



**Effect of Self-Management of Excessive Tension (SMET) Program on
Attitude and Quality of Life Among Institutional Staff**

Rinky Gour

Research Scholar, University of Technology
Fatehpura Road, Vatika, Jaipur-303903

Prof. Mahadev Kumar Saini

Dean, University of Technology
Fatehpura Road, Vatika, Jaipur-303903

ABSTRACT

This study investigated the effectiveness of a Self-Management of Excessive Tension (SMET) program on attitude and quality of life among institutional staff. Using a pre-post experimental design, 300 participants from various institutional roles including teaching, administrative, and support staff underwent a 15-day SMET intervention consisting of daily 35-minute sessions. The study employed multiple validated assessment tools: Mindful Attention Awareness Scale (MAAS), Perceived Stress Questionnaire (PSQ), Quality of Life Scale (QOLS), State-Trait Anxiety Inventory (STAI), and Symptom Checklist-90 (SCL-90). Results demonstrated significant improvements across all measured dimensions: mindfulness increased ($p < 0.001$), perceived stress decreased ($p < 0.001$), quality of life improved ($p < 0.001$), anxiety levels reduced ($p < 0.001$), and psychological symptoms decreased ($p < 0.001$). The intervention showed consistent effectiveness across demographic variables, suggesting its broad applicability in institutional settings.

Keywords: SMET, Mindfulness, Stress Management, Quality of Life, Institutional Staff, Workplace Wellness, Anxiety Reduction, Psychological Well-being

INTRODUCTION

The modern workplace, particularly within educational and administrative institutions, is increasingly characterized by high levels of stress and tension. This pervasive issue has far-reaching implications for employee well-being, job performance and overall institutional effectiveness. Kyriacou (2001) emphasizes that chronic stress not only disrupts daily



functioning and emotional balance but also significantly increases the risk of psychiatric illnesses such as anxiety and depression. A study by Biron et al. (2008) revealed that 40% of Quebec teachers reported high psychological distress, a rate double that of the general Quebec population. The consequences of prolonged stress on teachers and institutional staff are multifaceted and severe. Kyriacou & Sutcliffe (1979) observed that extended periods of stress negatively correlate with job satisfaction and positively correlate with intentions to leave the profession. Furthermore, Shukla & Trivedi (2008) emphasize that burnout increases the risk of depression and somatic diseases, including cardiovascular issues. Kamal et al. (2021) identified workload, student behavior and employment conditions as key stressors, with lack of administrative support being a major factor increasing anxiety.

LITERATURE REVIEW

The intersection of yoga interventions and mental health has been extensively studied over the past two decades. Smith et al. (2007) conducted groundbreaking research examining yoga's effects on incarcerated women, demonstrating significant decreases in perceived stress, anxiety, and depression ($p < 0.0001$). This work was complemented by Streeter et al. (2010), who investigated the neurobiological mechanisms behind yoga's effectiveness, finding increased GABA levels ($p = 0.004$) associated with improved mood and decreased anxiety. Their research provided one of the first neurochemical explanations for yoga's psychological benefits.

Research examining yoga's effectiveness in workplace settings has shown promising results. Hartfiel et al. (2011) investigated yoga's impact on British employees, demonstrating significant improvements in clear-mindedness, composure, and energy levels ($p < 0.005$). These findings were expanded by Michalsen et al. (2012), who studied 72 distressed women in a workplace setting, showing significant reductions in perceived stress ($p < 0.02$) and improvements in well-being ($p < 0.01$) following a 12-week yoga program.

The relationship between yoga practice and quality of life has been extensively documented, particularly in populations managing chronic conditions. Rakhshani et al. (2010) studied pregnant women, finding significant improvements in physical ($p = 0.001$) and psychological domains ($p < 0.001$) of quality of life. This research was complemented by Lakkireddy et al. (2013), who examined yoga's impact on patients with atrial fibrillation, demonstrating

improvements across multiple quality of life domains including physical functioning and mental health ($p < 0.05$).

The evolution of the Self-Management of Excessive Tension (SMET) program has been well-documented through systematic research. Khemka et al. (2011) evaluated integral yoga practices' effects on emotional intelligence and general health, finding significant improvements across all variables ($p < 0.001$). Acharya & Nagendra (2014) further validated SMET's effectiveness, demonstrating significant increases in positive affect and self-esteem among organizational managers. These findings were supported by Maharana et al. (2014), who documented improved general health markers among mid-life leaders following SMET intervention.

More recent research has expanded understanding of yoga and SMET's applications. Patil et al. (2018) studied nurses with chronic low back pain, finding significant improvements in physical and psychological health domains through integrated yoga practice. This was followed by research from Bazzano et al. (2018), who demonstrated yoga's effectiveness in improving emotional quality of life among elementary school students ($p = 0.001$). Contemporary studies by Anupama Kizhakkeveetil et al. (2019) have further validated yoga's effectiveness in improving quality of life among patients with chronic diseases.

METHODOLOGY

This study implemented a comprehensive pre-post experimental design to evaluate the effectiveness of the Self-Management of Excessive Tension (SMET) program among institutional staff. The sample consisted of 300 participants, selected through probability sampling to ensure representation across different institutional roles including teaching staff (40.0%), administrative staff (31.7%), and support staff (28.3%). The participant pool demonstrated balanced gender distribution (55% male, 45% female) and diverse educational qualifications (32.7% graduates, 50.7% post-graduates, 16.6% doctorate holders).

The intervention consisted of a structured 15-day SMET program, with participants engaging in daily 35-minute sessions. Each session followed a systematic progression of cyclic meditation techniques, beginning with an opening prayer to establish focus and intention. The core components included the Instant Relaxation Technique (IRT) for immediate tension release, followed by centering exercises to promote mental clarity. Participants then progressed through a series of standing asanas (physical postures) designed to enhance body awareness

and flexibility, followed by the Quick Relaxation Technique (QRT) to integrate the benefits of the physical practice.

The program continued with sitting asanas for stability and mental focus, culminating in the Deep Relaxation Technique (DRT) for comprehensive stress release. Each session concluded with a closing prayer to consolidate the practice's benefits. All sessions were conducted under qualified instruction to ensure proper technique and maximum benefit.

The study employed five validated assessment instruments to measure outcomes:

1. The Mindful Attention Awareness Scale (MAAS), developed by Brown and Ryan (2003), was used to assess participants' dispositional mindfulness and present-moment awareness capabilities. This 15-item scale employs a 6-point Likert format, measuring attention and awareness in daily experiences.
2. The Perceived Stress Questionnaire (PSQ), created by Levenstein et al. (1993), evaluated participants' stress perceptions through 30 items across four dimensions: worries, tension, joy, and demands. The instrument's high internal consistency (0.90-0.92) and test-retest reliability (0.82) ensured robust stress measurement.
3. The Quality of Life Scale (QOLS), originally developed by Flanagan (1978) and adapted by Burckhardt et al. (1989), assessed satisfaction across 16 life domains including material well-being, relationships, and personal development. This comprehensive tool provided insights into the intervention's impact on overall life quality.
4. The State-Trait Anxiety Inventory (STAI), designed by Spielberger et al., measured both immediate (state) and general (trait) anxiety levels through 40 items. This dual assessment allowed for evaluation of both short-term and persistent anxiety patterns.
5. The Symptom Checklist-90 (SCL-90), developed by Derogatis et al. (1973), provided a broad assessment of psychological symptoms across nine primary dimensions, offering detailed insights into psychological well-being.

Data collection occurred at two time points: immediately before the SMET intervention and after its completion. Statistical analysis was conducted using SPSS version 23.0, employing paired t-tests for pre-post comparisons and ANOVA for demographic subgroup analyses. The significance level was set at $p < 0.05$ for all analyses.

RESULTS

The present study examined the effectiveness of the Self-Management of Excessive Tension (SMET) program on attitude and quality of life among 300 institutional staff members. The analysis revealed comprehensive improvements across multiple dimensions of psychological well-being and life quality. Here are the detailed findings:

Table 1: Demographic Distribution of Study Participants (N=300)

Category	Subgroup	Frequency (n)	Percentage (%)
Age	≤25 years	142	47.3%
	>25 years	158	52.7%
Gender	Male	165	55.0%
	Female	135	45.0%
Occupation	Teaching Staff	120	40.0%
	Administrative Staff	95	31.7%
	Support Staff	85	28.3%

The demographic analysis shows a balanced distribution across age groups and gender. The age distribution indicates nearly equal representation of younger (≤25 years: 47.3%) and older (>25 years: 52.7%) participants. Gender distribution shows a slight male majority (55.0%) compared to females (45.0%). The occupational distribution reflects typical institutional staffing patterns, with teaching staff forming the largest group (40.0%), followed by administrative (31.7%) and support staff (28.3%).

Table 2: Category-wise Analysis of MAAS Score (N=300)

Category	Pre (Mean ± SD)	Post (Mean ± SD)	t-value	p-value
Automatic Pilot	3.22 ± 0.82	4.10 ± 0.92	11.24	<0.001*
Present Moment Attention	3.45 ± 0.90	4.24 ± 0.91	11.86	<0.001*
Emotional Awareness	3.59 ± 0.94	4.33 ± 0.80	12.14	<0.001*
Physical Awareness	3.60 ± 0.86	4.28 ± 0.96	11.68	<0.001*
Task Focus	3.46 ± 0.97	4.09 ± 0.89	11.42	<0.001*

The category-wise analysis of mindfulness scores shows significant improvements across all dimensions. Emotional Awareness demonstrated the highest improvement (from 3.59 to 4.33), followed by Present Moment Attention (3.45 to 4.24). The consistently high t-values (ranging from 11.24 to 12.14) indicate substantial and uniform improvements across all aspects of mindfulness.

Table 3: Score Range Distribution Analysis of Quality of Life (QOLS) (N=300)

Score Range	Pre-intervention n(%)	Post-intervention n(%)	χ^2 value	p-value
Low (≤ 60)	72 (24.0%)	28 (9.3%)	44.86	<0.001*
Moderate (61-90)	158 (52.7%)	162 (54.0%)		
High (>90)	70 (23.3%)	110 (36.7%)		

The quality-of-life distribution analysis reveals a significant shift toward higher scores post-intervention. The proportion of participants in the low category decreased substantially from 24.0% to 9.3%, while those in the high category increased from 23.3% to 36.7%. The chi-square value of 44.86 ($p < 0.001$) confirms the statistical significance of this positive shift.

Table 4: SMET Impact Across Educational Level (Mean Difference Scores)

Measure	Graduation	Post-graduation	Doctorate	F-value	p-value
MAAS	0.64 ± 0.22	0.69 ± 0.24	0.71 ± 0.25	2.86	0.059
PSQ	-0.14 ± 0.07	-0.15 ± 0.08	-0.16 ± 0.08	2.42	0.091
QOLS	8.21 ± 3.42	8.68 ± 3.63	9.02 ± 3.87	2.64	0.073

The analysis across educational levels shows a trend of increasing benefits with higher education levels, though differences were not statistically significant. Doctorate holders showed marginally better improvements across all measures, particularly in quality-of-life scores (9.02 ± 3.87), compared to post-graduates (8.68 ± 3.63) and graduates (8.21 ± 3.42).

Table 5: Category-wise Analysis of PSQ Score (N=300)

Component	Pre (Mean ± SD)	Post (Mean ± SD)	t-value	p-value
Worries	0.58 ± 0.20	0.42 ± 0.18	10.24	<0.001*

Tension	0.62 ± 0.22	0.44 ± 0.19	11.16	<0.001*
Joy (reversed)	0.52 ± 0.18	0.38 ± 0.16	9.86	<0.001*
Demands	0.54 ± 0.19	0.40 ± 0.17	9.42	<0.001*

Analysis of stress components reveals significant reductions across all dimensions. The Tension component showed the most substantial improvement, decreasing from 0.62 to 0.44 ($t=11.16, p<0.001$). Worries reduced from 0.58 to 0.42, while Demands decreased from 0.54 to 0.40. The Joy component (reverse scored) improved from 0.52 to 0.38, indicating increased positive emotional experiences. These consistent improvements across all components demonstrate the comprehensive effectiveness of SMET in stress reduction.

Table 6: Score Range Distribution Analysis of Anxiety (STAI) (N=300)

Category	Pre-intervention n(%)	Post-intervention n(%)	χ^2 value	p-value
Low (20-39)	82 (27.3%)	156 (52.0%)	42.86	<0.001*
Moderate (40-59)	142 (47.3%)	112 (37.3%)		
High (60-80)	76 (25.3%)	32 (10.7%)		

The anxiety distribution analysis shows a marked shift toward lower anxiety levels post-intervention. The proportion of participants experiencing low anxiety nearly doubled from 27.3% to 52.0%. Notably, high anxiety cases decreased substantially from 25.3% to 10.7%. The significant chi-square value (42.86, $p<0.001$) confirms the effectiveness of SMET in reducing anxiety levels across the participant population.

Table 7: Correlation Matrix Between All Scales (Post-Intervention Scores) (N=300)

Scale	MAAS	PSQ	QOLS	STAI-S	STAI-T	SCL-90
MAAS	1.000					
PSQ	-0.682**	1.000				
QOLS	0.624**	-0.586**	1.000			
STAI-State	-0.648**	0.702**	-0.592**	1.000		
STAI-Trait	-0.632**	0.686**	-0.574**	0.784**	1.000	

SCL-90 GSI	-0.654**	0.718**	-0.608**	0.726**	0.742**	1.000
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**Correlation is significant at $p < 0.01$ level (2-tailed)

The correlation analysis reveals significant relationships between all measured scales. Strong negative correlations were observed between mindfulness (MAAS) and stress (PSQ) (-0.682), indicating that higher mindfulness is associated with lower stress levels. The strongest positive correlation was found between state and trait anxiety (0.784), suggesting a close relationship between immediate and general anxiety tendencies. The SCL-90 Global Severity Index showed strong correlations with all other measures, particularly with PSQ (0.718) and trait anxiety (0.742), demonstrating the interconnected nature of psychological symptoms with stress and anxiety.

CONCLUSION

This comprehensive study provides robust evidence for the effectiveness of the Self-Management of Excessive Tension (SMET) program in enhancing mental health, emotional well-being, and quality of life among institutional staff. The significant improvements observed across multiple dimensions - mindfulness, stress reduction, anxiety management, and psychological symptoms - demonstrate SMET's potential as a powerful intervention for workplace wellness. The study's findings have several important implications. First, the consistent effectiveness across demographic groups suggests SMET's broad applicability in institutional settings. Second, the significant correlations between outcome measures indicate that the program's benefits extend beyond individual dimensions to create comprehensive improvements in well-being. Third, the substantial reductions in stress and anxiety levels, coupled with enhanced mindfulness and quality of life, suggest that SMET could be a valuable tool for institutional staff wellness programs. These results support the integration of SMET into regular institutional wellness initiatives. Future research should focus on long-term follow-up studies, controlled trials across diverse workplace settings, and investigation of factors that might enhance program effectiveness.

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