BT, NT and RT terms for a subject heading (3.66) and preparation of library brochures and newsletters (3.52). The respondents from Government Universities are better skilled than their counterparts from private universities in all the 17 linguistic intelligence skills (Table 3).

It is unearthed that GU respondents are best at 'introspecting better stock verification methods' (WAM of 3.88), 'preferring to solve problems related to library administration' (WAM of 3.84), 'following systematic approach in library management' and 'possessing knowledge of metric studies' (WAM of 3.82). They are least skilled in the 'preparation of library annual report' (WAM of 3.58) and 'perceiving cost effect analysis of each section of the library' (WAM of 3.10). The PU respondents are best at 'introspecting better stock verification methods' (WAM of 3.77), 'following systematic approach in library management' (WAM of 3.72) and 'preferring to solve problems related to library administration' (WAM of 3.63). GU respondents are better skilled than PU respondents in their logical-mathematical intelligence (Table 4).

It is made known that the GUR are greatly skilled at arranging books for displays or exhibitions (WAM=3.80), conducting library orientation or user education programmes (WAM=3.77), doing shelf rectification regularly (WAM =3.75) and imbibing users' gestures (WAM = 3.71). The PUR are highly skilled at arranging books for displays or exhibitions (WAM=3.59), conducting library orientation or user education programmes (WAM=3.57), doing shelf rectification regularly (WAM= 3.55) and imbibing users' gestures (WAM= 3.51). The respondents of Government universities are better skilled than their counterparts at private universities in respect of their bodily-kinesthetic intelligence. There is a great deal of difference in the magnitude of their bodily-kinesthetic intelligence (Table 5).

It is discovered that the GUR are greatly skilled at their knowledge on musical composers (3.57), playing light music in the reference hall (3.56) and doing things in rhythmic way (3.54). They are least skilled at classifying music materials into classic, folk, modern/western (3.43) and grouping/remixing the music scored and repeats wherever required. The PUR are highly skilled at playing light music in the reference hall (3.44), doing things in rhythmic way (3.43) and knowing the biographies of musical

composers (3.40). They are least skilled in classifying music materials into classic, folk, modern/western (3.29) and grouping/remixing the music scored and repeat wherever required (2.64). The GUR are better skilled than their counterparts at PUR with regard to their musical skills (Table 6).

It is uncovered that the GUR are highly skilled at enjoying working with other LIS professionals (4.34) and serving happily as a member or secretary of LIS association or working places (3.80). They are least skilled at having good number of LIS professional friends (3.63) and sharing their knowledge with others through conferences and seminars (3.26). The PUR are highly skilled at enjoying working with other LIS professionals (4.21) and serving happily as a member or secretary of LIS association or working places (3.58). They are least skilled at having good number of LIS professional friends (3.39) and sharing their knowledge with others through conferences and seminars (2.91). The respondents of Government universities are better skilled than their counterparts at Private universities in all the interpersonal intelligence skills (Table 7).

It is brought to the light that the GUR are highly skilled at four intrapersonal intelligence skills whose WAM is more than 4.0. They are : 'I maintain a daily record about my LIS activities' (4.36) ; 'I use my personal experience to solve problems/ issues in library' (4.26); 'I can set vision & mission for the development of library' (4.24) and 'I wish to be honest and frank in my feelings, thoughts and actions' (4.21). They have moderate skills at working alone and getting things done in the library (3.80) and learning from their errors and mistakes committed (3.79). The PU respondents have moderate skills at working alone and getting things done in the library (3.57) and learning from their errors and mistakes committed (3.57). They are least skilled at having clear notion about themselves and their objectives (2.74). The GUR are better skilled that their counterparts at Private Universities in all the 12 intrapersonal intelligence skills with slight variation (Table 8).

It is noticed that the GUR are most skilled at arranging natural breeze and ventilation enter the library and spreading awareness about the conducive environment (3.85) followed by perceiving nature with all its diversity in the library (3.79) and focussing on environmental awareness programme on TV (3.78). Their skills are moderate at having installed rainwater harvesting in the library (3.72) and keeping indoor plants in the library for pleasant atmosphere (3.70). The PUR are highly skilled at arranging natural breeze and ventilation enter the library and spreading awareness about the conducive environment (3.62) followed by focussing on environmental awareness

programme on TV (3.59) and perceiving nature will all its diversity in the library (3.57). They have moderate skills at keeping indoor plants in the library for pleasant atmosphere (3.50) and having installed rainwater harvesting in the library (3.51). The overall picture shows that the GUR are better than PUR in respect of their naturalistic intelligence skills (Table 9).

Government and Private University Respondents: It is identified that "I am comfortable in sharing novel ideas and new information with the library users/ clientele (4.37) ; Many of the works assigned by superiors are difficult to understand (4.35); I know how to touch the feelings of library committee / authorities (4.26); When books are lost, orders were misplaced, OPAC gets crashed ..., I keep myself cool and think about solving the issue (4.20) and I escape from complicated situations by leaving the place then (4.18)" are the five emotional intelligence skills the GUR are very good at. 'I am comfortable in sharing novel ideas and new information with the library users/ clientele' (4.23) ; ' Many of the works assigned by superiors are difficult to understand' (4.23); 'When books are lost, orders were misplaced, OPAC gets crashed ..., I keep myself cool and think about solving the issue' (4.16); 'I know how to touch the feelings of library committee / authorities' (4.17) and 'I escape from complicated situations by leaving the place then' (4.06)" are the five emotional intelligence skills the PUR are very good at. The GUR are better skilled than their counterparts in PUR in respect of all the fifteen emotional intelligence skills (Table 9).

9. CONCLUSION

The study which has covered the LIS professionals working in government and private universities reveals that the male and government university LIS professionals are very good and good at many skills while female and private university LIS professionals are okay at many skills. This indicates the need for initiating certain solid steps both from the professionals and from the universities. The professional bodies / learned societies in the field of library and information science may join hands with universities and other non-governmental organizations to organize various soft skills / multiple intelligence skills training programmes taking a survey beforehand. A well groomed library professional good at many skills is an asset any institution he/she works in. His/her multiple intelligence skills may bring drastic changes and positive impacts both in the library landscape and library services.

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