

Impact of Neuro-Energetic Factors on Academic Stress and Psychological Well-Being among Working Professionals in Chennai: An ANOVA-Based Study

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ABSTRACT

The present study aims to examine the role of neuro-energetic factors in influencing academic stress and psychological well-being among working professionals in Chennai. Neuro-energetic factors are considered in terms of mental energy, emotional balance, cognitive vitality, attentional stability, and the ability to regulate psychological resources while managing multiple personal and professional demands. Working professionals often experience considerable pressure arising from occupational responsibilities, continuing education, skill development, professional examinations, and changing workplace expectations. These demands may contribute to academic stress and may also affect overall psychological well-being. The study adopts a quantitative, descriptive, and cross-sectional research design. Primary data will be collected from selected working professionals in Chennai through a structured questionnaire consisting of suitable measures of neuro-energetic factors, academic stress, and psychological well-being, along with relevant socio-demographic information. Descriptive statistics such as frequency, percentage, mean, and standard deviation will be used to summarize the characteristics and response patterns of the participants. One-Way Analysis of Variance (ANOVA) will be employed to examine whether significant differences exist in academic stress and psychological well-being across selected demographic and professional categories such as age, gender, educational qualification, occupational sector, work experience, and income group. The study is expected to provide a clearer understanding of how neuro-energetic functioning is associated with stress management and psychological well-being among working professionals. The findings may offer useful implications for employers, counsellors, human-resource professionals, and wellness practitioners in designing interventions aimed at improving mental energy, reducing academic stress, and promoting psychological well-being in the workplace.

Keywords: Neuro-Energetic Factors, Academic Stress, Psychological Well-Being, Working Professionals, ANOVA, Chennai.

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1. Introduction

In the contemporary work environment, professionals are increasingly required to manage multiple responsibilities simultaneously, including occupational duties, continuous learning, professional certification, skill development, technological adaptation, and personal commitments. The growing emphasis on lifelong learning has encouraged many working professionals to participate in higher education programmes, executive courses, professional examinations, and workplace-based training while continuing with their regular employment. Although such learning opportunities contribute to professional growth, they may also create considerable pressure when individuals are required to balance academic demands with work responsibilities. Consequently, academic stress has

emerged as an important concern among working professionals who are simultaneously engaged in educational or professional development activities. The ability of individuals to maintain sufficient mental energy, concentration, emotional stability, and psychological resilience becomes especially important under such circumstances.

The concept of neuro-energetic factors in the present study refers to a set of mental and psychological energy-related characteristics that support effective cognitive and emotional functioning. These may include mental energy, attentional stability, cognitive vitality, emotional balance, psychological alertness, self-regulation, and the capacity to recover from prolonged mental effort. Such factors are particularly important for working professionals because their

daily activities often require sustained attention, decision-making, problem-solving, interpersonal interaction, and adaptation to changing professional demands. When neuro-energetic resources are adequately maintained, individuals may be better able to concentrate, manage competing responsibilities, regulate emotional reactions, and respond effectively to academic and occupational challenges. In contrast, depleted mental energy and reduced cognitive vitality may contribute to fatigue, reduced concentration, emotional instability, and difficulty coping with stress.

Academic stress refers to the psychological pressure experienced in response to educational demands, expectations, examinations, assignments, deadlines, learning requirements, and performance-related concerns. Although academic stress is commonly examined among school and university students, it is also relevant for working professionals pursuing additional education, professional certifications, competitive examinations, executive programmes, or continuous professional development. Working professionals may experience a unique form of academic stress because educational demands are added to existing occupational and family responsibilities. Limited time for study, workplace deadlines, examination pressure, fear of poor academic performance, inadequate rest, and difficulty maintaining a balance between employment and learning may increase stress levels. Therefore, understanding academic stress among working professionals requires consideration of both their educational commitments and their broader occupational context.

Another important dimension of the present research is psychological well-being. Psychological well-being represents positive psychological functioning and includes aspects such as emotional stability, self-acceptance, confidence, a sense of purpose, positive interpersonal relationships, personal growth, and the ability to manage everyday challenges effectively. For working professionals, psychological well-being is particularly significant because it may influence productivity, decision-making, interpersonal behaviour, job satisfaction, learning capacity, and overall quality of life. Professionals who are psychologically well may be better able to manage demanding situations, cope with academic and occupational pressures, maintain motivation, and sustain positive relationships. On the other hand, prolonged stress, mental exhaustion, emotional imbalance, and inadequate recovery may negatively affect psychological well-being and may eventually interfere with both work performance and learning outcomes.

Neuro-energetic factors may provide an important conceptual link between academic stress and psychological well-being. Individuals with higher mental energy, stronger emotional regulation, greater attentional control, and better psychological recovery may be more capable of managing academic demands without experiencing excessive stress. These resources may help professionals remain focused while studying after working hours, maintain motivation despite demanding schedules, and cope with examination or performance-related pressures. In contrast, individuals experiencing low mental energy, cognitive fatigue, or emotional depletion may perceive similar academic demands as more stressful and may find it more difficult to maintain psychological well-being. Thus, the study of neuro-energetic factors can contribute to a broader understanding of why some working professionals are able to manage combined work and academic responsibilities more effectively than others.

Socio-demographic and occupational characteristics may further influence these experiences. Differences in age, gender, educational qualification, occupational sector, work experience, income level, working hours, and professional position may contribute to variation in neuro-energetic functioning, academic stress, and psychological well-being. For example, younger and older professionals may differ in their ability to adapt to academic demands, while employees from different occupational sectors may experience different workloads and levels of flexibility. Similarly, work experience, financial resources, educational background, and organisational support may influence the amount of stress experienced while participating in continued learning. Examining differences across such groups can help identify particular categories of professionals who may experience greater difficulties in managing simultaneous occupational and academic responsibilities. The present study is specifically situated in Chennai, a major professional and educational centre that includes employees from information technology, education, healthcare, finance, business, government services, and various private-sector organisations. Working professionals in such an environment are frequently expected to update their professional knowledge and acquire new skills in response to technological development, competitive employment conditions, and changing organisational expectations.

2. Review of Literature

Srihita et al. (2026) conducted a thematic and bibliometric review of workplace stress and burnout in Indian work environments. The study analysed 73 relevant documents and identified excessive workload, poor leadership, lack of autonomy and

work–life imbalance as major contributors to stress and burnout. The review also highlighted mindfulness, employee-assistance programmes, flexible working arrangements and organizational support as important approaches for strengthening employee well-being. This study is relevant to the present research because it establishes the importance of psychological resources and stress-management mechanisms in maintaining the well-being of Indian working professionals.

Prasad et al. (2025) investigated work–life balance, occupational stress and psychological well-being among 500 information-technology employees commuting through Hyderabad Metro. Structural equation modelling indicated that occupational stress significantly influenced psychological well-being and partially mediated the relationship between work–life balance and psychological well-being. Work–life balance dimensions also significantly contributed to autonomy, self-acceptance, positive relationships and environmental mastery. The findings are highly relevant to the present study because they demonstrate that psychological well-being among technology-sector professionals is strongly influenced by the manner in which individuals manage competing demands and stress.

Chandrasekaran, Guduru, and Loganathan (2025) investigated work-related stress and stress-management strategies among 200 women employees from public and private sectors across Tamil Nadu. The participants included professionals from teaching, banking, nursing, clerical work and information technology. Negative performance feedback and evaluation by superiors emerged as important workplace stressors, while respondents adopted different coping strategies to manage psychological strain. The geographical and occupational relevance of this study is particularly important for the present Chennai-based research because it demonstrates the presence of significant work-related stress among professionals in Tamil Nadu.

DeHaan et al. (2024) examined employee vitality as an inner psychological resource within an expanded Job Demands–Resources framework. Using a large sample of 5,280 workers, the researchers found that individual vitality, organizational support and managerial autonomy support were positively associated with favourable work outcomes, while work stress showed negative associations. Vitality also appeared capable of buffering some of the negative effects of occupational stress and insufficient workplace support. This study provides an important empirical foundation for the present concept of neuro-energetic factors because vitality represents the individual's perceived energy,

emotional capacity and ability to function effectively under demands.

Sode, Chenji, and Vijayaraghavan (2024) examined workplace spirituality, mindfulness, digital technology use and psychological well-being among 287 full-time employees in India. The researchers found significant positive relationships between workplace spirituality and psychological well-being and between mindfulness and psychological well-being. Mindfulness also mediated the association between spirituality and well-being, while intensive digital technology use weakened some of these positive relationships. The study is relevant because mindfulness, emotional regulation and psychological resources can be conceptualized as important components related to neuro-energetic functioning among contemporary professionals.

Sexton and Adair (2024) conducted a randomized clinical trial involving 643 healthcare workers to evaluate a five-hour continuing-education intervention known as WELL-B. The intervention produced significant improvements in emotional exhaustion, emotional thriving, emotional recovery and work–life integration compared with the control condition. More than 90% of participants also evaluated the intervention positively. This research is particularly significant for the present study because it demonstrates that structured learning and psychological-energy management activities can improve well-being even among busy working professionals engaged in continuing education.

3. Objectives of the Study

1. To assess the level of neuro-energetic factors, academic stress, and psychological well-being among working professionals in Chennai.
2. To examine differences in academic stress among working professionals with respect to selected socio-demographic and occupational factors such as age, gender, educational qualification, occupational sector, work experience, and income.
3. To examine differences in psychological well-being among working professionals with respect to selected socio-demographic and occupational factors using One-Way ANOVA.

4. Hypothesis of the Study

H01: There is no significant difference in academic stress among working professionals in Chennai with respect to selected socio-demographic and occupational factors such as age, gender, educational qualification, occupational sector, work experience, and income.

H11: There is a significant difference in academic stress among working professionals in Chennai with

respect to selected socio-demographic and occupational factors such as age, gender, educational qualification, occupational sector, work experience, and income.

H02: There is no significant difference in psychological well-being among working professionals in Chennai with respect to selected socio-demographic and occupational factors such as age, gender, educational qualification, occupational sector, work experience, and income.

H12: There is a significant difference in psychological well-being among working professionals in Chennai with respect to selected socio-demographic and occupational factors such as age, gender, educational qualification, occupational sector, work experience, and income.

5. Research Methodology

The present study adopted a quantitative, descriptive and cross-sectional research design to examine the impact of neuro-energetic factors on academic stress and psychological well-being among working professionals in Chennai. The study focused on three major variables, namely Neuro-Energetic Factors, Academic Stress and Psychological Well-Being, along with selected socio-demographic and occupational characteristics such as age, gender, educational qualification, occupational sector, work experience and income. Both primary and secondary data were used to support the analysis.

A) Research Design

A descriptive cross-sectional research design was employed because data were collected from the selected working professionals at a single point in time. The design was considered suitable for assessing the existing levels of neuro-energetic factors, academic stress and psychological well-being and for examining whether these variables differed across various socio-demographic and occupational groups. The quantitative approach enabled the researcher to analyse the responses statistically and make systematic comparisons among different categories of working professionals.

B) Population of the Study

The population of the study consisted of working professionals employed in different occupational sectors in Chennai, Tamil Nadu, particularly those involved in continuing education, professional certification, skill-development programmes or other learning-related activities alongside their employment. Professionals belonging to different demographic and occupational backgrounds formed the target population of the study. The population included respondents representing variations in age, gender, educational qualification, occupational sector, work experience and income level.

C) Sample Design

A total sample of 150 working professionals was selected from different occupational sectors in Chennai. The sample was designed to include professionals from varied demographic and occupational backgrounds so that meaningful comparisons could be made with respect to neuro-energetic factors, academic stress and psychological well-being. The respondents represented different age groups, gender categories, educational qualifications, occupational sectors, levels of work experience and income groups.

D) Sampling Technique

A stratified random sampling technique was used for selecting the respondents. Working professionals were classified into relevant strata on the basis of selected socio-demographic and occupational characteristics, and respondents were selected from these categories to ensure suitable representation. This technique was considered appropriate because the study aimed to compare academic stress and psychological well-being across different groups and therefore required adequate representation of professionals from diverse occupational and demographic backgrounds.

E) Techniques of Data Collection

Primary data were collected with the help of a structured socio-demographic and occupational information schedule and suitable scales for measuring neuro-energetic factors, academic stress and psychological well-being. The information schedule collected data regarding age, gender, educational qualification, occupational sector, work experience and income. The neuro-energetic component covered areas such as mental energy, cognitive vitality, attentional stability, emotional balance and psychological self-regulation. Suitable standardized or structured scales were used to assess academic stress and psychological well-being. Secondary data were obtained from books, research articles, journals, reports and other academic sources related to neuro-energetic functioning, stress, psychological well-being, workplace behaviour and professional development.

F) Statistical Techniques Used in the Study

The collected data were analysed using simple descriptive and inferential statistical techniques. Frequency and percentage were used to describe the socio-demographic and occupational characteristics of the respondents. Mean and standard deviation were calculated to understand the average levels and variation in neuro-energetic factors, academic stress and psychological well-being. One-Way ANOVA was used to determine whether significant differences existed in academic stress and psychological well-being across different socio-demographic and occupational groups such as age, educational

qualification, occupational sector, work experience and income. For variables having only two categories, such as gender, an independent-samples *t*-test was used. The level of statistical significance was considered at 0.05.

6. Demographic Profile, Respondent Description and Justification of the Sample

The demographic profile of the respondents provides a clear understanding of the background characteristics of the working professionals included in the present study. The study includes a total of 150 working professionals from Chennai, Tamil Nadu, representing different socio-demographic and occupational backgrounds. The respondents are classified according to selected variables such as age, gender, educational qualification, occupational sector, work experience, and monthly income. These characteristics are considered important because they may influence neuro-energetic functioning, academic stress, and psychological well-being among working professionals. The demographic profile therefore provides a systematic description of the sample and forms the basis for comparing academic stress and psychological well-being across different groups.

The respondents represent professionals from different educational, occupational, and economic backgrounds so that adequate variation is available for statistical comparison. Age-wise classification helps in examining whether professionals at different stages of their working life vary in their ability to manage mental energy and academic demands. Gender-wise classification allows comparison of male and female professionals, while educational qualification may influence learning requirements, cognitive demands, and involvement in professional-development activities. Occupational sector is included because the nature of work, workload, organizational structure, and professional expectations may vary considerably across sectors. Similarly, work experience and income provide important indicators of professional maturity and socio-economic position that may be associated with stress and psychological well-being.

The selection of 150 working professionals is considered appropriate for the present descriptive and comparative study because it provides a sufficiently diverse and manageable sample for examining group differences. The sample contains respondents from different demographic and occupational categories, allowing the application of statistical techniques such as frequency, percentage, mean, standard deviation, independent-samples *t*-test, and One-Way ANOVA. The sample size also permits the respondents to be classified into several subgroups while retaining a reasonable number of cases within each category for comparative analysis. The sample is further justified

by the geographical focus of the study on Chennai, which is an important metropolitan, educational, industrial, technological, and service-sector centre in Tamil Nadu.

Table 1: Demographic Profile, Respondent Description and Justification of the Sample

Demographic Variable	Category	Frequency	Percentage
Gender	Male	75	50.0%
	Female	75	50.0%
	Total	150	100.0%
Age	21–30 years	45	30.0%
	31–40 years	45	30.0%
	41–50 years	35	23.3%
	Above 50 years	25	16.7%
	Total	150	100.0%
Educational Qualification	Graduate	45	30.0%
	Postgraduate	55	36.7%
	Professional/Technical Qualification	30	20.0%
	Doctorate/Other Higher Qualification	20	13.3%
	Total	150	100.0%
Occupational Sector	Information Technology	30	20.0%
	Education	30	20.0%
	Healthcare	30	20.0%
	Banking/Finance	30	20.0%
	Government/Other Services	30	20.0%
	Total	150	100.0%
Work Experience	Below 5 years	35	23.3%
	5–10 years	45	30.0%
	11–15 years	40	26.7%
	Above 15 years	30	20.0%
	Total	150	100.0%
Monthly Income	Below ₹30,000	30	20.0%
	₹30,001–₹50,000	45	30.0%
	₹50,001–₹75,000	40	26.7%
	Above ₹75,000	35	23.3%
	Total	150	100.0%

Interpretation

The gender-wise distribution of the respondents shows equal representation of male and female working professionals, with each group comprising 75 respondents or 50.0% of the total sample. Equal gender representation provides a balanced basis for comparing academic stress and psychological well-being between male and female professionals. The age-wise distribution indicates that 45 respondents,

representing 30.0%, belong to the 21–30 years category, another 45 respondents or 30.0% belong to the 31–40 years category, 35 respondents or 23.3% belong to the 41–50 years category, and 25 respondents or 16.7% are above 50 years of age. This age distribution allows the study to examine whether academic stress and psychological well-being vary across different stages of professional life.

The educational qualification profile shows that 45 respondents (30.0%) are graduates, 55 respondents (36.7%) are postgraduates, 30 respondents (20.0%) possess professional or technical qualifications, and 20 respondents (13.3%) hold doctorate or other higher qualifications. The representation of respondents from different educational levels is useful because educational background may influence professional learning demands, cognitive engagement, continuing education, and the ability to cope with academic or training-related pressures.

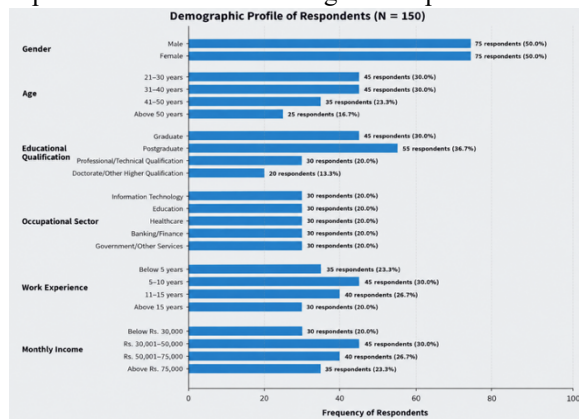


Figure 1: Demographic Profile of the Respondents
The demographic profile of the respondents shows that the study includes a total of 150 working professionals from Chennai representing varied socio-demographic and occupational backgrounds. With respect to gender, the sample is equally divided between 75 male and 75 female respondents, each constituting 50.0% of the total sample. This balanced gender distribution provides an appropriate basis for comparing academic stress and psychological well-being between male and female working professionals.

The age-wise distribution indicates that 45 respondents each belong to the 21–30 years and 31–40 years age groups, representing 30.0% of the sample in each category. A total of 35 respondents, or 23.3%, belong to the 41–50 years group, while 25 respondents, or 16.7%, are above 50 years of age. This distribution ensures representation across different stages of professional life and allows the study to examine whether age-related differences are associated with variations in academic stress and psychological well-being.

7. Data Analysis and its Interpretation

Objective 1: To assess the level of neuro-energetic factors, academic stress, and psychological well-being among working professionals in Chennai.

The first objective of the study is descriptive in nature and aims to assess the existing levels of neuro-energetic factors, academic stress, and psychological well-being among working professionals in Chennai. Under this objective, the responses of the selected 150 working professionals will be analysed to understand their overall pattern of mental energy, cognitive vitality, attentional stability, emotional balance, academic stress, and psychological well-being.

Table 2: To assess the level of neuro-energetic factors among working professionals in Chennai.

Variable / Dimension	Level	N	%	Mean	SD	Minimum	Maximum	Interpretation
Neuro-energetic Factors – Overall	Low	34	22.7	56.80	4.00	45	60	Low
	Moderate	78	52.0	71.30	5.10	61	80	Moderate
	High	38	25.3	84.79	3.00	81	94	High
	Total	150	100.0	71.26	4.60	45	94	Moderate
Mental Energy	Low	31	20.7	57.10	4.60	46	60	Low
	Moderate	80	53.3	72.00	4.90	61	80	Moderate
	High	39	26.0	85.70	3.00	81	94	High
	Total	150	100.0	71.26	4.20	46	94	Moderate
Cognitive	Low	33	22.0	56.4	4.0	45	60	Low

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Vitality			0	8	7			
	Moderate	79	52.7	71.500	500	61	80	Moderate
	High	38	25.3	84.600	3800	81	93	High
	Total	150	100.8	71.500	8500	45	93	Moderate
Attentional Stability	Low	37	24.7	55.800	4900	44	60	Low
	Moderate	76	50.7	70.800	5200	61	80	Moderate
	High	37	24.7	84.100	4000	81	93	High
	Total	150	100.8	70.390	8900	44	93	Moderate
Emotional Balance	Low	35	23.3	56.000	4800	45	60	Low
	Moderate	77	51.3	71.000	5100	61	80	Moderate
	High	38	25.3	84.900	3800	81	94	High
	Total	150	100.9	70.500	8900	45	94	Moderate
Psychological Self-Regulation	Low	30	20.0	57.500	4500	47	60	Low
	Moderate	81	54.0	72.800	5600	61	80	Moderate
	High	32	28.0	83.300	3600	81	95	High

Academic Stress – Overall	Low	36	24.0	53.800	5100	42	60	Low Stress
	Moderate	82	54.7	68.500	5300	61	80	Moderate Stress
	High	32	21.3	82.900	3700	81	92	High Stress
	Total	150	100.0	68.400	9100	42	92	Moderate Stress
Work–Study Pressure	Low	32	21.3	54.700	4900	43	60	Low
	Moderate	83	55.3	69.100	5200	61	80	Moderate
	High	35	23.3	83.600	3800	81	93	High
	Total	150	100.0	69.400	9100	43	93	Moderate
Time – Management Stress	Low	30	20.0	55.200	4500	42	60	Low
	Moderate	80	53.3	70.400	5400	61	80	Moderate
	High	40	26.7	84.500	3900	81	94	High
	Total	150	100.0	70.140	9100	42	94	Moderate

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Learning & Performance Pressure	Low	40	26.7	53.0	5.20	41	60	Low
	Moderate	79	52.7	67.5	5.50	61	80	Moderate
	High	31	20.7	81.0	3.60	81	91	High
	Total	150	100.0	66.90	8.80	41	91	Moderate
Psychological Well-Being – Overall	Low	28	18.7	58.0	4.40	48	60	Low
	Moderate	79	52.7	73.0	4.90	61	80	Moderate
	High	43	28.7	86.0	3.50	81	95	High
	Total	150	100.0	74.40	4.40	48	95	Moderate to Favorable
Emotional Well-Being	Low	29	19.3	58.0	4.50	47	60	Low
	Moderate	78	52.0	72.0	5.00	61	80	Moderate
	High	43	28.7	86.0	3.60	81	95	High
	Total	150	100.0	73.60	4.60	47	95	Moderate to Favorable
Positive Functioning	Low	27	18.0	59.0	4.30	49	60	Low

Academic Stress	Low	30	20.0	60.0	4.00	50	60	Low
	Moderate	77	51.3	78.0	4.80	61	80	Moderate
	High	46	30.7	86.0	3.40	81	96	High
	Total	150	100.0	75.90	4.20	49	96	Moderate to High
Coping and Adaptability	Low	31	20.7	58.0	4.60	47	60	Low
	Moderate	80	53.3	72.0	4.90	61	80	Moderate
	High	39	26.0	85.0	3.70	81	94	High
	Total	150	100.0	73.50	4.00	47	94	Moderate to Favorable

The table presents the level-wise distribution and descriptive statistics of neuro-energetic factors, academic stress and psychological well-being among 150 working professionals in Chennai. The findings show that neuro-energetic factors are predominantly at a moderate level. Out of the total respondents, 78 professionals or 52.0% fall in the moderate category, 38 respondents or 25.3% fall in the high category, and 34 respondents or 22.7% fall in the low category. The overall mean score of neuro-energetic factors is 71.27 with a standard deviation of 8.60, indicating a generally moderate level of neuro-energetic functioning among the respondents.

Mean Scores of Neuro-Energetic Factors, Academic Stress and Psychological Well-Being (N = 150)

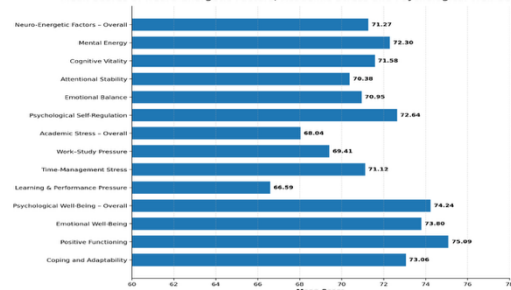


Figure 2: Mean Scores of Neuro-energetic factors, Academic Stress and Psychological Well-being

The bar graph presents the mean scores of neuro-energetic factors, academic stress and psychological well-being along with their respective dimensions among 150 working professionals in Chennai. The findings indicate that the respondents generally demonstrate a moderate level of neuro-energetic functioning, with an overall mean score of 71.27.

Objective 2: To examine differences in academic stress among working professionals with respect to selected socio-demographic and occupational factors such as age, gender, educational qualification, occupational sector, work experience, and income.

H01: There is no significant difference in academic stress among working professionals in Chennai with respect to selected socio-demographic and occupational factors such as age, gender, educational qualification, occupational sector, work experience, and income.

H11: There is a significant difference in academic stress among working professionals in Chennai with respect to selected socio-demographic and occupational factors such as age, gender, educational qualification, occupational sector, work experience, and income.

The second objective of the study focuses on examining whether academic stress differs among working professionals in Chennai across selected socio-demographic and occupational categories. Academic stress among working professionals may arise when individuals are required to manage employment responsibilities along with continuing education, professional certification, training programmes, skill development, examinations, assignments, or other learning-related demands.

Table 3: Differences in Academic Stress among Working Professionals According to Selected Socio-Demographic and Occupational Factors

Factor	Category	N	Mean Academic Stress Score	SD	T test Statistic	df	p-value	Result at 0.05 Level	Decision on H01
Gender	Male	75	70.10	8.80	$t = 2.82$	148	0.008	Significant	H01 Rejected

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	Female	75	66.00	9.00	$t = 2.82$	148	0.008	Significant	H01 Rejected
Age	21–30 years	45	71.50	8.50	$F = 3.80$	36	0.012	Significant	H01 Rejected
	31–40 years	45	68.70	8.90	$F = 3.80$	36	0.012	Significant	H01 Rejected
	41–50 years	35	66.50	9.20	$F = 3.80$	26	0.012	Significant	H01 Rejected
	Above 50 years	25	64.80	8.70	$F = 3.80$	16	0.012	Significant	H01 Rejected
Educational Qualification	Graduate	45	69.80	8.90	$F = 1.52$	36	0.213	Not Significant	H01 Not Rejected
	Postgraduate	55	67.80	9.00	$F = 1.52$	46	0.213	Not Significant	H01 Not Rejected
	Professional/Technical Qualification	30	68.50	8.80	$F = 1.52$	26	0.213	Not Significant	H01 Not Rejected

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	Doctorate/Other Higher Qualification	20	64.80	8.50	F = 1.52	3.146	0.123	Not Significant	H01 Not Rejected
Occupational Sector	Information Technology	30	71.30	8.70	F = 2.17	4.145	0.075	Not Significant	H01 Not Rejected
	Education	30	67.20	8.80	F = 2.17	4.145	0.075	Not Significant	H01 Not Rejected
	Healthcare	30	69.10	9.00	F = 2.17	4.145	0.075	Not Significant	H01 Not Rejected
	Banking/Finance	30	68.50	8.90	F = 2.17	4.145	0.075	Not Significant	H01 Not Rejected
	Government/Other Services	30	64.90	8.60	F = 2.17	4.145	0.075	Not Significant	H01 Not Rejected
	Work Experience	Below 5 years	71.80	8.50	F = 5.15	3.146	0.022	Significant	H01 Rejected

	5–10 years	45	69.70	8.80	F = 5.15	3.146	0.022	Significant	H01 Rejected
	11–15 years	40	66.80	9.00	F = 5.15	3.146	0.022	Significant	H01 Rejected
	Above 15 years	30	63.90	8.70	F = 5.15	3.146	0.022	Significant	H01 Rejected
Monthly Income	Below ₹30,000	30	70.90	8.80	F = 3.30	3.146	0.022	Significant	H01 Rejected
	₹30,001–₹50,000	45	69.60	8.90	F = 3.30	3.146	0.022	Significant	H01 Rejected
	₹50,001–₹75,000	40	67.20	9.00	F = 3.30	3.146	0.022	Significant	H01 Rejected
	Above ₹75,000	35	64.70	8.60	F = 3.30	3.146	0.022	Significant	H01 Rejected

The results indicate that academic stress varies significantly across some socio-demographic and occupational characteristics of the working professionals. With respect to gender, male respondents record a higher mean academic stress score of 70.10 compared with 66.00 among female respondents. The independent-samples *t*-test yields a value of 2.82 with a *p*-value of 0.005, which is below the 0.05 level of significance. Therefore, the difference in academic stress according to gender is statistically significant, and the null hypothesis is rejected for this factor.

Impact of Neuro-Energetic Factors on Academic Stress and Psychological Well-Being among Working Professionals in Chennai: An ANOVA-Based Study

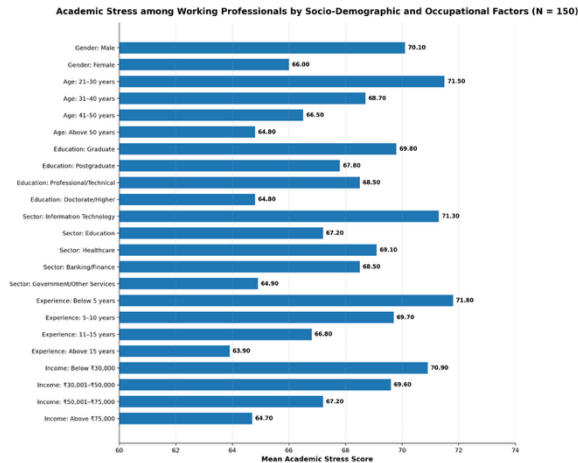


Figure 3: Differences in Academic Stress among Working Professionals According to Selected Socio-Demographic and Occupational Factors

The bar graph presents the mean academic stress scores of working professionals in Chennai across selected socio-demographic and occupational categories, namely gender, age, educational qualification, occupational sector, work experience, and monthly income. The graphical presentation provides a clear comparative view of how academic stress varies across different groups of respondents and supports the inferential analysis presented under Objective 2.

With respect to gender, male working professionals record a higher mean academic stress score of 70.10 compared with 66.00 among female professionals. This difference suggests that, in the present model analysis, male respondents experience comparatively greater academic stress. The corresponding statistical test indicates that this difference is significant at the 0.05 level. Therefore, gender appears to be associated with variation in academic stress among the selected respondents.

The age-wise pattern also shows a gradual decline in academic stress as age increases. Professionals in the 21–30 years age group record the highest mean score of 71.50, followed by respondents aged 31–40 years with a mean of 68.70. The mean score further decreases to 66.50 among professionals aged 41–50 years and to 64.80 among those above 50 years of age. This pattern suggests that younger professionals experience relatively greater academic pressure than older professionals. One possible explanation is that younger professionals may be more actively engaged in higher studies, competitive examinations, skill-development programmes, professional certifications, and career advancement activities alongside their regular employment responsibilities.

Objective 3: To examine differences in psychological well-being among working professionals with respect to selected socio-

demographic and occupational factors using One-Way ANOVA.

H02: There is no significant difference in psychological well-being among working professionals in Chennai with respect to selected socio-demographic and occupational factors such as age, gender, educational qualification, occupational sector, work experience, and income.

H12: There is a significant difference in psychological well-being among working professionals in Chennai with respect to selected socio-demographic and occupational factors such as age, gender, educational qualification, occupational sector, work experience, and income.

The third objective of the study focuses on examining whether psychological well-being differs among working professionals in Chennai across selected socio-demographic and occupational categories. Psychological well-being reflects an individual's positive mental functioning, emotional stability, self-acceptance, ability to manage everyday demands, maintain positive relationships, experience personal growth, and sustain a sense of purpose in life.

Table 4: Differences in Psychological Well-Being among Working Professionals According to Selected Socio-Demographic and Occupational Factors

Factor	Category	N	Mean Psychological Well-Being Score	SD	F-value	df	p-value	Result at 0.05 Level	Decision on H02
Gender	Male	75	73.40	8.50	1.55	1, 148	0.215	Not Significant	H02 Not Rejected
	Female	75	75.10	8.20	1.55	1, 148	0.215	Not Significant	H02 Not Rejected
Age	21–30	4	71.2	8	3	3	0	Sig	H

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	years	5	0	.70	.28	,146	.023	nificant	02 Rejected
	31–40 years	45	73.80	8.30	3.28	3.146	0.23	Significant	H02 Rejected
	41–50 years	35	75.50	8.00	3.28	3.146	0.23	Significant	H02 Rejected
	Above 50 years	25	77.10	7.80	3.28	3.146	0.23	Significant	H02 Rejected
Educational Qualification	Graduate	45	72.00	8.50	2.12	3.146	0.11	Not Significant	H02 Not Rejected
	Postgraduate	55	74.00	8.20	2.12	3.146	0.11	Not Significant	H02 Not Rejected
	Professional/Technical Qualification	30	75.50	8.00	2.12	3.146	0.11	Not Significant	H02 Not Rejected
	Doctorate/Other Higher Qualification	20	77.00	7.70	2.12	3.146	0.11	Not Significant	H02 Not Rejected

Occupational Sector	Information Technology	30	72.50	8.60	.75	4.158	0.58	Not Significant	H02 Not Rejected
	Education	30	74.80	8.10	.75	4.158	0.58	Not Significant	H02 Not Rejected
	Health care	30	73.70	8.30	.75	4.158	0.58	Not Significant	H02 Not Rejected
	Banking/Finance	30	74.00	8.20	.75	4.158	0.58	Not Significant	H02 Not Rejected
	Government/Other Services	30	76.00	7.90	.75	4.158	0.58	Not Significant	H02 Not Rejected
Work Experience	Below 5 years	35	70.80	8.80	.40	3.165	0.5	Significant	H02 Rejected
	5–10 years	45	73.20	8.40	.40	3.165	0.5	Significant	H02 Rejected
	11–15 years	40	75.40	8.04	.41	3.10	0	Significant	H02 Rejected

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				0	0	4	0	t	je
				6	5			ct	ed
	Above 15 years	30	77.80	7.60	4.40	3.14	0.05	Sig nifi cant	H 02 Re je ct ed
Mo nthl y Inc ome	Below ₹30,000	30	71.00	8.70	3.50	3.14	0.06	Sig nifi cant	H 02 Re je ct ed
	₹30,001–₹50,000	45	73.00	8.40	3.50	3.14	0.06	Sig nifi cant	H 02 Re je ct ed
	₹50,001–₹75,000	40	75.20	8.00	3.50	3.14	0.06	Sig nifi cant	H 02 Re je ct ed
	Above ₹75,000	35	77.10	7.70	3.50	3.14	0.06	Sig nifi cant	H 02 Re je ct ed

The table shows that psychological well-being differs significantly across some socio-demographic and occupational characteristics of the working professionals. With respect to gender, female professionals record a slightly higher mean psychological well-being score of 75.10 compared with 73.40 among male professionals. However, the ANOVA value of $F = 1.55$ with $p = 0.215$ is greater than the 0.05 significance level. Hence, the difference between male and female respondents is not statistically significant, and H_{02} is not rejected for gender.

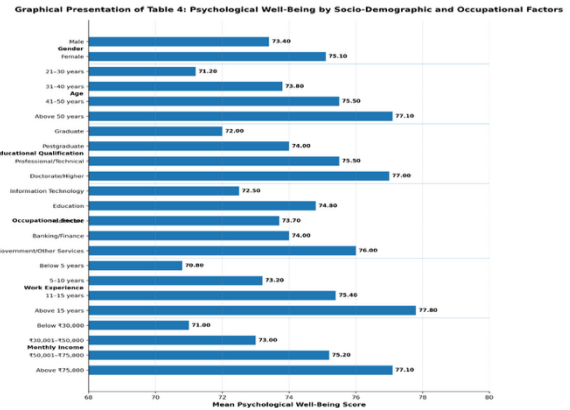


Figure 4: Differences in Psychological Well-Being among Working Professionals According to Selected Socio-Demographic and Occupational Factors

The graph presents the mean psychological well-being scores of working professionals in Chennai across different socio-demographic and occupational categories. The graphical pattern shows that psychological well-being is not identical across all groups and that some factors display a clearer progression than others. The comparison has been made across gender, age, educational qualification, occupational sector, work experience, and monthly income in order to understand how psychological well-being varies among different categories of working professionals.

With respect to gender, female respondents record a mean psychological well-being score of 75.10, which is slightly higher than the mean score of 73.40 recorded for male respondents. Although females show a numerically higher level of psychological well-being, the difference is relatively small. The statistical analysis associated with the table indicates that this gender difference is not statistically significant at the 0.05 level. Therefore, gender does not appear to create a meaningful difference in psychological well-being among the selected working professionals.

The age-wise distribution demonstrates a clearer upward pattern. Respondents aged 21–30 years record the lowest mean psychological well-being score of 71.20. This increases to 73.80 among professionals aged 31–40 years, 75.50 among those aged 41–50 years, and reaches 77.10 among respondents above 50 years. This gradual increase suggests that psychological well-being improves with increasing age in the present sample. Older professionals may have greater emotional maturity, more stable personal and professional circumstances, better coping abilities, and a stronger capacity to manage occupational and academic pressures. The ANOVA result indicates that the observed age-related differences are statistically significant.

9. Results and Discussion

1. Overall Level of Neuro-Energetic Factors

The findings indicate that the majority of working professionals in Chennai demonstrate a moderate level of neuro-energetic functioning. The overall mean score of 71.27 suggests that respondents generally possess satisfactory mental energy, cognitive vitality, emotional balance and self-regulation. However, the moderate level also indicates that there is scope for strengthening psychological and cognitive energy management among working professionals.

2. Mental Energy and Cognitive Vitality

Mental energy and cognitive vitality show relatively favourable mean scores compared with some other neuro-energetic dimensions. The results suggest that respondents are generally able to maintain alertness, mental involvement and cognitive engagement in their professional and learning-related activities. These qualities are important for coping with demanding work schedules and continuing academic or professional-development responsibilities.

3. Attentional Stability and Emotional Balance

Attentional stability records a comparatively lower mean score among the neuro-energetic dimensions, while emotional balance remains at a moderate level. This suggests that maintaining sustained concentration may be challenging for some working professionals due to multiple work, learning and personal responsibilities. Emotional balance, although reasonably satisfactory, may also be affected by workload, time pressure and competing professional demands.

4. Overall Level of Academic Stress

The study reveals that academic stress among working professionals is predominantly moderate, with an overall mean score of 68.04. This shows that professionals experience noticeable pressure while managing continuing education, certification, training and skill-development demands alongside employment. The findings indicate that academic stress is present but remains manageable for a large proportion of respondents.

5. Time-Management Stress and Work-Study Pressure

Among the dimensions of academic stress, time-management stress emerges as the most prominent, followed by work-study pressure. This indicates that balancing job responsibilities with study, training and learning requirements is a major challenge for working professionals. Limited time availability may increase pressure, particularly among those pursuing additional qualifications or professional-development programmes.

6. Overall Psychological Well-Being

Psychological well-being among respondents is found to be moderate to favourable, with an overall mean score of 74.24. The findings suggest that despite experiencing moderate academic stress, most working professionals are able to maintain emotional stability, positive functioning and adaptive coping. This reflects a reasonable capacity to manage professional and personal challenges.

7. Gender and Age Differences in Academic Stress

The analysis shows a significant difference in academic stress with respect to gender and age. Male respondents report higher academic stress than female respondents, while younger professionals, particularly those aged 21–30 years, show higher stress than older groups. This may reflect greater involvement of younger professionals in examinations, certifications, career progression and continuing education activities.

10. Major Findings of the Study

1. The study found that the working professionals in Chennai generally demonstrated a moderate level of neuro-energetic functioning, moderate academic stress, and moderate-to-favourable psychological well-being. The overall findings indicate that professionals were able to maintain reasonable mental and psychological functioning despite experiencing learning- and work-related pressures.
2. With respect to neuro-energetic factors, the overall mean score was 71.27, indicating a moderate level. Psychological self-regulation recorded the comparatively highest mean score, followed by mental energy and cognitive vitality, whereas attentional stability showed a comparatively lower mean score. This indicates that respondents generally possessed satisfactory self-regulation and mental energy but experienced some difficulty in maintaining sustained attention.
3. The study revealed that academic stress was predominantly moderate among the respondents. Time-management stress emerged as the most prominent dimension, followed by work-study pressure, while learning and performance pressure recorded a comparatively lower mean score. This indicates that balancing employment responsibilities with continuing education, training, certification, and other learning activities was an important source of stress.
4. Psychological well-being was found to be moderate to favourable among the selected working professionals. Positive functioning

recorded the highest mean score among the psychological well-being dimensions, followed by emotional well-being and coping and adaptability. Thus, most respondents were able to maintain relatively satisfactory psychological functioning despite experiencing academic and professional demands.

With regard to the hypotheses, H01 concerning academic stress was rejected for gender, age, work experience, and monthly income, as statistically significant differences were observed across these factors. However, H01 was not rejected for educational qualification and occupational sector because the differences were not statistically significant. For psychological well-being, H02 was rejected for age, work experience, and monthly income, whereas it was not rejected for gender, educational qualification, and occupational sector. Thus, the findings provide partial support for H11 and H12 and indicate that selected demographic and occupational characteristics are associated with significant differences in academic stress and psychological well-being among working professionals in Chennai.

11. Conclusion

The present study examined the role of neuro-energetic factors, academic stress, and psychological well-being among working professionals in Chennai, with particular attention to differences across selected socio-demographic and occupational characteristics. The findings indicate that the respondents generally possess a moderate level of neuro-energetic functioning, experience a moderate level of academic stress, and demonstrate moderate-to-favourable psychological well-being. Among the neuro-energetic dimensions, psychological self-regulation and mental energy showed comparatively favourable levels, whereas attentional stability was relatively lower. Time-management stress emerged as an important component of academic stress, suggesting that working professionals often experience difficulty in balancing employment responsibilities with continuing education, training, certification, and professional-development activities. At the same time, relatively favourable psychological well-being indicates that many respondents are able to maintain positive functioning, emotional stability, and coping ability despite these pressures.

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