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Level of Stress Among Speech and Language Pathologists Working in Clinical Setups

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ABSTRACT:

Background: The manifestation of stress symptoms has a broad impact on physiological, cognitive, and emotional domains. For speech and language pathologists (SLPs), the ability to identify and manage stress is essential, as it directly influences their professional performance and the quality of care provided to patients and clients.

Methods: This cross-sectional study gathered data from speech-language pathologists employed in hospitals and rehabilitation centres throughout Punjab. The sample was determined using a non-probability convenience sampling technique, enrolling 242 participants. An online survey was administered to collect data, targeting SLPs in clinical settings with at least one year of experience. The survey consisted of both male and female professionals across various age groups. The Work Stress Questionnaire (WSQ) was employed to measure stress levels.

Results: The study's cohort had an average age of 28.35 ± 7.97 years, comprising 26 males (10.7%) and 216 females (89.3%). The average work experience among the participants was 4.4 ± 5.62 years, with stress scores averaging at 15.10 ± 5.14. A breakdown of stress levels revealed that 8 participants (3.3%) experienced mild stress, 80 (33.1%) moderate stress, and 154 (63.6%) severe stress. Notably, a significant association was observed between stress levels and factors such as qualification level and gender ($P<0.05$).

Conclusion: The findings of this study indicate that most speech-language pathologists endure severe work-related stress. Addressing this concern is imperative to ensure the well-being of SLPs and the efficacy of speech therapy services.

Keywords: Occupational Stress, Speech Therapy, Speech-Language Pathologists, Work-Related Stress

INTRODUCTION:

Stress, while lacking a universally accepted definition, is typically characterized as a state of disharmony or a disruption to bodily homeostasis in response to perceived threats or challenging situations. It manifests in both positive and negative forms; positive stress can prompt a person to escape from danger, whereas negative stress may hinder an individual's potential and detrimentally affect their health. The adverse effects of stress extend to cognitive abilities, potentially altering behaviour, health, and interpersonal relationships. The body's response to stress stimuli often involves the release of hormones such as epinephrine, norepinephrine, and cortisol by the endocrine system, triggered by the autonomic nervous system. These hormones initiate various physiological changes, including the production of β-endorphin, which facilitates the fight-or-flight response and heightens sensory acuity to better manage stressors. Conversely, persistent negative stress can lead to an increase in cortisol

production, thereby enhancing energy generation at the expense of suppressing immune function, making each stress response unique to the stimulus encountered.

In the context of employment, continuous stress may contribute to physical complaints such as upper and lower back pain. Speech-Language Pathologists (SLPs) face a heightened risk of job burnout and stress, exacerbated by recent changes and expansions in their professional roles within educational settings. The efficacy of SLPs is integral to achieving communication objectives for individuals with speech and language disorders. However, the demanding nature of their work can give rise to substantial occupational stress, potentially impeding job performance. It is therefore imperative to examine the correlation between the performance of SLPs and their experience of job stress.

Job stress is a multifaceted issue, arising from factors like excessive workload, deadline pressures, interpersonal conflicts, and organizational problems. Chronic job stress can have pernicious effects on one's physical, mental, and behavioural well-being, manifesting as burnout, decreased productivity, and diminished quality of work. Another study identified various stress-related manifestations among language pathologists, including reduced participation, behavioural changes, emotional exhaustion, lack of support, and work constraints. Contrarily, data from forty-eight surveys indicated increased stress levels linked to workload, compensation, medication prescription practices, and specialization areas. Nevertheless, no significant difference in stress levels was observed between urban and rural settings. These findings collectively underscore the prevalence of significant stress among SLPs due to work-related factors, emphasizing the necessity to address and alleviate such stress as a priority (16).

Research indicates that speech and language pathologists (SLPs) employed in clinical settings encounter substantial stress due to various workplace factors and job demands. A Canadian investigation highlighted that SLPs face moderate to high stress levels, primarily attributed to workload and time management challenges. Furthermore, the study pinpointed the lack of resources, limited control over the work environment, and inadequate communication with colleagues and management as significant stressors (2). An American study echoed these findings, revealing that SLPs working in school settings report high stress levels, exacerbated by increasing workloads, caseloads, and the rigors of documentation. The SLPs also reported stress due to the complexity of their clients' needs, the challenge of managing difficult behaviours and resistance from clients and their families, and a lack of support from peers and supervisors (17).

Additionally, a Pakistani study reflected similar concerns, with clinical SLPs experiencing moderate to high stress levels. Their stress was linked to the demanding nature of their work, particularly when treating clients with complex communication disorders, operating with limited resources, and facing insufficient training opportunities. Notably, this study also found that compensation issues and job insecurity contributed to the stress experienced by SLPs (18).

Historically, the impact of stress on quality of life has not been a focal point of concern, especially in countries like Pakistan, where research on the subject is scarce, leading to a lack of awareness. This study aims to delve into the psychological impacts of stress on SLPs working across various clinical settings. Its objective is to identify the primary sources of distress among these professionals and to devise strategies to mitigate such challenges. By addressing these stressors, not only will the SLP workforce benefit, but so will their clients, ultimately fostering a positive societal understanding of stress impacts and enhancing overall well-being.

MATERIALS & METHODS:

This cross-sectional study engaged 242 speech-language pathologists (SLPs) selected through non-probability convenience sampling, adhering to predetermined inclusion and exclusion criteria.

Participants, encompassing a balanced gender representation and having a minimum of one year of professional experience, were recruited for the study. Data collection was conducted using the Work Stress Questionnaire (WSQ), a validated tool comprising 25 items designed to evaluate work-related stress levels.

Prior to data collection, informed consent was obtained from each participant following ethical approval granted by the Institutional Review Board (IRB) of Riphah University. Necessary permissions were secured from the participating institutions, and ethical clearance was acquired from the respective ethical committee. The WSQ was administered electronically, with participants receiving a concise overview of the study's purpose and procedures, ensuring clarity and transparency.

The study spanned a six-month period after the approval of the research synopsis, targeting SLPs employed in various hospitals and rehabilitation centres in Lahore. The WSQ's scoring system is cumulative, with totals less than 4 indicating mild stress, scores ranging from 5 to 13 suggesting moderate stress, and scores exceeding 14 denoting severe stress.

Following the data collection phase, participant responses were compiled and analysed to ascertain the correlation between the identified stress levels and the associated factors affecting SLPs. The analysis was conducted utilizing SPSS software version 25, facilitating a comprehensive statistical assessment of the findings.

RESULTS:

The presented data provides a comprehensive analysis of stress levels categorized by qualifications and gender within a sample of 242 individuals. A total of 8 participants (3.3%) experienced mild stress, while moderate stress was reported by 80 participants (33.1%). The majority, comprising 154 individuals (63.6%), faced severe stress.

Delving into the specifics of educational qualifications, we find that none of the 133 bachelor's degree holders reported mild stress. In contrast, 22 of them (16.5%) experienced moderate stress, and a significant majority of 111 (83.5%) suffered from severe stress, highlighting a pronounced trend towards higher stress levels in this group. The statistical significance of this distribution is underlined by a p-value of 0.000, indicating a robust association between stress levels and holding a bachelor's degree.

In comparison, the stress distribution among the 109 master's degree holders appears more balanced. Here, 8 individuals (7.3%) reported mild stress, moderate stress was noted by 58 (53.2%), and severe stress was reported by 43 participants (39.5%).

Table 1 Level of Stress

Level of Stress	Frequency	Percentage
Mild Stress	8	3.3%
Moderate Stress	80	33.1%
Severe Stress	154	63.6%
Total	242	100%

Gender-wise, the distribution of stress levels also shows notable differences. Among the 52 male participants, a single individual (1.9%) reported mild stress, 39 (75%) indicated moderate stress, and 12 (23.1%) experienced severe stress. Similarly, the association between stress levels and gender is statistically significant with a p-value of 0.000.

Table 2 Stress Level Association to Qualifications and Gender

Qualification					
	Mild Stress	Moderate Stress	Severe Stress	Total	P value
Bachelor	0	22	111	133	0.000
Master	8	58	43	109	
Gender					
Male	1	39	12	52	0.000
Female	7	41	142	190	

Females reported higher levels of stress, with 7 out of 190 (3.7%) experiencing mild stress, 41 (21.6%) moderate stress, and a striking 142 (74.7%) facing severe stress. This denotes a considerable disparity in stress levels between the genders, particularly in the severe category.

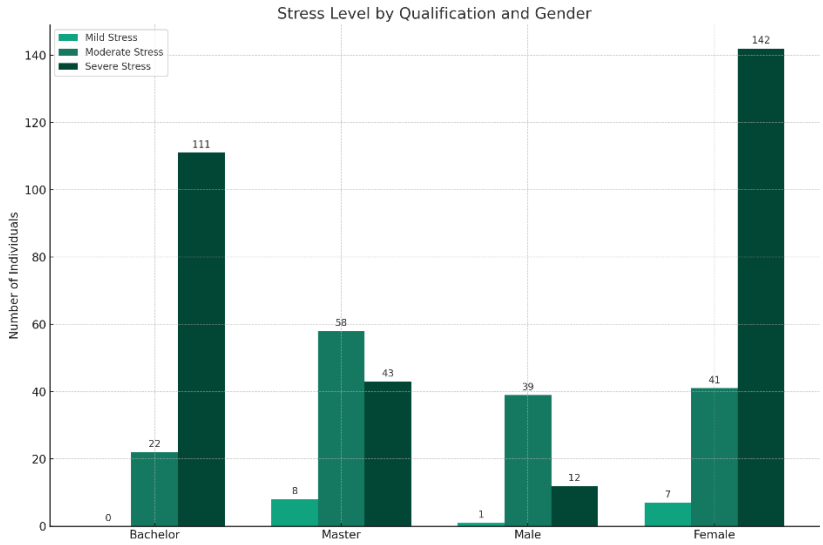

Figure 1 Stress Level by Qualification and Gender

Overall, the data suggests a substantial link between stress levels and both educational qualifications and gender, with severe stress being the most prevalent among individuals with a bachelor's degree and among females. The statistical significance of these findings is affirmed by the p-values, reinforcing the importance of these demographic factors in stress level experiences.

DISCUSSION:

The discussion of stress levels among Speech-Language Pathologists (SLPs) is bolstered by a wide array of studies that have assessed job satisfaction, overall well-being, and the factors contributing to stress within this profession. A review in 2021 highlighted that job satisfaction among SLPs was notably low, especially in the UK, and linked this to elevated stress levels among practitioners. This lack of satisfaction was correlated with increased workloads, unsatisfactory salaries, and a dearth of professional support. These findings are consistent across studies, underscoring a significant relationship between stress, job dissatisfaction, and the experience of burnout, all tethered to the support and reward systems inherent in the profession (2,21).

Our study aligns with these narratives, reporting a high incidence of stress among SLPs, with 3.3% experiencing mild stress, 33.1% moderate stress, and a significant 63.6% grappling with severe stress. Contrary to previous findings, our results indicate that stress levels do not significantly differ with gender ($P>0.05$). A study by Seung Min Oh in 2019 further illuminates these trends, revealing that SLPs scored

an average of 56.68 on the Korean Occupational Stress Scale-Short Form (KOSS-SF), with a standard deviation of 7.95, peaking at a maximum value of 64.75, notably in job security aspects which scored 47.00. Attitudinal measures among SLPs were also examined, yielding an average score of 2.86 out of 4, with a standard deviation of 0.41, while behavioral changes scored 2.77 with a standard deviation of 0.47. These scores suggest that stress correlates with compensation, workplace environment, service attitude, and job autonomy, positing that an enhancement in these domains may mitigate stress levels (22).

Our findings further demonstrate a potential link between educational attainment and stress, with bachelor students reporting higher stress levels compared to their master counterparts. This raises implications for educators, legislators, and mental health professionals, suggesting that academic and social pressures might disproportionately affect bachelor students, who may juggle various commitments such as part-time work and extracurricular activities. In contrast, master students might possess more refined coping strategies and time management skills that buffer against graduate-level academic pressures (23).

The emotional toll of delivering bad news was also examined in a 2018 study by Rinat Gold et al., which surveyed SLPs in Israel. The study found that such tasks often precipitated work-related stress, impacting health and efficacy (24). This reinforces our findings, with a substantial 63.6% of participants reporting high levels of stress. Our study also unveils a significant gender disparity in stress levels, with female students more likely to experience severe stress compared to males. This could be attributed to societal pressures and gender norms that impose additional expectations on women to excel in multiple spheres, thereby exacerbating stress (25).

The average stress score in our study was 15.10 ± 5.14, indicating a notable impact on job performance among SLPs. This aligns with Munneba Ijaz et al.'s assertion that stress rates are comparable across genders, corroborated by our findings that stress levels are uniform across male and female SLPs (18). However, our study did not establish a strong link between the high stress rates and specific job-related factors such as workload and social support.

CONCLUSION

In conclusion, the evidence suggests that SLPs are prone to high levels of stress, which are compounded by factors such as workload, time pressures, and inadequate social support. The delivery of bad news is a critical stressor that merits attention due to its adverse impact on emotional well-being and job performance. Our study underscores the prevalence of severe stress among SLPs, necessitating interventions aimed at improving job autonomy, compensation, work environment, and communication. These measures are pivotal in enhancing the occupational well-being of SLPs and, by extension, the efficacy of the services they provide.

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