

Understand Work Alienation, Digital Technology Overload and Job Satisfaction Among Library Professionals in India

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ABSTRACT

The present study uses a quantitative method and attempts to explain the rationale for work alienation among library professionals working in India during the COVID-19 period. A total of 151 usable survey questionnaires were collected from library professionals working in Central Universities, the Indian Institute of Management (IIM), and other important institutions in India. Data were analysed using SPSS 19 software. Results revealed that digital technology complexity ($\beta= 0.354$) and digital technology overload (0.276) were two important independent variables that were positively related to work alienation and significantly explained the phenomenon among library professionals in India. It was also interesting to note that perceived organisational support (-0.122) and job satisfaction (-0.165) among library professionals were negatively related to work alienation among library professionals. This study proved digital overload and digital complexity as two major antecedents of work alienation while, also confirming that job satisfaction is a major antecedent that reduces work alienation. It urges the top management of the library institutions to provide organisational support to the library professionals to ensure lesser or no work alienation happen among them.

Keywords: COVID-19; Digital overload; Digital complexity; Work alienation; Job satisfaction; Perceived organisational support

1. INTRODUCTION

Libraries are institutions that act as knowledge reservoirs. They have contributed to the growth and development of the nation by storing and disseminating knowledge sources such as books, journals, manuscripts, reports, and many other such documents.¹⁻² Students, academicians, and other professionals use these knowledge reservoirs and prepare themselves to better contribute to the development of their respective fields. The objectives and the goals of the libraries are achieved with the help of dedicated library professionals and personnel.³ They facilitate the transaction of knowledge and act as a bridge between knowledge users and libraries. Thus, library professionals are one of the major stakeholders of knowledge storage provision and dissemination. As library professionals are very integral to the entire knowledge dissemination and management process hence research studies must be conducted to better understand their job-related attitudes and behaviour.⁴

The COVID-19 pandemic impacted every domain of human life and educational institutions such as schools colleges, and libraries were not an exception.⁵ Although digitalisation and computerisation were taking pace in India well before the pandemic, the momentum picked up during the COVID-19 pandemic.⁶ Libraries wanted to contribute their role in the educational sector and online or digital process adoption was the way forward. It led to an unanticipated accelerated growth of digitalisation in libraries. This fast-paced digitalisation posed both challenges as well as opportunities for libraries as an institution.

As an opportunity digitalisation enabled access to online content and knowledge transfer in form of online books, journals, and other related databases to its users. However, the challenges were multiple.⁷ Out of many challenges, one important challenge before the libraries was how will library professionals respond to the increased technology and digital load.⁸ While some studies on job satisfaction had been carried out among library professionals internationally⁹⁻¹⁰ and locally focussing

on a particular state,¹¹ no study has been reported so far at the national level from India.

This study attempts to answer the above question. The researcher tries to capture the response of library professionals via a survey questionnaire and analyse it to understand the behavioral response and attitudes of employees against the increased digital load and complexity. Overall, the study attempts to answer the following research questions:

RQ 1. What is the impact of digital technology overload and complexity on work-related behavior among library professionals?

RQ 2. What is the role of perceived organisational support in the entire process?

Researcher conceptually proposes that digital technology complexity and overload will develop a feeling of work alienation i.e., a psychological separation or estrangement from the workplace among library professionals. Furthermore, perceived organisational support will help library professionals in reducing the detrimental impact of digital technology complexity and overload. In the following sections, the researcher presents the literature review, hypothesis development, methodology, analysis, results, and discussion segment.

2. LITERATURE REVIEW AND HYPOTHESES

2.1 Digital Technology Overload and Complexity

Digital overload is a high influx of information coming via multiple channels that slows and/or inhibits the information processing of the users in the digital context.¹² Due to COVID-19 library professionals were prone to digital overload as they had to address a large number of queries of the users through smart phones, computers, the internet, intranet, portal, library apps, etc. Due to the increased digital overload library professionals were compelled to the following conditions: (a) process more information than usual, (b) work faster on the information, (c) work on a very timely and tight schedule as it was digital access, and (d) adopt some new digital technology.¹³

Apart from digital overload library professionals also faced digital complexity issues. As some of the digital technologies were relatively new and the professionals had very little idea or no idea about them.¹⁴ Furthermore, library professionals required time to understand these newly adopted digital technologies, and training was also required to understand and assimilate these new technologies into day-to-day functioning.

2.2 Work Alienation

Work alienation has been defined as psychological separation from one's workplace professionally or/and socially.¹⁵ There are various antecedents of work alienation listed in the literature. According to Muttar,¹⁶ *et al.*, complex organisational structures and transactional leadership styles may lead to work alienation among employees. Earlier DiPietro and Pizam¹⁷ had also

illustrated (a) strict control of organisational processes, (b) formalised structure, and (c) overburdening with work as critical antecedents of work alienation among employees.

Since in the present COVID-19 context library professionals have to work on digital technology overload and digital complexity in limited time and resources, it may so happen that the library professionals may develop a feeling of work alienation. The researcher used job demands and resources (JDR) theory to support the above postulations.¹⁸ According to the job demands and resources (JDR) theory employees have limited resources at the workplace such as time, tools, and skill sets, and too many demands such as new technology adoption, work overload, and other jobs to complete. It is bound to happen that employees may feel stressed and alienated from the work if the job demands surpass the job resources available at hand.

Hence, the following hypothesis proposed:

H1: Digital overload will be positively related to work alienation among library professionals

H2: Digital complexity will be positively related to work alienation among library professionals

2.3 Perceived Organisational Support

Perceived organisational support (POS) has been defined as a feeling or belief among employees that their organisation and management care for their overall well-being.¹⁹ It is well established in the literature that POS has helped employees achieve the following: (a) commitment to the organisation, (b) Task performance and productivity, and (c) intention to stay with the organisation²⁰ well, achieve goals, and stay committed to the organisation. Further, Bhatnagar and Aggarwal²¹ validated that perceived organisational support may be negatively related to work alienation among employees. Thus, based on the aforementioned research the following hypothesis is proposed:

H3: Perceived Organisational Support will be negatively related to Work alienation among library professionals

2.4 Job Satisfaction

Job satisfaction has been defined as "the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values".²² In simple words, job satisfaction is a positive and happy attitude toward one's job and workplace.²³ There are various antecedents and consequences of job satisfaction in the workplace. Some of the important antecedents of job satisfaction at the workplace are work autonomy and socialisation at the workplace. Job satisfaction is also found among employees who are less stressed.²⁴ Studies exploring the positive aspect of job satisfaction indicate that job satisfaction is positively related to the job and organisational loyalty and organisational citizenship behavior among employees.²⁵ As work alienation is estrangement from the workplace that appears opposite of job and organisational loyalty hence, we propose that

library professionals who are satisfied with their job will be less work alienated. Thus, the following hypothesis:
 H4: Job satisfaction will be negatively related to work alienation among library professionals.

3. RESEARCH METHODOLOGY

3.1 Research Design

The present study uses correlational research design and simple regression to understand the relationships between digital technology overload, digital complexity, work alienation, perceived organisational support, and job satisfaction among library professionals.

3.2 Sample Size

Samples were full-time and part-time working library professionals (Table 1) in libraries of central universities, the Indian Institute of Management (IIMs), state universities, and other important institutions of India. The convenience sampling method was used for the data collection process. A total of 151 usable questionnaires were collected for research analysis.

3.3 Procedure

The research design used for the present study was quantitative. The sample for the current study was library professionals working in libraries of universities and other higher institutions in India. Questionnaires containing items related to digital overload, digital complexity, work alienation, job satisfaction, and perceived organisational support were circulated to the library professional staff via the official institute email id or social networking sites. Data were collected during January and February 2022. The survey was voluntary and participants were assured that their responses will be kept confidential. Item responses were recorded on a 7- point Likert scale.

From Figure 1, it can be observed that more male (55 %) library professionals participated in this survey compared to Females (45 %). Similarly, figure 2 reveals that 47.7 % of respondents are in the age group 20 to 35 years; 33.1 % of respondents are in the 36 to 50 age group and 19.2 % of respondents are above 50 years. As far as the type of institution is concerned, 29.6 % of respondents come from other institutions, followed

by 25.2 % of respondents from central universities, 23.2 % respondents from the state university, and 22 % from IIMs. Analysis of their designation shows that 28.3 % of respondents are Librarians, 26.3 % are Professional Assistants, 25.7 % are Library Assistants, and 20.4 % are other Library Staff members. Concerning years of experience, 39.1 % of respondents hold experience below five years, 22.5 % hold experience from 10 to 15 years, 21.2 % have experience from 6 to 10 years, and 17.2 % have work experience above 15 years.

Table 1. Employment details of the respondents

Type	Division	Frequency	Percentage
Type of institutions	Central universities	38	25.2
	State universities	35	23.2
	IIM	33	22
	Other institutions	45	29.6
Designation	Other library staff	30	20.4
	Professional assistant	40	26.3
	Library assistant	39	25.7
	Librarian	42	28.3
Experience	Below 5 years	59	39.1
	6-10 years	32	21.2
	10-15 years	34	22.5
	Above 15 years	26	17.2

4. RESULT AND ANALYSIS

Table 2 shows the descriptive statistics for 151 respondents of library staff in various universities, institutes, and colleges. Measures of Digital Overload ($M= 4.2, SD=1.6$), Digital complexity ($M=4.2, SD = 1.5$), Work Alienation ($M=3.7, SD=1.3$), Job satisfaction ($M = 5.3, SD = 1.1$) and Perceived Organisational Support ($M = 4.3, SD = 1.1$) was found.

The data were also analysed statistically by Carl Pearson’s correlation product-moment method to determine the relationship between digital overload and work alienation (Hypothesis 1); digital complexity and work alienation (Hypothesis 2); Work alienation and Perceived organisational support (Hypothesis 3) and Work alienation and job satisfaction (Hypothesis 4).

The results of the inter-correlations between variables are shown in Table 3. It was found that digital overload and digital complexity are positively and significantly correlated ($r = 0.84, p < 0.01$), and digital overload and

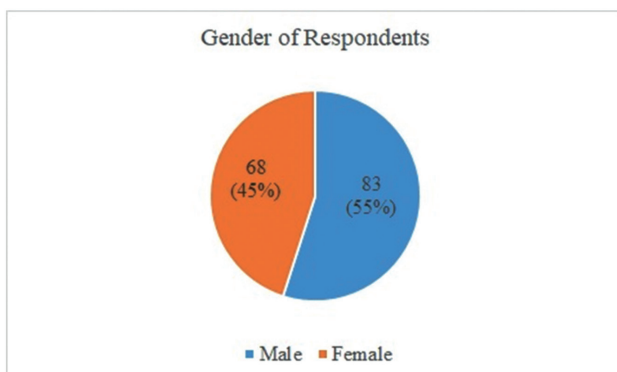


Figure 1. Gender-wise distribution of respondents.

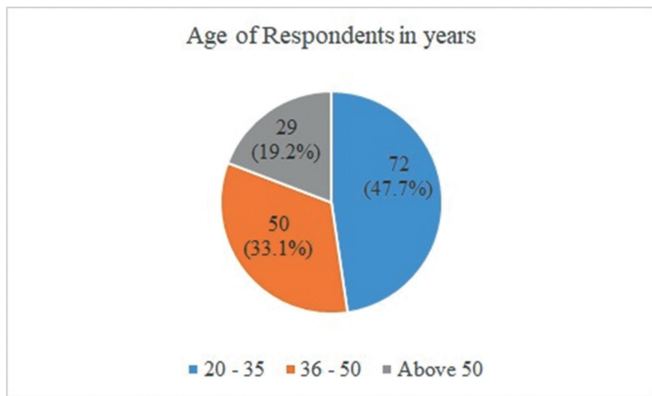


Figure 2. Age-wise distribution of respondents.

Table 2. Mean and standard deviation scores of digital overload, digital complexity, work alienation, job satisfaction, and perceived organisational support (POS) (N= 151)

S. No.	Variable	Mean	Std. deviation
1	Digital overload	4.2	1.6
2	Digital complexity	4.2	1.5
3	Work alienation	3.7	1.3
4	Job satisfaction	5.3	1.1
5	Perceived Organisational Support (POS)	4.3	1.1

work alienation are positively and significantly correlated ($r = 0.74, p < 0.01$), thus confirming hypothesis 1. Digital overload and perceived organisational support are negatively and significantly related ($r = -0.26, p < 0.01$). Correlation between digital overload and job satisfaction are negatively and significantly related ($r = -0.22, p < 0.01$). Further digital complexity and

Table 4. Multiple regression table having work alienation as the dependent variable and digital overload, digital complexity, POS, and job satisfaction as the independent variable

R square	0.677644353				
Adjusted R square	0.668812692				
Standard error	0.74368339				
Observations	151				
ANOVA					
	df	SS	MS	F	P-value
Regression	4	169.74444	42.43611	76.72898	0.00
Residual	146	80.74749	0.55306		
Total	150	250.49193			
	Coefficients	Standard error	t Stat	P-value	
Intercept	2.428401553	0.431839	5.623402	0.000000	
POS	-0.122036794	0.075042	-1.626245	0.106054	
DO	0.276247962	0.071253	3.876977	0.000159	
DC	0.354514579	0.076453	4.637048	0.000008	
JS	-0.164846326	0.072817	-2.263848	0.025057	

Table 3. Correlation between Digital Overload (DO), Digital Complexity (DC), Work Alienation (WA), POS, and Job Satisfaction (JS) among library professionals

Correlation	DO	DC	WA	POS	JS
DO	1				
DC	0.84**	1			
WA	0.74**	0.78**	1		
POS	-0.26**	-0.36**	-0.41**	1	
JS	-0.22**	-0.32**	-0.43**	0.64**	1

** . Correlation is significant at the 0.01 level (2-tailed)

work alienation are positively and significantly correlated ($r = 0.78, p < 0.01$), thus confirming hypothesis 2. Digital complexity and perceived organisational support are negatively and significantly related ($r = -0.36, p < 0.01$). Correlation between digital complexity and job satisfaction are negatively and significantly related ($r = -0.32, p < 0.01$). Moreover, correlation between work alienation and POS are negatively and significantly related ($r = -0.41, p < 0.01$). Thus, confirming hypothesis 3. Finally, the correlation between work alienation and job satisfaction is negatively and significantly related ($r = -0.43, p < 0.01$). Thus, confirming hypothesis 4.

The multiple regression equation explained above is of the following form:

$$y = b_1x_1 + b_2x_2 + \dots + b_nx_n + c.$$

Here, b_i 's ($i = 1, 2, \dots, n$) are the regression coefficients. It represents the value at which the dependent variable (Y) changes when the independent variable (X) changes.

The results of the multiple regression as shown in Table 4 suggest that the adjusted R square value is 0.67 which indicates a good regression model. Moreover, the F test was significant at a 0.00 level. As far as

the independent and dependent variables are concerned work alienation was the (dependent variable) and digital overload, digital complexity, Perceived Organisational Support (POS), and job satisfaction were the independent variables. Based on the readings of the coefficients of independent variables it can be predicted that 66.7 % variation in work alienation can be explained by the above multiple regression model. It is also interesting to note that digital complexity has the highest significant positive coefficient (0.35). It indicates that digital complexity is the biggest factor that is causing work alienation among library professionals. Similarly, digital overload has the second highest significant positive coefficient (0.35). Job satisfaction has the highest significant negative coefficient (-0.16) indicating that job satisfaction is reducing work alienation among library professionals.

5. DISCUSSION AND CONCLUSION

Researcher conceptually formulated the present study and attempted to answer two research questions and prove three hypotheses that suggested work alienation among library professionals as a response of digital overload and digital complexity.

Based on the correlation and regression analysis it was found that library professionals do develop work alienation in response to digital overload and digital complexity. These two independent variables were significantly and positively explaining work alienation among library professionals. It was interesting to note that the job satisfaction of library professionals was negatively and significantly related to work alienation. Perceived Organisational Support (POS) was negatively related to work alienation but was not significant.

The findings of the study have several implications for theory and practice. Firstly, this study is among the first few studies that have attempted to study the response and work-related behavior of library professionals during COVID-19. Secondly library science literature is largely filled with user-related studies very few studies have attempted to study the behavior and attitude of library professionals. This study fills the gap and contributes to the literature. Moreover, this study contributes to the theory of work alienation and confers digital overload and digital complexity as two major antecedents of work alienation. This study also confirms job satisfaction as a major antecedent that reduces work alienation. Through the findings this study urges the top management of the library institutions to provide organisational support to the library professionals which could be in form of the availability of resources, providing training, coaching, and other mentoring activities. If these organisational supports are provided probably lesser work alienation will occur among library professionals.

Apart from contributing to literature and practice, this study has a few limitations too. The limitations are as follows: (a) Issue of common method bias: As the study uses data collected from self-reported measures hence there may occur common method bias, (b) This

study is cross-sectional hence the generalise ability scope is very limited, (c) Sample size is not very large and hence there is a scope to work on the larger sample set. Future studies may apply simple random sampling instead of convenience sampling. Studies may also compare the level of work alienation across different types of library institutions.

This research indicates that the library professionals worked throughout COVID-19 lockdown to provide resources to the needed clients via electronic channels and the top level administration need to support and encourage them. The organisational support means a lot to every personnel and will lead to better job satisfaction and no alienation from work.

REFERENCES

1. Bausmith, J.M. & Barry, C. Revisiting professional learning communities to increase college readiness: The importance of pedagogical content knowledge. *Educational Researcher*, 2011, **40**(4), 175–178. Doi: 10.3102/0013189X11409927.
2. Zhou, J. The role of libraries in distance learning during COVID-19. *Infor. Development*, 2022, **38**(2), 227–238. Doi: 10.1177/02666669211001502.
3. Rubenstein, E.L. I want to provide patrons with good information: Public library staff as health information facilitators. *The Library Quarterly*, 2018, **88**(2), 125–141. Doi: 10.1086/696579
4. Asif, M. & Singh, K.K. Trends, opportunities and scope of libraries during COVID-19 pandemic. *IP Indian J. Lib. Sci. Infor. Technol.*, 2020, **5**(1), 24–27. Doi: 10.18231/j.ijlsit.2020.005.
5. Martzoukou, K. Academic libraries in COVID-19: A renewed mission for digital literacy. *Library Management*, 2020, **42**(4/5), 266–276. Doi: 10.1108/LM-09-2020-0131.
6. Chakraborty, S. & Jana, S. Challenges and opportunities of academic libraries in India because of COVID-19. *Annals of Lib. Infor. Stud.*, 2021, **68**(2), 110–118.
7. Madhusudhan, M. & Nidhi. Infodemic during the COVID-19 pandemic: A study of University of Delhi LIS students. *Annals Lib. Infor. Stud.*, 2022, **69**(2), 109–112.
8. Babbar, M. & Gupta, T. Response of educational institutions to COVID-19 pandemic: An inter-country comparison. *Policy Futures in Education*, 2022, **20**(4), 469–491. Doi: 10.1177/14782103211021937.
9. Sohail, M. Job satisfaction among the library and information professionals in Fiji a survey. *DESIDOC J. Lib. & Infor. Technol.*, 2019, **39**(1), 47–53. Doi: 10.14429/djlit.39.1.13330.
10. Aghaei, S.; Habibi, S.; Khodayari-Zarnaq, R. & Iraj, Z. Exploring academic library managers communication skills and the effect on librarians job motivation and satisfaction. *DESIDOC J. Lib. & Infor. Technol.*,

- 2021, **41**(5), 339–344.
Doi: 10.14429/djlit.41.5.16551.
11. Pandita, R.K. & Dominic, J. Impact of information technology on the job satisfaction of LIS professionals: A case study of Jammu & Kashmir. *DESIDOC J. Lib. & Infor. Technol.*, 2018, **38**(2), 75.
Doi: 10.14429/djlit.38.2.12543.
 12. Lehman, A. & Miller, S.J. A Theoretical conversation about responses to information overload. *Information*, 2020, **11**(8), 379.
Doi: 10.3390/info11080379.
 13. Tarafdar, M.; Tu, Q.; Ragu-Nathan, B.S. & Ragu-Nathan, T.S. The impact of techno stress on role stress and productivity. *J. Management Information Systems*, 2007, **24**(1), 301–328.
Doi: 10.2753/MIS0742-1222240109.
 14. Benbya, H.; Nan, N.; Tanriverdi, H.; Tanriverdi, H. & Yoo, Y. Complexity and information systems research in the emerging digital world. *MIS Quarterly*, 2020, **44**(1), 1–17.
 15. Amarat, M.; Akbolat, M.; Ünal, Ö. & Güneş Karakaya, B. The mediating role of work alienation in the effect of workplace loneliness on nurses' performance. *Journal of Nursing Management*, 2019, **27**(3), 553–559.
Doi: 10.1111/jonm.12710.
 16. Muttar, A.K.; Keir, M.Y.A.; Mahdi, O.R. & Nassar, I.A. Antecedents and consequences of work alienation-A critical review. *Journal of Statistics Applications & Probability*, 2019, **8**(3), 279–288.
Doi: 10.18576/jsap/080311.
 17. DiPietro, R.B. & Pizam, A. Employee alienation in the quick service restaurant industry. *Journal of Hospitality & Tourism Research*, 2008, **32**(1), 22–39.
Doi: 10.1177/1096348007309567.
 18. Bakker, A.B. & Demerouti, E. Job demands-resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 2017, **22**(3), 273–285.
Doi: 10.1037/ocp0000056.
 19. Eisenberger, R.; Huntington, R.; Hutchison, S. & Sowa, D. Perceived organisational support. *Journal of Applied Psychology*, 1986, **71**(3), 500–507.
Doi: 10.1037/0021-9010.71.3.500.
 20. Krishnan, J. & Mary, V.S. Perceived organisational support- An overview on its antecedents and consequences. *Int. J. Multidisciplinary Res.*, 2012, **2**(4), 1–13.
 21. Bhatnagar, J. & Aggarwal, P. Meaningful work as a mediator between perceived organisational support for environment and employee eco-initiatives, psychological capital and alienation. *Employee Relations: The International Journal*, 2020, **42**(6), 1487–1511.
Doi: 10.1108/ER-04-2019-0187.
 22. Locke, E.A. What is job satisfaction? *Organisational Behavior and Human Performance*, 1969, **4**(4), 309–336.
Doi: 10.1016/0030-5073(69)90013-0.
 23. Armstrong, M. A handbook of human resource management practice. Kogan Page Publishers. 2006.
 24. Yang, J.-T. Antecedents and consequences of job satisfaction in the hotel industry. *International Journal of Hospitality Management*, 2010, **29**(4), 609–619.
Doi: 10.1016/j.ijhm.2009.11.002.
 25. Rúnarsdóttir, M. Organisational citizenship behavior and job loyalty as consequences of job satisfaction. Reykjavik University. 2018. Degree Thesis. 35p. URI: <https://skemman.is/handle/1946/30698>. (Accessed on 12 July 2022).

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