Multiple Intelligence Skills of Library and Information Science Professionals Working in the Universities of Tamil Nadu: A Study

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Abstract

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. This present study explores 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 reveals 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. In toto, 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.

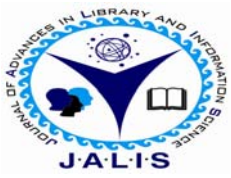
Keywords

Linguistic intelligence; logical intelligence; spatial intelligence; intrapersonal intelligence; interpersonal intelligence; naturalistic intelligence; LIS professionals.

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Introduction: Gardner's Theory of Multiple Intelligences

'Multiple intelligences: A psychological and educational theory' put forth by **Gardner (1983)** suggests that each individual manifests varying levels of intelligence and thus each person has a unique "cognitive profile". The theory was first laid down in 1983 in his book "Frames of mind: The theory of Multiple Intelligences" and has been further refined in subsequent years.

Gardner identifies different kinds of intelligences based upon eight criteria. His eight criteria for describing something as an independent kind of intelligence include: case studies of individuals exhibiting unusual talents in a given field; neurological evidence for areas of the brain that are specialized for particular capacities); the evolutionary relevance of the various capacities; psychometric studies; and a symbolic formulation of the area treated by each proposed intelligence. Gardner (1993) originally identified seven core intelligences: linguistic, logical-mathematical, spatial, bodily-kinesthetic, musical, interpersonal and intrapersonal. In 1999, he added an eighth, the naturalistic intelligence and indicated that work continues on whether there is an existential intelligence.

2. Review of Literature

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. 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.
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 (Feret & Marcinek 1999;Goulding et al., 1999: Lynch & Smith, 2001; Kwasik, 2002; Lovato-Grassman, 2003; Patridge & Hallam, 2004; Myburg, 2005; O'Connor & Li,2008; Orme, 2008; Howard,

2009 and Nonthcumjane, 2010).In addition, the LIS professionals should possess generic skills like information literacy, communication, critical thinking, teamwork, ethics and social responsibility and leadership traits (Feret & Marcinek 1999; Goulding et al., 1999: Lynch & Smith, 2001; Kwasik, 2002; Lovato-Grassman, 2003; Fisher, 2004; Patridge & Hallam, 2004; Myburg, 2005; Choi & Rasmussen, 2006; O'Connor & Li,2008; Orme, 2008; Choi & Rasmussen, 2009; Howard, 2009, Babu (2011) and Nonthcumjane, 2010).) In order to disseminate knowledge and information available in all current formats: print and electronic, the new era librarians are required to understand the need to learn more about new technologies and be comfortable using them in order to perform their utmost role, which is to organize the vast amount of information and resources in a way that is conveniently accessible to library users (Bin Hashim and Mokhtar 2012).Babu, Vinayagamoorthy and Gopalakrishnan (2007) stated that that Library and information professionals of today need to acquire knowledge and skills in information and communication technology (ICT) as the services of more and more libraries are now centering on information technology, especially in educational Institutions.

Babu and Ramesha (2007) outlined the various Soft Skills and certain core competencies for LIS professionals. They have argued for the Soft Skills Training in LIS Schools in general and universities in particular.Baskaran, Tamizhchelvan and Gopalakrishnan (2005) undertook a study to identify three different multiple intelligence of 255 library science students undergoing BLISc and MLIS course in the Centre for Distance Education, University of Madras and found 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. Kumbar (2006) conducted a study on Multiple Intelligences with 142 school libraries and effective use of library resources. 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.

3. Methodology

All the 47 universities of Tamilnadu are placed under the area of operation of the present study. 19 state universities, 2 central universities and 26 deemed universities are included in the list. The researcher adopted simple random sampling to select the respondents from these 47 universities. 441 respondents are selected from these 47 universities. 325 male and 116 female respondents/ 188 Government University and 253 private university respondents form the sample for the present study. The researcher has built a well structured questionnaire to elicit the opinion of the respondents to fulfil the objectives of the study.

4. Objectives

The specific objectives of the present study are :

- To measure the linguistic intelligence of the respondents
- To measure the logical-mathematical intelligence of the respondents
- To measure the spatial intelligence of the respondents
- To measure the bodily-kinesthetic intelligence of the respondents
- To measure the musical intelligence of the respondents
- To measure the interpersonal intelligence of the respondents
- To measure the intrapersonal intelligence of the respondents
- To measure the naturalistic intelligence of the respondents

5. Data Analysis And Interpretation

5.1 Socio-Demographic Information

Table -1 : Sector-wise Distribution of the Respondents

Sector of Universities	Frequency	Percent
Government Sector	188	42.6
Private Sector	253	57.4
Total	**441**	**100.0**

Table 1 emits 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 in Tamilnadu.

Table- 2 : Gender-wise Distribution of the Respondents

Gender	Frequency	Percent
Male	325	73.7
Female	116	26.3
Total	**441**	**100.00**

Table 2 reveals that out of 441 respondents surveyed under the study, 73.7% (325) are male respondents and 26.3% (116) are female respondents. This makes it clear that most of the library professionals in Tamilnadu universities are males and only $1/4^{th}$ of LIS professionals are females. Domination of male library professionals over female library professionals is made visible here.

Table- 3 : Designation-wise Distribution of the Respondents

Designation	Frequency	Percent
Prof / Librarian	29	6.6
Associate Prof. /	16	3.6
Asst. Prof. / Asst.	115	26.1
Technical Officer	281	63.7
Total	**441**	**100.0**

Table 3 discloses the designation-wise distribution of the respondents. While there are only 16 (3.6%) Associate Professors / Deputy Librarians in the present study, there are 29 (6.6%) Librarians/Professors under the purview of this study. 26.1 % (115) of the respondents are Assistant Professors / Assistant Librarians. The majority of the respondents (281) are Technical Officers / Library Assistants constituting 63.7% of total sample of the study.

5.2 Multiple Intelligences

5.2.1 Linguistic Intelligence of the Respondents

Table-4 : ***Linguistic Intelligence of the Respondents***

Statements / Variables	SA	A	N	D	SD
I can compile index for books	58 (13.2%)	58 (13.2%)	325 (73.7%)	0 (0.00%)	0 (0.00%)
I can prepare informative abstract	114 (25.9%)	34 (7.7%)	293 (66.4%)	0 (0.00%)	0 (0.00%)
I can prepare brochure/ newsletter/ flyers for library	110 (24.9%)	50 (11.3%)	278 (63.0%)	3 (0.7%)	0 (0.00%)
I can find suitable words from thesaurus and dictionaries for subject headings	72 (16.3%)	44 (10.0%)	321 (72.8%)	4 (0.9%)	0 (0.00%)
I know the alternative words for searching any classification schedule	96 (21.8%)	20 (4.5%)	325 (73.7%)	0 (0.00%)	0 (0.00%)
I can give suitable key words for retrieving information	102 (23.1%)	58 (13.2%)	281 (63.7%)	0 (0.00%)	0 (0.00%)
I know the meaning of connecting symbols in CC & UDC	95 (21.5%)	346 (78.5%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
I can identify the BT / NT / RT for a subject heading	99 (22.4%)	129 (29.3%)	210 (47.6%)	3 (0.7%)	0 (0.00%)
I can prepare official communications effectively	114 (25.9%)	14 (3.2%)	313 (71.0%)	0 (0.00%)	0 (0.00%)
I can read/ prepare catalogues in more than one language, excluding my mother tongue	68 (15.4%)	92 (20.9%)	281 (63.7%)	0 (0.00%)	0 (0.00%)
I do work with Unicode to enter regional language details in Software	112 (25.4%)	16 (3.6%)	313 (71.0%)	0 (0.00%)	0 (0.00%)
I translate text from English to Tamil and vice versa	70 (15.9%)	85 (19.3%)	286 (64.9%)	0 (0.00%)	0 (0.00%)
I can deliver talks in library orientation programmes both in Tamil and English	87 (19.7%)	41 (9.3%)	313 (71.0%)	0 (0.00%)	0 (0.00%)
I can handle / process books in various languages other than my mother tongue	59 (13.4%)	108 (24.5)	274 (62.1%)	0 (0.00%)	0 (0.00%)

I attend to the reference queries posed in two/three languages other than my mother tongue	99 (22.4%)	17 (3.9%)	325 (73.7%)	0 (0.00%)	0 (0.00%)
I do write for library blogs, Tweets & other SNS	47 (10.7%)	69 (15.6%)	325 (73.7%)	0 (0.00%)	0 (0.00%)
I remember various CC/DDC/UDC numbers & bibliographic elements in AACR / ISBD/CCF	103 (23.4%)	13 (2.9%)	325 (73.7%)	0 (0.00%)	0 (0.00%)

Note. CC = Colon Classification; UDC = Universal Decimal Classification; BT = Broader Term; NT = Narrower Term; RT = Related Term; SNS = Social Networking Sites; AACR = Anglo American Cataloguing Rules; ISBD = International Standard Bibliographic Description; CCF = Common Communication Format

Strongly agree: 114 respondents (25.9%) strongly agree that they can prepare informative abstracts and official communications effectively. While 112 (25.4%) respondents strongly agree that they can work with Unicode to enter regional language details in software's, 110 (24.9%) respondents strongly agree that they can prepare brochures, newsletters and flyers for the library. 23.4 % (103) of the respondents strongly agree that they remember various classification numbers and bibliographic elements of various standard formats, 23.1% (102) of them can give suitable keywords for retrieving information. Only 47 (10.7%) respondents strongly agree that they can write for library blogs, twitter and other social networking sites. While 13.2% (58) of the respondents strongly agree that they can compile index for books, 13.4% (59) of them can handle / process books in various languages other than their mother tongues.

Agree: 346 (78.5%) respondents agree that they know the meaning of connecting symbols in CC and UDC. While 129 (29.3%) respondents agree that they can identify BT, NT and RT for a subject heading, 108 (24.5%) respondents can handle books in other languages. Only 17 % (3.9%) of the respondents agree that they can attend to the reference queries posed in 2/3 languages other than their mother tongues, just 13 % of them agree that they remember various classification numbers and bibliographic elements.

Neutral (Neither Agree Nor Disagree): 325 (73.7%) respondents are neutral about their skills in compiling index for books, knowing the alternative words for searching any classification schedule, attending reference queries posed in two or three languages, writing for library blogs, tweets and social networking sites and remembering various CC/DDC/UDC numbers and bibliographic elements in AACR/ISBD/CCF. 71 % (313) of the respondents are neither strong nor weak at various skills like preparation of official communications, working with Unicode compliant softwares and delivering library orientation programmes in Tamil and English.

5.2.2 Logical – Mathematical Intelligence of the Respondents

Table 5 : ***Logical-Mathematical Intelligence skills of the respondents***

Statements / Variables	**SA**	**A**	**N**	**D**	**SD**
I clearly perceive cost effect analysis of each section of the library	70 (15.9%)	90 (20.4%)	0 (0.00%)	281 (63.7%)	0 (0.00%)
I follow systematic/ logical approach in library management	104 (23.6%)	128 (29.0%)	0 (0.00%)	209 (47.4%)	0 (0.00%)
I introspect about better stock verification methods	116 (26.3%)	130 (29.5%)	0 (0.00%)	195 (44.2%)	0 (0.00%)
I prefer to solve problems related to library administration	104 (23.6%)	108 (24.5%)	0 (0.00%)	229 (51.9%)	0 (0.00%)
I have working knowledge various metric studies like Bibliometrics	70 (15.9%)	171 (38.8%)	0 (0.00%)	200 (45.4%)	0 (0.00%)
I have better experience in IRS (Field search, Boolean, using field term & truncation etc..)	114 (25.9%)	60 (13.6%)	0 (0.00%)	267 (60.5%)	0 (0.00%)
I have experience in the preparation of library annual report	58 (13.2%)	90 (20.4%)	0 (0.00%)	293 (66.4%)	0 (0.00%)
I have experience in handling qualitative	114	2	0	325	0

and quantitative information in the library	(25.9%)	(5.0%)	(0.00%)	(73.7%)	(0.00%)
I can prepare library budget for various funding sources	102 (23.1%)	14 (3.2%)	0 (0.00%)	325 (73.7%)	0 (0.00%)
I can use SPSS & MSEXCEL software for the statistical analysis	104 (23.6%)	24 (5.4%)	0 (0.00%)	313 (71.0%)	0 (0.00%)
I can conduct user studies & draw inferences using various tools	100 (22.7%)	16 (3.6%)	0 (0.00%)	325 (73.7%)	0 (0.00%)

*Note***.** IRS = Information Retrieval System; SPSS = Statistical Package for Social Sciences

Strongly agree: 116 respondents (26.3%) strongly agree that they introspect better stock verification methods followed by 114 (25.9%) respondents who strongly agree that they can handle qualitative and quantitative information in the library and they have better experience in information retrieval system. While 23.6% (104) of the respondents strongly agree that they follow systematic / logical approach in library management, prefer to solve problems related to library administration and can use softwares for statistical analysis of library usage and information seeking behaviour studies. Only 70 (15.9%) respondents strongly agree that they can clearly perceive cost-effective analysis of each section of the library and they have working knowledge of various metric tools and techniques.

Agree: 38.8 % (171) of the respondents agree that they have working knowledge of metric studies, 29.5% (130) of them agree that they introspect better stock verification methods. While 128 (29.00%) respondents agree that they follow systematic approach in library management, 90 (20.4%) of them agree that they clearly perceive cost effect analysis of each section of the library and have experience in the preparation of library annual report.

Disagree: 73.7 % (325) of the respondents disagree that they have experience in handling quantitative and qualitative information in the library, can prepare budget for various funding sources and can conduct user studies and draw inferences using various tools. 313 (71%) respondents disagree that they can use SPSS and MS Excel for the statistical analysis followed by 293 (66.4%) respondents who disagree that they have experience in the preparation of library annual report. While 200 (45.4%) respondents disagree that they have working knowledge of metric studies, 195 (44.2%) respondents disagree that they introspect better stock verification methods.

5.2.3 Spatial Intelligence of the Respondents

Table 6 : ***Spatial Intelligence skills of the Respondents***

Statements / Variables	SA	A	N	D	SD
I select the necessary colours for painting the library building & furniture	101 (22.9%)	47 (10.7%)	293 (66.4%)	0 (0.00%)	0
I assist the Architect and the Engineers in the design of library sections and seating& lighting arrangement	72 (16.3%)	44 (10.0%)	325 (73.7%)	0 (0.00%)	0
I am able to work in the planning of interior decoration of the library	85 (19.3%)	31 (7.0%)	325 (73.7%)	0 (0.00%)	0
I like to fix leaders photos, symbols, maps, flow charts and diagrams along with text of quotations in the library	116 (26.3%)	12 (2.7%)	32 (7.3%)	281 (63.7%)	0
I can identify the fields in library automation modules	85 (19.3%)	20 (4.5%)	336 (76.2%)	0 (0.00%)	0
I can design the library websites	116 (26.3%)	32 (7.3%)	12 (2.7%)	281 (63.7%)	0
I can design network topology for the digital library	87 (19.7%)	29 (6.6%)	325 (73.7%)	0 (0.00%)	0
I prefer to provide special arrangement for physically challenged users	114 (25.9%)	14 (3.2%)	313 71.0%)	0 (0.00%)	0

I work for creating functional spaces in my library	105 (23.8%)	11 (2.5%)	325 (73.7%)	0 (0.00%)	0
I can prepare library layout / design / model / sketch	116 (26.3%)	12 (2.7%)	313 (71.0%)	0 (0.00%)	0
I arrange library furniture to have spatial accommodation	87 (19.7%)	41 (9.3%)	313 (71.0%)	0 (0.00%)	0
I plan for to have enough exit space (in case of emergency)	52 (11.8%)	76 (17.2%)	32 (7.3%)	281 (63.7%)	0

Strongly Agree: 116 respondents (26.3%) strongly agree that they are good at ' fixing photos, maps and diagrams with text of quotations in the library, 'preparing library layout/design /sketch', 'designing library websites' while 114 (25.9%) respondents strongly agree that they can provide special arrangement for physically challenged users. While 23.8 % (105) of the respondents strongly agree that they can 'create functional spaces in libraries', 22.9% (101) of the respondents strongly agree that they 'can select the necessary colours for painting the library'.

Agree: 76 respondents agree that they can plan for enough exit space while 47 respondents agree that they can select necessary colours. Only 12 respondents (2.7%) agree that they can fix photos and prepare library layout/sketch.

Neutral: Most of the respondents neither agree or nor disagree with 10 out of 12 items that form the components of spatial intelligence. More than 70 % of the respondents are neutral that they can assist the architect and engineers in the design of library sections, seating and lighting arrangement, work in the planning of interior decoration of the library, identify the fields in library automation modules, provide special arrangement for physically challenged users, create functional spaces in the library, prepare library layout/model and arrange library furniture to have spatial accommodation.

Disagree: 63.7% (281) of the respondents disagree that they can fix the photos, symbols, and charts with quotations in the library, design the library websites and plan to have enough exit space in the library in case of emergency.

5.2.4 Bodily-Kinesthetic Intelligence of the Respondents

Table 7 : ***Bodily-Kinesthetic Intelligence Skills of the Respondents***

Statements / Variables	**SA**	**A**	**N**	**D**	**SD**
I prefer to work in replacing the books in the library racks	116 (26.3%)	12 (2.7%)	313 (71.0%)	0 (0.0%)	0 (0.0%)
I conduct library orientation / user education programmes	128 (29.0%)	32 (7.3%)	281 (63.7%)	0 (0.0%)	0 (0.0%)
I am good at imbibing users' gestures	102 (23.1%)	58 (13.2%)	281 (63.7%)	0 (0.0%)	0 (0.0%)
I enjoy arranging computers/ racks/ furniture etc ..	100 (22.7%)	48 (10.9%)	293 (66.4%)	0 (0.0%)	0 (0.0%)
I can scan/upload the documents in the IR/digital library	70 (15.9%)	58 (13..2%)	32 (7.3%)	281 (63.7%)	0 (0.00%)
I prepare list of books to be bound / condemned / mended	114 (25.9%)	14 (3.2%)	313 (71.0%)	0 (0.0%)	0 (0.0%)
I prepare library communications in computer systems	58 (13.2%)	70 (15.9%)	313 (71.0%)	0 (0.0%)	0 (0.0%)
I arrange books for displays / exhibitions	140 (31.7%)	20 (4.5%)	281 (63.7%)	0 (0.0%)	0 (0.0%)
I do shelf rectification regularly	119 (27.0%)	41 (9.3%)	281 (63.7%)	0 (0.0%)	0 (0.0%)

Note: IR = Institutional Repository

Strongly Agree: A maximum of 140 (31.7%) respondents strongly agree that they can arrange books for displays or exhibitions. While 128 respondents (29%) strongly agree that they conduct

library orientation or user education programmes, 119 (27%) of them do shelf rectification regularly. Only 70 (15.9%) respondents strongly agree that they can upload/scan the documents in the IR/digital library while just 58 (13.2%) respondents prepare library communications in computer systems.

Agree: 15.9% (70) of the respondents agree that they prepare library communications in computer systems and 13.2% (58) of the respondents agree that they are good at imbibing users' gestures and they scan / upload documents in the IR/ digital library. Just 2.7% (12) of the respondents agree that they prefer to replace the books in the library racks.

Neutral (Neither Agree Nor Disagree): A majority of 313 (71%) respondents neither agree nor disagree that they prefer to replace the books in the library racks, prepare list of books to be bound/condemned and prepare library communications in computer systems followed by 293 (66.4%) respondents who enjoy arranging computers / racks or furniture. 281 (63.7%) respondents neither agree nor disagree that they conduct library orientation or user education programmes, arrange books for displays or exhibitions, do shelf rectification regularly and are good at imbibing users' gestures.

Disagree: There is only one skill the respondents disagree with. 281 (63.7%) respondents disagree that they can scan/upload the documents in the institutional repository or digital library.

5.2.5 Musical Intelligence of the Respondents

Table 8 : ***Musical Intelligence of the Respondents***

Statements	SA	A	N	D	SD
I can classify music materials into classic, folk & modern / western	5 (1.1%)	143 (32.4%)	293 (66.4%)	0 (0.0%)	0 (0.0%)
I collect, preserve, disseminate (both print & electronic) music records	30 (6.8%)	118 (26.8%)	293 (66.4%)	0 (0.0%)	0 (0.0%)
I can upload the music materials in the IR/digital library	7 (1.6%)	153 (34.7%)	281 (63.7%)	0 (0.0%)	0 (0.0%)
I like doing things in rhythmic way	62 (14.1%)	86 (19.5%)	293 (66.4%)	0 (0.0%)	0 (0.0%)
I can group/ remix the music scores and repeat wherever required	20 (4.5%)	140 (31.7%)	0 (0.00%)	281 (63.7%)	0 (0.0%)
I play light music in the reference hall	58 (13.2%)	102 (23.1%)	281 (63.7%)	0 (0.0%)	0 (0.0%)
I know the biographies on musical composers	61 (13.8%)	87 (19.7%)	293 (66.4%)	0 (0.0%)	0 (0.0%)

Strongly Agree: Only very few respondents strongly agree that they possess various musical skills. A majority of 62 (14.1%) respondents like doing things in rhythmic way. While 61 (13.8) respondents strongly agree that they know the biographies of musical composers, just 5 (1.1%) can classify music materials into classic, folk and modern and 7 (1.6%) respondents can upload the music materials in the IR/digital library.

Agree: 34.7 % (153) of the respondents agree that they can upload the music materials in the IR/digital library. While 143 (32.4%) respondents agree that they can classify music materials into classic, folk and modern, 140 (31.7%) respondents agree that they can group/remix the music scores and repeat wherever required. 26.8 % (118) of the respondents agree that they can collect, preserve and disseminate music records while 23.1 % (102) of the respondents play light music in the reference hall.

Neither Agree Nor Disagree: Majority of the respondents belong to this neutral community who neither agree nor disagree with various skills of their music intelligence. A maximum of 293 (66.4%) respondents are neutral that they can classify music materials into classic, folk and modern; collect, preserve and disseminate music records; do things in rhythmic way and know the biographies of musical composers. 63.7 % (281) of the respondents neither agree nor disagree that they can upload music materials in the IR/digital library and play light music in the reference hall.

Disagree: The only disagreed skill is 'I can group/ remix the music scores and repeat wherever required' with 63.7% (281) of the respondents.

5.2.6 Interpersonal Intelligence of the Respondents

Table 9 : ***Interpersonal Intelligence of the Respondents***

Statements	SA	A	N	D	SD
I enjoy working with other LIS professionals	117 (26.5%)	324 (73.5%)	0 (0.00%)	0 (0.00%)	0
I can easily manage the rush hour in library	116 (26.3%)	32 (7.3%)	293 (66.4%)	0 (0.00%)	0
I like to share my knowledge with others through Conference etc., about Govt GOs./UGC communications and other related information	148 (33.6%)	12 (2.7%)	0 (0.00%)	281 (63.7%)	0
I would patiently listen to the views of my fellow LIS professionals & library users	137 (31.1%)	11 (2.5%)	293 (66.4%)	0 (0.00%)	0
I make friends easily with LIS professionals	116 (26.3%)	0 (0.00%)	325 (73.7%)	0 (0.00%)	0
I am happy to serve as a member, secretary, president in the LIS Association and/or working place	148 (33.6%)	0 (0.00%)	293 (66.4%)	0 (0.00%)	0
I have a good number of LIS professionals friends and a circle of close contacts	70 (15.9%)	78 (17.7%)	293 (66.4%)	0 (0.00%)	0
I prefer to participate in LIS forum, e-groups, face book, twitter etc.. and other social networks	110 (24.9%)	38 (8.6%)	293 (66.4%)	0 (0.00%)	0
I appreciate other LIS professional's attitudes/ view/aptitudes/achievements	68 (15.4%)	92 (20.9%)	281 (63.7%)	0 (0.00%)	0

Note. GO =Government Orders; UGC = University Grants Commission

Strongly Agree: A maximum of 148 respondents (33.6%) strongly agree that they can share their knowledge with others through conferences, seminars etc and they are happy to serve as a member, secretary etc., of library associations / working places. 137 (31.1%) respondents strongly agree that they would patiently listen to the views of colleagues and users. The least number of 68 (15.45) and 70 (15.9%) respondents strongly agree that they appreciate other LIS professionals' attitudes and achievements and they have built a good number of professional friends and close contracts respectively.

Agree: 73.5 % (324) of the respondents agree that they enjoy working with other LIS professionals. 20.9% (92) of the respondents agree that they appreciate other LIS professional's views and achievements. Just 2.7 % (12) of the respondents agree that they share their knowledge with others through conferences and seminars while 2.5 % (11) of them patiently listen to the views of colleagues and users.

Neither agree Nor Disagree: A maximum of 325 (73.7%) respondents neither agree nor disagree that they make friends easily with LIS professionals while 293 (66.4%) respondents are neutral that they can easily manage rush hours in library, patiently listen to the views of colleagues and users, are happy to serve as a member, secretary etc., of library associations / working places, have built a good number of professional friends and close contracts and participate in LIS forums and other social media networks.

Disagree: 281 (63.7%) respondents disagree that they share their knowledge with others through Conference, Seminars, workshops and training courses about Govt GOs./UGC communications and other related information. There is no other skill which is disagreed by the respondents.

5.2.7 Intrapersonal Intelligence Skills

Table 10 : ***Intrapersonal Intelligence of the Respondents***

Statements	SA	A	N	D	SD
I can set vision & mission for the development of library	88 (20.0%)	353 (80.0%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
I can work alone & get things done in the library	134 (30.4%)	26 (5.9%)	281 (63.7%)	0 (0.00%)	0 (0.00%)
I use my personal experience to solve problems/ issues in library	86 (19.5%)	355 (80.5%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
I am aware of my capacities/limitations in LIS knowledge	114 (25.9%)	46 (10.4%)	281 (63.7%)	0 (0.00%)	0 (0.00%)
I wish to be honest and frank in my feelings, thoughts and actions	70 (15.9%)	371 (84.1%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
I have clear notion about myself and my objectives	70 (15.9%)	90 (20.4%)	0 (0.00%)	281 (63.7%)	0 (0.00%)
I learn from my errors and mistakes committed	132 (29.9%)	28 (6.3%)	281 (63.7%)	0 (0.00%)	0 (0.00%)
I maintain a daily record about my LIS activities	132 (29.9%)	309 (70.1%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
I put conscious efforts in satisfying my users	100 (22.7%)	60 (13.6%)	281 (63.7%)	0 (0.00%)	0 (0.00%)
I can understand readers' mind and act suitably	42 (9.5%)	118 (26.8%)	281 (63.7%)	0 (0.00%)	0 (0.00%)
I let readers express / share (conversation, suggestion box etc)	100 (22.7%)	60 (13.6%)	281 (63.7%)	0 (0.00%)	0 (0.00%)
I employ various methods (survey, observation etc) to know my readers	92 (20.9%)	68 (15.4%)	281 (63.7%)	0 (0.00%)	0 (0.00%)

Strongly Agree: A maximum of 134 respondents strongly agree that they can work alone and get things done in the library (30.4%) followed by 132 (29.9%) respondents who strongly agree that they learn from errors and mistakes committed and maintain a daily record about their LIS activities. While 114 (25.95) respondents strongly agree that they are aware of their capacities / limitations in LIS knowledge, 100 (22.7%) respondents strongly agree that they put conscious efforts in satisfying their users and let readers express / share. Only 42 (9.5%) respondents strongly agree that they can understand readers' mind and act suitably.

Agree: 84.1 % (371) of the respondents agree that they wish to be honest and frank in their feelings, thoughts and actions while 80.5% (355) of the respondents agree that they use their personal experience to solve problems in library and 80% (353) of them agree that they can set vision and mission for the development of library. Only 5.9% (26) of the respondents agree that they can work alone and get things done in the library and 6.3 % (28) of them agree that they learn from errors and mistakes committed.

Neither Agree Nor Disagree: 281 respondents (63.7%) neither agree nor disagree that they can work alone and get things done in the library; are aware of their capacities and limitations in LIS knowledge; can learn from their errors and mistakes committed; can put conscious efforts in satisfying their users; can understand readers' mind and act suitably; let readers express / share and they can employ various methods to know their readers.

5.2.8 Naturalistic Intelligence Skills of the Respondents

Table 11 : ***Naturalistic Intelligence Skills of the Respondents***

Statements	SA	A	N	D	SD
I am good at perceiving nature with all its diversity in the library	132 (29.9%)	28 (6.3%)	281 (63.7%)	0 (0.00%)	0 (0.00%)
I spread awareness about the conducive environment	156 (35.4%)	4 (9.0%)	281 (63.7%)	0 (0.00%)	0 (0.00%)
I have capability to transform the conventional library	119	41	0	281	0

	(27.0%)	(9.3%)	(0.00%)	(63.7%)	(0.00%)
I like to allow the natural breeze & ventilation enter into the library	156 (35.4%)	4 (9.0%)	281 (63.7%)	0 (0.00%)	0 (0.00%)
I like to keep Indoor plants in the library for pleasant atmosphere	99 (22.4%)	61 (13.8%)	281 (63.7%)	0 (0.00%)	0 (0.00%)
I like to have a beautiful garden in library premises	148 (33.6%)	12 (2.7%)	0 (0.00%)	281 (63.7%)	0 (0.00%)
I would like to focus on environmental awareness programmes on TV	137 (31.1%)	23 (5.2%)	281 (63.7%)	0 (0.00%)	0 (0.00%)
I like to display the new arrivals of books & journals in a beautiful / decorative and creative manner	128 (29.0%)	32 (7.3%)	0 (0.00%)	281 (63.7%)	0 (0.00%)
I have installed rainwater harvesting in my library	105 (23.8%)	55 (12.5%)	281 (63.7%)	0 (0.00%)	0 (0.00%)
I keep the library neat and tidy to avoid pollutants	125 (28.3%)	35 (7.9%)	0 (0.00%)	281 (63.7%)	0 (0.00%)
I like to have a water fountain in the library	112 (25.4%)	48 (10.9%)	281 (63.7%)	0 (0.00%)	0 (0.00%)

Strongly Agree: A majority of 156 (35.4%) respondents strongly agree that they can spread awareness about the conducive environment and allow the natural breeze and ventilation enter into the library. 33.6% (148) of the respondents strongly agree that they like to have a beautiful garden in library premises and 29.9% (132) of the respondents strongly agree that they are good at perceiving nature with all its diversity in the library. While 99(22.4%) respondents strongly agree that they like to keep indoor plants in the library for pleasant atmosphere, 105 (23.8%) respondents strongly agree that they have installed rainwater harvesting in their libraries.

Agree: 3.8% (61) of the respondents agree that they like to keep indoor plants in the library for pleasant atmosphere while 12.5% (55) of the respondents agree that they have installed rainwater harvesting in their libraries. Only just 4 (0.09%) respondents agree that they like to allow natural breeze and ventilation enter into the library and spread awareness about the conducive environment.

Neither Agree Nor Disagree: 281 respondents (63.7%) neither agree nor disagree that they are good at perceiving nature with all its diversity in the library; spread awareness about the conducive environment; like to allow the natural breeze and ventilation enter into the library; like to keep indoor plants in the library for pleasant atmosphere; like to focus on environmental awareness programmes on TV; have installed rainwater harvesting in their libraries and like to have a water fountain in the library.

Disagree: 63.7 % (281) of the respondents disagree that they have capability to transform the conventional library, like to have a beautiful garden in library premises, like to display the new arrivals in a beautiful and decorative manner and like to have water fountain in the library.

6. 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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