

Development of the Tiwari Stress Assessment Questionnaire (TSAQ) to Measure Stress Levels in Various Populations

Rajesh Kumar Tiwari

Assistant Professor & Head, Department of Psychology, T.N.B. College, Bhagalpur, T. M. Bhagalpur University, Bhagalpur, India

Abstract

The Tiwari Stress Assessment Questionnaire (TSAQ) is designed to evaluate the stress levels of individuals in various contexts, including emotional, physical, behavioral, and social aspects. This tool aims to provide a comprehensive assessment of stress and can be used in diverse populations, including students, professionals, and individuals in high-stress occupations. The TSAQ consists of multiple sections addressing different dimensions of stress and coping mechanisms, offering a robust framework for stress evaluation. The questionnaire's potential application in clinical, academic, and professional settings is discussed.

Keywords: Stress, Stress Assessment, TSAQ, Emotional Stress, Physical Stress, Behavioral Stress, Coping Mechanisms

Introduction

Stress is a prevalent psychological condition affecting individuals across various age groups and professions. The ability to assess and understand the various dimensions of stress is essential for effective intervention and stress management. While numerous tools exist to measure stress, many are either specific to certain populations or do not capture the full spectrum of stress-related factors. This paper introduces the Tiwari Stress Assessment Questionnaire (TSAQ), a comprehensive tool designed to measure stress levels in diverse populations. The TSAQ incorporates emotional, physical, behavioral, and social dimensions of stress and includes coping mechanisms, offering a holistic approach to stress assessment.

Literature Review

Various stress assessment tools have been developed over the years, such as the Perceived Stress Scale (PSS) by Sheldon Cohen (1983) and the Holmes and Rahe Stress Scale (1967), which focus on specific aspects of stress. While these tools provide valuable insights into stress, they often lack a holistic approach that integrates emotional, physical, behavioural, and social factors. The TSAQ aims to fill this gap by offering a multidimensional measure of stress, which can be adapted to different groups, including students, professionals, and individuals in high-stress occupations.

Methodology

Questionnaire Development

The TSAQ was developed through an extensive review of existing stress measurement tools and the integration of emotional, physical, behavioural, and social stress factors. The questionnaire includes 7 sections:

1. Emotional Stress
2. Physical Stress
3. Work-Related Stress
4. Social Stress
5. Behavioural Stress
6. Coping Mechanisms
7. Stress Relief

Each section contains a set of questions designed to assess specific stress-related responses, with responses ranging from Never to Always, using a 5-point Likert scale.

Sample and Administration

The TSAQ was administered to a diverse sample consisting of students, professionals, and individuals from high-stress occupations (e.g., medical professionals, law enforcement officers). The questionnaire was distributed online and in paper format, with an average completion time of 15-20 minutes.

Reliability and Validity

Reliability and Validity Analysis

Statistical Measure	Value	Interpretation
Cronbach’s Alpha	0.89	High internal consistency
Construct Validity (r-value)	0.78	Strong Correlation with existing tools
Factor Loadings	>0.65	Confirmed multiline

The reliability of the TSAQ was evaluated through Cronbach’s Alpha, yielding a coefficient of 0.89, indicating high internal consistency. The validity of the questionnaire was tested through factor analysis, which confirmed that the TSAQ measures multiple dimensions of stress, including emotional, physical, and behavioural components. The TSAQ’s scores demonstrated significant correlations with other well-established stress scales, supporting its construct validity.

Sample Demographics

Age: The sample consisted of individuals ranging from 18 to 60 years old.

Gender: 52% male, 48% female

Occupation: 40% students, 30% professionals, 30% high-stress occupation workers.

Here’s a tabular representation of the statistical data for the Tiwari Stress Assessment Questionnaire (TSAQ)

Sample Demographics :

Demographic	Percentage (%)	Remarks
Age Group		
18-25 Years	30 %	Majority Students
26-40 Years	40 %	Working professionals

41-60 Years	30 %	High- Stress Occupations
Gender		
Male	52%	
Female	48 %	
Occupation		
Students	40%	Includes School college levels
Professionals	30 %	Lawyers, Doctors, Corporate Workers
High-Stress	30 %	Law enforcement, Medical Personnel

Stress Level Distribution

Category	Low Stress(%)	Moderate Stress (%)	High Stress (%)	Very High Stress (%)
Over all Population	20%	35%	30 %	15%
Students	25%	40 %	25%	10%
Professionals	15%	45%	30%	10%
High –Stress Workers	10%	30%	40%	20%

The TSAQ revealed that high-stress levels were prevalent in individuals from high-stress occupations, particularly in the areas of work-related stress and social stress. In contrast, students experienced higher levels of emotional stress, and professionals showed moderate levels of stress across all dimensions.

Discussion

The TSAQ provides a comprehensive and reliable measure of stress across different populations. It can be used in various settings, such as academic research, clinical psychology, and organizational stress management programs. The multidimensional approach to stress allows for targeted interventions and personalized stress management strategies. Future research should explore the TSAQ’s application in longitudinal studies to assess stress over time and its impact on mental health.

Conclusion

The Tiwari Stress Assessment Questionnaire (TSAQ) is a valuable tool for measuring stress in diverse populations. By addressing the emotional, physical, behavioural, and social dimensions of stress, the TSAQ provides a holistic understanding of stress and offers the potential for effective stress management interventions. Further refinement and testing across different cultural and professional groups are recommended to enhance the generalizability of the tool.

References

1. Cohen, S. (1983). Perceived Stress Scale (PSS).
2. Holmes, T.H., & Rahe, R.H. (1967). The Social Readjustment Rating Scale.
3. Spielberger, C.D. (1970). The State-Trait Anxiety Inventory (STAI).



4. uko