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Occupational Stress and Job Performance Among University Library Professionals of North-East India

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Methods – Descriptive survey method was used for the study. The sample population consisted of 123 library professionals from different parts of North-East India selected through convenience sampling technique. The survey consisted of a structured questionnaire divided into three sections: demographic information, self-perceived occupational stress, and self-rated job performance. Descriptive and inferential statistical techniques including frequency, mean, standard deviation, t-test, correlation coefficient, and simple linear regression analysis were used to analyze data and interpret results with the help of the statistical package SPSS version 20.

Results – The findings of the study established that a majority of library professionals working in university libraries of North-East India perceived a moderate level of occupational stress. It was also determined that male and female library professionals do not differ in their perception of occupational stress (p > 0.05), while a significant mean difference was found between male and female library professionals' perceptions towards their job performance (p < 0.05). Males scored themselves higher than females in terms of eight indicators of job performance: quality of work performance, ability to handle multiple jobs, communication skills, decision making, problem solving, technical skills, ability to perform competently under pressure, and contribution to the overall development of the library.

Regarding the relationship between occupational stress and job performance, the data indicated a significant negative relationship between occupational stress and job performance (r = -0.296, p < 0.01). In addition to this, intrinsic impoverishment, under participation, low status, and poor peer relationships were some of the factors negatively affecting the job performance of library professionals.

Conclusion – The present study provides an insight about how occupational stress affects job performance of library professionals working in academic libraries. The findings revealed that there exists a modest but statistically significant negative relationship between occupational stress and job performance, which implies that an increment in the level of perceived occupational stress tends to influence library professionals' self-perception of job performance negatively.
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Abstract  

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Introduction

Stress is a “perceived phenomenon associated with tension and anxiety. One is considered as being under stress when a situation is perceived as presenting an extra demand on the individual’s capabilities and resources” (Nawe, 1995, p. 30). Most often, stress can be defined:

As a way a human body reacts to stimuli from the environment; it can influence one’s psychological and physical condition. Experiencing lower levels of stress can be stimulating, but being exposed to higher levels of stress for long periods of time may affect one’s health and cause negative emotions, feelings of pressure, anxiety, irritability, loss of appetite, and others, and finally bad performance at work. (Petek, 2018, p. 129)

Research has shown that stress in general exists in different forms; it may be psychological, emotional, social, occupational, or job related. Over the past few decades, occupational stress, or job stress, has been emerging as a growing concern because we spend a lot of time at the workplace. Blix et al. (1994) stated that “occupational stress is considered to be one of the ten leading work-related health problems” (p. 157). According to Kaur and Kathuria (2018):

Occupational stress is a mental or physical tension or both, created and related to
occupation and its environment which comprise of persons and objects from within and outside the work place resulting into absenteeism, lack of motivation and initiative, low productivity and service efficiency, job dissatisfaction and disruption of the smooth functioning of the organization. (p. 13)

Employees’ efficiency in the organization is evidenced in terms of their performance at the workplace. Job performance is an important criterion for organizational outcomes and success. Ojo (2009) defined job performance as an extent to which the day-to-day work is being carried out. Job performance can be defined as individual productivity in terms of both quantitative and qualitative aspects of the job. It indicates how well a person is performing their job and to what extent, the employee is able to meet their job duties as well as policies and standards of the organization.

Several studies have pointed out that there are emerging issues in the library and information science profession that poses a threat or stress factor to library professionals, especially the academic librarians. These include “new expectations and the constantly changing role of librarians due to the dynamic nature of information and its delivery in the university system, triggered by the emergence of ICT in the library and information practice” (Ajala, 2011, para. 2). Reena (2009) further supported this by averring that one of the realities of 21st century is that the library professionals are faced with constant challenges in their working environments. This is not only because of the role they have to play inside the libraries but also due to the increasing demands and expectations of the users within the libraries. Moreover, as said by Saqib Saddiq, librarians were mostly unhappy with their workplace, often finding their job repetitive and unchallenging. They complained about their physical environment, saying that they were sick of being stuck between bookshelves all day as well as claiming that their skills were not used and that they felt they had very little control over their career (“Librarians ‘suffer most stress’,” 2006). According to Topper (2007), after years of doing the same tasks can be stressful and many librarians may feel that they are not being challenged in their work.

**Statement of the Problem**

The university library constitutes a vital element in any academic institution, and hence library professionals play a significant role in promoting teaching, learning, and research by providing information sources and services to students, researchers, and faculty. Library staff should be concerned about the needs of the library users so that optimum utilization of the resources available can be achieved. The library staffs are the facilitators for the contact between users and resources. The work of the library professionals in service delivery is a key element that contributes to overall effectiveness of the organization. In extending their services as much as possible, stress should not be a hurdle in enacting efforts to serve the user community. Research has already established that a high level of occupational stress may lead to a high level of dissatisfaction among the employees, a lack of job mobility, burnout, poor work performance, and less effective interpersonal relations at work (Manshor et al., 2003).

Gender is another variable that can potentially affect the attitudes and perceptions of employees at the workplace. A few studies have already asserted that though the library profession is open for all genders, it is mostly female (Carmichael, 1992; Wiebe, 2004). “Although librarianship is a female-dominated profession, both males and females within the profession suffer from work-related pressures based on the practices of gender bias” (Greer et al., 2001, p. 127). Several studies have shown that some differences exist in the level of dissatisfaction between male and female library staff. Graddick and Farr (1983), for example, pointed out that females often view themselves as being treated worse than males in the
workplace. Kirkland (1997) argued that most of the women in libraries suffer from a deprivation of inside information, challenging assignments, and recognition in their organizations. Thus, several studies have discussed the gender-related issues of different aspects of work, but very few empirical studies directly examine gender-based differences among library employees’ perceptions regarding occupational stress and job performance at the university level.

It is in the light of these problems that the present study seeks to gain an insight on how occupational stress affects job performance of library professionals working in university libraries of North-East India. The study also attempts to explore gender differences among library professionals in their perceptions of occupational stress and their own job performance.

**Scope and Limitation of the Study**

The study limits itself to measuring the perceived level of occupational stress and examining the relationship between perceived occupational stress and self-rated job performance of university library professionals in North-East India. The libraries attached to eight central universities, four state universities, and one Institution of National Importance located in various states of North-East India were picked up for the study. It should be noted that, North-East India is made up of total eight states: Assam, Arunachal Pradesh, Meghalaya, Sikkim, Manipur, Mizoram, Nagaland, and Tripura. The geographical coverage of the study includes only Assam, Arunachal Pradesh, Meghalaya, Sikkim, Manipur, and Tripura. The newly established universities including private universities are excluded from the study because these institutions are still in their infancy.

**Literature Review**

Numerous bodies of literature have explored stress from different perspectives in different organizational settings and highlighted various stressors related to those situations. Stress can be caused by many problems, such as problems at the workplace, financial problems, family problems, and problems in employees’ surroundings.

The Health and Safety Executive (HSE, 2001) defined stress as an adverse reaction to excessive or extreme pressures or demands that may be placed upon individuals. The pressure and demands that causes stress are known as stressors. According to Hinkle (1974), the term stress denoted “force, pressure, strain or strong effort” exerted upon a material object or a person or upon a person’s “organs or mental powers” (p. 337). In this definition, individuals were acted upon by external forces.

Occupational stress or work-related stress arises when work demands of various types and combinations exceed the person’s capacity and capability to cope with it. Somvir and Kaushik (2013) investigated occupational stress among library professionals in Haryana state and reported that most of the librarians were frustrated because they were compared with clerical staff and had to work under the in-charge of a non-professional, who did not know about the duties and responsibilities of being a librarian. Low salary, less freedom to make decisions related to budget, responsibility for loss of books, technological changes, and a lack of interaction among library professionals were some of the factors discouraging librarians to provide better library services. Ratha et al. (2012) highlighted that workload, technology, shift work, user satisfaction, job insecurity, lack of administrative support, low status, inadequate salary, changing library environment, and reduced staff strength were some of the leading causes of occupational stress among library professionals in private engineering colleges in Indore City. Mahanta (2015) carried out a study to determine the sources of stress and magnitude of stress among the library professionals of Central Library, Tezpur University, Assam. The researcher found that
the library employees in the study experienced organizational role stress to a moderate extent. The study identified that role ambiguity, inter-role distance, role stagnation, and role erosion were the powerful sources of stress among the library staff. In fact, role conflict, role ambiguity, and role overload have also been studied as antecedents of occupational stress (Brief & Aldag, 1976; Ivanceyich et al., 1982).

Gender seems to play a significant role in employees’ perception of work-related stress and job performance. Jick and Mitz (1985) stated that workplace stress is a major problem and suggested that gender may be considered an important demographic characteristic in the experience of stress. Mosadeghrad (2014) revealed in his study that there was a strong correlation between the occupational stress of hospital employees and their gender. Female employees reported higher occupational stress than their male colleagues. Dina (2016) found that women suffered from stress more frequently than men owing to their dual responsibilities including work in the library and taking care of children or parents at home. Oloruntoba and Ajayi (2006) found that most male academic librarians have higher job performance than their female colleagues. Oyeniran and Akphorhonor (2019) stated that male librarians working in the university libraries in Nigeria contributed more than their female counterpart in terms of performance. The gender difference had a positive influence on the job performance of librarians in the university libraries in Nigeria.

Much of the earlier literature on occupational stress emphasizes its effects on job performance. Ali et al. (2011) found that there exists a highly significant positive relationship between job stress and job performance among banking employees (i.e., job performance was found to be better under stressful situations at workplace). In addition, all the three indicators of job performance—skills, efforts, and working conditions—had a positive direct relationship with job stress. Conversely, Ahmed and Ramzan (2013) reported the existence of a significant negative relationship between job stress and job performance in the banking sector, which implied that both variables were inversely proportional to each other. When job stress was low, job performance increased, and when job stress was high, job performance decreased.

Dina (2016) carried out a study to investigate the impact of stress on professional librarian’s job performance in Nigerian University libraries. The findings showed that high amounts of stress can affect a professional librarians’ quality in terms of job performance in relation to their job demands and expectations. Those professional librarians engaged in other activities besides their primary assignments for which they are employed were found more likely to be stressed than the others thereby affecting their job performance negatively. Occupational stress was identified as one of the major problems impacting professional librarians’ wellbeing, commitment, and job performance.

Kaur and Kathuria (2018) conducted a study among 301 library professionals working in central libraries of 24 universities in Punjab and Chandigarh. The study revealed that occupational stress and job performance shared a negative but significant co-efficient of correlation with each other, which implies that as the level of occupational stress increased, the level of job performance decreased. Ilo et al. (2019) investigated the relationship between job stress and job performance in university libraries in Nigeria. The study identified low productivity, increased absenteeism, hypertension, job dissatisfaction, frustration, depression, and negative job attitude as negative effects of stress on the job performance of librarians. Amusa et al. (2013) revealed in their study that a significant correlation exists between the work environment and job performance of librarians. Moreover, the study highlighted that the librarians’ job performance was considered fair with regard to variables such as professional practice, contribution to the overall development of the library, ability to
attend promptly to client’s request, and meeting minimum requirements for job promotion.

In summary, after reviewing all the relevant studies, occupational stress clearly exists in academic library environments and some of the common stressors affecting maximum the number of library employees include role overload, role conflict, role ambiguity, low status, lack of administrative support, and changing library environment. Both occupational stress and job performance were found to be interrelated with each other, which imply that higher levels of occupational stress are related to lower levels of job performance and vice-versa. Gender proved to be one of the significant factors influencing both occupational stress and job performance.

Aims

The aims of the present study are presented here:

1. To assess the perceived level of occupational stress among library professionals working in university libraries of North-East India.
2. To study the gender differences regarding perceived occupational stress and job performance among the library professionals.
3. To identify the relationship between occupational stress and job performance.
4. To examine the impact of occupational stress on job performance.

Hypotheses of the Study

Based on the aims of the study, the following null hypotheses were formulated:

- $H_0$ – There is no significant difference between male and female library professionals regarding perceived level of occupational stress.
- $H_{01}$ – Male and female library professionals do not differ in their perception of job performance.
- $H_{02}$ – No significant relationship exists between occupational stress and job performance.
- $H_{03}$ – There is no significant impact of occupational stress on job performance.

Methods

The Population

A descriptive survey method was employed to collect primary data from library professionals who work full time and who have a minimum qualification of a Diploma in Library & Information Science in different universities of North-East India that were recognized by the University Grants Commission (UGC) of India. Convenience sampling technique was used to gather data from a sample population of 123 library professionals who were easily available as well as willing to participate in the study from various states of North-East India. The breakdown of the sample population is given in Table 1.

Research Instrument

A structured questionnaire was constructed in print and distributed personally to the participants, making quantitative data relatively easy to collect. The questionnaire was divided into three sections: demographic information, self-perceived occupational stress, and self-rated job performance. To measure the level of perceived occupational stress, we designed an Occupational Stress Scale that was adapted from the Occupational Stress Index (OSI) of Srivastava and Singh (1984) and the Organisational Role Stress (ORS) Scale of Pareek (1983). The OSI scale, a widely used scale in India was adopted by Ratha et al. (2012) and Chandraiah et al. (2003) in their studies. Similarly, the ORS scale, which is more specifically used in Indian socio-cultural settings, was used by Mahanta (2015) and Jena.
and Pradhan (2011) in their research studies.
Reena (2009) used both the OSI and ORS scales in order to construct an instrument especially useful for the library and information science profession. The scale used in the study consists of a total of 23 items on 11 dimensions of occupational stress: role overload, role conflict, role ambiguity, under participation, low status, poor peer relationship, personal inadequacy, strenuous working conditions, career stagnation, intrinsic impoverishment, and unreasonable groups & political pressures. Brief descriptions of the dimensions of occupational stress used in the context of present study are stated here:

- **Role overload** arises when employees feel pressured because of added duties and responsibilities and lack the resources to perform them.
- **Role conflict** refers to situations with conflict of role expectations.
- **Role ambiguity** refers to a situation caused by lack of clarity or understanding about job expectations and responsibilities in the performance of a particular role.
- **Under participation** is when there is a lack of one’s influence on the decision-making process of the organization.
- **Low status** refers to a state of insignificance in the organizational as well as in the social system.
- **Poor peer relationship** occurs when there is lack of mutual co-operation between coworkers in solving organizational problems.
- **Personal inadequacy** refers to employees lacking the required skills to perform tasks expected to function within their roles.
- **Strenuous working conditions** refers to a lack of comfort and safety in the work environment.
- **Career stagnation** occurs when a employees feel a lack of engagement with their work or career.
- **Intrinsic impoverishment** refers to monotonous nature of assignments, lack of ample opportunity to utilize one’s abilities and develop one’s aptitude, etc.
- **Unreasonable group and political pressure** evolve from a situation where one is required to take a lot of decisions against his will or against formal rules and procedures under pressure.

Responses on all items were gathered through a five-point Likert scale (Strongly Agree = 5, Agree = 4, Disagree = 3, Strongly Disagree = 2, and Undecided = 1). The Cronbach’s Alpha Coefficient of Reliability was computed to verify the internal consistency of items used to measure a variable which was found to be .744. Nunnally (1978) recommended at least .70 alpha coefficients for social sciences as acceptable.

Similarly, to measure job performance, a self-assessment “Job Performance Scale” was constructed that consists of a total of 14 job

| Type of University                  | No. of Universities Surveyed | No. of Respondents |
|-------------------------------------|------------------------------|--------------------|
| State Universities                  | 4                            | 33                 |
| Central Universities                | 8                            | 79                 |
| Institution of National Importance  | 1                            | 11                 |
| Total                               | 13                           | 123                |
performance indicators (including completion of tasks on a given time, quality of work performance, ability to handle multiple jobs, communication skills, decision making, problem solving, technical skills, managerial skills, ability to perform competently under pressure, punctuality and regularity at work, meeting minimum requirements for promotion, interpersonal relationship with co-workers, contribution to the overall development of the library, and overall capacity to work) rated on a five-point Likert scale (Very Good = 5, Good = 4, Average = 3, Poor = 2, and Very Poor = 1). The purpose of designing the scale was to gather input from the library professionals about their self-perception of how well they are performing their job. The reliability coefficient of the scale was found to be .905 using Cronbach’s alpha method. Statistical techniques like frequency, mean, standard deviation, t test, correlation coefficient, and simple linear regression analysis were used to analyze the data and interpret the results with the help of the statistical package SPSS version 20. The descriptive statistics of the two variables selected for the study, i.e., occupational stress and job performance, are presented in Table 2.

Table 2 reflects that the mean and standard deviation of the total scores of perceived occupational stress is 60.91 and 9.069 respectively, whereas the mean and standard deviation of the total scores of self-rated job performance is calculated to be 59.02 and 6.968 respectively. The overall score ranges from a minimum of 40 to a maximum of 85 in the case of perceived occupational stress while the job performance scores ranges from a minimum of 40 to a maximum of 70. The table shows that the mean of both variables (i.e., occupational stress and job performance) seems to be identical; however, the range of scores was found to be greater in the case of occupational stress.

Results

The results and their analysis are presented here and keeping in mind the aims of the study.

Demographic Information

The demographic data collected are presented in Table 3 and describe the demographic characteristics of the sample population.

The demographic profile of the respondents in the present study demonstrated that with respect to responses on gender, 77 (62.60%) respondents were males while 46 (37.39%) were females. In response to age distribution, the highest number of respondents (35.77%) belongs to the age group of 31 to 40 years, which indicates a youthful working class. Table 3 also shows that a majority of the respondents (55.28%) hold master’s degrees as their highest professional qualification and a plurality (45.52%) had work experience of above 15 years.

Perceived Levels of Occupational Stress

In order to assess the perceived levels of occupational stress, the Mean (\(\bar{x}\)) and Standard Deviation (SD) of the total scores of occupational stress obtained from the sum of the responses of
Table 3
Demographic Profile of the Respondents

| Demographic Variables                  | Frequency (n = 123) | Percentage (%) |
|----------------------------------------|---------------------|----------------|
| Gender                                 |                     |                |
| Male                                   | 77                  | 62.60          |
| Female                                 | 46                  | 37.39          |
| Age Group (in years)                   |                     |                |
| 21–30                                   | 12                  | 9.75           |
| 31–40                                   | 44                  | 35.77          |
| 41–50                                   | 34                  | 27.64          |
| 51–60                                   | 33                  | 26.82          |
| Highest Professional Qualification     |                     |                |
| Ph.D.                                   | 23                  | 18.69          |
| M.Phil.                                 | 8                   | 6.50           |
| Master’s Degree                         | 68                  | 55.28          |
| Bachelor’s Degree                       | 16                  | 13.00          |
| Certificate/Diploma                     | 8                   | 6.50           |
| Years of Work Experience                |                     |                |
| 0–5                                     | 19                  | 15.44          |
| 6–10                                    | 36                  | 29.26          |
| 11–15                                   | 12                  | 9.75           |
| Above 15                                | 56                  | 45.52          |

all respondents were considered. Therefore, the total scores of occupational stress were divided into three categories on the basis of their $x$ and $SD$. Following the principles of normal distribution, the scores falling above or equal to $x + SD$, between $x + SD$ and $x - SD$, and below or equal to $x - SD$ were categorized as high level, moderate level, and low level, respectively.

Level of Occupational Stress
- High level = Above or equal to 70
- Moderate level = Between 52 and 70
- Low level = Below or equal to 52

Both Table 4 and Figure 1 depict that a majority of library professionals surveyed perceived a moderate level of occupational stress (i.e., 63.41%), which consists of 47 males and 31 females. Of the remaining library professionals, 18.69% perceived a low level of stress and 17.88% experienced a high level of occupational stress.

Gender Differences with Regard to Perceived Occupational Stress

The results in Table 5 clearly depict that t value for mean difference in occupational stress between male and female library professionals is -0.741, which is not significant ($p > 0.05$). The overall mean and standard deviation of male and female library professionals are found to be 60.44 (SD = 9.372) and 61.70 (SD = 8.581) respectively regarding their perceived level of occupational stress. This implies that the male and female library professionals working in university libraries do not differ in their perception of occupational stress. Thus, the null hypothesis ($H_0$) is accepted. The dimension-wise comparative analysis between male and female library professionals in terms of perceived occupational stress is presented in Table 6.
Table 4
Perceived Levels of Occupational Stress Among Library Professionals

| Levels          | N  | (%)   | Gender  | N  | (%)   |
|-----------------|----|-------|---------|----|-------|
| Occupational    |    |       |         |    |       |
| Stress          |    |       |         |    |       |
| High Level      | 22 | 17.88 | Male    | 14 | 63.63 |
|                 |    |       | Female  | 8  | 30.43 |
| Moderate Level  | 78 | 63.41 | Male    | 47 | 60.25 |
|                 |    |       | Female  | 31 | 39.74 |
| Low Level       | 23 | 18.69 | Male    | 16 | 69.56 |
|                 |    |       | Female  | 7  | 30.43 |

Figure 1
Perceived levels of occupational stress.

Table 5
Significance of Mean Difference in Perceived Occupational Stress of Library Professionals Between Male and Female

| Variable        | Gender | N   | Mean  | Standard Deviation | t value | p value |
|-----------------|--------|-----|-------|--------------------|---------|---------|
| Occupational    | Male   | 77  | 60.44 | 9.372              | -0.741  | 0.460   |
| Stress          | Female | 46  | 61.70 | 8.581              |         |         |
Table 6
Comparative Analysis Between Male and Female Library Professionals in Terms of Occupational Stress Dimensions

| Dimensions of Occupational Stress | Gender | N  | Mean | Standard Deviation | t value | p value |
|----------------------------------|--------|----|------|--------------------|---------|---------|
| Role Overload                    | Male   | 77 | 9.60 | 1.982              | 0.743   | 0.459   |
|                                  | Female | 46 | 9.33 | 1.921              | -0.184  | 0.854   |
| Role Conflict                    | Male   | 77 | 2.99 | 0.939              | 0.458   | 0.650   |
|                                  | Female | 46 | 3.02 | 1.125              | -0.184  | 0.854   |
| Role Ambiguity                   | Male   | 77 | 4.75 | 1.425              | -0.455  | 0.650   |
|                                  | Female | 46 | 4.87 | 1.276              | -0.184  | 0.854   |
| Low Status                       | Male   | 77 | 4.47 | 1.586              | -0.377  | 0.707   |
|                                  | Female | 46 | 4.59 | 1.881              | -0.377  | 0.707   |
| Under Participation              | Male   | 77 | 5.10 | 2.043              | -0.754  | 0.452   |
|                                  | Female | 46 | 5.39 | 2.049              | -0.754  | 0.452   |
| Poor Peer Relationship           | Male   | 77 | 7.71 | 1.891              | 0.053   | 0.958   |
|                                  | Female | 46 | 7.70 | 1.860              | 0.053   | 0.958   |
| Personal Inadequacy              | Male   | 77 | 5.86 | 1.457              | 0.120   | 0.905   |
|                                  | Female | 46 | 5.83 | 1.270              | 0.120   | 0.905   |
| Career Stagnation                | Male   | 77 | 3.01 | 1.082              | -0.257  | 0.798   |
|                                  | Female | 46 | 3.07 | 1.104              | -0.257  | 0.798   |
| Strenuous Working Conditions     | Male   | 77 | 10.13| 2.232              | -0.882  | 0.380   |
|                                  | Female | 46 | 10.50| 2.288              | -0.882  | 0.380   |
| Intrinsic Impoverishment          | Male   | 77 | 4.45 | 1.667              | 0.053   | 0.958   |
|                                  | Female | 46 | 5.02 | 1.938              | 0.053   | 0.958   |
| Unreasonable Groups & Political Pressures | Male | 77 | 2.36 | 0.872              | -0.180  | 0.858   |
|                                  | Female | 46 | 2.39 | 0.745              | -0.180  | 0.858   |

**Gender Differences with Regard to Perceived Job Performance**

Table 7 reveals that the t value for the mean difference in terms of job performance between male and female library professionals is 3.163 (p < 0.05). There exists a significant mean difference in library professionals’ perception of job performance based on their gender. The overall mean and standard deviation of male and female library professionals are found to be 60.51 (SD = 6.522) and 56.54 (SD = 7.051) respectively. Since the mean score of male library professionals is greater than their female counterpart, we can derive that the male library professionals perceived their level of job performance as better compared to the female library professionals. Thus, the null hypothesis (H0) is rejected. Table 8 shows the comparative analysis between male and female library professionals in terms of their self-perception towards job performance indicators.

From Table 8, we can observe a statistically significant difference between the mean scores of male and female library professionals with regard to eight indicators of job performance: quality of work performance, ability to handle
Table 7
Significance of Mean Difference in Perceived Job Performance of Library Professionals Between Male and Female

| Variable              | Gender | N   | Mean | Standard Deviation | t value | p value |
|-----------------------|--------|-----|------|--------------------|---------|---------|
| Job Performance       | Male   | 77  | 60.51| 6.522              | 3.163   | 0.002*  |
|                       | Female | 46  | 56.54| 7.051              |         |         |

*Significant at 0.05 level (2-tailed)

Table 8
Comparative Analysis Between Male and Female Library Professionals in Terms of Job Performance Indicators

| Indicators of Job Performance                          | Gender | N   | Mean | Standard Deviation | t value | p value |
|--------------------------------------------------------|--------|-----|------|--------------------|---------|---------|
| Completion of Tasks on a Given Time                    | Male   | 77  | 4.49 | 0.620              | 1.035   | 0.303   |
|                                                       | Female | 46  | 4.37 | 0.679              |         |         |
| Quality of Work Performance                            | Male   | 77  | 4.47 | 0.575              | 2.306   | 0.023** |
|                                                       | Female | 46  | 4.22 | 0.593              |         |         |
| Ability to Handle Multiple Jobs                        | Male   | 77  | 4.40 | 0.712              | 2.326   | 0.022** |
|                                                       | Female | 46  | 4.09 | 0.755              |         |         |
| Communication Skills                                   | Male   | 77  | 4.26 | 0.715              | 2.333   | 0.021** |
|                                                       | Female | 46  | 3.93 | 0.800              |         |         |
| Decision Making                                        | Male   | 77  | 4.09 | 0.747              | 2.501   | 0.014** |
|                                                       | Female | 46  | 3.72 | 0.886              |         |         |
| Problem Solving                                        | Male   | 77  | 4.26 | 0.637              | 3.348   | 0.001*  |
|                                                       | Female | 46  | 3.85 | 0.698              |         |         |
| Technical Skills                                       | Male   | 77  | 4.27 | 0.719              | 3.816   | 0.000*  |
|                                                       | Female | 46  | 3.74 | 0.801              |         |         |
| Managerial Skills                                      | Male   | 77  | 3.92 | 0.900              | 1.100   | 0.274   |
|                                                       | Female | 46  | 3.74 | 0.880              |         |         |
| Ability to Perform Competently Under Pressure          | Male   | 77  | 4.10 | 0.836              | 3.307   | 0.001*  |
|                                                       | Female | 46  | 3.57 | 0.935              |         |         |
| Punctuality and Regularity at Work                     | Male   | 77  | 4.64 | 0.605              | 1.615   | 0.109   |
|                                                       | Female | 46  | 4.46 | 0.585              |         |         |
| Meeting Minimum Requirements for Promotion            | Male   | 77  | 4.06 | 0.978              | 1.053   | 0.294   |
|                                                       | Female | 46  | 3.87 | 1.024              |         |         |
| Interpersonal Relationship With Coworkers              | Male   | 77  | 4.52 | 0.641              | 0.749   | 0.455   |
|                                                       | Female | 46  | 4.43 | 0.544              |         |         |
| Contribution to the Overall Development of the Library| Male   | 77  | 4.56 | 0.573              | 2.243   | 0.027** |
|                                                       | Female | 46  | 4.30 | 0.662              |         |         |
| Overall Capacity to Work                               | Male   | 77  | 4.45 | 0.527              | 1.765   | 0.080   |
|                                                       | Female | 46  | 4.26 | 0.681              |         |         |

*Significant at 0.01 (2-tailed) level; **Significant at 0.05 (2-tailed) level
Table 9
Correlation Between Occupational Stress and Job Performance

| Variables       | Occupational Stress | Job Performance |
|-----------------|---------------------|----------------|
| Occupational Stress | Pearson Correlation Sig. (two-tailed) | 1 | -0.296** |
|                 | N                  | 123 | 0.001 |
| Job Performance | Pearson Correlation Sig. (two-tailed) | -0.296** | 1 |
|                 | N                  | 0.001 | 123 |

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

multiple jobs, communication skills, decision making, problem solving, technical skills, ability to perform competently under pressure, and contribution to the overall development of the library. The mean score of male library professionals is greater than their female counterpart in terms of these eight indicators of job performance. Hence, it indicates that the male library professionals had a better self-perception than the female library professionals in the case of quality of work performance, ability to handle multiple jobs, communication skills, decision making, problem solving, technical skills, ability to perform competently under pressure, and contribution to the overall development of the library.

**Relationship Between Occupational Stress and Job Performance**

Karl Pearson’s coefficient of correlation was used to investigate the relationship between occupational stress and job performance in totality as well as through eleven dimensions of occupational stress. The level of significance of coefficient of correlation was calculated through two-tailed significant value.

A highly significant relationship was found from the above analysis between occupational stress and job performance through Karl Pearson’s coefficient of correlation, which means that the correlation is significant at 0.01 level. The results from Table 9 reveals that there is a negative relationship that proves to be significant ($p < 0.01$) between occupational stress and job performance of library professionals ($r = -0.296$). Hence the null hypothesis ($H_0$) is rejected.

The objective of identifying the relationship between occupational stress and job performance of library professionals was further studied by focusing on the relationship of each dimension of occupational stress with job performance. Table 10 demonstrates dimension-wise values of coefficient of correlation. It is evident from the table that intrinsic impoverishment has the strongest value of coefficient of correlation ($r = -0.352$) followed by under participation ($r = -0.331$), low status ($r = -0.242$), and poor peer relationship ($r = -0.188$). The remaining seven dimensions of occupational stress (role overload, role conflict, role ambiguity, personal inadequacy, career stagnation, strenuous working conditions, and
unreasonable groups & political pressures) have shown no correlation with job performance. This means that the library professionals working in university libraries moderately experiencing these seven dimensions of occupational stress are not likely to bear a definite effect of it on their job performance.

**Impact of Occupational Stress on Job Performance**

Simple linear regression analysis was chosen to determine whether there is significant impact of occupational stress on job performance of library professionals working in university libraries. The present study was conducted to find out any association between the two variables selected (i.e., occupational stress and job performance). In this case, occupational stress was used to predict the dependent variable job performance. No doubt, there may be other parameters or factors affecting job performance that are not presented in the study because of its limitations. The value of \( R^2 \) is found to be 0.088, which means that 8.8% of the variance in job performance can be explained by occupational stress. Furthermore, the value of \( F = 11.629 \) (1,121) with significance level of \( p = 0.001 \) determined the linear regression model as statistically significant.

The criterion to assess the contribution of the predictor variable given by Cohen (1988) was used in this study. According to this source, for linear regression models in behavioural sciences, the proportion of variance explained by the predictor variable an \( R^2 \) value between 2% and 12.99% suggests a small effect size, a value between 13% and 25.99% indicates a medium effect size, and a value of 26% and greater suggests a large effect size. Since the correlation coefficient in the present study is -0.296 and the \( R^2 \) value is equal to 8.8% variance, the independent variable—occupational stress—is having a small but significant impact on the dependent variable job performance in a negative manner. From Table 11, we can observe that occupational stress is able to explain the

### Table 10

| Dimensions of Occupational Stress       | Coefficient of Correlation (r) |
|-----------------------------------------|--------------------------------|
| Role Overload                           | -0.005                         |
| Role Conflict                           | -0.051                         |
| Role Ambiguity                          | -0.133                         |
| Low Status                              | -0.242**                       |
| Under Participation                     | -0.331**                       |
| Poor Peer Relationship                   | -0.188*                        |
| Personal Inadequacy                     | -0.096                         |
| Career Stagnation                       | -0.087                         |
| Strenuous Working Conditions            | -0.054                         |
| Intrinsic Impoverishment                 | -0.352**                       |
| Unreasonable Groups & Political Pressures| -0.036                         |

*Correlation is significant at the 0.05 level (two-tailed)
**Correlation is significant at the 0.01 level (two-tailed)
Table 11
Simple Linear Regression Analysis Between Occupational Stress and Job Performance

| Dependent Variable | Independent Variable | Unstandardized Coefficients | Standardized Coefficients | t     | Sig. |
|--------------------|----------------------|-----------------------------|---------------------------|-------|------|
|                    | (Constant)           | 72.882                      | 4.108                     | 17.741| 0.000|
| Job Performance    | Occupational Stress  | -0.227                      | 0.067                     | -3.410| 0.001|

\( R = -0.296 \) \hspace{1cm} \( R^2 = 0.088 \) \hspace{1cm} Adjusted \( R^2 = 0.080 \) \hspace{1cm} \( F = 11.629 \) \hspace{1cm} Sig. = 0.001

The variance in job performance by the \( B \) value of \(-0.227\). Since the sign of regression coefficient value is negative, it indicates that as occupational stress increases by one unit, job performance decreases by \(0.227\) units. Therefore, the null hypothesis \( (H_0) \) is rejected.

Discussion

The main purpose of the present study was to investigate the occupational stress and job performance of university library professionals in North-East India. The results obtained from the current study revealed that a majority of the university library professionals perceived occupational stress to a moderate extent. This finding obtained from Table 4 is in agreement with the result obtained from the study carried out by Mahanta (2015) and Wijetunge (2012), where the existence of a moderate level of work-related stress was reported among university library professionals. However, a few studies carried out by Ogunlana et al. (2013), Saddiq (2015), and Agyei et al. (2019) were not in agreement with the prior result and reported a higher level of work-related stress. The variation in stress levels recorded in the previous studies may be a result of different organizational factors like conditions of service, size of the user community served by the library, status of library staff, financial availability, job security, career growth, and other reasons that might have brought about different perceptions about work-related stress among library professionals.

The result obtained from both Tables 5 and 6 reveal that male and female library professionals do not differ in terms of perceived occupational stress, which is in line with the studies carried out by Kaur and Kathuria (2018) and Somvir and Kaushik (2013), wherein there was no significant difference found between male and female library professionals in terms of occupational stress. In spite of dual responsibilities at both home and workplace, women library professionals did not differ from their male counterpart in terms of their perception of occupational stress. This is contrary to the findings of Ogunlana et al. (2013), who exposed that male librarians were more susceptible to job stress than female librarians despite the fact that both were working in the same environment. The data acquired from Table 7 indicates that significant mean difference exists between male and female library professionals’ perception of their job performance. Males scored themselves better than females in the areas of quality of work performance, ability to handle multiple jobs, communication skills, decision making, problem solving, technical skills, ability to perform competently under pressure, and contribution to the overall development of the library (Table 8).

The result presented in Table 9 show a significant negative relationship between perceived levels of occupational stress and job performance of library professionals. This finding gives further support to the literature.
that demonstrates a significant negative relationship between occupational stress and job performance, including those studies conducted by Smith (2000), Kaur and Kathuria (2018), and Nwadiani (2006). This is also in agreement with the claims of Palmer et al. (2004), which stated that stress beyond an optimal point can lead to low productivity. Similarly, Hansen (2008) also claimed that stress is critical to maximizing one’s job performance. Furthermore, McGrath (1976) emphasized that job stress is considered a factor that may affect organizational effectiveness through lowering employee’s performance. The stressor intrinsic impoverishment has proved to be the most negative predictor influencing job performance (Table 10). It implies that the monotonous nature of library jobs and the lack of ample opportunities to utilize the abilities and experience of library professionals independently can also yield negative outcomes on their self-perception of job performance. Other stressors like under participation, low status, and poor peer relationship were some of the factors found to negatively affect the job performance of library professionals in university libraries of North-East India. Furthermore, based on the findings of Table 11, it was established that occupational stress has a statistically significant impact on job performance.

**Conclusion**

Based on the findings from the investigation, it can be concluded that occupational stress exists among university library professionals in North-East India, and majority of the professionals experienced stress up to moderate extent. Though the level of occupational stress is moderate among library professionals, the study reveals significant negative relationship between perceived occupational stress and job performance. It implies that an incremental increase in the level of perceived occupational stress tends to influence library professionals self-perception of job performance negatively. Stressors like intrinsic impoverishment, under participation, low status, and poor peer relationship were some of the factors negatively influencing their perception of job performance. Male and female library professionals did not differ with regard to their perceived occupational stress. On the other hand, males scored themselves better than females on of eight indicators of job performance: quality of work performance, ability to handle multiple jobs, communication skills, decision making, problem solving, technical skills, ability to perform competently under pressure, and contribution to the overall development of the library. The results reveal a negative relationship between the two variables of occupational stress and job performance, but the current study cannot be generalized due to a limited sample size. Further studies can be conducted with a larger sample size in order to realize the other organizational or socio-cultural factors that may have an effect on job performance.

**Author Contributions**

Pallabi Devi: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Resources, Validation (lead), Visualization, Writing – original draft Prof. Narendra Lahkar: Conceptualization (lead), Methodology (lead), Project administration, Supervision, Validation, Writing – review & editing

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