

Impact of Classroom Behavioural Challenges on Teachers' Physical and Mental Health: A Physiotherapy Perspective on Coping Strategies

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Abstract: Background: Classroom behavioural challenges are a significant stress for teachers, leading to psychological strain and physical health issues. Constant exposure to disruptive behaviours can cause burnout, anxiety, and musculoskeletal pain. However, the role of physiotherapy in addressing these problems is not well studied.

Methods: A cross-sectional study was conducted with school teachers using a structured, self-administered questionnaire. The tool assessed how often classroom behavioural challenges occurred, their severity, physical symptoms (such as neck pain, back pain, and fatigue), and mental health indicators including stress, anxiety, and emotional exhaustion. The study also looked at coping strategies teachers used, specifically physiotherapy-based approaches like ergonomic changes, posture correction, relaxation techniques, and stretching exercises. Descriptive and inferential statistics helped analyse the links between behavioural challenges and health outcomes.

Results: Teachers who frequently faced classroom behavioural challenges reported higher levels of musculoskeletal pain, especially in the neck, shoulders, and lower back, along with greater psychological distress. Teachers who used physiotherapy-based coping strategies, including ergonomic adjustments, stretching exercises, and relaxation techniques, showed lower levels of discomfort and stress.

Conclusion: Classroom behavioural challenges harm teachers' physical and mental health. Adding physiotherapy interventions, such as ergonomic training and stress-relief exercises, can be effective

ways to alleviate these effects. The study emphasizes the need for collaborative occupational health programs to support teachers' well-being and improve their long-term professional sustainability.

Keywords: Teacher stress, classroom behaviour, musculoskeletal pain, mental health, physiotherapy, coping strategies.

INTRODUCTION

Teaching is a valuable and impactful profession. However, rapid changes in society and technology, along with constant scrutiny, are creating more challenges for teachers (Carroll et al., 2022). The new difficulties and uncertainties in the social world, along with the complexities of the profession—like competition among colleagues, standardized performance, rising accountability, and quick assessments—put the teaching profession at high risk (Zhang et al., 2023). Teaching has been linked to increased stress (Carroll et al., 2022; Li et al., 2022). High stress among teachers can lead to health issues and negative job outcomes, which often result in burnout and turnover of qualified teachers (Puhakka et al., 2021; Gearhart et al., 2022). For these reasons, teachers' well-being matters not only for the educators and their schools but also for society's future (McCallum et al., 2017; Yu et al., 2022).

Although there is still limited evidence, recent research suggests that teachers' well-being affects their relationships with students, the overall school environment, and student performance (López et al., 2017). Studies indicate that teachers' mental states influence their personal well-being, and that students' mental health is connected to their teachers' well-being (Harding et al., 2019). Further research shows that a teacher's well-being is vital for young people's ability to innovate and be productive (McCallum, 2021). It is also connected to teaching effectiveness and affects students' academic performance (Harding et al., 2019; Hascher and Waber, 2021). Moreover, teacher well-being influences educational management (Hascher and Waber, 2021), and the relationships within teaching teams, as well as students' academic success, are closely linked (Göktaş and Metin, 2022).

While many studies have highlighted the importance of teacher well-being, earlier research has focused on its negative aspects (Li et al., 2022). This research showed that teaching is a demanding and stressful profession that can lead to job dissatisfaction, mental health issues, and reduced well-being. However, insights from positive psychology (Seligman and Peterson, 2003) have encouraged researchers to examine well-being in education more closely. Currently, there is increasing interest and concern among researchers, managers, and policymakers about teachers' well-being. This focus aims not only to find ways to lessen stress,

exhaustion, and burnout but also to help teachers thrive by boosting their optimism and self-efficacy.

Teachers' well-being

The state of well-being depends on several social, psychological, and biological determinants along with the state of health and sickness in general (Klapp et al., 2023). In fact, well-being is one of the concepts of health, including physical, psychological, and social well-being. The World Health Organization (WHO) states that "...well-being does not mean merely the absence of disease or infirmity" and that "mental well-being is defined as the well-being in which every individual realizes their abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to contribute meaningfully to his or her community" (WHO, 2014).

Thus, well-being must be understood in a broader sense than in the absence of illness. Rather, it refers to the healthy and successful functioning of teachers in their work and the ability of teachers to create a positive balance between the available resources and the challenges and demands (psychological, physical, individual, social, and environmental) that arise (Benevene et al., 2020). Well-being encompasses cognitive and affective as well as physical and mental components, and dispositional, personal, organizational, and environmental factors (Benevene et al., 2020).

Research shows that teachers' well-being is related to many aspects, such as personal characteristics and job engagement (Jelińska and Paradowski, 2021), workload or students' classroom behaviour (Chan et al., 2021), positive relationships with students, colleagues and families, as well as students' better academic performance (Baumeister et al., 2003), emotion regulation, a positive work environment and teachers' self-efficacy (feeling successful as a teacher) (Collie et al., 2015; Sohail et al., 2023); and contextual factors such as institutional resources and the amount of support received (Kumpikaitė-Valiūnienė et al., 2021). Negative work environments and negative emotions, as well as feelings of being ostracized or bullied by colleagues, are factors in teacher burnout (Sohail et al., 2023). Thus, teachers' well-being reflects their professional satisfaction and happiness, and is perceived as a multidimensional and multilayered psychological construct (Li et al., 2022). It has been associated with other phenomena, including positive emotions and satisfaction, motivation and commitment,

resilience and thriving, and negative associations with teacher stress and burnout (Burić et al., 2019; Hascher and Waber, 2021).

Psychological distress and burnout

Psychological distress refers to non-specific symptoms of stress, anxiety and depression (Viertiö et al., 2021). Psychological distress manifests itself in a series of mental disorders such as anxiety, sadness, irritability, reduced self-confidence, and emotional distress, and is closely linked to physical and mental illnesses and poorer quality of life (Ozoemena et al., 2021).

Burnout is defined as a reaction to prolonged stress at work, which results from a sustained mismatch between an employee's resources and the demands placed on the employee (Bakker and Demerouti, 2017). Burnout is associated with reduced personal satisfaction and depersonalization (Bianchi et al., 2015), high levels of distress and multiple physical and mental problems, sleep disturbances, reduced productivity and motivation, and an increased risk of sickness absence (Stier-Jarmer et al., 2016). Burnout is characterized by feelings of physical, emotional, and mental exhaustion, manifested by emotional strain, negative attitudes toward work-life balance (Schilling et al., 2018), indolence, and guilt (Figueiredo-Ferraz et al., 2021).

Emotional exhaustion is a key symptom of burnout (Arens and Morin, 2016). People who are burnt out are emotionally exhausted and feel negative and disengaged from their work, which leads to lower productivity, stifled creativity and innovation, work accidents, absenteeism, and physical and mental illnesses. Studies in the field of education have shown that teachers' enthusiasm drops sharply when burnout increases (Voss et al., 2023). Teachers' emotional exhaustion leads to less engagement and effort in lesson planning, as well as more negative attitudes toward students (Frenzel et al., 2021)

The present study

Compared to other professions, teachers are at high-risk of different mental health issues. While stress is a normal response to distressing or threatening events, it becomes pathological when chronic (Seo et al., 2017). A study on work-related stress in 26 professions (Johnson et al., 2005) found that teachers had one of the lowest levels of psychological well-being among all professions studied. Teachers around the world still face problems of stress and burnout, which cause anxiety and depression (Agyapong et al., 2022).

Educators consistently report higher levels of behavioral, psychological, and physiological symptomatology due to work-related stress (Ormiston et al., 2022). Stress management strategies can reduce stress and its consequences, and improve mental health. Although the mental health of teachers is becoming an increasingly important issue, there is a lack of research on the use of stress coping strategies in this area. To address this societal issue, it is important to empirically assess the impact of coping strategies on teachers' mental health.

Given these concerns, there is a growing need to explore effective **coping strategies** that can mitigate the adverse effects of classroom behavioural challenges. Traditional approaches often focus on psychological interventions such as stress management and mindfulness. However, the role of **physiotherapy** is gaining attention as a holistic approach to managing both physical and mental health. Physiotherapy interventions—including posture correction, ergonomic training, relaxation techniques, breathing exercises, and physical activity—can help reduce musculoskeletal discomfort and improve stress resilience.

Adopting a physiotherapy perspective allows for a comprehensive understanding of teacher well-being by integrating **physical rehabilitation with mental health support**. This approach is particularly relevant in addressing occupational stress, as it targets both the physiological and psychological dimensions of health. Therefore, examining the impact of classroom behavioural challenges on teachers' physical and mental health, along with physiotherapy-based coping strategies, is essential for enhancing teacher well-being and professional effectiveness.

Aim:

- To study the impact of classroom behavioural challenges on teachers' physical and mental health.
- To explore the effectiveness of physiotherapy-based coping strategies in improving their overall well-being.

Objectives:

- To identify the common types and frequency of classroom behavioural challenges faced by teachers.

- To study the impact of these behavioural challenges on teachers' **physical health**, including musculoskeletal pain and fatigue.
- To study the impact on **mental health**, including stress, anxiety, and emotional exhaustion.
- To understand the coping strategies currently adopted by teachers to manage classroom behavioural challenges
- To understand the effectiveness of **physiotherapy-based coping strategies** such as posture correction, ergonomic modifications, relaxation techniques, and exercise.

METHODOLOGY

Study Design

- Cross-sectional observational study

Study Setting

- Schools (primary, secondary, or higher secondary institutions).

Sample Size

- Approximately 100 participants

Sampling method

- Purposive sampling.

Inclusion Criteria

- Teachers having more than 1 year of professional experience
- Teachers teaching students aged between 18 –23 years.

Exclusion Criteria

- Teachers currently undergoing physiotherapy.

Outcome Measures

- Self -Validated Questionnaire, it includes 6 domains;

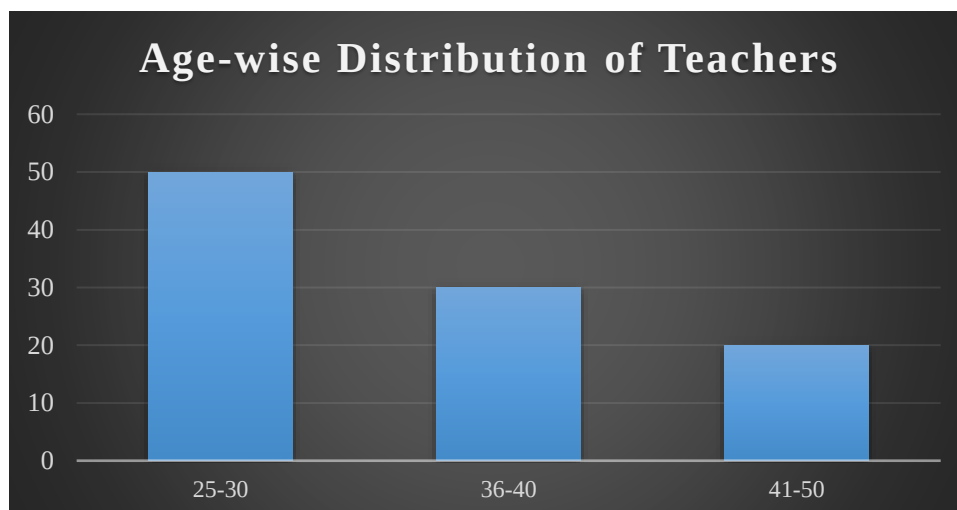
1. Demographic data (age, gender, years of experience)
2. Students Behavioural Challenges
3. Teachers Mental Health Challenges
4. Teachers Physical Health Challenges (Musculoskeletal & fatigue)
5. Teachers Coping Strategies
6. Physiotherapy Awareness and Practices

PROCEDURE

An Ethical clearance was obtained from the Institutional Ethics Committee of TMV's Lokmanya Tilak College Of Physiotherapy Kharghar. Permission from the concerned head of college/institute was obtained. The purpose and procedure of the study was explained to the participants and written informed consent was taken from before participation in the study.

Data was collected using a structured questionnaire comprising of 6 domains. A demographic and professional data sheet consists of age, gender, teaching experience. Classroom behavioural challenges were assessed using a self-validated questionnaire focusing on the frequency and type of disruptive student behaviours. Physical health challenges were evaluated using Musculoskeletal Questionnaire to assess frequency and intensity of musculoskeletal pain. Mental health status to assess the frequency of mental health challenges faced by teachers using a self-validated questionnaire. Coping strategies, particularly from a physiotherapy perspective, was evaluated using a questionnaire addressing ergonomic practices, physical activity, relaxation techniques, posture correction and awareness of physiotherapy interventions for stress and physical health.

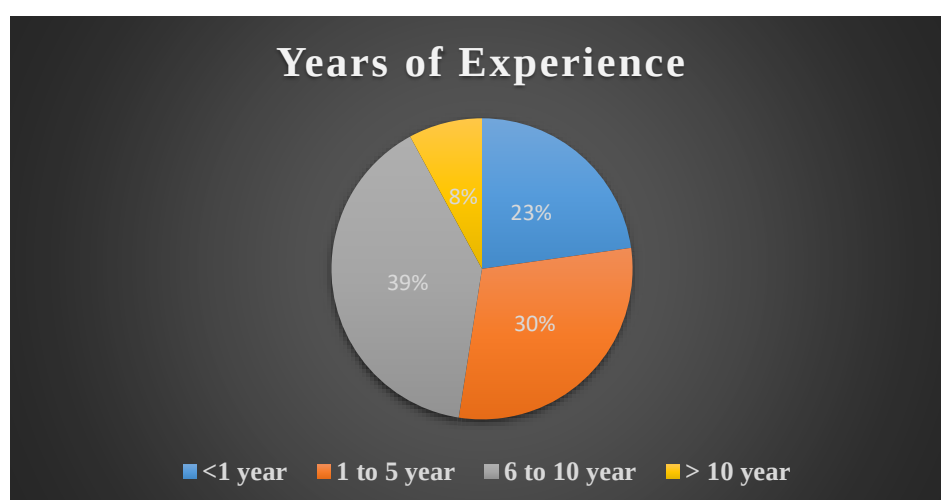
DATA ANALYSIS



Graph 1: Age wise Distribution of Teachers

Table 1: Age wise Distribution of Teachers

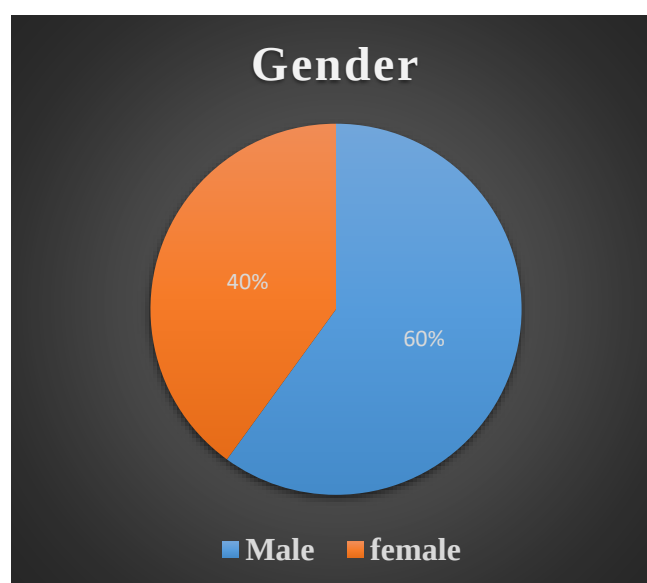
AGE	NO. OF PARTICIPANTS
25-30	50
36-40	30
41-50	20



Graph 2: Years of Experience

Table 2: Years of Experience

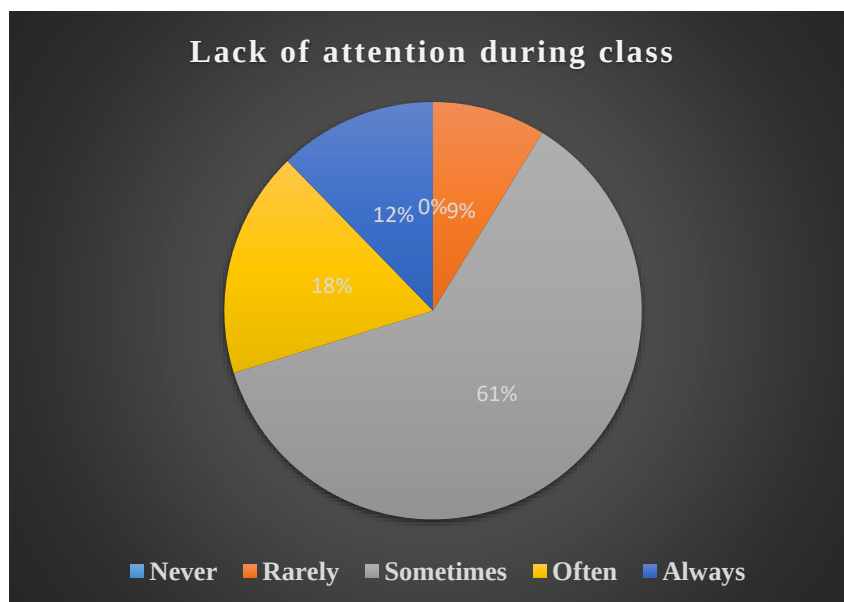
YEARS OF EXPERIENCE	NO. OF PARTICIPANTS
< 1 year	23%
1 – 5 years	30%
6 – 10 years	39%
>10 years	8%



Graph 3: Gender wise Distribution of Teachers

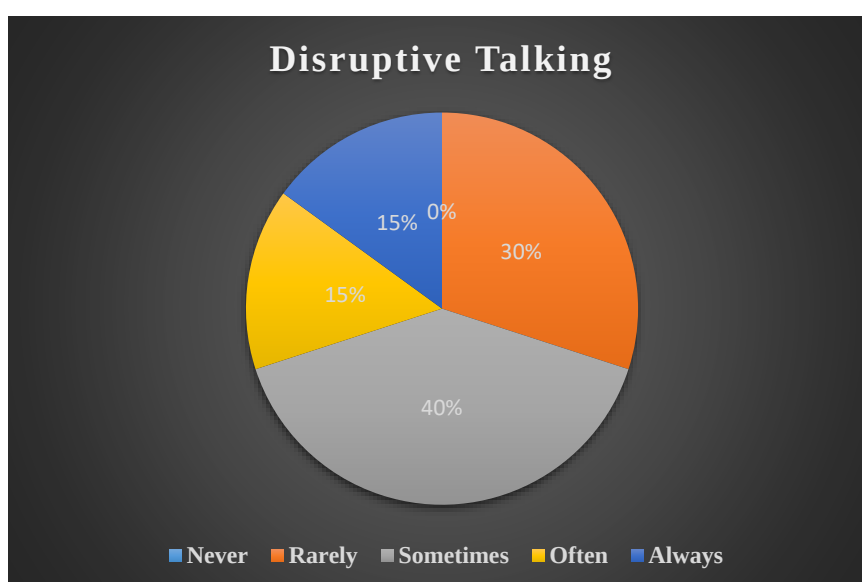
INTERPRETATION: In this study, 40% of participants were female whereas 60% of participants were male.

SECTION A- Students Behavioural Challenges



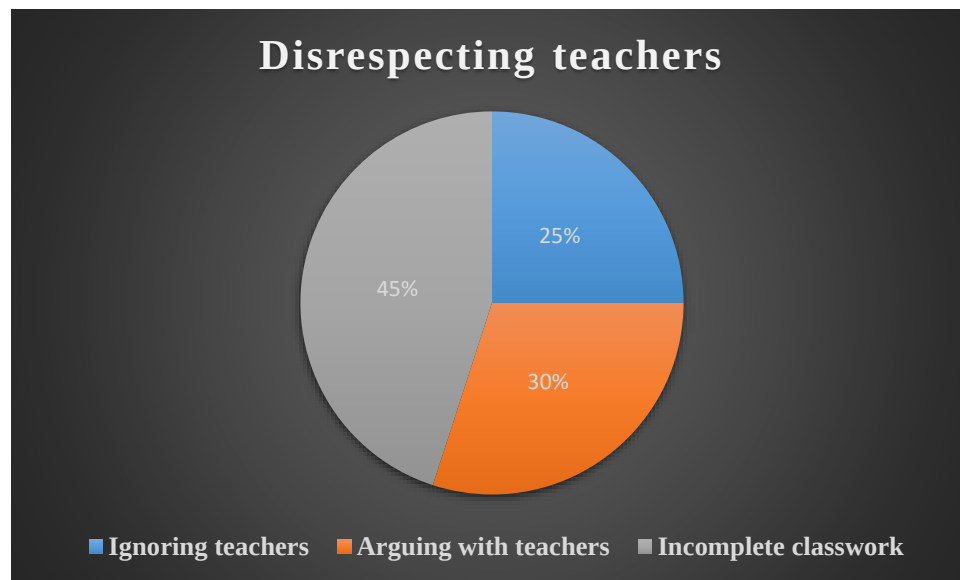
Graph 4: Lack of attention during class

INTERPRETATION: In this study, 61% of teachers reported that students sometimes lack attention during class, whereas 18 % of teachers reported that students often lack attention during class.



Graph 5: Disruptive talking

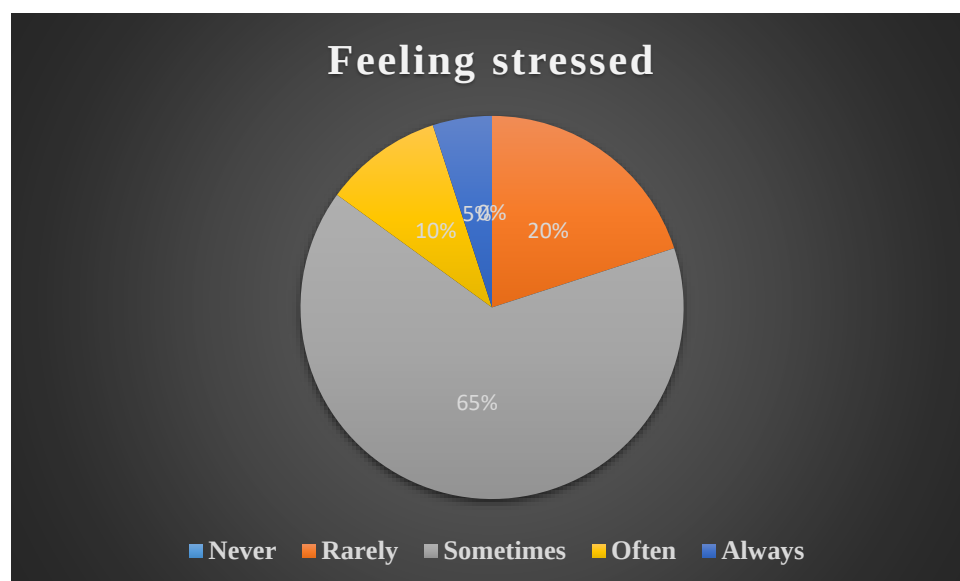
INTERPRETATION: In this study, 40% of teachers reported disruptive talking during class, whereas 15 % of teachers reported disruptive talking during class.



Graph 6: Disrespecting teachers

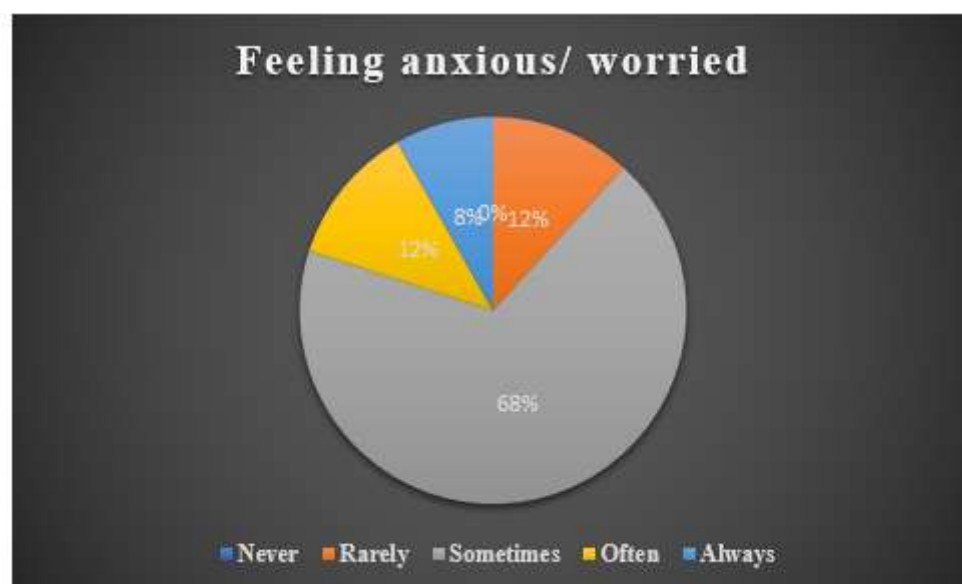
INTERPRETATION: In this study, 45% of teachers reported disrespecting teachers during class due to incomplete classwork, whereas 30% of teachers reported disrespecting teachers during class due to arguing with teachers, 25% of teachers reported disrespecting teachers during class due to ignoring teachers.

SECTION B- Teachers Mental Health Challenges



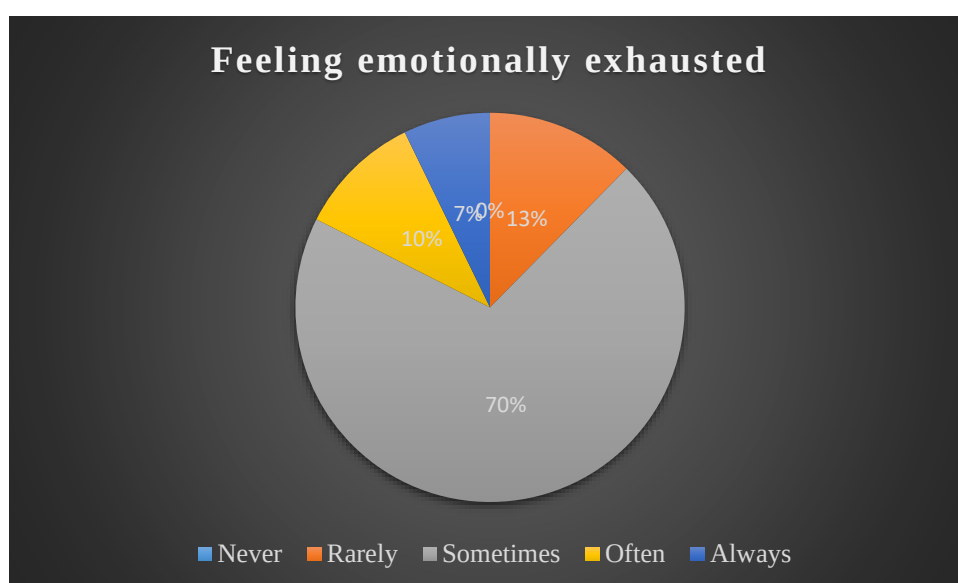
Graph 7: Feeling stressed

INTERPRETATION: In this study, 65% of teachers reported stressed sometimes , whereas 20% of teachers faced stressed rarely.



Graph 8: Feeling anxious/worried

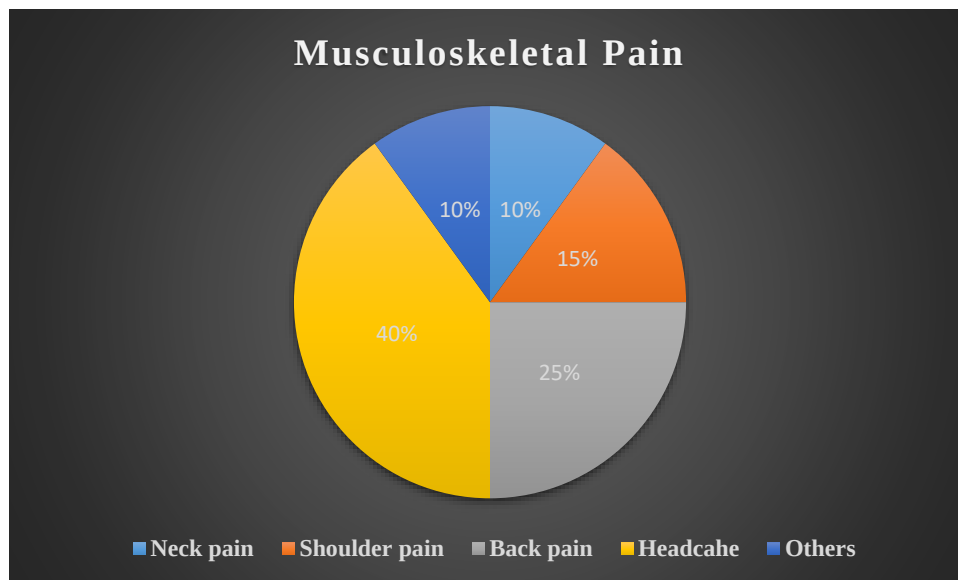
INTERPRETATION: In this study, 68% of teachers reported anxious sometimes, whereas 12% of teachers reported anxious oftenly.



Graph 9: Feeling emotionally exhausted

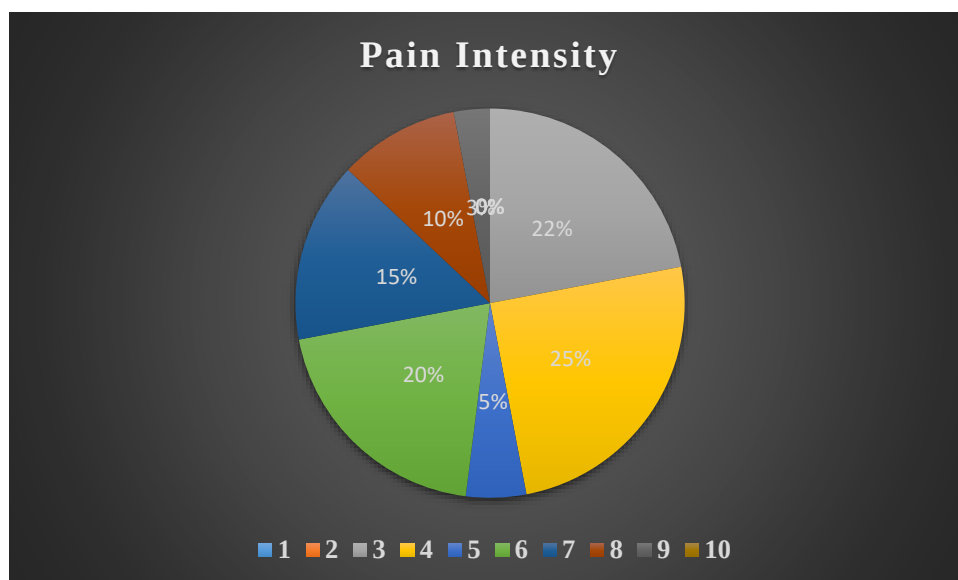
INTERPRETATION: In this study, 70% of teachers reported emotionally exhausted sometimes, whereas 10% of teachers reported emotionally exhausted oftenly.

SECTION C- Teachers Physical Health Challenges (Musculoskeletal & fatigue)



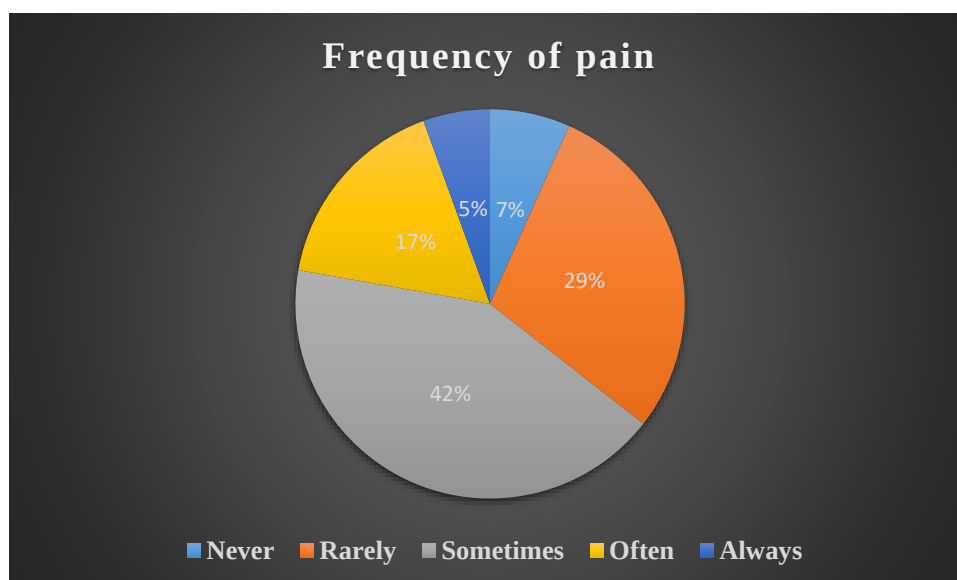
Graph 10: Musculoskeletal pain

INTERPRETATION: In this study, 40% of teachers reported headache, whereas 25% of teachers reported back pain, 15% of teachers reported shoulder pain, 10 % of teachers reported neck pain.



Graph 11: Pain Intensity

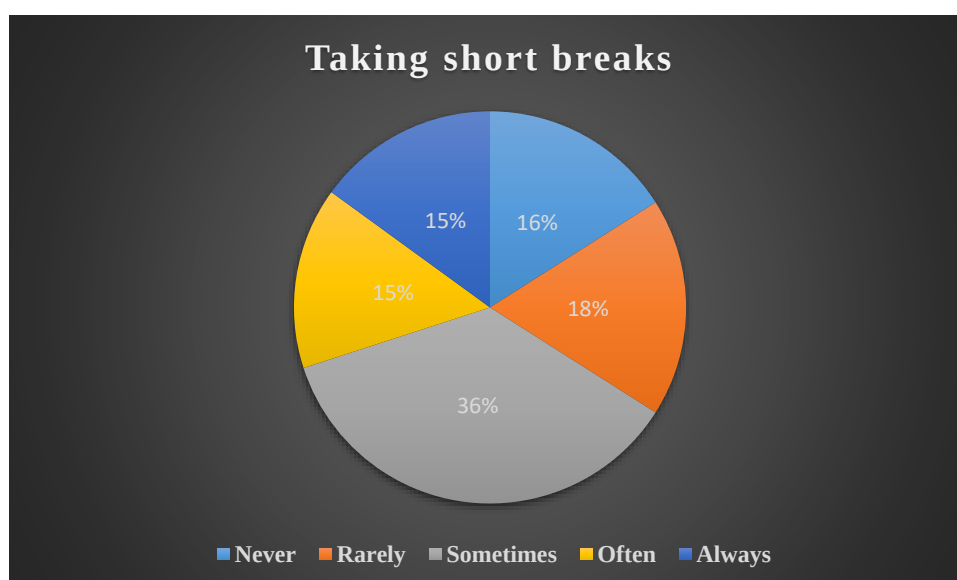
INTERPRETATION: In this study, 20% of teachers reported pain intensity 6/10 whereas 22% of teachers reported pain intensity 9/10



Graph 12: Frequency of Pain

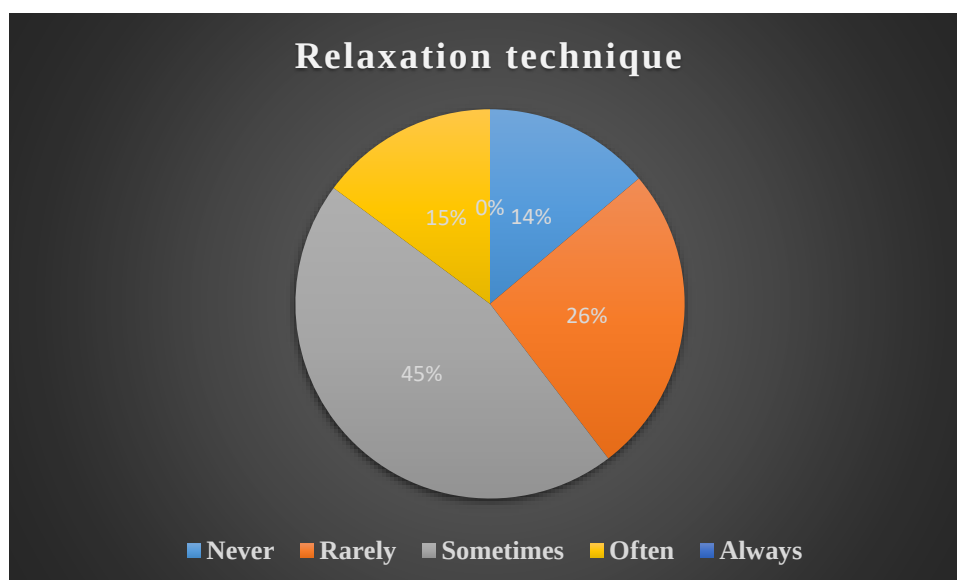
INTERPRETATION: In this study, 42% of teachers reported frequency of pain sometimes, whereas 29 % of teachers reported frequency of pain rarely.

SECTION D- Teachers Coping Strategies



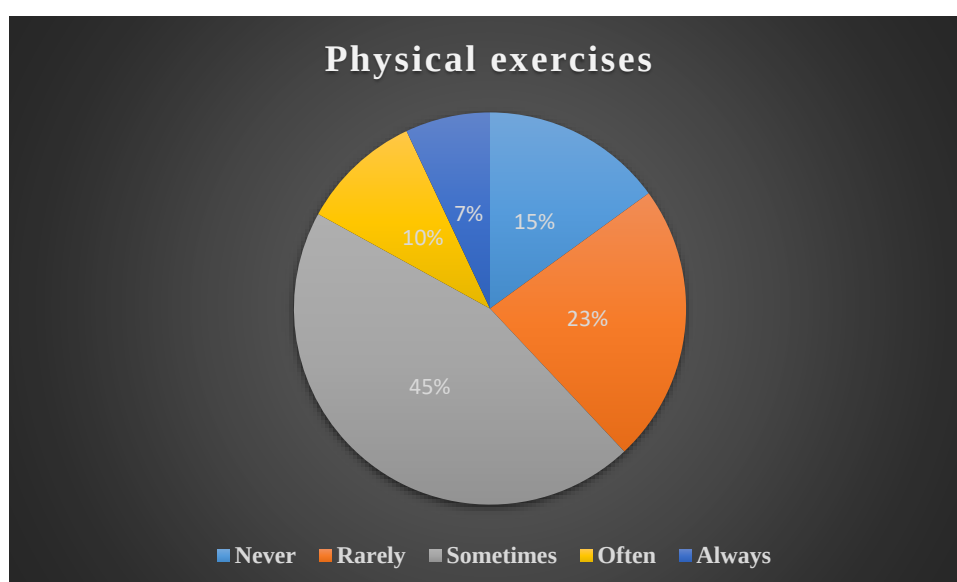
Graph 13: Taking short breaks

INTERPRETATION: In this study, 36% of teachers take short breaks sometimes, whereas 18% of teachers take short breaks rarely.



Graph 14: Relaxation Technique

INTERPRETATION: In this study, 45% of teachers practiced relaxation technique sometimes, whereas 15 % of teachers practiced relaxation technique oftenly.



Graph 15: Physical exercises

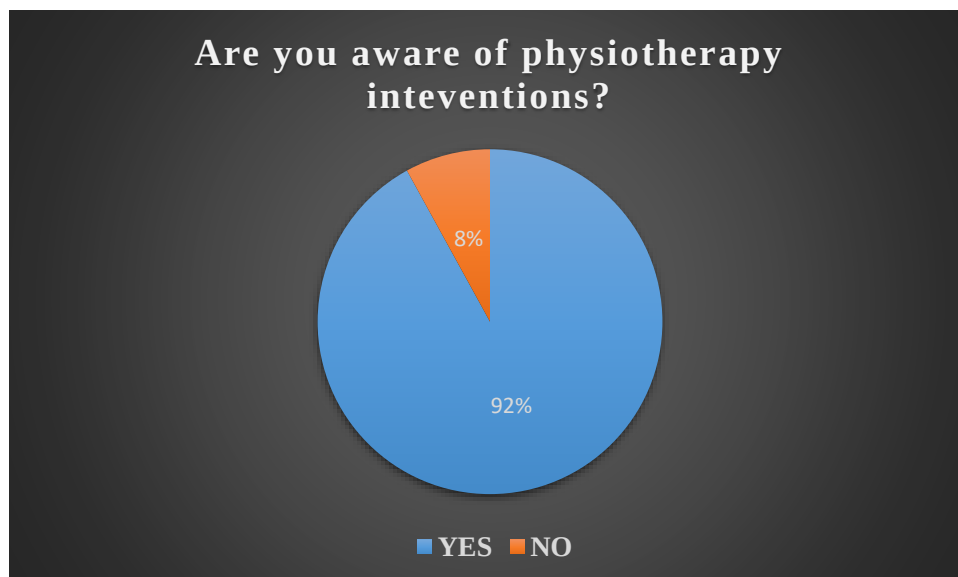
INTERPRETATION: In this study, 45% of teachers practiced physical exercises sometimes, whereas 23 % of teachers practiced physical exercises rarely.



Graph 16: Time management strategies

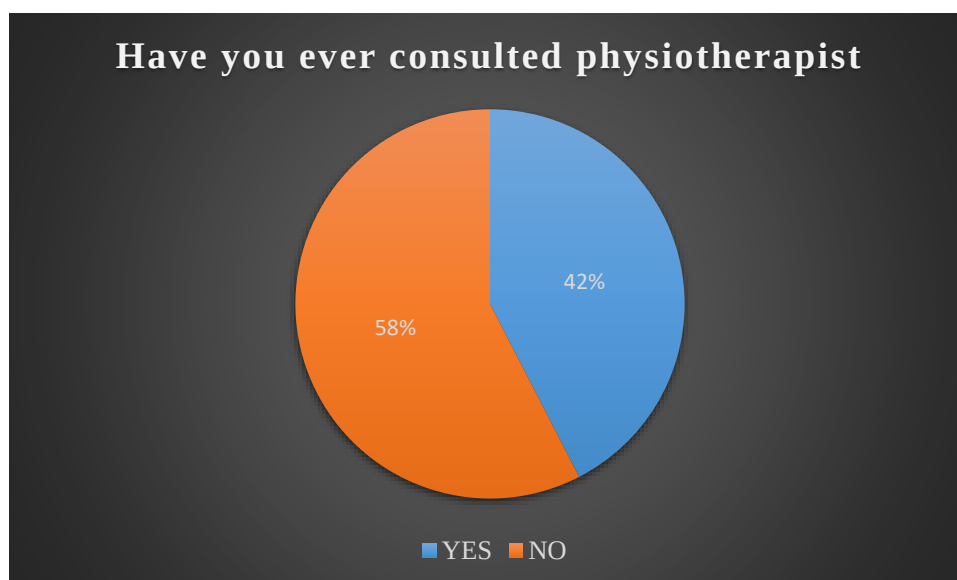
INTERPRETATION: In this study, 45% of teachers practiced time management strategies sometimes, whereas 10 % of teachers practiced time management strategies oftenly.

SECTION D- Physiotherapy Awareness and Practices



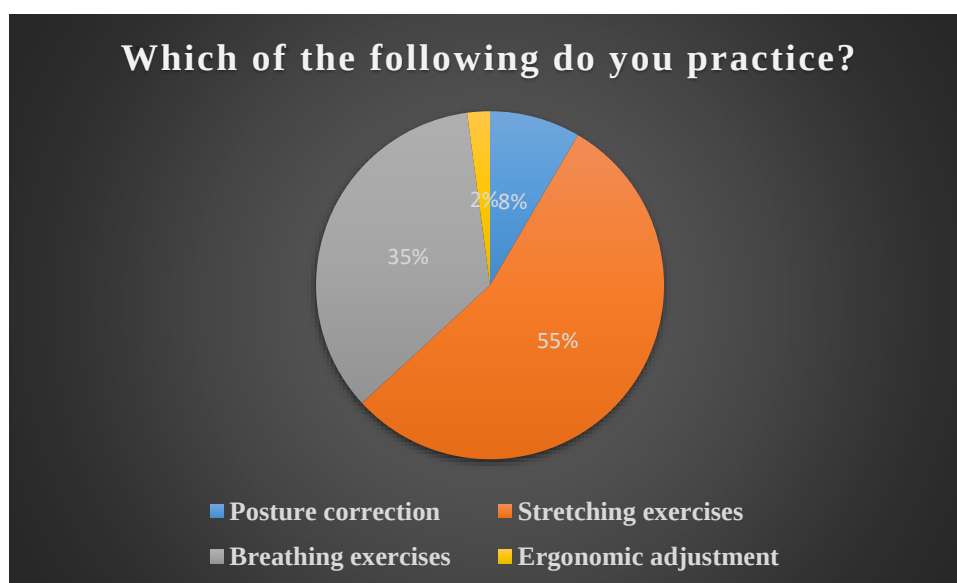
Graph 17: Awareness of Physiotherapy Interventions

INTERPRETATION: In this study, 92% of teachers are aware of physiotherapy interventions.



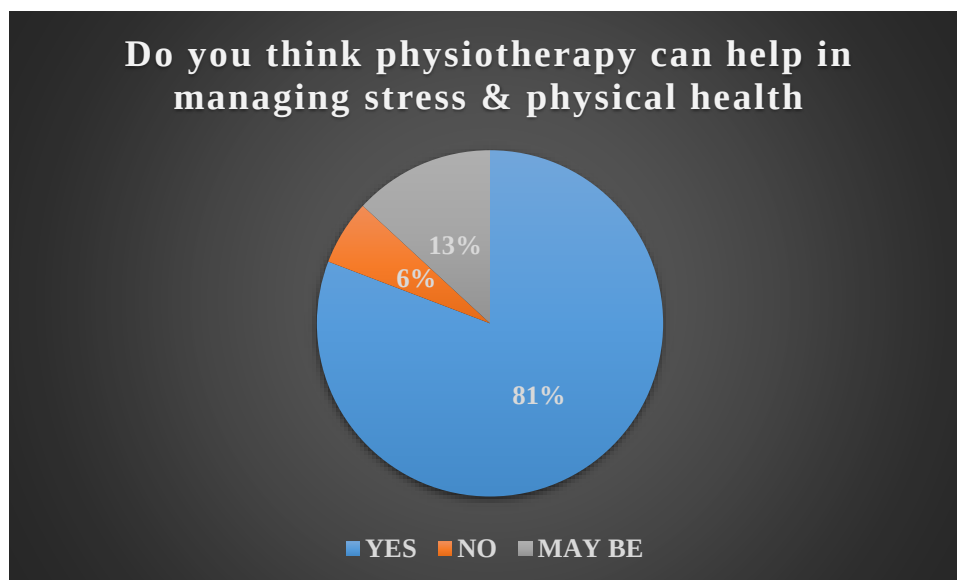
Graph 18: Consultation of Physiotherapist

INTERPRETATION: In this study, 58% of teachers consult physiotherapist.



Graph 19: Physiotherapy - practice

INTERPRETATION: In this study, 55% of teachers practice stretching exercises, 35% of teachers practice breathing exercise.



Graph 20: Physiotherapy – (Managing stress & physical health)

INTERPRETATION: In this study, 81% of teachers reported that physiotherapy can help in managing stress & physical health.

DISCUSSION

The aim of this study was to assess the impact of classroom behavioural challenges on teachers' physical and mental health with emphasis on physiotherapy-based coping strategies. Although previous studies have already analysed the consequences of stress and burnout syndrome experienced by teachers, we have gone beyond the study of these negative effects to include factors that will allow us to predict the direction of improvement of teacher emotional health and thus contribute to the overall well-being of schools.^[1-3]

The results of this study broaden the understanding of classroom behavioural challenges such as lack of attention, disruptive talking and disrespecting teachers is significantly associated with increased levels of psychological distress, including stress, anxiety, and emotional exhaustion among teachers. These results are consistent with existing literature indicating that occupational stress in teaching is strongly influenced by classroom management difficulties.^[8-10]

Furthermore, the study identified that prolonged exposure to such stressors may predispose teachers to symptoms associated with conditions like anxiety disorders and burnout syndrome. Emotional exhaustion, in particular, emerged as a key outcome, indicating that teachers facing persistent classroom challenges may experience feeling stressed, anxious and exhausted. These

findings reinforce the need for early identification and intervention to prevent long-term psychological consequences.

This study highlights from physical health perspective, teachers reported musculoskeletal discomfort, particularly shoulder pain, back pain, headache. This can be attributed to prolonged standing, poor posture during classroom management, and increased muscle tension resulting from stress. The interplay between psychological stress and physical symptoms highlights the biopsychosocial nature of teachers' health issues, emphasizing the need for multidisciplinary interventions.^[12-14]

This study highlights a number of stress coping strategies that teachers use when faced with challenges, such as taking short breaks, relaxation techniques, physical exercises and time management strategies. Previous study also identified that teachers often adopt coping mechanisms, such as avoidance or emotional suppression, which may further exacerbate both mental and physical health problems. In contrast, those who engaged in positive coping strategies—such as structured physical activity, relaxation techniques, and ergonomic adjustments—reported comparatively better health outcomes.^[15,16] These findings reinforce the need for early identification and intervention to prevent long-term psychological consequences.

A key contribution of this study lies in its emphasis on physiotherapy as an integral component of coping and intervention strategies. Physiotherapy-based approaches, including posture correction, stretching exercises, strengthening programs, and relaxation techniques such as deep breathing and progressive muscle relaxation, were found to be effective in mitigating both physical and psychological symptoms. Participants who regularly practiced these interventions showed significant reductions in pain intensity and stress levels indicating clinically meaningful improvements.

The effectiveness of physiotherapy interventions can be explained through both mechanical and neurophysiological mechanisms. Postural correction and ergonomic training help in reducing mechanical strain on the musculoskeletal system, thereby alleviating pain. Simultaneously, relaxation techniques activate the parasympathetic nervous system, reducing stress responses and promoting overall well-being. This dual benefit makes physiotherapy a valuable and holistic approach to managing occupational health issues in teachers. Moreover, the findings highlight the importance of integrating workplace wellness programs within educational institutions. Regular physiotherapy sessions, ergonomic assessments, and stress

management workshops can play a significant role in improving teachers' health and productivity. Preventive strategies, such as early screening for musculoskeletal disorders and awareness programs on posture and movement, can further reduce the risk of chronic conditions.

Teachers' well-being influences teaching effectiveness and students' mental well-being, safety, and academic performance^[8-10] emotional health support and support for teachers is a valuable way to both improve the well-being of the teachers themselves and contribute to better learning conditions for students. Supporting teachers' well-being and fostering teacher student relationships is an important part of creating a healthy school climate^[21] Therefore, providing psychological support to teachers is an untapped opportunity to improve educational practices.

The present study provides strong evidence that classroom behavioural challenges have a significant and multifaceted impact on teachers' physical and mental health. The statistically significant associations between behavioural challenges, psychological distress, and musculoskeletal discomfort highlight the urgent need for comprehensive intervention strategies. Physiotherapy-based coping strategies emerge as effective and practical solutions, offering both preventive and therapeutic benefits. Integrating such approaches into occupational health frameworks and educational policies can enhance teachers' well-being, improve job satisfaction, and ultimately contribute to better educational outcomes.

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