



Effects of Work Stress on Library Professionals' Performance and Health: A Perspective from Karachi, Pakistan

Salman Abid State Bank of Pakistan Email: <u>salman.abid@gmail.com</u>

Farhat Hussain University of Karachi Email: <u>fhkhan@uok.edu.pk</u>

Aamir Hamid State Bank of Pakistan Email: <u>aamirhamidlis@yahoo.com</u>

> Naveed e Sehar University of Karachi Email: <u>nsehar@uok.edu.pk</u>

Abstract

This study aimed to scrutinize the effect of work-related stress on job performance and health of library and information professionals'. The study utilized a survey research approach; the participants of this survey were the LIS professionals working in various universities of Karachi. They were approached to record their views via a self-developed questionnaire, with a response rate of 76%. The collected data was scrutinized using SPSS through various descriptive and inferential statistical tests. The outcomes of study affirm that librarians experience a modest level of stress and it adversely affects their work performance such as negligence at work, difficulty in decision making, fear of failure, and late sittings at the office, but they consider stress did not affect their normal routine activities, errors at work, meet work deadlines. Job stress has a strong relationship with work performance, which means that academic librarians' job performance is affected by work stress. Work stress has effects on library professionals' health at a moderate level, and found that work stress has a positive relation with health of librarians. The respondents were on the same pitch because there is no substantial change found in their opinions with respect to their gender and type of institutions. So the study found that work-related stress has effects on work performance and library professionals' psychological and physical health.

Keywords: Work Stress, Job Stress, Job Performance, Library Professionals, Pakistan





Introduction

Academic libraries are under colossal strain to demonstrate that they are an integral part of the organization in an era of technological advances and the rising cost of library materials. On the other hand, university librarians face many challenges at work that causes stress among them. Work-related stress is a physiological, behavioral and mental retort of a worker when feels an irregularity between demands and capacity to attain them, which leads to health problems (Ehsan & Ali, 2019). Several studies have focused on work-related stress over the years and it is a major concern for LIS professionals globally. Work is commonly known as an activity that involves the mental and physical effort to achieve a goal or result (Kim & McKenzie, 2014; Schwarz et al., 2008). More broadly, work is synonymous with the role and includes the social and physical aspects of the work environment. People often identify with their job or role and are inspired by its individuality or practicality (Karasek et al., 1998). Stress is a word rarely understood and discussed; each person has their own meaning. Stress can come from any thought or situation that makes you nervous, irritated, or angry. According to Stranks (2005), stress may be defined in different ways, such as: a) a general response to the attack, b) an effect that has an impact on natural balance, c) a response to environmental change, d) a psychological reaction to the inability to manage problems, e) prolonged feeling of anxiety, which eventually leads to illness, f) nonspecific bodily response. The word stress describes how we feel and what is happening around us. We may have financial issues, family responsibilities, neighborhood problems, etc. Even minor problems like traffic jams, power outages, and internet disruption, can put a bit of pressure on us, making our lives more difficult and stressful (Lindström, 2005; Oyewole & Popoola, 2013).

Taylor (2021) states that the human reaction to stress comprises organized physical changes that configure the body for optimal mental management and bodily movement to deal with difficulties or overcome danger. He further explained that stress might be instigated by work, home, wealth, relationships and an individual's physical or mental well-being. Work-related stress is an increasing global concern, impacting not only employee productivity and health but also has an impact on organizational performance. People at work worry about several types of things: increasing competition, annual assessments, new technologies, pay scale, promotion, outsourcing jobs, threats of layoffs, growing demands from employers, office politics, etc. (Devi & Lahkar,





2021; Kaur & Kathuria, 2018). Work-related stress is not a syndrome but a state of mind but continued and exceeded stress at work can lead to mental and physical illness (Devi & Lahkar, 2021). This study aimed to examine the extent of work-related stress among LIS professionals and its effect on their job performance and health. The research focused on librarians work in various government and private universities in Karachi. Endeavors are being made to comprehend what are the major difficulties faced by LIS professionals that lead to work-related stress.

Rationale of the Study

The general impression of libraries is that they are calm and peaceful places, as is the view that librarianship is a low-stress profession (Careercast, 2019). However, like other professions, librarians also face difficulties in their workplace, e.g. excessive user expectations, lack of resources, working conditions, relationships with colleagues, security and remuneration at work, lack of professional growth, rapid technological advances, etc. (Azam, M., & Ahmad, K., 2023). Work-related stress was examined in many studies worldwide but fewer in Pakistan for different professions (Ali et al., 2013; Chaudhry, 2012; Warraich et al., 2014). A couple of studies have recently been conducted to assess the influence of stress on job performance of LIS professionals in Pakistan (Khan et al., 2016; Rizvi & Sehar, 2022; Zaidi et al., 2021). This study steered thorough research in Karachi to measure work-related stress of LIS professionals and its effect on their job performance and physical well-being. The study would be helpful for library professionals, university administration and higher education experts to understand the concern of work-related stress between university librarians and find remedy to address this emergent issue. Along these lines, the current study was intended to analyze and gauge work-related stress among university librarians. This investigation could act as a preliminary study, as it provides data on work-related stress variables that implicitly or explicitly influence the work efficiency of LIS professionals employed in different public and private sector universities in Karachi.

Objectives of Research

This research intends to measure work-related stress and its effects on performance and physical health of LIS professionals employed in government and private universities in Karachi. Further purposes of present study are mentioned as under:

• To evaluate degree of work-related stress among LIS professionals



- To explore the effects of work-related stress on job performance of LIS professionals
- To examine the effects of work-related stress on psychological and physical well-being of LIS professionals

Hypotheses of the Study

H1: Work-related stress significantly impacts the job performance of LIS professionals.

H₂: Work-related stress significantly affects the psychological and physical well-being of LIS professionals.

Ho₃: There is no significant difference between the perceptions of LIS professionals about the effects of work-related stress on their job performance in connection with their gender and institution type.

Ho₄: There is no significant difference between the perceptions of LIS professionals about the effects of work-related stress on their psychological and physical well-being in connection with their gender and institution type.

Literature Review

Libraries assume a crucial role in our society and facilitate access to knowledge and culture (Jin et al., 2024). A study by Rafi et al., (2020) produce prospects for education, learning, knowledge, wisdom, awareness through different information sources and provide services to their patrons. According to Crummett and Perrault (2008), an academic library is an assigned place in a higher education institution that comprises print and electronic scholarly resources to support academic and research activities. Thanuskodi (2015) characterized the academic library as a place connected to the institute of higher education that fulfills two corresponding needs, academics and intellectual work. APA (2021) defines stress as a physical and mental reaction to inner and outer stressors. It includes changes in an individual's biological makeup, affecting how he feels and acts. A study by Lazarus (1966) affirms that stress arises when individuals feels unable to fulfill demands and feel insecure about their prosperity. A forerunner in stress research Selye (1980) asserts that stress is a rational notion that suffers from a combination of being too familiar and slightly realized. Cox (1978) gave a comprehensive meaning of stress and characterizes it as a marvel emerging from a correlation between the requests of the individual and their capacity to adapt. Any disparity will lead to stress and possible backlash thereafter. Lazarus and Folkman





(1984) deliberately emphasize that stress is an unevenness amongst demands and supplies. Palmer (1989) comprehensively characterizes the expression stress as a mental, physiological, and social reaction by a person when perceive a disparity between the demands placed on them and their capacity to meet those prospects, which gradually lead to chronic sickness. The term stress is in the sense of a mediational cycle in which stressors activate a tenacity that causes misery if the structure fails to meet its demands. Stress is something beyond intense emotional or physiological onset and has the potential to cause serious health issues (Linden et al., 2018). Spiers (2007) defines stress as a reaction to excessive pressure or constant responsibility when a person feels incapable of handling it. By tracing the historical context of the word stress, Rout and Rout (2002) discover that it was first utilized in the 17th century to mean difficulty, waterways, misfortune or burden, and later, in the 18th and 19th centuries, the word has been used to depict pressure, worry, or tough strength.

Yan and Xie (2016) described work stress as a progression of physical, mental, plus behavioral reactions caused by the continuous exposure of individuals in an organization to at least one stressor. Salami (2010) viewed perceived work-related stress as a hostile experience or adverse feelings, for example, pressure, uneasiness, disappointment, outrage and misery. Malta (2004) defines work-related stress as any individual distress caused by incidents or stressful situations that a person cannot cope with. Comish et al. (1994) expounded work-related stress as the inability to handle work compression because of a gap between an individual's skills and work requirements. Stress management is a social skill that can apply to handle stressful situations (Hamid & Younus, 2022). It is a physical and mental state that impacts individual's productivity, competence, health, and excellence at work. As Cox (1993) indicates, work-related stress is a mental condition that results from the individual's view of an irregularity between job requests and their capacities to adapt to those. Husna and Ahmad (2022) remarked as work-related stress is a psychological condition that can prompt to dysfunctional behavior at work and is the individual's response to an irregularity between work needs and their capacity to adapt.

Job performance comprehends the overall contributions employees make to an organization, which are recognized as a result of their abilities, opportunities and motivation (Dina, 2016; Warraich et al., 2014). A study was steered by Wood et al. (2020) to analyze burnout of





academic librarian working in United States. This large-scale study involved 1628 academic librarians, and the results show those academic librarians are usually in a state of burnout. The results show that an increasing number of women experience a high level of burnout than their male peers. Harwell (2008) observe the effect of chronic stress and burnout in librarians and recognized contributing factors and consequences of work-related stress in libraries. The investigation also identifies instances of burnout in libraries and suggested strategies to deal with burnout. In a recent study researchers Zaidi et al., (2021) analyzed the relationship between workplace inspiration, work pressure, and job satisfaction of library professionals employed in libraries of public university of Lahore. The study proved positive correlation between workplace inspiration and job satisfaction and found that job stress was inversely correlated. Moyosore (2021) presented the results of a study that revealed higher work stress among librarians working in public higher education institutions, resulting in unsatisfactory quality of work life. Devi and Lahkar (2021) conducted a study on job stress and productivity of university library professionals in North East India. Outcomes of the study showed that most librarians experience moderate levels of job stress and show an adverse relationship between job stress and productivity. (Smith et al., 2020) studied that librarians experience work-related stress that leads to an extreme psychological state of burnout. The results show that several participants agreed that their work is stressful and that stress affects their productivity. Another research examined the association between administrative components and fatigue in Swedish public libraries. The results of study showed that organizational reasons, workload and communal factors are perceived with more emotional fatigue, while organizational factors, community and values are perceived with more skepticism (Linden et al., 2018). An inquiry on the effects of stress on work of library professionals in Nigerian university libraries by Dina (2016) underlined this issue of job stress among librarians. The study revealed that efficiency of university librarians could be affected by work-related stress. Another survey showed that the majority of respondents (67.87%) believed that stress does not affect work productivity (Lemu, 2007). The study concluded that stress was detrimental to the health of librarians and recommended simple and straightforward workflows as a remedy.



Research Methodology

Research methodology is a strategy designed to achieve the specified research answers, as indicated, the motivation behind the research is to ensure that the evidence empowers us to respond to the underlying inquiry as explicitly as could really be expected (Vaus, 2010). The fundamental part of research design is the research approach used to find replies to research queries. The present study is quantitative in nature and adopted the survey research method to gather information. Survey research provides a numerical representation of patterns, perspectives, or opinions within a population by reviewing a sample from that population (Creswell & Creswell, 2018).

Population of the study

The study aimed to analyze stress and its effects on the work performance of library professionals working at different universities in Karachi. Consequently, the study population includes all library professionals (including head librarian, deputy librarian, librarian, assistant librarian, library assistant, and so on) working in public and private-sector universities in Karachi. This study used the convenience sampling technique for the selection of universities. Out of twelve public sector universities, nine universities were selected for this study, three public sector universities were excluded from study due to administrative structure and restricted student base. In order to balance the sample of the study, equal number of private sector universities of same nature were selected. More than eighty library and information science professionals were identified as sample size, out of which 56 professionals participated in the study.

Research Instrument

Quantitative research collects data using various research tools such as observations, surveys, polls, interviews, questionnaires, etc. Questionnaire as defined by Kumar (2014) as an inventory of queries that the responses to which are noted down by the respondents. The questionnaire is also defined as a tool for getting replies to inquiries by utilizing a structure in which the respondent answers (Goode & Hatt, 1952). For this study, a comprehensive survey research instrument comprising structured questions was designed to record responses from the targeted respondents. The Perceived Stress Scale was initially evolved in 1983 by Sheldon Cohen, a researcher who used the PSS-14 to measure respondents' perceived stress. It is the most generally utilized psychosomatic tool to measure stress opinion and is available in three different versions:





PSS-14, PSS-10 and PSS-4 (Cohen et al., 1983). The final research instrument was developed based on the results of the pilot examination, in which crosschecked questions were initially included in the survey to explore potential participants' misinformation, but were abandoned misconstrued by most participants. Responses were measured on a 5-point Likert Scale to capture the experiences and behaviors of respondents with work-related stress. Likert Scale is a measuring tool, introduced in 1932 by Renis Likert that asks individuals to rank their degree of agreement or disagreement with questions that measure their approaches or opinions (Sullivan, 2009). The online platform used to host the questionnaire was Google, which offers the service of carrying out online surveys and analytical representation of data. A pilot review was undertaken to test the validity of the survey and identified quite a few changes in the format of the online questionnaire, with some questions being rephrased to remove ambiguity (Ahmad et al., 2019). The reliability of research tool is determined by calculating internal consistency of the questionnaire. Inner consistency of the research tool was assessed by computing Cronbach's Alpha values. Which was created by Lee Cronbach in 1951 (Cronbach, 1951). Cronbach's Alpha ranges from 0 to 1, with a = 0.7 or greater is considered reasonably reliable. The internal reliability of research tool was achieved when Cronbach's Alpha values of questionnaire were found to be significantly reliable (Table 1) and useable in the study.

Survey Questions	No. of	Cronbach's Alpha
Survey Questions	Items	Value
Q.1 What is the existing level of work-related stress?	10	.702
Q.3 How does work-related stress effect job performance?	10	.934
Q.4 How does work-related stress impact health?	10	.890

Table-1	Data	collection	instrument	reliability	test

Data Analysis

Data was collected using various social media platforms such as WhatsApp, Facebook, emails, besides visited some universities to get high response. After data gathering, the next stage was data analysis. Data analysis as defined by (Brown, 2019) is the most common way of looking at cleaning, changing and visualizing information to find valuable data, draw conclusions and back decisions. When information is gathered with the help of research instrument, it is first organized



and analyzed to identify any inconsistencies. Data was coded to assign a numerical value for analysis and transferred to Microsoft Excel. The organization and analysis of data is performed using SPSS software.

Demographic Outline of the Respondents

The overall response rate of this study was 70%, higher was from male library professionals' side males 31 (55.4%) and females 25(44.6). Mostly 47 (83.9%) earned MLIS/BS-LIS degrees and 9 (16.1%) MPhil-LIS. The respondents 13 (23.2%) have 1-5 years of working experience and also 13 (23.2%) fall in group 6-10 years. 6 (10.7%) respondents have experience 11-15 years, and 11 (19.7%) fall in group 16-20 years and 13 (23.2%) fall in group 21 years and above. The respondents have different designations as 6 (10.7%) Chief Librarians, 10 (17.9%) Deputy Librarians, 7 (12.5%) fall in group Librarians and mostly 29 (51.8%) were assistant librarians and only 4 (7.1%) belonged to title library assistant. The mostly response rate 33 (58.9%) got from public institutions as compare to private 23 (41.1%).

Level of Work-Related Stress

To evaluate the degree of work stress amongst LIS professionals, Perceived Stress Scale (PSS-10) was included in data collection tool. On PSS-10 scorecard, individuals were approached to get responses on a 5-point Likert scale ranging from 1 (never) to 5 (very often). Table 3 highlighted the main symptoms as identified in the *Perceived Stress Scale*. A total of ten statements were asked of the respondents and they were instructed to record their responses on given scale. Mostly 71.4% of respondents responded as sometimes against the statement, *how frequently an unexpected event upset you*? The majority 48.2% respondents chose the options sometime over the next two topic statements *how often have you felt out of control of the important aspects of your life*? and *how frequently have you experienced nervousness and stress*? The next statement was *how often have you felt assured in your ability to manage your personal problems*? 37.5% respondents answered never followed by 33.9 almost never. Mostly 41.1% LIS professionals selected option sometimes and 35.7% answered almost never on the statement *how frequently have you felt like things were working out for you*? Highest number 51.8% respondents opined as sometimes when asked question statement *how often have you felt overwhelmed by your responsibilities*? The 48.2% of library professionals responded as sometimes against the statement



how frequently have you managed to control life's irritations? 44.6% countered as almost never against the question statement how often have you felt in control of everything? For the most part, 64.3% rated as sometimes against the statement how frequently have things beyond your control made you angry? 42.9% of respondents replied as sometimes to the question statement how often have you felt overwhelmed by difficulties piling up?

Symptoms	Never	Almost Never	Some Times	Fairly Often	Very Often
How frequently an unexpected event upset you?	1.8	7.1	71.4	12.5	7.1
How often have you felt out of control of the important aspects of your life?	3.6	19.6	48.2	19.6	8.9
How frequently have you experienced nervousness and stress?	3.6	19.6	48.2	25.0	3.6
*How often have you felt assured in your ability to manage your personal problems?	37.5	33.9	19.6	8.9	0
*How frequently have you felt like things were working out for you?	7.1	35.7	41.1	12.5	3.6
How often have you felt overwhelmed by your responsibilities?	7.1	21.4	51.8	17.9	1.8
*How frequently have you managed to control life's irritations?	12.5	33.9	48.2	1.8	3.6
*How often have you felt in control of everything?	3.6	44.6	26.8	16.1	8.9
How frequently have things beyond your control made you angry?	3.6	7.1	64.3	16.1	8.9
How often have you felt overwhelmed by difficulties piling up?	12.5	30.4	42.9	8.9	5.4

Table-2 Perceptions of LIS	professionals about level of work-related stress
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*Positive question where weights were reversed for the purpose of score calculations 1=Never, 2=Almost Never, 3=Some Times, 4=Fairly Often, and 5=Very Often

Effects of Work-Related Stress on Job Performance

Table 3 shows the effects of work-related stress on job performance of LIS professionals employed at various universities in Karachi. The participants' opinions were recorded by asking ten statements, the first one was *unable to perform my duties normally* 37.5% of participants disagreed, 17.9% strongly disagreed. The next statement was *afraid of failure due to stress at work*, participants differ from this statement that work-related stress causes afraid of failure among LIS





professionals 42.9% disagreed, 10.7% strongly disagreed. Then asked about *neglect some tasks due to work overload* respondents 32.1% agreed, 25% neither agreed nor disagreed, admits that some tasks are neglected due to excess work. When asked about *late sittings* then majority 30.4% disagreed, 21.4% strongly disagreed, did not agree that late sitting is a significant factor that can affect their job performance. The next statement was about *absence from work due to stress*, librarians 46.4% disagreed, 19.6% neither agreed nor disagreed, have a mixed response on this statement. As with the following statement about *increase probability of errors in work* participants gave a mixed response 44.6% disagreed, 23.2% neither agreed nor disagreed and 21.4% agreed. When asked about *difficult to meet deadlines*, a number of participants 53.6% disagreed showing their dissent that it has little impact on their job performance. The next question about *lose interest/faith in work*, respondents again differ 51.8% disagreed, 16.1% strongly disagreed. When asked about *difficulty in decision making due to stress*, participants gave a mixed response 32.1% disagreed, 26.8% neither agreed nor disagreed and 23.2% agreed. The last statement was about *avoiding responsibility*, and participants were in a mixed view over this statement 35.7% disagreed, 25% strongly disagreed and 23.2% neither agreed nor disagreed.

Symptoms	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Unable to perform my duties normally	17.9	37.5	25.0	16.1	3.6
Afraid of failure due to stress at work	10.7	42.9	10.7	32.1	3.6
Neglect some task due to work overload	10.7	25.0	25.0	32.1	7.1
Late sittings	21.4	30.4	21.4	21.4	5.4
Absence from work due to stress	19.6	46.4	26.8	3.6	3.6
Increase probability of errors in work	5.4	44.6	23.2	21.4	5.4
Difficult to meet deadlines	7.1	53.6	17.9	16.1	5.4
Lose interest/faith in work	16.1	51.8	14.3	12.5	5.4
Difficulty in decision making due to stress	10.7	32.1	26.8	23.2	7.1
Avoiding responsibility	25.0	35.7	23.2	10.7	5.4

1=Strongly Disagree, 2=Disagree, 3=Neither Agree nor Disagree, 4=Agree, and 5=Strongly Agree





Effects of Work-Related Stress on Health

Table 4 revealed the impact of work related stress on health of LIS professionals working in various higher education institutions in Karachi. Respondents 28.6% agreed and 12.5% strongly agreed that they *feel nervous/upset*, so the results indicated that some participants experience anxiety and tension in the workplace. The second statement was about whether they *feel frustration/depression* at work, 30.4% of the respondents agreed and 10.7% strongly agreed that they feel unhappy and frustrated at work. 37.5% library professionals agreed that they overreact to situations in some cases and it is due to work-related stress.

When asked about *forgot important things/occasions*, respondents have a mixed opinion 33.9% disagreed, 23.2% neither agreed nor disagreed and 28.6% agreed. The next statement was if they experienced *disturbed work-life balance*, the majority of respondents 48.2% disagreed that work-related stress affects their home life. The health issues such as *headache, back/neck pain, blood pressure*, the results indicated that respondents have health problems due to stress at work, 28.6% neither agreed nor disagreed, 28.6% agreed and 14.3% strongly agreed. The next statement was about eating habits, *loss of appetite/overeating*, results showed mixed opinions 37.5 disagreed, 25% neither agreed nor disagreed and 26.8% agreed. When obtained opinions about *increased caffeine/nicotine consumption*, the majority of respondents 41.1% disagreed and 16.1% strongly disagreed. When respondents were asked if they had experienced, *weigh gain or loss*, the results showed that they disagreed that stress affected their body weight 37.5% disagreed. The last statement was about *sleeplessness*, the respondents had mixed opinions 23.2% neither agreed nor disagreed insomnia.

Symptoms	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Feel nervous/upset	10.7	25.0	23.2	28.6	12.5
Frustration/depression	8.9	25.0	25.0	30.4	10.7
Overreact to situations	7.1	25.0	21.4	37.5	8.9
Forgot important things/ occasions	7.1	33.9	23.2	28.6	7.1
Disturbed work-life balance	3.6	48.2	16.1	21.4	10.7

Table-4: Perceptions of LIS professionals about work-related stress on health



Headache, back/neck pains, blood pressure	8.9	19.6	28.6	28.6	14.3
Loss of appetite/overeating	5.4	37.5	25.0	26.8	5.4
Increased caffeine/ nicotine consumption	16.1	41.1	14.3	25.0	3.6
Weight gain or loss Sleeplessness	7.1 12.5	37.5 26.8	25.0 23.2	23.2 30.4	7.1 7.1

1=Strongly Disagree, 2=Disagree, 3=Neither Agree nor Disagree, 4=Agree, and 5=Strongly Agree

Relation between Work-Related Stress and Job Performance

Table 5 describes the results of Pearson's correlation test between work-related stress job performance of LIS professionals. The outcomes showed that stress has a strong relationship (.673), which means that job performance of academic librarians is affected by work stress.

		Work-Related Stress	Job Performance
Work-Related Stress	Pearson Correlation	1	.191
	Sig, (2-tailed)		.158
	Ν	56	56
Job Performance	Pearson Correlation	.191	1
	Sig, (2-tailed)	.158	
	N	56	56

Table-5 Correlation between work-related stress and job performance

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

Relation between Work-Related Stress and Health

Table 6 outlines the relationship between work-related stress and health of LIS professionals. The results indicated that work stress has a positive relationship (.398), which means that library professionals may face health problems due to work-related stress.

Table-6 Pearson's Correlation between causes of work-related stress and impact on health	
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		Work-Related Stress	Job Satisfaction
Work-Related Stress	Pearson Correlation	1	.187
	Sig, (2-tailed)		.168
	Ν	56	56
Health	Pearson Correlation	.187	1
	Sig, (2-tailed)	.168	
	Ν	56	56



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

Difference in Perceptions about the Effects of Work-Related Stress on job performance with Regard to Gender

The Table 7 reported that not a remarkable difference found between the mean values of males (M= 2.4677, SD=.77519) and females (M=2.7720, SD=.77164); t (56) = -1.463, p = 0.149. So P-value is greater than the standard value .05, thus establishing that no significant difference existed between the groups of male and female participants' perceptions regarding the effectiveness of work-related stress on job performance.

Table-7 Difference in perceptions about the effects of work-related stress on job performance with regard to gender

Gender	Ν	Mean	Std. Deviation	t	Sig.
Male	31	2.4677	.77519	-1.463	.149
Female	25	2.7720	.77164		
	o =				

*Note. Significant at $\leq .05$

Difference in Perceptions about the Effects of Work-Related Stress on Job Performance with Regard to Type of Institutions

The statistical results indicated the respondents from public institutions (M=2.5788, SD=.77812) and private (M=2.6391, SD=0.80269); t (56) = -.282, p = .779 are on the same pitch. The views of both groups of the participants are same regarding the effects of work-related stress on job performance as revealed in the Table 8.

Table-8 Difference in perceptions about the effects of work-related stress on job
performance with regard to type of institutions

Institution	Ν	Mean	Std. Deviation	t	Sig.
Public	33	2.5788	.77812	282	.779
Private	23	2.6391	.80269		

*Note. Significant at $\leq .05$

Difference in Perceptions about the Effects of Work-Related Stress on Health with Regard to Gender

The Table 9 revealed the means values in terms of males (M= 2.8355, SD=.77784) and females (M=3.1160, SD=.89660); t (56) = -1.253, p = .216. The P-value is greater than .05 so it



was proved that there was no significant difference existed between the perceptions of male and female participants regarding the effectiveness of work-related stress on health.

 Table-9 Difference in perceptions about the effects of work-related stress on health with regard to gender

Gender	Ν	Mean	Std. Deviation	t	Sig.
Male	31	2.8355	.77784	-1.253	.216
Female	25	3.1160	.89660		
2	05				

*Note. Significant at $\leq .05$

Difference in Perceptions about the Effects of Work-Related Stress on Health with Regard to Type of Institutions

To investigate whether significant difference exists in the perceptions of respondents from various private and public institutions. The results of Table 10 indicated that respondents from public (M=3.0576, SD=.86170) and private institutions (M=2.8217, SD=0.79827); t (56) = 1.038, p = .304; there were no statistically significant differences. So it was proved that librarians from a variety of institutions public and private are on the same pitch regarding the effectiveness of work-related stress on health.

Table-10 Difference in perceptions about the effects of work-related stress on health w	ith
regard to type of institutions	

Institution	Ν	Mean	Std. Deviation	t	Sig.
Public	33	3.0576	.86170	1.038	.304
Private	23	2.8217	.79827		

Discussion

LIS professionals working in higher education institutions play an essential role in achieving organizational learning and research objectives, and they strive to provide informational support to students, teachers and researchers (Ahmad et al., 2020). Stress is identified as a serious problem for university librarians' well-being, performance and also badly damages their physical and psychological health (Dina, 2016). Recent studies have found that work-related stress is increasingly common among academic staff, affecting their productivity and health (Hayes et al., 2021; Wood et al., 2020). The results of the present study indicated that library professionals experience moderate levels of work-related stress and it has significant effect on job performance,





these outcomes as in-line with the studies (Devi & Lahkar, 2021; Mahanta, 2015; Wijetunge, 2012). The present study outcomes are consistent with the examination by Moyosore (2021) which measured job stress levels among public tertiary institutions and found that librarians experience high work-related stress levels, resulting in poor performance. A study by Cameron et al. (2021) shows that lack of support, work-life balance and workload contribute to high-stress levels among tenure-track academic librarians. People do not handle stress well, and prolonged work-related stress affects the productivity of librarians working at public and private universities in Karachi.

 H_1 : Work-related stress significantly impacts the job performance of LIS professionals, is accepted. Some critical factors that affect performance, as highlighted in the study, include abandonment of tasks due to work overload, difficulty making decisions, risk of making mistakes, fear of failure and staying late at the office. The findings are supported as the stress of university library professionals' results depicted by Dina (2016) negatively affects the quality or performance of work. A research (Smith et al., 2020) also confirms the outcomes of this study, which shows that most participants believe that their work-related stress affects their productivity. Devi and Lahkar (2021) found that a large number of librarians working in university libraries in northeast India experience moderate levels of work-related stress. The present study found significant relationships between work stress and job performance these results endorsed previous studies which also have the same outcomes (Devi & Lahkar, 2021; Dina, 2016; Moyosore, 2021; Warraich et al., 2014; Zaidi et al., 2021).

 H_2 : Work-related stress significantly affects the psychological and physical well-being of LIS professionals, is also accepted because study proved that librarians working in different universities of Karachi also experience the effects of job stress on their physiological and mental health. The present study discovered a positive relation between work stress and the health of library professionals, this means job stress has effects on employees' health, in various studies same results were presented (Linden et al., 2018; Smith et al., 2020). It has been shown in several studies that stress is detrimental to the worker's health (Islam et al., 2012). The results also revealed that work-related stress affected the health of library professionals, as they felt frustration/depression, overreact to situations, headaches, back/neck pains, blood pressure, felt



sleeplessness, whereas they did not feel an effect on work-life balance, increased in caffeine/nicotine consumption, weight gain or loss. Furthermore, the study also showed that long-term work-related stress leads to decreased job performance and affects university librarians' psychological and physiological health.

Ho₃: There is no significant difference between the perceptions of LIS professionals about the effects of work-related stress on their job performance in connection with their gender and institution type.

Ho₄: There is no significant difference between the perceptions of LIS professionals about the effects of work-related stress on their psychological and physical well-being in connection with their gender and institution type.

The hypotheses 3rd and forth one are accepted because male and female librarians viewed in the same tone there is no difference found between the means of male and female respondents and also from the library professionals belonging to private and public sector universities these results endorsed the studies' findings (Devi & Lahkar, 2021; Kaur & Kathuria, 2018; Rizvi & Sehar, 2022).

The outcomes of this research are supposed to help universities, students, librarians, data scientists and policymakers tackle work-related stress. The study highlighted the major symptoms of work-related stress on library professionals, such as headache, muscle pain, blood pressure, overreaction to the situation, frustration, depression, nervousness, memory loss, sleep disorder, etc. The results are in accordance with the study by Farler and Broady Preston (2012) that identified health problems among library staff in a College of Higher Education, that is, eating, drinking, sleep disturbances, fatigue, etc. Dina (2016) also found that mental health of librarians is affected by work-related stress, leading to fatigue and absenteeism.

Conclusion

Work-related stress is a multifaceted problem triggered by many internal and external factors. The study was perceived by library professionals working in public and private universities in Karachi. The results affirm that library staff experience difficulty in decision making, fear of failure, and late sittings at the office, but they consider stress did not affect their normal routine activities, errors at work, meet work deadlines. Study concluded that work stress has effects on



library professionals' health and job performance. The outcomes of this investigation are supposed to help universities, students, librarians, data scientists and policy makers to tackle the issue of work-related stress.

Recommendations

Based on the research outcomes, following measures may be implemented to comfort universities and their administrations to condense work-related stress in university libraries:

- The first and most crucial step is to raise awareness of work-related stress among all stakeholders. University management must analyze the workload and find possible stressors associated with working in university libraries. The goal should be solely to build trust in the workforce and improve the overall productivity of university libraries.
- The distribution of work should be fair and based on the skill set of library staff.
- To improve the efficiency of library staff, a rotation policy should be implemented to ensure equal opportunity for all library staff.
- Appropriate recognition of work motivates employees, reduces stress and enhances productivity it can be quickly done through a letter of appreciation or a friendly get-together

References

- Ahmad, K., JianMing, Z., & Rafi, M. (2019). An analysis of academic librarians competencies and skills for implementation of Big Data analytics in libraries: A correlational study. *Data Technologies and Applications*, 53(2), 201–216. <u>https://doi.org/10.1108/DTA-09-2018-0085</u>
- Ahmad, K., JianMing, Z., & Rafi, M. (2020). Librarian's perspective for the implementation of big data analytics in libraries on the bases of lean-startup model. *Digital Library Perspectives*, 36(1), 21–37. https://doi.org/10.1108/DLP-04-2019-0016
- Ali, K., Ishtiaq, I., & Ahmad, M. (2013). Occupational stress effects and job performance in the teachers of schools of Punjab (Pakistan). *International Journal of Academic Research in Business and Social Sciences, 3*(11), 665. https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=716ef3ecbefb6d8c2451f7 https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=716ef3ecbefb6d8c2451f7



- APA. (2021). APA dictionary of psychology. Retrieved from American Psychological Association: https://dictionary.apa.org/
- Azam, M., & Ahmad, K. (2023). Adoption of big data analytics for sustainability of library services in academic libraries of Pakistan. *Library Hi Tech*. https://doi.org/10.1108/LHT-12-2022-0584
- Brown, M. S. (2019). Transforming unstructured data into useful information. In S. Kudyba, Big sata, mining, and analytics: Components of strategic decision making (pp. 224-246). Boca Raton: CRC Press.
- Cameron, L., Pierce, S., & Conroy, J. (2021). Occupational stress measures of tenure-track librarians. *Journal of Librarianship and Information Science*, 53(4), 551-558. https://doi.org/10.1177/0961000620967736
- Careercast. (2019). The 2019 jobs rated report. Retrieved from CareerCast: <u>https://www.careercast.com/jobs-rated/2019-jobs-rated-report?page=1</u>
- Chaudhry, A. Q. (2012). The Relationship between Occupational Stress and Job Satisfaction: The Case of Pakistani Universities. *International Education Studies*, 5(3), 212-221. https://doi.10.5539/ies.v5n3p212
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *journal of health and social behavior*, 24. <u>https://doi.org/10.2307/2136404</u>
- Comish, R., Daboval, J., & Swindle, B. (1994). Managing stress in the workplace. *The National Public* Accountant, 39, 24-27.
- Cox, T. (1978). Stress. Basingstoke: Macmillan.
- Cox, T. (1993). *Stress research and stress management: Putting theory to work* (Vol. 61). Sudbury: Hse Books.
- Creswell, J. W., & Creswell, J. D. (2018). *Research Design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Los Angeles: Sage.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, *16*(3), 297-334. <u>https://link.springer.com/article/10.1007/bf02310555</u>



- Crummett, C. (2008). *The use of CMC technologies in academic libraries*. In S. Kelsey, & K. S. Amant, The Handbook of Research on Computer Mediated Communication (Vol. I). Hershey: Information Science Reference.
- Devi, P., & Lahkar, N. (2021). Occupational stress and job performance among university library professionals of North-East India. *Evidence Based Library and Information Practice*, 16(2), 2-21. DOI: <u>https://doi.org/10.18438/eblip29821</u>
- Dina, T. (2016). The effect of stress on professional librarians job performance in Nigerian university libraries. *Library Philosophy & Practice*. <u>http://digitalcommons.unl.edu/libphilprac/1431</u>
- Ehsan, M., & Ali, K. (2019). The impact of work stress on employee productivity: Based in the banking sector of Faisalabad, Pakistan. *International Journal of Innovation and Economic Development*, 4(6), 32-50. http://dx.doi.org/10.18775/ijied.1849-7551-7020.2015.46.2003
- Farler, L., & Broady-Preston, J. (2012). Workplace stress in libraries: A case study. Aslib Proceedings, 64(3), 225-240. <u>https://doi.org/10.1108/00012531211244509</u>
- Goode, W. J., & Hatt, P. K. (1952). Methods in social research. New York: McGraw-Hill.
- Hamid, A., & Younus, M. (2022). Why soft skills matter: Analyzing the relationship between soft skills and productivity in workplace of academic library professionals. *Libri*, 72(3), 263-277.
- Harwell, K. (2008). Burnout strategies for librarians. *Journal of Business & Finance Librarianship*, 13(3), 379-390. https://doi.org/10.1080/08963560802183021
- Hayes, S. W., Priestley, J. L., Moore, B. A., & Ray, H. E. (2021). Perceived stress, work-related burnout, and working from home before and during COVID-19: An examination of workers in the United States. *Sage Open*, 11(4). <u>https://doi.org/10.1177/21582440211058193</u>
- Husna, A. ul, & Ahmad, S. (2022). Relationship Between Knowledge Management and Job Satisfaction Among University Librarians of the Punjab, Pakistan. *Journal of Information Management and Practices*, 1(2), 1–22.
- Islam, J., Mohajan, H., & Datta, R. (2012). Stress management policy analysis: a preventative approach. *International Journal of Economics and Research*, *3*(4), 1-17. <u>https://mpra.ub.uni-muenchen.de/50698/</u>
- Jin, P., Yu, L., Ahmad, K., Shafique, H. M., & Ahmad, A. (2024). Evaluating the factors influencing the adoption of digital culture among university students in developing areas of South Punjab.





 Information
 Development,
 02666669241270909.

 https://doi.org/10.1177/02666669241270909
 02666669241270909
 02666669241270909.

- Karasek, R., Brisson, C., Kawakami, N., Houtman, I., Bongers, P., & Amick, B. (1998). The Job Content Questionnaire (JCQ): an instrument for internationally comparative assessments of psychosocial job characteristics. *Journal of occupational health psychology*, 3(4), 322. DOI: 10.1037//1076-8998.3.4.322
- Kaur, H., & Kathuria, K. (2018). Occupational stress among library professionals working in universities of Punjab and Chandigarh. *International Journal of Information Dissemination* and Technology, 8(1), 22–24. https://doi.org/10.5958/2249-5576.2018.00005.5
- Khan, A., Rehman, H., & Rehman, D. S.-U. (2016). An empirical analysis of correlation between technostress and job satisfaction: A case of KPK, Pakistan. *Pakistan Journal of Information Management* and Libraries, 14. http://journals.pu.edu.pk/journals/index.php/pjiml/article/viewArticle/763
- Kim, J.-H., & McKenzie, L. A. (2014). The impacts of physical exercise on stress coping and wellbeing in university students in the context of leisure. *Health*, 6(19), 2570. DOI: <u>10.4236/health.2014.619296</u>
- Kumar, R. (2014). *Research methodology: A step-by-step guide for beginners* (4th ed.). Los Angeles: Sage.
- Lazarus, R. S. (1966). Psychological stress and the coping process. New York: McGraw-Hill.
- Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal and coping. New York: Springer.
- Lemu, A. A. (2007). Stress management by library and information science professionals in Nigerian university libraries. Samaru Journal of Information Studies, 7(2), 5-11. DOI: <u>10.4314/sjis.v7i2.40602</u>
- Linden, M., Salo, I., & Jansson, A. (2018). Organizational stressors and burnout in public librarians. Journal of Librarianship and Information Science, 50(2), 199-204. https://doi.org/10.1177/0961000616666130
- Lindström, M. (2005). Psychosocial work conditions, unemployment and self-reported psychological health: a population-based study. *Occupational Medicine*, 55(7), 568-571.
 DOI: 10.1093/occmed/kqi122



- Mahanta, K. (2015). Assessment of stress in university library: A case study. In M. Saikia, M. Eqbal & D. Pratap (Eds.), *Library management: New trends and challenges* (1st ed., pp. 33–41). Academic Publication.
- Malta, M. (2004). Stress at work, a concept in stress human factors limited. *Business Psychology* Strategy Development, 33(6), 125-133.
- Moyosore, A. (2021). The quality of work life and job stress among librarians in public tertiary institutions. *International Journal of Research Publications*, 68(1). <u>https://ijrp.org/paper-detail/1638</u>
- Oyewole, G. O., & Popoola, S. O. (2013). Effects of psycho-social factors on job performance of library personnel in federal colleges of education in Nigeria. *Library Philosophy and Practice*, 872, 1-26. <u>https://digitalcommons.unl.edu/libphilprac/872/</u>
- Palmer, S. (1989). Occupational stress. The Health and Safety Practitioner, 7, 16-18.
- Rafi, M., Ahmad, K., Naeem, S. Bin, Khan, A. U., & JianMing, Z. (2020). Knowledge-based society and emerging disciplines: a correlation of academic performance. *Bottom Line*, 33(4), 337– 358. <u>https://doi.org/10.1108/BL-12-2019-0130</u>
- Rizvi, Ahsan Raza & Sehar, Naweed- e- Dr. (2022). Stress effects on work efficiency: study by professionals at the Cambridge school library of Karachi Sindh, Pakistan. *Library Philosophy* and Practice (ejournal). 7206. <u>https://digitalcommons.unl.edu/libphilprac/7206</u>
- Rout, U. R., & Rout, J. K. (2002). *Stress management for primary health care professionals*. New York: Kluwer Academic Publishers.
- Salami, S. O. (2010). Job stress and counterproductive work behaviour: Negative affectivity as a moderator. *The Social Sciences*, *5*, 486-492. <u>https://dx.doi.org/10.3923/sscience.2010.486.492</u>
- Schwarz, U. v., Lindfors, P., & Lundberg, U. (2008). Health-related effects of worksite interventions involving physical exercise and reduced workhours. *Scandinavian journal of work, environment & health*, 179-188. https://doi.org/10.5271/sjweh.1227
- Selye, H. (1980). *The stress concept today*. In I. L. Kutash, & e. a. L. B. Schlesinger, Handbook on stress and anxiety (pp. 127-129). San Francisco: Jossey-Bass.



- Smith, D. L., Bazalar, B., & Wheeler, M. (2020). Public librarian job stressors and burnout predictors. *Journal of Library Administration*, 60(4), 412-429. https://doi.org/10.1080/01930826.2020.1733347
- Spiers, C. (2007, November 02). *Definition of stress: what is stress*? Retrieved from Stress Busting: http://www.stressbusting.co.uk/definition-of-stress/
- Stranks, J. (2005). *Stress at work: management and prevention. Amsterdam: Butterworth-Heinemann.* UK: Elsevier.
- Sullivan, L. E. (2009). The SAGE glossary of the social and behavioral sciences. Los Angeles: Sage.
- Taylor, A. (2021). Stress and health: Understanding the effects and examining interventions. Basel: MDPI.
- Thanuskodi, S. (2015). ICT skills among library professionals: a case study of universities in Tamilnadu, India. In S. Thanuskodi, Handbook of Research on Inventive Digital Tools for Collection Management and Development in Modern Libraries (pp.1-20). Hershey:IGI Global.

Vaus, D. (2010). Research design in social research. London: Sage Publications Ltd.

- Warraich, U. A., Ahmed, R., Ahmad, N., & Khoso, I. (2014). Impact of stress on job performance: An empirical study of the employees of private sector universities of Karachi, Pakistan. *Research Journal of Management Sciences*, 2319. <u>https://ssrn.com/abstract=2463554</u>
- Wijetunge, P. (2012). Work-related stress among the university librarians of Sri Lanka. *Journal of the University Librarians Association*, Sri Lanka, 16(2), 125–137.
- Wood, B. A., Guimaraes, A. B., Holm, C. E., Hayes, S. W., & Brooks, K. R. (2020). Academic librarian burnout: A survey using the Copenhagen Burnout Inventory (CBI). *Journal of Library Administration*, 60(5), 512-531. <u>https://doi.org/10.1080/01930826.2020.1729622</u>
- Yan, H., & Xie, S. (2016). How does auditors' work stress affect audit quality? Empirical evidence from the Chinese stock market. *China Journal of Accounting Research*, 9(4), 305-319. https://doi.org/10.1016/j.cjar.2016.09.001
- Zaidi, S. A., Rehman, S. U., & Ashiq, M. (2021). Workplace motivation and stress on job satisfaction of librarians working in public sector universities of Lahore, Pakistan. *International Journal* of Information Science and Management, 19(2), 181-195. <u>https://ijism.ricest.ac.ir/article_698345.html</u>