

**PREVALENCE OF BURNOUT AND THE FACTORS ASSOCIATED
WITH IT AMONG SECONDARY SCHOOL TEACHERS IN
KOTTAYAM DISTRICT, KERALA**

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**Dissertation submitted in partial fulfilment of the requirements for the award
of the degree of Master of Public Health**



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DECLARATION

I hereby declare that this dissertation titled **“Prevalence of Burnout and the Factors Associated with it among Secondary School Teachers in Kottayam District, Kerala”** is a Bonafide record of my original research. It has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published and unpublished work of others has been duly acknowledged in the text.



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CERTIFICATE

Certified that the dissertation titled **“Prevalence of Burnout and the Factors Associated with it among Secondary School Teachers in Kottayam District, Kerala”** is a record of the research work undertaken by Dr Ritwik, in partial fulfilment of the requirements for the award of the degree of Master of Public Health under my guidance and supervision.



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TABLE OF CONTENTS

LIST OF TABLES.....	ix
LIST OF FIGURES	xi
GLOSSARY OF ABBREVIATIONS	xii
ABSTRACT	xiii
CHAPTER 1	1
INTRODUCTION AND LITERATURE REVIEW	1
1.1 Introduction.....	1
1.2 Review of literature.....	5
1.2.1 Definitions of Stress, Anxiety, and Depression.....	6
1.2.2 Burnout	8
1.2.2.1 Dimensions of Burnout according to Maslach.....	8
1.2.2.2 Causes of Burnout.....	10
1.2.2.3 Signs and Symptoms.....	11
1.2.2.4 Stages of Burnout.....	11
1.2.2.5 Consequences.....	12
1.2.3 Some of the available scales for the measurement of Burnout.....	14
1.2.4 Studies on translation and validation of the Oldenburg Burnout Inventory (OLBI)	15
1.2.5 Studies on burnout across different occupations.....	17
1.2.6 A systematic review of studies on burnout among teachers	22
1.3 Gaps in the Literature.....	25
1.4 Rationale	26
1.5 Objectives of the study.....	26
CHAPTER 2	28
METHODOLOGY	28
2.1 Part 1- Translation and validation of Oldenburg Burnout Inventory (OLBI) to Malayalam	28

2.1.1 Translation of OLBI English version to Malayalam.....	28
2.1.2 Backward translation of OLBI Malayalam version to English.....	28
2.1.3 Assessment of content validity through expert rating.....	28
2.1.4 Cognitive interview.....	32
2.1.5 Reliability Assessment of the Translated Scale	32
2.1.5.1 Test-retest reliability	32
2.1.5.2 Internal consistency	33
2.2 Part 2 – Cross-sectional survey.....	34
2.2.1 Study design.....	34
2.2.2 Study setting.....	34
2.2.3 Target population	34
2.2.4 Sample size estimation.....	34
2.2.5 Sample selection procedure	35
2.2.6 Inclusion and exclusion criteria	36
2.2.7 Study duration.....	37
2.2.8 Data collection process	37
2.2.9 Data Collection Tools.....	38
2.2.10 Data entry and storage	39
2.2.11 Operational definition of variables	39
2.2.12 Data analysis	41
2.2.13 Ethical consideration.....	42
CHAPTER 3.....	43
RESULT	43
3.1 Part 1- Translation and validation of Oldenburg Burnout Inventory (OLBI) to Malayalam	43
3.1.1 Translation.....	43
3.1.2 Back translation	43

3.1.3 Content validity assessment	44
3.1.4 Cognitive Interviews	46
3.1.5 Reliability assessment	47
3.1.5.1 Test-retest reliability	47
3.1.5.2 Internal consistency reliability	51
3.2 Part 2 - Cross-Sectional Survey	52
3.2.1 Background details of the study participants	53
3.2.2 Teachers' Satisfaction with their students' performances and working environment	56
3.2.3 Lifestyle and general health-related characteristics of teachers	59
3.2.4 Details of burnout, stress, anxiety and depression among teachers	62
3.2.5 Work stress and coping strategies among teachers	65
3.2.6 Factors associated with Burnout - Results from the Bivariate Analysis	66
3.2.7 Burnout and associated factors - Results from the multivariable logistic regression analysis.....	74
3.2.8 Factors Associated with the Exhaustion and Disengagement - Results from the Bivariate and Multivariate Analysis.....	78
CHAPTER 4.....	85
DISCUSSION AND CONCLUSION.....	85
4.1 Translation and validation of the Oldenburg Burnout Inventory in Malayalam.....	86
4.2 Characteristics of the teachers who participated in the survey	89
4.3 Teachers' satisfaction with the class performance and their working environment.....	89
4.4 Level of Burnout Among Teachers	90
4.5 Factors associated with burnout and its dimensions	92
4.6 Coping strategies for managing stress among teachers	96
4.7 Strengths and limitations of the study.....	97
4.8 Conclusion and Recommendations.....	99
BIBLIOGRAPHY	101
ANNEXURES.....	109

ANNEXURE 1: Summary of studies on burnout among teachers	109
ANNEXURE 2: Participant information sheet, Consent form, and Template for content validity assessment.....	114
ANNEXURE 3: Participant information sheet, Consent form, and Template for Cognitive debriefing (English)	118
ANNEXURE 4: Participant information sheet, Consent form, and Template for Cognitive debriefing (Malayalam)	122
ANNEXURE 5: Consent form for Test-retest reliability(English).....	126
ANNEXURE 6: Consent form for Test-retest reliability(Malayalam)	127
ANNEXURE 7: Oldenburg Burnout Inventory – item details during the Translation and Validation process	128
ANNEXURE 8: Final Scale-Oldenburg Burnout Inventory Malayalam.....	131
ANNEXURE 9: Participant information sheet, Consent form, and Tool for Cross-sectional survey (English).....	133
ANNEXURE 10: Participant information sheet, Consent form, and Tool for Cross-sectional survey (Malayalam)	148
ANNEXURE 11: Independent Predictors of Burnout: Results from Linear Regression Analysis.....	166
ANNEXURE 12: Know the Signs of Burnout - Seek Help Early	170
ANNEXURE 13: Permission obtained to Translate & Validate OLBI from the Author.	171
ANNEXURE 14: Permission obtained from the Director of General Education, Kerala	172
ANNEXURE 15: IEC approval	173
ANNEXURE 16: Plagiarism report.....	175

LIST OF TABLES

1.1 Scales for measuring burnout.....	14
3.1 List of experts who participated in content validity assessment.....	44
3.2 The relevance rating by six experts on the translated items of OLBI.....	45
3.3 Pattern of answers provided by teachers during the test and retest	48
3.4 Results of the Wilcoxon signed-rank test assessing the differences between test and retest responses for each item	49
3.5 Results of the Wilcoxon signed-rank test for the test-retest scores of the overall scale and its dimensions.....	49
3.6 Intraclass Correlation Coefficient (ICC) Values for the Test-Retest of Each Item, overall scale, and its dimensions.....	50
3.7 Internal consistency of the items in the overall scale (OLBI)	51
3.8 Internal consistency of the items in the exhaustion and disengagement dimensions ..	51
3.9 Socio-demographic characteristics of teachers	54
3.10 Occupation-related characteristics of teachers.....	55
3.11 Distribution of teachers reported duties other than teaching	56
3.12 Teachers' Satisfaction with their respective classes they teach.....	56
3.13 Students' behaviour towards teachers	57
3.14 Teachers' Satisfaction with the Working Environment	58
3.15 Teachers' Perception of Staff Shortage and Leave Vacancies	58
3.16a Ever use of tobacco and alcohol among teachers.....	59
3.16b Physical activities reported by the teachers	59
3.16c Physical activity status of teachers.....	60
3.17 General health characteristics of teachers.....	61
3.18 Distribution of Burnout Among Teachers	63

3.19 Teachers with moderate to high levels of burnout – Proportion and its 95% Confidence Interval	64
3.20 Stress, Anxiety, and Depression among teachers.....	64
3.21 Distribution of work stress, coping strategies, work-life balance, and counselling status among teachers.....	65
3.22 Association of Burnout with Socio-demographic and Occupation-related Characteristics of Teachers	66
3.23 Teacher's satisfaction with the class & students' behaviour.....	68
3.24 Teacher's Satisfaction with the Working Environment.....	69
3.25 Association of Burnout with Physical activity status of teachers	71
3.26 Association of Burnout with General health characteristics of teachers.....	72
3.27 Association of Burnout with Stress, Anxiety, depression, Job Stress, and work-life balance	73
3.28a Association of independent variables with burnout(Model 1)	76
3.28b Association of independent variables with burnout(Model 2).....	77
3.29 Results of the bivariate analysis of factors associated with the Exhaustion	79
3.30 Factors associated with the Exhaustion –Results from binary Logistic regression analysis.....	80
3.31 Results of the bivariate analysis of factors associated with the Disengagement	82
3.32 Factors associated with the Disengagement –Results from binary Logistic regression analysis.....	83

LIST OF FIGURES

1.1 An overview of the review of literature	5
1.2 Identification and selection of studies for the systematic review	23
1.3 Forest Plot of Prevalence Estimates and Pooled Proportion in a Random-Effects Meta-Analysis.....	24
2.1 Overview of translation and validation of the Oldenburg Burnout Inventory (OLBI) 29	
2.2 The distribution of high schools in the Kottayam district and the sample selection process.....	36
3.1 Box plot of the total burnout scores across test and retest.....	47
3.2 Age distribution of the study participants	53
3.3 Distribution of total burnout scores among teachers	62
3.4 Distribution of exhaustion scores among teachers.....	62
3.5 Distribution of disengagement Scores Among Teachers	62

GLOSSARY OF ABBREVIATIONS

AOR – Adjusted Odds Ratio	MDD – Major Depressive Disorder
CBI – Copenhagen Burnout Inventory	NSS – National Service Scheme
CFA – Confirmatory Factor Analysis	ODK – Open Data Kit
COR – Crude Odds Ratio	OLBI – Oldenburg Burnout Inventory
95% CI – 95 % Confidence Interval	OR – Odds Ratio
DP – Depersonalization	PA – Personal Accomplishment
EE – Emotional Exhaustion	PSS – Perceived Stress Scale
ICVI – Item Content Validity Index	R ² – Coefficient of Determination
ICC – Intraclass Correlation Coefficient	SCVI – Scale Content Validity Index
IEC – Institutional Ethics Committee	SCVI/Ave – Scale Content Validity Index by Average method
IT – Information Technology	SPSS – Statistical Package for the Social Sciences
LMIC – Low and Middle-Income Countries	WHO – World Health Organization
MBI – Maslach Burnout Inventory	

ABSTRACT

Background: Teachers face high-stress levels due to the demanding nature of their work, placing them at increased risk of burnout, adversely impacting their productivity and well-being. This study aimed to estimate the prevalence and associated factors of burnout among secondary school teachers in the Kottayam district, Kerala, using a cross-sectional survey.

Methods: The Oldenburg Burnout Inventory (OLBI), a widely used tool for measuring burnout, was translated and validated in Malayalam after obtaining permission from the original author. The process followed standard guidelines, including translation, back-translation, content validation, and reliability testing. A multistage cluster sampling strategy was used to select participants from government, aided and unaided schools in the district. Data were collected using a structured, self-administered questionnaire that captured sociodemographic, occupational, health, and psychosocial-related variables. Data analysis was done using SPSS version 27, where descriptive statistics were used to summarise the data and logistic regression to identify factors associated with burnout and its dimensions.

Results: The Malayalam version of the OLBI demonstrated good content validity and reliability with a Cronbach's alpha value of 0.821. Among 255 participants, 66 per cent (95% CI: 60-71%) reported moderate to high burnout(score > 35). Key predictors of burnout were a low level of satisfaction with the class's performance (AOR 3.83, 95% CI: 1.92–7.66) and having moderate to high stress levels (AOR 5.06, 95% CI: 2.69–9.53) compared to their counterparts. Self-rated health status was also significantly associated with burnout (AOR 2.84, 95% CI: 1.42–5.7 for average health and AOR 6.01, 95% CI: 1.44–25.15 for poor health as compared with good health status).

Conclusion: The Malayalam version of the Oldenburg Burnout Inventory was shown to be a valid and reliable tool to measure burnout among school teachers in Kerala. The study showed that a significant proportion of teachers experience moderate to high burnout. The predictors identified in the study highlight the need for efforts that support teachers' well-being through stress management, health promotion, and the creation of a better working environment to ensure teachers remain healthy, motivated, and capable of providing quality education.

CHAPTER 1

INTRODUCTION AND LITERATURE REVIEW

1.1 Introduction

According to the World Health Organization (WHO), health is “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (*WHO constitution*, 1948), and mental health is defined as “a state of well-being in which the individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community”(World Health Organization, 2022a).

“In 2019, 970 million people globally were living with mental health disorders, where anxiety and depression were more common”. Mental health disorders can cause problems in every aspect of our lives and lead to a poor quality of life. It affects both our personal and professional lives. Globally, out of the total years people live with disabilities due to any health conditions, one-sixth of those years lived are due to disorders related to mental health, and the economic consequences are enormous, as the productivity losses are much higher compared to the direct costs of care(World Health Organization, 2022b).

Mental health disorders increase the risk of other diseases and injuries. Worldwide, on average, governments allocate just 2.8 per cent of their health budget for mental health-related services. Whereas, the situation is worse in low-income countries where the spending on mental health services is lower (0.5 per cent of their health budget) as compared to high-income countries (5.1 per cent of their health budget), which highlights a significant gap in the funding for mental health across the globe(Pan American Health Organization, 2024).

As per the Global Burden of Disease (GBD) 2021 estimates, mental health disorders accounted for 5.38 per cent of the global disease burden, measured in Disability-Adjusted Life Years (DALY), and the burden was increasing annually by 1.43 per cent. In India, mental health disorders contributed to 5.25 per cent of the total disease burden, with a higher annual growth rate of 2.08 per cent, and in Kerala, the burden was 6.26 per cent of the total disease burden, with an annual growth rate of 0.32 per cent only (Institute for Health Metrics and Evaluation, 2021).

Based on the National Mental Health Survey 2015-16, “The lifetime occurrence of any mental morbidity in Kerala was 14.14 per cent. One in eight individuals in Kerala experiences mental health issues requiring intervention, such as treatment, counselling or both. Common mental health disorders account for 11 per cent of all psychiatric cases, with substance abuse (higher for tobacco users than alcohol) being the most common, followed by mood disorders, particularly depressive disorders, and neurotic and stress-related conditions, especially phobic anxiety disorder and agoraphobia.” (Jyrwa et al., 2023).

Laws and regulations on mental health globally are aimed at protecting the rights of people who are mentally ill and ensuring their access to quality services that include treatment and care. Legislatively, laws differ across countries but share common goals, for example, reducing stigma, preventing discrimination, and enabling mental health services to respect human rights. The World Health Organisation emphasised that such laws are crucial in addressing these concerns. The **Mental Health Care Act 2017** is a landmark law in India that provides accessible and affordable mental health services to citizens grounded in human rights. The act also focuses on decriminalising suicide, protecting the rights and dignity of people with mental health issues, prohibiting discrimination, and improving the quality of the services provided (Government of India, 2017).

Mental health and public health intersect in workplace wellness. Common mental health disorders like stress, burnout, anxiety, and depression will reduce a person's productivity. Decreased productivity will limit the ability to achieve higher positions and good relationships at the workplace, ultimately affecting job satisfaction, which will lead to increased absenteeism at work and eventually loss of the job(Tulane University, 2021). Chronic and long-standing mental health issues lead to many somatic complaints and other diseases like heart disease, Diabetes, etc.

There are certain laws and regulations aimed at protecting workers and focusing on workplace wellness and safety. One of the important laws that has become an inspiration to various other countries, including India, is the Occupational Safety and Health Act of 1970 in the United States, whose primary goal is to ensure safe and healthy working conditions by developing and implementing regulatory standards. The **Occupational Safety, Health and Working Conditions Code, 2020 (OSH Code)** is the Indian counterpart, which consolidates 13 labour laws to ensure safe, healthy, and fair working conditions across industries in India.

Almost 60 per cent of the world's population is at work. Burnout is as important as stress when we speak about workplace wellness. Burnout happens when emotional, physical, and mental exhaustion takes over due to prolonged or intense stress, often linked to the workplace. This issue is especially prevalent in fields like teaching, healthcare, and customer service, where the workload exceeds available resources and support. According to the Statista report based on the survey conducted by Szimiegera among global industries in 2019, employees in the hospitality industry face a higher risk of burnout, followed by those in manufacturing, healthcare, education, and social work(Statista, 2019).

A safe and healthy working environment is not only a fundamental right, but it also helps reduce workplace tension and conflicts, decrease staff turnover, and improve performance and productivity. Mental health issues like burnout may be associated with work conditions, workplace characteristics, or career development opportunities. An increased demand for the job, low level of control at work, job insecurity, poor organisational justice, bullying, and limited social support could be the factors that are associated with a higher risk of developing mental health issues. Although every sector has its psychosocial risks that concern all workers, some appear especially at risk due to the peculiar nature of their jobs and the characteristics of their workplace or the environment where they work (Harvey et al., 2017; World Health Organization, 2022c, 2022d).

Teaching is a highly demanding profession, and teachers handle numerous critical responsibilities that cannot be compromised as they significantly affect students and the overall educational system. The duties of a teacher are always subject to change in a highly evolving society and the change in the educational culture, and also depending on the setting (government or private) in which they work. Some of the key duties of teachers apart from teaching are lesson planning and curriculum delivery, student assessment and evaluations, communication with parents, classroom management, monitoring students and providing guidance to them. In addition, administrative duties, conducting surveys and campaigns, coordinating school events, organising school health programs, and also activities related to professional developments like training and workshops are part of their responsibilities.

Education develops a child's personality through interaction with their environment, with teachers being a crucial influence. So, Teachers' responsibilities extend beyond delivering knowledge; they nurture students' self-efficacy and competence, making their mental and physical health vital for societal development (Bhriyu, 2021). Factors such as increased

workloads, inadequate resources, administrative pressures, and the emotional demands of supporting students can contribute to the development of burnout among teachers. Thus, it is vital to address the burnout among teachers, and the present study focuses on identifying burnout and associated factors among school teachers.

1.2 Review of literature

This section includes the results of a literature search conducted through PubMed, Google Scholar, the World Health Organisation websites, Google Search, and other cited documents. An overview of the review of literature is provided in Figure 1.1.

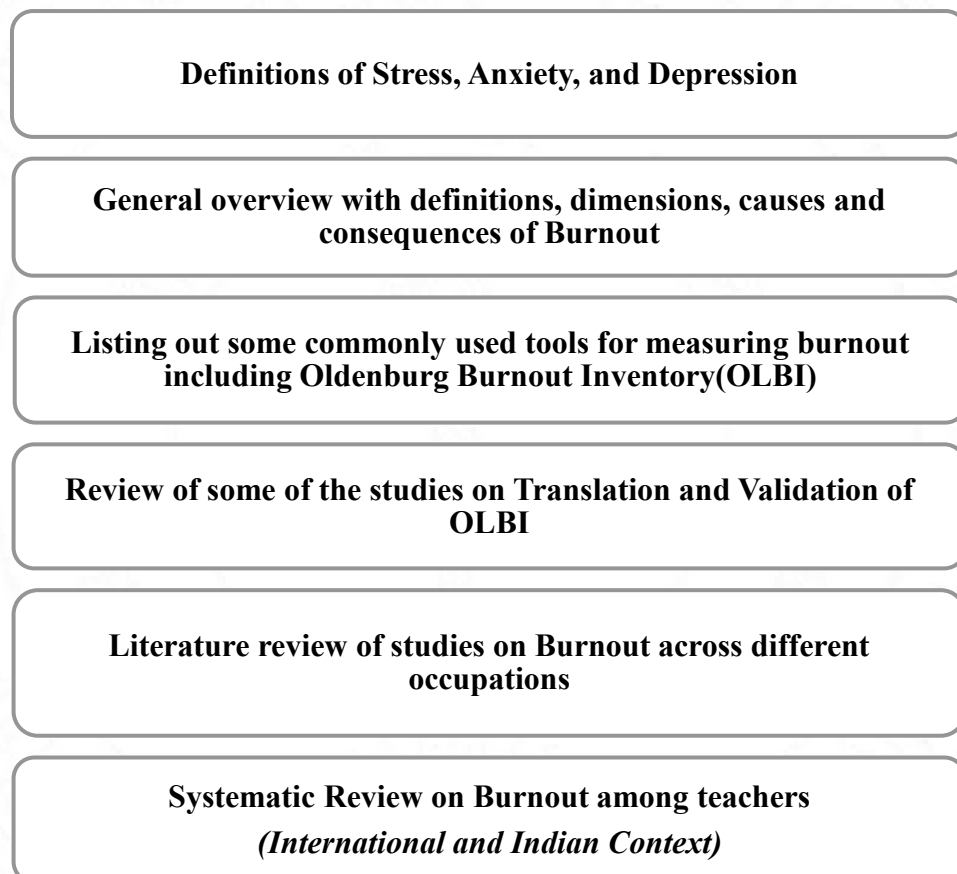


Figure 1.1. An overview of the review of literature

1.2.1 Definitions of Stress, Anxiety, and Depression

Stress

Stress is a multidimensional concept, and definitions vary as much as it does with context. The fact is that everyone experiences stress, and its outcomes depend on how well a person learns to deal with it. This affects every system of the body, disrupts the balance between the mind and the body, and eventually influences overall health in ways that impair life quality(American Psychological Association, 2018a).

According to the American Psychological Association, Stress is “a physiological or psychological response to internal and external stressors”(American Psychological Association, 2018a).

WHO defined stress as “a state of worry or mental tension caused by a difficult situation”(World Health Organization, 2023c).

WHO defined Occupational stress as “a pattern of reactions that occur when workers are presented with work demands not matched to their knowledge, skills, or abilities and which challenges their ability to cope”(World Health Organization, 2007).

According to Kyriakou, stress in teachers is defined as “the experience by a teacher of unpleasant negative emotions such as anger, frustration, anxiety, depression, and nervousness, resulting from some aspect of their work”(Kyriacou, 2001).

Anxiety

“An affective state marked by severe apprehension and somatic symptoms of tension in which an individual feels impending danger, catastrophe, or misfortune”(American Psychological Association, 2018b). The body frequently mobilises itself, ready to meet the perceived threat, and muscles go into spasms, along with an increase in breathing and heart

rate. Conceptually and physiologically, the term anxiety may be separated from fear, but they are often used interchangeably. Anxiety is a long-lasting feeling mainly focused on the events that happen in the future and which have uncertainty and are widely diffused in response to a non-specific threat. At the same time, appropriate fear is a short-acting, present-oriented response to an identifiable and specific threat, says the American Psychological Association(American Psychological Association, 2018b).

Anxiety is difficult to control, disrupts daily activities, and negatively affects a person's family, social, and work life. Anxiety disorder is the most common mental health disorder, which affected over 300 million people globally in 2019. More women are affected by anxiety disorders as compared to men(World Health Organization, 2023a).

Depression or Major Depressive Disorder(MDD)

“Depression is a form of common mental disorder with a depressed mood or loss of pleasure or interest in activities lasting a longer period”(World Health Organization, 2023b).

Depression is different from the natural ups and downs that come with feelings of sadness towards life. This causes serious symptoms that affect, change, and disrupt the way one feels, thinks, and handles daily activities like sleep, eating, and work. People with a history of abuse, severe losses, or other highly stressful experiences are more likely to have depression. Women are diagnosed with depression more often than men(National Institute of Mental Health, 2024; World Health Organization, 2023b).

Many studies describe that chronic stress can cause anxiety and depression in the long run. Chronic stress has a role in developing anxious depression. According to the definition from the Diagnostic and Statistical Manual of Mental Disorders (DSM), “Anxious depression is a MDD combined with an anxiety disorder”(Ross et al., 2017).

1.2.2 Burnout

According to the International Classification of Diseases, 11th Edition (ICD-11), Burnout is defined as “a syndrome conceptualised as resulting from chronic workplace stress that has not been successfully managed”(ICD-11 for Mortality and Morbidity Statistics, 2024).

It is mentioned that ‘Burnout refers specifically to phenomena in the occupational context’ and it shouldn’t be applied in any other context or aspect of life(ICD-11 for Mortality and Morbidity Statistics, 2024)

Historically, burnout was identified as a social problem in the early 1970s and is defined in many ways, but most of these were multifaceted definitions. Herbert Freudenberger, an American-German psychologist in the 1970s, first coined the concept of burnout, occupational Burnout, or Burnout syndrome. He defined it as “a progressive loss of idealism, energy, and purpose experienced by people in the helping professions as a result of the condition of the work”(Freudenberger, 1974).

Christina Maslach, an American social psychologist and professor, has done some extensive research on burnout and has defined burnout as “a prolonged response to chronic emotional and interpersonal stressors on the job, and it is defined by three dimensions: exhaustion, cynicism, and inefficiency”(Maslach et al., 2001). Her exploration of this topic led to the development of the Maslach Burnout Inventory (MBI), a widely used tool for assessing burnout.

1.2.2.1 Dimensions of Burnout according to Maslach

The three dimensions of burnout, according to Maslach, are:

- Emotional exhaustion
- Depersonalization or cynicism

- Inefficiency or low personal accomplishment

Emotional exhaustion

It is the most central quality and widely reported dimension of burnout. It represents the basic individual stress response dimension of burnout and is defined as the “feelings of being emotionally overextended and depleted of emotional and physical resources due to work demands”(Maslach et al., 2001).

Exhaustion is defined by Evangelia Demerouti as “a consequence of intensive physical, affective and cognitive strain, that is, as a long-term consequence of prolonged exposure to certain job demands,” where she included both physical and cognitive aspects in the definition in addition to the affective aspect defined by Maslach earlier(Demerouti et al., 2010).

Depersonalization or cynicism

In human service sectors, we can see a constant interaction between a service provider and a recipient. So, this dimension of burnout emphasises the interpersonal context of burnout, where a person feels detached from various aspects of the job. Literature mentions that distancing is a quick response to exhaustion, which often leads to depersonalization or cynicism across various occupations(Maslach et al., 2001).

Inefficiency or lack of accomplishment

It focuses on the self-evaluation context of burnout, where a person feels a lack of achievement or productivity. A person who is emotionally exhausted and detached might feel worthless. So this dimension of burnout usually happens in parallel with the other two(Maslach et al., 2001).

Some of the available scales and the different dimensions they define are described in Section 1.2.3.

1.2.2.2 Causes of Burnout

Burnout results from the interplay of multiple factors connected to the workplace. They are related to:

Job Characteristics

This includes workload, time constraints, role conflict, role ambiguity, poor social support, and limited feedback from superior officers (Maslach et al., 2001).

Occupational characteristics

Historically, burnout studies were focused on the human service and education sector, and one of the rising concerns was the emotional challenges of working intensively with other people, either in caregiving or teaching roles. Different occupation has their own demands, where the workers are exposed to various stressors that can lead to burnout. So, burnout studies have been carried out across different occupational sectors, for example, medical professionals, teachers, IT employees, and social services, and each of these occupations contributes differently to the above-mentioned dimensions of burnout(Maslach et al., 2001).

Organisational characteristics

This includes various aspects like the culture, leadership style, adaptability, and organisational structure, which align with the overall objective of the organisation. It is often shaped by sociocultural and economic demands(Maslach et al., 2001).

1.2.2.3 Signs and Symptoms

Burnout develops progressively over time, and people with burnout experience signs and symptoms concerning physical, emotional, and behavioural aspects. For example, physically, they have weakness, headaches, muscle pain, and sleep disturbances. Emotionally, they have self-doubt, loss of motivation, negativity, and helplessness, and Behaviourally, they have laziness, frustration, and isolation (Smith M.A. and Reid, 2018).

1.2.2.4 Stages of Burnout

There are five stages in the development of burnout, which happens slowly and gradually.



1. The honeymoon phase brings a sense of excitement, increased energy, enhanced creativity, and greater productivity. This happens at the start of a new job.
2. Stress onset is the next stage. If not managed properly can lead to the next stage. This stage has an early onset of manageable stress.
3. Chronic stress is the stage where a person experiences stress for a longer period with more marked symptoms.
4. The burnout stage is where a person experiences the above-said signs and symptoms and develops as a result of poorly managed stress.
5. Habitual burnout is the final stage, which slowly lays the foundation for the development of Depression (Smith M.A. and Reid, 2018).

The stages indicate the direction of the development of burnout and eventually how it becomes one of the many causes for the development of depression. However, the literature emphasises that the association between burnout and depression is bidirectional as they share some similar symptoms and risk factors, although it remains unclear. A prospective

study on dentists in Finland highlighted that people with burnout were 2.6 times more likely to have depression (95% CI: 2.0–3.5). Similarly, those with depression were 2.2 times more likely to experience burnout (95% CI: 1.4–3.4)(Ahola and Hakanen, 2007). Another prospective study on Finnish dentists highlighted that burnout predicts depressive symptoms and not vice versa, which is in contrast with the previous article discussed(Hakanen and Schaufeli, 2012). Hence, the debate continues.

1.2.2.5 Consequences

The consequences of burnout become evident when it affects the individual and their work, thereby affecting the organisation and their personal life. Some of the major outcomes of burnout include:

Reduced job performance

Burnout reduces job performance and contributes to reduced job satisfaction, absenteeism or presenteeism, and a strong motive to leave the job, and it affects the organisation with actual turnover(Maslach et al., 2001). When an individual suffers from burnout, they are likely to make errors and become less innovative, which will significantly impact their productivity, and later, this can have a serious negative impact on the whole organisation, as the overall productivity and service quality will be compromised(American Psychological Association, 2023).

Health implications

Poorly managed burnout can cause a wide range of chronic diseases concerning both physical and mental spheres. The literature emphasises that burnout is associated with cardiovascular diseases (hypertension, stroke, etc.), musculoskeletal disorders (neck and back pain), gastrointestinal disorders, and diabetes. A study done by Honkonen et al. in the

general population of Finland found an association between burnout with cardiovascular disorders among men and musculoskeletal disorders among women(Honkonen et al., 2006). There is evidence supporting the association linking burnout with various bodily mechanism that leads to ill health, including metabolic syndrome, dysregulation of the hypothalamic-pituitary-adrenal axis, sleep disturbances, systemic inflammation, impaired immunity functions, blood coagulation, and fibrinolysis(Melamed et al., 2006).

A systematic review by Salvagioni et al. on various consequences of burnout has shown that burnout is a significant predictor for the development of hypercholesterolemia, diabetes, coronary heart disease, hospitalization due to cardiovascular disorders, musculoskeletal pain, long-lasting fatigue, headaches, gastrointestinal issues, respiratory problems, severe injuries and mortality below the age of 45 years(Jodas Salvagioni et al., 2017).

Burnout is identified as a predisposing factor for some infections, like the common cold, flu-like illness, and gastric complaints, with exhaustion being the strongest indicator for the development of these infections (Mohren et al., 2003).

The development of mental health issues as a result of burnout is more complex. "Burnout has been linked to the personality dimension of neuroticism and the psychiatric profile of job-related neurasthenia," and it also leads to anxiety, depression, and low self-esteem(Maslach et al., 2001). Zhang *et al.* conducted a study among teachers in China and found that burnout was associated with mental illness concerning many mental health conditions, such as depression, phobia, anxiety, hostility, and Obsessive-Compulsive Disorder(Zhang et al., 2014). A systematic review by Ryan et al. on physicians has found that burnout is associated with anxiety, depression, risk of suicide, and substance abuse,

which includes alcohol intake and other drugs; however also emphasises that the association of burnout and substance abuse is weak(Ryan et al., 2023).

1.2.3 Some of the available scales for the measurement of Burnout

Table 1.1 Scales for measuring burnout

Scale	Purpose	Sensitivity and Specificity	Reliability
Maslach Burnout Inventory (MBI) (Maslach and Jackson, 1981)	Designed to measure three components of Burnout Syndrome, which are: 1. Emotional Exhaustion (EE) 2. Depersonalization (DP) 3. Reduced Personal Accomplishment (PA)(Maslach et al., 1997)	Sensitivity is 91.9%, and specificity is 93.2% (Wickramasinghe et al., 2018).	Cronbach's alpha values for each component are EE – 0.90, DP – 0.79, and PA – 0.71, respectively(Maslach et al., 1997).
Burnout Assessment Tool (BAT) (Schaufeli et al., 2020)	It measures the risk of Burnout, which has four dimensions in its core scale (BAT-C) 1. Exhaustion 2. Mental distance 3. Cognitive impairment 4. Emotional impairment(Schaufeli et al., 2020)	Sensitivity (76.6 to 84.2%) and Specificity (69.4 to 82.8%)(Schaufeli et al., 2023).	Cronbach's alpha values for each component are 0.92 for Exhaustion, 0.91 for Mental distance, 0.92 for Cognitive impairment, and 0.90 for Emotional impairment, a total of 0.95 for BAT-C(Schaufeli et al., 2020).

Table 1.1 Scales for measuring burnout (Contd.)

Scale	Purpose	Sensitivity and Specificity	Reliability
Copenhagen Burnout Inventory (CBI) (Kristensen et al., 2005)	Developed to measure Burnout. It has three scales, which are 1. Personal Burnout 2. Work-related burnout 3. Client-related burnout(Kristensen et al., 2005).	Sensitivity is 91%, and Specificity is 85% (Aiello et al., 2022).	Cronbach's alpha of 0.85 to 0.87(Kristensen et al., 2005).
Oldenburg Burnout Inventory (OLBI) (Demerouti et al., 2010)	Developed to measure burnout. It has two dimensions, which are 1. Exhaustion 2. Disengagement(Demerouti et al., 2010)	Sensitivity is 83%, and specificity is 100% if the cut-off > 30 is used(Nguyen Huynh et al., 2021).	Cronbach's alpha of the whole scale is 0.81(Tipa et al., 2019).

1.2.4 Studies on translation and validation of the Oldenburg Burnout Inventory (OLBI)

The OLBI was developed by Evangelia Demerouti and Arnold Bakker in 1999. OLBI serves as an alternative to the MBI by assessing burnout through its two core dimensions: Exhaustion and Disengagement. OLBI has addressed one major shortcoming of MBI by including statements in both positive and negative directions. Exhaustion covers a broader definition compared to exhaustion defined by Maslach as physical, cognitive, and affective fatigue resulting from prolonged exposure to job demands. At the same time, disengagement refers to distancing from one's work, characterised by negative attitudes and a lack of commitment. OLBI has been validated across various cultural settings and professions. OLBI not only assesses burnout but also captures work engagement, with its dimensions of Vigor and Dedication serving as counterparts for Exhaustion and

Disengagement, showing its versatile nature. Some of the studies on the translation and validation of OLBI in other languages and cultural settings are discussed here (Demerouti et al., 2010).

A study by Mehadi et al. focused on translating and validating the OLBI into the Malay language among Malaysian medical students. The methodology of the study included translation and backtranslation of the tool with the help of language and content experts. There were two stages for validation, such as assessing the face validity and the construct validity. Face validity was done among 32 medical students who gave feedback on the clarity and comprehension of the scale. The overall face validity index exceeded 70 per cent, indicating that most of the items were clearly understood. Construct validity was assessed through goodness of fit, convergent validity, and discriminant validity, along with confirmatory factor analysis (CFA). The result showed a satisfactory goodness of fit after the removal of various items, along with satisfactory convergent and discriminant validity. The range of Cronbach's alpha was found to be 0.80, suggesting a good internal consistency. The study concluded that the final structure of the OLBI Malay version has only nine items, which is a reliable and valid tool for measuring burnout among medical students and can be used for future research in the Malaysian population (Mahadi et al., 2018).

Another study by Subburaj and Vijayadurai tried to translate and validate OLBI into Tamil with police constables and higher secondary school teachers. It was also focused on checking the psychometric properties of the translated tool. The procedure of translation was carried out with the help of language experts, which yielded a satisfactory level of match for each item. The internal consistency of the translated scale was high, suggesting a Cronbach's alpha of 0.93. The study concluded that the Tamil version of the OLBI retained

the same number of items as the original and could be used for diverse occupations in the Indian context who speak Tamil (Subburaj and Vijayadurai, 2016).

A study by Xu et al. aimed to determine the reliability and validity of the OLBI Chinese version among nurses. To a greater extent of the methodology followed the usual process of translation and validation. The OLBI-Chinese version in this study is similar to the original version, with two dimensions and 16 items confirmed by exploratory factor analysis. Cronbach's alpha for the overall scale was 0.905, with a split-half reliability of 0.883 at a significant level of $p < 0.01$. Further, the CFA suggests an acceptable model fit for this version. The correlation with OLBI and the Maslach Burnout Inventory (MBI) was quite high, with confirmed criterion validity at a correlation coefficient, $r = 0.873$. The study found that the Chinese OLBI is a reliable and valid measure of burnout when assessing burnout among nurses (Xu et al., 2021).

1.2.5 Studies on burnout across different occupations

The job characteristics and demands across different occupations vary, and each job contributes differently to the development of burnout. There are studies on the prevalence of burnout across many occupations in formal and informal sectors worldwide. Some of them are reviewed below:

Studies among healthcare professionals

A study done by Hu et al. in 2021 to determine the level of burnout among doctors ($n=1122$) and nurses ($n=1289$) working in Intensive Care Units (ICUs) in China using MBI found that the prevalence of high-level burnout if the cut-off score is ≥ 27 for EE, ≥ 13 for DP and ≤ 31 for PA respectively was 71.3 per cent among doctors and 68.3 per cent among nurses. The prevalence of burnout in its dimensions, such as emotional exhaustion, depersonalization, and low personal accomplishment in doctors was 61 per cent, 36 per

cent, and 20.1 per cent, respectively, and that of nurses was 56.7 per cent, 30.7 per cent, and 20.2 per cent, respectively. Burnout was significantly high among those who have a lesser frequency of everyday exercise, have co-morbidities, have more than 5 years of working, work night shifts, and are posted in general ICUs (Hu et al., 2021).

A study by Saravanabavan et al. on 204 healthcare professionals in India using MBI found that the prevalence of high burnout was 80 per cent (Cut-off score of ≥ 36). Job satisfaction was negatively associated with burnout. Stress was significantly related to the emotional exhaustion and depersonalization dimensions of burnout (Saravanabavan et al., 2019).

Study among physiotherapists

A Systematic Review and Meta-analysis done by Venturini et al. among physiotherapists (n = 5984) showed the prevalence of burnout was 8 per cent and 27 per cent for emotional exhaustion, 23 per cent for depersonalization, and 25 per cent for low personal accomplishment. The prevalence was high among physiotherapists worldwide, particularly in developing countries (Venturini et al., 2024).

Study among the army and police officers

A study among 2026 army officers working in the plateau region of China using MBI found that 43.2 per cent of participants experienced severe burnout, whereas 54.3 per cent experienced a medium level of burnout. Burnout was significantly lower among the younger age group as compared to those who were above 30 years old. Likewise, a high school diploma, more than 10 years of service, and less than 8 hours of working had increased the chance of experiencing burnout. Similarly, working hours, length of service, and household income were also associated with burnout. Moderate to severe burnout concerning emotional exhaustion, depersonalization, and low personal accomplishment is 97.5 per cent, 93.6 per cent, and 97.3 per cent (Shi et al., 2024).

Another study by Jothipala et al. among 1692 army officers of the Sri Lankan army using MBI found that the prevalence of burnout was 28 per cent (95% CI, 23.13-32.87) while taking a cut-off score of ≥ 28.5 to define burnout with a higher sensitivity and specificity, and one out of four army personnel will be suffering from burnout(Jothipala et al., 2023).

A study among 633 police officers in northeast Ethiopia using CBI found that the prevalence of burnout is 45.7 per cent. The study showed that women were more affected by burnout as compared to men. Similarly, burnout was associated with variables related to occupation, like organisational and operational job stress, job demand, and job satisfaction. Quality and quantity of sleep were also found to be significantly associated with burnout. (Bezie et al., 2024).

Another study conducted among 351 Mexican police officers using MBI revealed an overall burnout prevalence of 23.6 per cent if the cut-off score is > 26 for EE, > 9 for DP, and < 34 for PA, respectively, which is correlated with age, poor perceived self-health status, diet habits and poor sleeping habits. BMI was the most critical factor associated with burnout(Torres-Vences et al., 2022).

Study among telecommunication sales personnel

A study among 849 telecommunication sales managers in Lithuania looked to address several factors, like psychosocial, sociodemographic, and lifestyle factors, which are likely to contribute to the development of high-risk burnout, where burnout was assessed using MBI. As this study mainly focused on addressing the gap in the literature of exploring the associated factors of burnout in all its dimensions, they found that job demands and witnessing bullying were a strong predictor of emotional exhaustion. Job control, self-rated health, and physical inactivity, along with witnessing bullying, are the predictors of depersonalization. Job control, social support, physical inactivity, smoking, alcohol, and

BMI are predictors of low personal accomplishment among this occupational group(Malinauskas et al., 2022).

Study among pilots

A study by Demerouti et al. using OLBI examined whether the work-related elements, such as job demand and resources and their outcomes, such as happiness and job crafting, were related to burnout among 1147 European pilots. The results suggested that job demands were positively associated with exhaustion, and job resources had a favourable effect as they reduced disengagement and increased job crafting. Happiness was negatively associated with both dimensions of burnout, say, exhaustion and disengagement. The prevalence of high burnout among pilots was 40.02 per cent using a mean cut-off of ≥ 2.85 for exhaustion and ≥ 2.6 for disengagement. This study emphasises that work-related psychosocial factors contribute to the onset of burnout, which subsequently impacts overall work outcomes such as creativity, happiness, and satisfaction(Demerouti et al., 2019).

Studies among bank professionals

A study on burnout among banking professionals in Brazil using MBI found the total prevalence was 71.8 per cent, with 31.1 per cent having high-level burnout and 40.7 per cent having moderate-level burnout. Job-related factors such as low social support at work had 13 times higher odds of developing high burnout. Similarly, high strain during work had 6.3 times higher odds of developing high burnout. Other factors like high effort or low reward and over-commitment were also significantly related to burnout, regardless of gender. High-level burnout was associated with age younger than 40 years and not having work-related academic training. Burnout was also associated with income level. The study concluded by emphasising a strong association between occupational stress and burnout, regardless of gender, age, and other job characteristics(Valente et al., 2016).

Another study on banking professionals in Pakistan using MBI showed that the prevalence of burnout was more than 70 per cent. Job-related factors like workload, inadequate salary, technical problems at work, and prolonged working hours have higher mean scores of burnout and were identified as significant stressors. Other factors, like spending time with family and worrying about the job at home, also lead to the development of burnout. They pointed out that increasing stress could lead to a high level of burnout in all its dimensions. Symptoms that are significant of burnout were headache, extreme fatigue, back pain, and sleep disturbance (Khattak et al., 2014). In summary, both studies indicated a higher level of burnout among bank employees compared to those in other professions.

Study among lawyers

A study done among 180 lawyers in Taipei reported a higher mean score of occupational stress, which consists of factors like job control, psychological demands, and support from supervisors and coworkers. They used the CBI Chinese version to assess burnout. People with high psychological demands had twice the odds of developing high personal and work-related stress. Similarly, the effort-reward ratio indicated 4.5 times higher odds of developing personal burnout and 9.3 times higher odds of developing work-related burnout. Occupational stress was found to be associated with personal and work-related burnout after adjusting for confounders. They also found that litigious lawyers, as compared to non-litigious lawyers, have an increased risk of client-related burnout with an odds ratio of 2.57 (Tsai et al., 2009).

Study among people with different occupations

A study in Norway explored within and between gender differences in burnout across eight occupations. The sample comprises subjects from various fields of work, such as lawyers, physicians, nurses, teachers, church ministers, bus drivers, and people working in

advertising and IT, and they used OLBI to assess burnout. A representative sample consisting of 4965 workers across different occupations was selected, ensuring a male and female proportion in the total sample. They found that women were experiencing more exhaustion and lower disengagement than men. These differences vary across different jobs, especially in the disengagement dimension of burnout. However, the study concluded that women experience slightly higher burnout as compared to men and certain jobs, such as physicians, nurses, and teachers, who are more prone to burnout, which depends on various organisational factors like job demands and workload (Innstrand et al., 2011).

In summary, Burnout is a widespread issue affecting various professions globally, including healthcare workers, pilots, military personnel, and bank employees. The population affected by burnout varies depending on the specific demands and stressors which is inherent in each occupation. While previous discussions have focused on professions other than teaching, the following section will present a systematic review of studies examining burnout and its associated factors among teachers.

1.2.6 A systematic review of studies on burnout among teachers

PubMed, Web of Science, and Google Scholar were used to perform a systematic review of studies on burnout among teachers.

Search strategies

PubMed: (((burnout, professional[MeSH Terms]) OR (burnout)) AND (teachers)) OR (teacher, school[Mesh Terms])

Web of Science: burnout (AllFields) and teachers (Title)

Google Scholar: allintitle: burnout, teachers

Inclusion criteria: Studies on burnout among teachers that address the prevalence and associated factors and are only open-access and English were included.

Exclusion criteria: Intervention studies, systematic reviews, meta-analyses, and other unpublished studies are excluded.

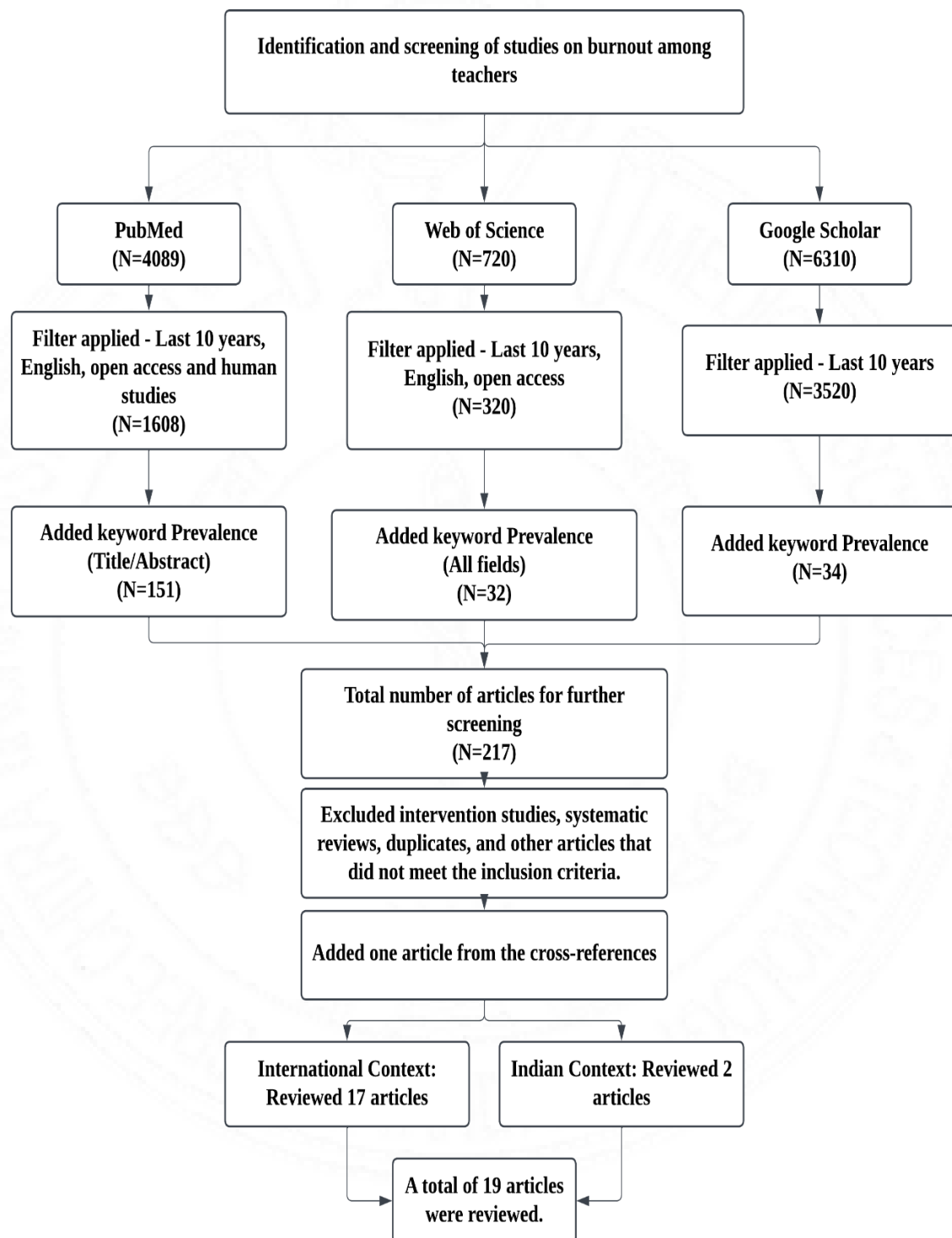


Figure 1.2 Identification and selection of studies for the systematic review

The list of studies and the details are provided in Annexure 1, and the observations are provided using a Forest plot(Figure 1.3).

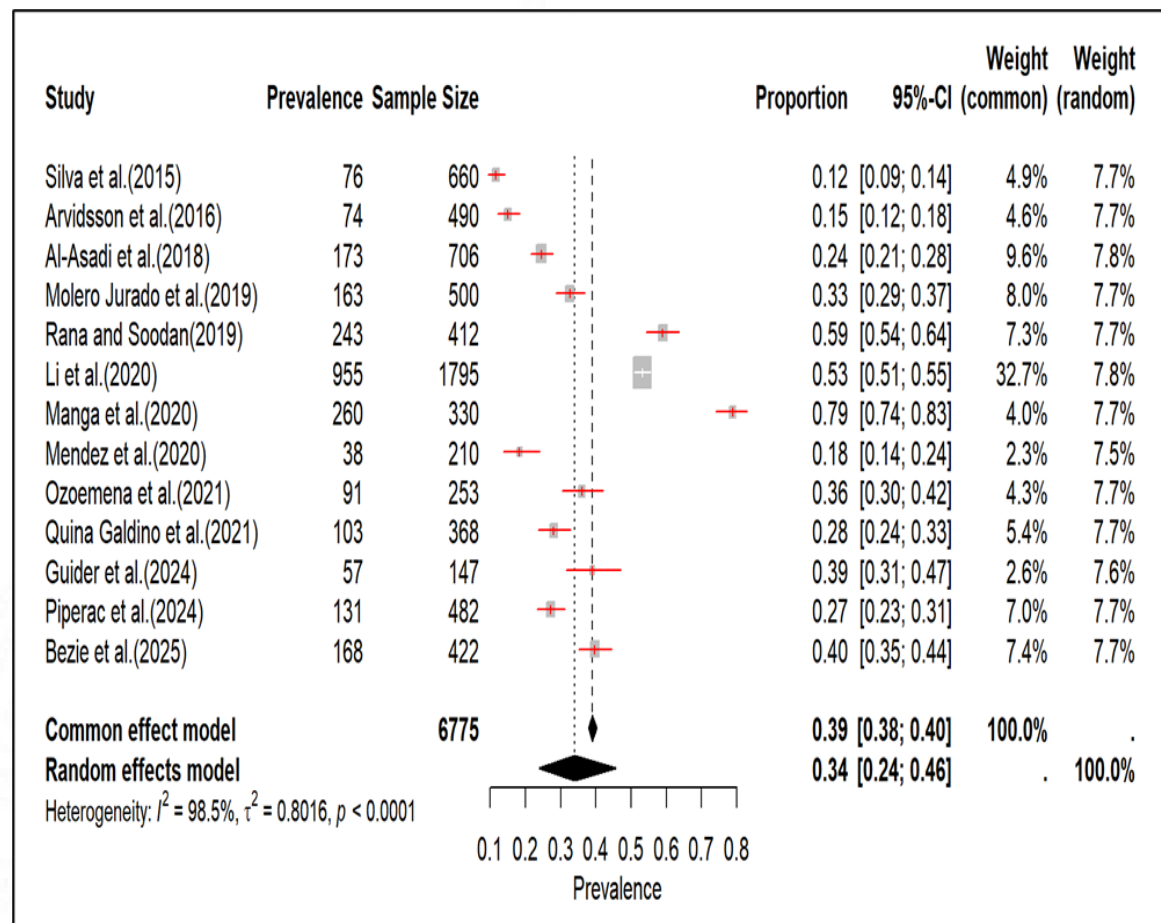


Figure 1.3 Forest Plot of Prevalence Estimates and Pooled Proportion in a Random-Effects Meta-Analysis

The plot was developed using R software 4.4.2. The plot presents a meta-analysis of the prevalence estimates from 13 studies selected from the systematic review, which reported overall burnout prevalence. Six studies which didn't mention the overall prevalence of burnout were excluded. Each study's prevalence, sample size, and 95% Confidence Intervals are displayed. The horizontal line across the boxes indicates the width of the 95% CI. The meta-analysis shows a substantial heterogeneity ($I^2 = 98.5\%$, $p < 0.0001$). An I^2 value of 98.5 per cent suggests that 98.5 per cent of the total variation in the prevalence

estimates is due to the difference between the studies rather than random sampling error, which is statistically highly significant. So, a random effect model was chosen over a common effect model, and the overall pooled prevalence for a random effect was 34 per cent (95% CI 24-46%). The diamond represents the overall prevalence and its 95% Confidence Interval.

In summary, the prevalence of burnout varies widely across the studies, which ranged from 11.56 per cent to 78.8 per cent, depending on the country, sample size, and scales used to measure burnout. Factors which showed an association with burnout include demographic variables such as age, gender, and marital status; job-related factors such as teaching experience, workload, student-teacher ratio, and school type; and psychological factors such as stress, self-efficacy, depression, anxiety, and resilience. Also, it is observed that there are chances of seasonal variation in the levels of burnout during different periods of an academic year. Teachers might experience an increased level of burnout at the end of an academic year, pointed out by Marić *et al.* in their article (Marić et al., 2020).

1.3 Gaps in the Literature

The absence of a Malayalam-translated and validated version of the OLBI highlights the need for such a translated tool, which would be valuable for assessing burnout among teachers and other occupations in Kerala.

The relevance of studies on burnout is also emerging, like that of studies on other mental health issues. As burnout is a possible factor for developing other health issues in the future, there is much research going on concerning burnout among different sections of occupations all around the world. Globally, studies on burnout among teachers reported a wide range of prevalence, where regional differences, differences due to assessment scales, and educational culture should be taken into account. There are only limited studies on

burnout among teachers in India. Also, there have been no studies focusing on secondary school teachers, even though both educational systems and societies have undergone significant changes in recent years. Hence, the present study needs to emphasise filling the gap in finding the prevalence and associated factors of burnout among secondary teachers in an educationally advanced state like Kerala, in India.

1.4 Rationale

“Teachers are the backbone of any country, the pillars upon which aspirations are converted into reality,” said Dr APJ Abdul Kalam.

Teachers are the backbone of the education system and play a central role in shaping future generations. Their well-being is essential for creating a healthier and more productive society. The literature review highlighted the need to evaluate burnout levels and identify its causes to implement effective measures that benefit teachers, students, and the wider community.

Therefore, evaluating burnout and understanding the factors that contribute to the development of burnout among secondary school teachers is essential, and this will help to identify some of the potential areas where we can intervene and develop interventions that improve their well-being, enhance job satisfaction, and enable them to support students better.

1.5 Objectives of the study

The study aims to determine the prevalence and associated factors of burnout among secondary school teachers using the translated and validated Malayalam version of the Oldenburg Burnout Inventory (OLBI).

So, my **specific objectives** are:

- To translate and validate the Oldenburg Burnout Inventory (OLBI) in Malayalam among secondary school teachers
- To estimate the prevalence of burnout among secondary school teachers in the Kottayam district, Kerala
- To study the factors associated with burnout among secondary school teachers in the Kottayam district, Kerala

CHAPTER 2

METHODOLOGY

2.1 Part 1- Translation and validation of Oldenburg Burnout Inventory (OLBI) to Malayalam

An overview of the translation and validation process of the OLBI is provided in Figure 2.1.

2.1.1 Translation of OLBI English version to Malayalam

The translation process of the Oldenburg Burnout Inventory commenced after obtaining permission from the author who developed the scale (see Annexure 13). Then, the scale was translated from English to Malayalam by three independent translators. Thereafter, the researcher reconciled the three translated versions, and a Malayalam translated version was developed (Version 1).

2.1.2 Backward translation of OLBI Malayalam version to English

The reconciled Malayalam version of OLBI was then back-translated to English by two independent translators. After comparing the back-translated versions with the original English version of OLBI, minor modifications were made by the researcher in version 1. Then, it was adopted for further assessment (Version 2).

2.1.3 Assessment of content validity through expert rating

The translated version was then tested with six experts who were professionals from diverse fields such as psychology, social work, and public health. Experts were identified through personal contacts and approached via phone calls. After receiving a briefing on the scale and validation process, they were requested to provide consent before the tool was sent for

validation. The validation process was carried out online using Google Forms (see Annexure 2).

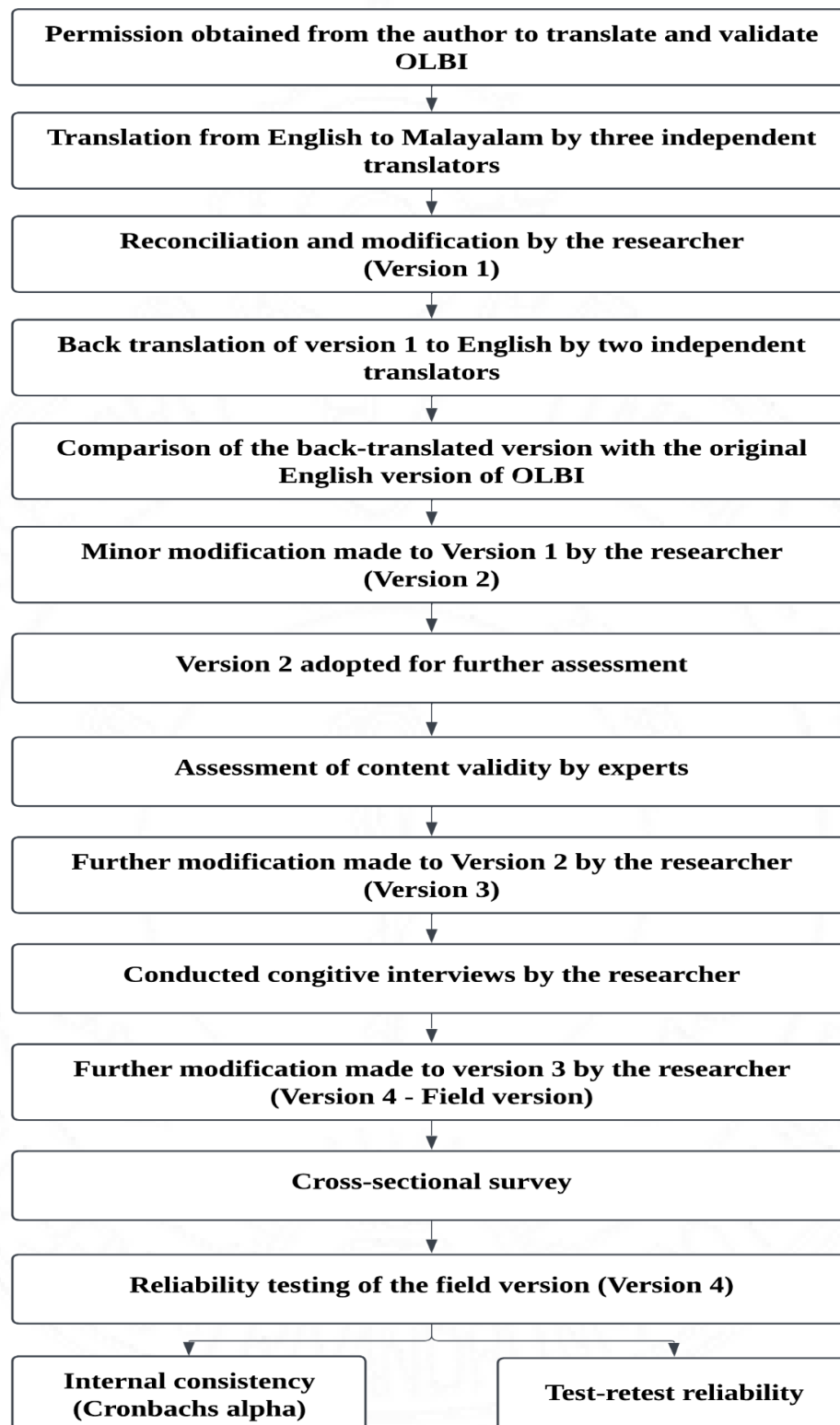


Figure 2.1 Flowchart depicting the overview of translation and validation of the Oldenburg Burnout Inventory (OLBI)

Translated Malayalam and original English versions of the items were listed along with some questions to assess the relevance of the translated items. Each item was rated by the experts into “4”-Highly relevant, ”3”-Quite relevant, “2”-Somewhat relevant, and “1”-Not relevant.

The Item–Content Validity Index (ICVI) for each of the items was calculated as “the number of experts giving a rating of either 3 or 4, divided by the total number of experts, i.e. the proportion in agreement about relevance” (Davis, 1992; Polit et al., 2007).

$$\text{ICVI} = \frac{\text{Number of experts rating the scale as relevant}}{\text{Total number of experts}}$$

Since this ICVI does not consider agreement by chance by the raters, modified kappa was calculated (Polit et al., 2007). To estimate the modified kappa, the probability of chance agreement was first calculated for each item using the formula:

$$P_c = \left[\frac{N!}{A! (N - A)!} \right] * 0.5^N$$

where “N” is the number of experts in a panel, and “A” is the number of panellists who agree that the item is relevant.

Modified kappa was calculated by:

$$K = \frac{(\text{ICVI} - P_c)}{(1 - P_c)}$$

where “P_c” is the probability of chance agreement and “ICVI” is the content validity index of each item. As per the guidelines described by Cicchetti and Sparrow (1981) and Fleiss (1981), the evaluation criteria for kappa are described as **Fair** if k = 0.40 to 0.59; **Good** if k = 0.60– 0.74; and **Excellent** if k > 0.74 (Cicchetti and Sparrow, 1981; Fleiss et al., 2003). Similarly, the recommended acceptable limit of ICVI values is at least 0.83 for

each item if the validity assessment involves a minimum of six experts (Polit et al., 2007; Polit and Beck, 2006).

For estimating the Scale-level Content Validity Index (SCVI), there are two methods such as the Average method (SCVI/Ave) and the Universal Agreement method (SCVI/UA). Here, we calculated the SCVI using the Average method. Similarly, there are two formulas for calculating the SCVI/Ave, and the direct way is to find the average of the ICVI scores for all items on the scale. The other method is by calculating the average of proportion relevance as judged by all experts. Where proportion relevance by each expert was calculated as “the number of items in the scale rated either 3 or 4 by an expert, divided by the total number of items” (Davis, 1992; Lynn, 1986; Polit et al., 2007; Polit and Beck, 2006).

Formula 1:

$$\text{SCVI/Ave} = \frac{\text{Sum of ICVI scores}}{\text{Number of item}}$$

Formula 2:

$$\text{SCVI/Ave} = \frac{\text{Sum of proportion relevance rating}}{\text{Number of experts}},$$

$$\text{Where the Proportion relevance} = \frac{\text{Number of items in the scale rated as relevant by an expert}}{\text{Total number of items}}$$

The SCVI value of 0.90 or higher will be considered acceptable according to the recommendations made by Waltz et al. (Waltz et al., 2016). Further modifications were made in version 2 by the researcher based on the content validity indicators and suggestions from experts for each of the items on the scale (Version 3).

2.1.4 Cognitive interview

“Cognitive interviewing is a formal technique to evaluate whether questionnaire items are understandable to respondents and will be useful for making conclusions. It is a cost-effective approach for improving questionnaire-based research and provides evidence for the content validity of items”(Balza et al., 2022; Willis, 2004). A cognitive interview was conducted among 4 eligible teachers, ensuring both female and male representation. The interviews were conducted in person with teachers to gather feedback and insights on the translated scale. This was done to get clarity and relevance of the items in the translated scale from the participant's point of view. The questions were read aloud by the researcher, and the participants were requested to repeat them in their own words to reflect their understanding (see Annexure 3 and 4). They were asked about the appropriateness of the language used in each item and to interpret the meaning. Further modifications were done by the researcher in the translation based on the interviews, and then the Malayalam-translated field version was finalised (Version 4).

2.1.5 Reliability Assessment of the Translated Scale

Reliability is the repeatability of the scale. Test-retest reliability and finding internal consistency were the two methods adopted to assess the reliability of the translated version of OLBI (version 4). Both reliability analyses were conducted using SPSS version 27 for Windows.

2.1.5.1 Test-retest reliability

Test-retest reliability was assessed among 40 participants during the survey, where the scale was administered twice to the same subsample with a minimum gap of two weeks. The reliability evaluation was done using the Wilcoxon signed-rank test and the Intraclass

Correlation Coefficient for each item in the translated scale. Likewise, it was also done for the overall scale and its dimensions.

Wilcoxon signed-rank test is a non-parametric test used to compare the response of repeated measures and will help to conclude whether there is any significant difference between responses taken at two different time points. A significant p-value ($p\text{-value} < 0.05$) indicates there is a difference between the two responses from the test and retest.

The Intraclass Correlation Coefficient (ICC) is a statistical measure used to assess the reliability or consistency of measurements made by different raters or across repeated measures of the same subjects. ICC is such an index which reflects both the degree of correlation and the agreement between measurements. There are ten different forms of ICC depending on the model, type and definition, and each of the forms gives different results when applied to the same data sets. So, choosing the right form is important. Following the recommendations of Shrout and Fleiss, we here used a two-way mixed-effects model to calculate ICC values. The analysis used the single-measurement type with an absolute agreement definition, as the agreement between repeated measurements is essential for meaningful test-retest reliability. ICC values with 95 per cent confidence intervals (CI) were calculated. ICC values between 0.5 and 0.9 are indicative of moderate to good reliability, while values greater than 0.9 are suggestive of excellent reliability (Koo and Li, 2016).

2.1.5.2 Internal consistency

Internal consistency measures how well the items on a scale measure the same construct. All participants who took part in the survey were included in this step. It was measured using Cronbach's alpha coefficient for each item in the translated scale after the survey.

Likewise, it was also done for the overall scale and its dimensions. A value of 0.7 or greater indicates an acceptable level of internal consistency.

2.2 Part 2 – Cross-sectional survey

2.2.1 Study design

The study's primary objective is to find the prevalence of burnout among secondary school teachers using a cross-sectional study as the research design.

2.2.2 Study setting

The study setting consists of high schools in the Kottayam district, Kerala, including government, aided, and unaided schools.

2.2.3 Target population

All high school teachers in Government, aided, and unaided high schools in the Kottayam district were the target population.

2.2.4 Sample size estimation

From the literature, the prevalence of burnout among teachers ranges from 11.56 per cent(Silva et al., 2015) to 78 per cent(Manga et al., 2020). The sample size is calculated using the OpenEpi (version 3.01) application. We anticipated the prevalence of burnout as 36 per cent based on a previous study conducted among teachers in Nigeria using the MBI-General Survey(Ozoemena et al., 2021). A relative precision of 20 per cent was considered, which corresponds to a margin of error (d) of 7.2 per cent for the 95% confidence interval, ensuring that the results will be statistically robust. Additionally, a design effect (DEFF) of 1.5 was applied to account for the potential clustering effect within the schools. Based on

these input values, the estimated sample size was 257 participants. To accommodate a potential 10% non-response rate, the final sample size was adjusted to 286 participants.

Assuming an average of eight teachers per school, we calculated that 36 schools in total will be required to meet the target sample size (i.e., 286 participants divided by eight teachers per school).

2.2.5 Sample selection procedure

There were 263 schools that had secondary divisions in the Kottayam district. The list of schools was obtained from the website Sametham Kerala School Databank (Sametham, 2024). In this study, we used a Multistage cluster sampling method. Out of the 263 high schools in the Kottayam district, 73 are Government, 168 are aided, and 22 are unaided schools. The schools were categorised into four clusters based on the educational districts of Pala, Kanjirapally, Kottayam, and Kaduthuruthy. Among the four educational districts, Kottayam and Kanjirapally were selected randomly using the lottery method. According to the sample size estimate, the required number of schools for the study was 36. A total of 18 schools were randomly chosen from each educational district, ensuring a proportional representation of Government, aided, and unaided schools, as such: 28 per cent, 64 per cent and 8 per cent, respectively. Accordingly, the number of schools selected from Government, aided, and unaided schools were six, ten and two, and five, twelve, and one from Kottayam and Kanjirapally, respectively (see figure 2.2). A total of eleven government schools, twenty-two aided, and three unaided high schools were selected. Eight teachers were selected from each school meeting the eligibility criteria. Teachers from each school were randomly selected for the study after obtaining a list of teachers from the school head. Whenever a teacher declined to participate, another was randomly chosen from the remaining names on the list. In schools with more than 8 teachers, the selection was

random, whereas in schools with 8 or fewer teachers, all teachers were included and invited to participate. Participation in the study was entirely voluntary.

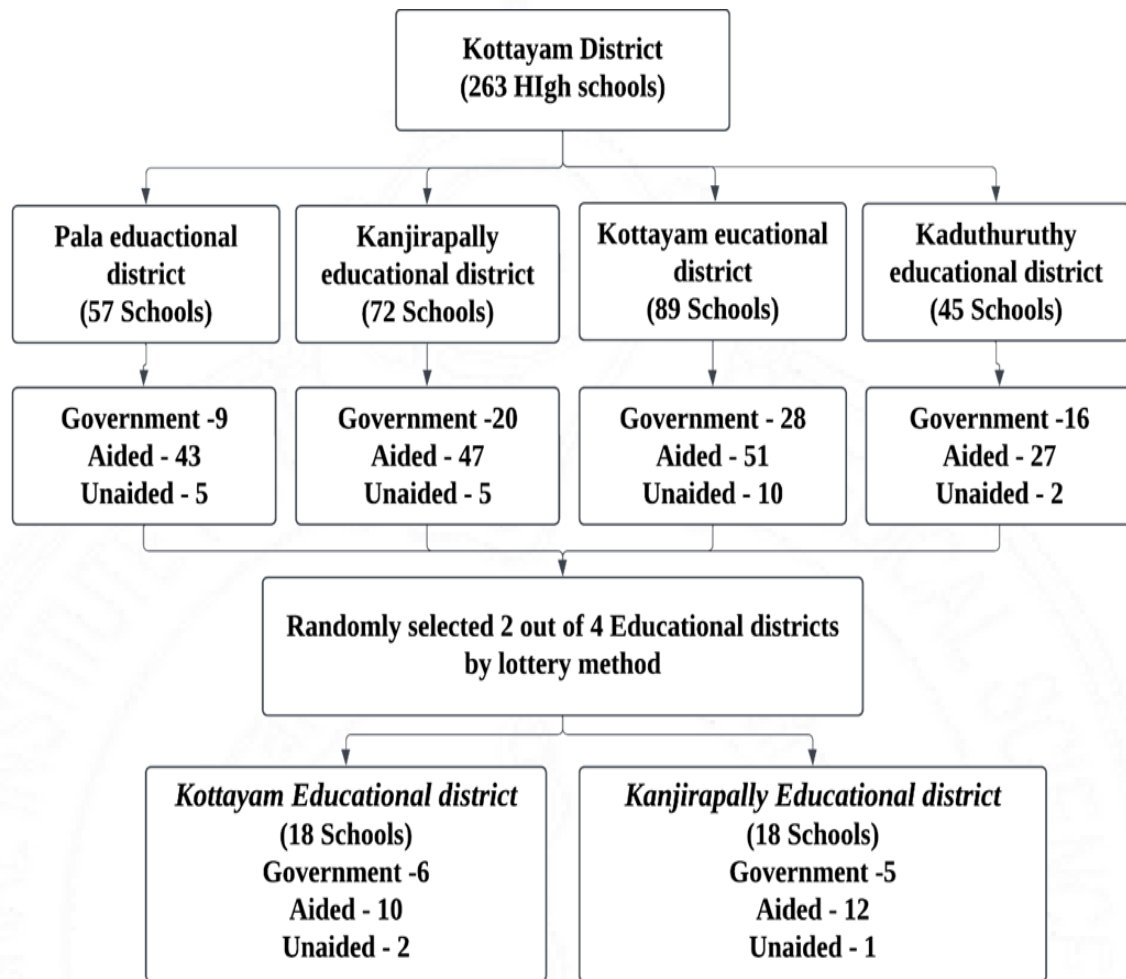


Figure 2.2 The distribution of high schools in Kottayam district and the sample selection process

2.2.6 Inclusion and exclusion criteria

Inclusion criteria

Teachers who work full-time in Government, aided, and unaided schools with at least one year of experience and who are willing to participate were included in the study.

Exclusion criteria

Teachers who were unavailable at the school during the time of data collection due to sick leave were excluded from the study.

2.2.7 Study duration

The duration of data collection was two months, which was from January 2025 to March 2025, and the total duration of the study was six months, including data collection, analysis, and submission of the dissertation.

2.2.8 Data collection process

The participant's recruitment was done by the researcher. A structured, self-administered questionnaire in Malayalam was used to collect data from the participants. Permission was obtained from the respective principals of the schools, and the questionnaires were distributed to eligible teachers who consented to participate. Responses were then collected at a time convenient for the participants. The online mode of data collection was done wherever necessary using an Open Data Kit (ODK) form, which is the same as the printed questionnaire, after getting consent from the participants. Given the time constraints of participants during working hours, and the fact that the tools for assessing burnout and other variables like stress, anxiety, and depression are self-administered, the researcher distributed the questionnaire or sent the link to the questionnaire tool in ODK via WhatsApp or email according to their convenience, after obtaining their permission to participate. The link is activated for one entry by one person. The researcher approached all the selected 36 schools for data collection, and none of the schools declined to participate in the study.

2.2.9 Data Collection Tools

The tool used for data collection consists of seven sections (see Annexure 9 and 10). The structured questionnaire was prepared in English and then translated into Malayalam for data collection.

Section 1: Survey details

This section includes questions related to the name of the school, the type of school, and the location of the school.

Section 2: Socio-Demographic details

This section includes questions on age, sex, marital status, number of children, place of work, educational qualifications, and average monthly income.

Section 3: Occupation-related details

This section includes questions related to the years of experience, the nature of employment, class size, subjects taught, working hours, non-teaching activities, satisfaction with the class and student behaviours, and working environment.

Section 4: Habits and Hobbies

This section includes questions related to tobacco use, smokeless tobacco use, alcohol consumption, and physical activity.

Section 5: General health

This section includes questions on comorbidities, medication status, self-rated health, absence due to illness, and sleep patterns.

Section 6: Burnout (Oldenburg Burnout Inventory)

This section includes a total of 16 questions, eight questions each on two domains of burnout, which are disengagement and emotional exhaustion.

Section 7: Stress, Anxiety, Depression, and some questions on coping strategies and work-life balance.

Stress is measured using the Perceived Stress Scale 10 (PSS-10)

Anxiety and Depression are measured using the Patient Health Questionnaire(PHQ-4)

2.2.10 Data entry and storage

Data entry was carried out by ODK forms since the data collection comprises both physical and online modes. The online data collection is done on ODK forms, and the physically collected data is later entered manually using the ODK form. All paper-based forms completed during the research were kept under lock and key by the researcher, who was responsible for the research data regarding security and maintaining confidentiality. The digital data and ODK Forms did not contain any personal identifying information. All participants were assigned a unique identification code. The data entered in ODK was saved on the institute server and subsequently downloaded from the server. The downloaded data was then stored on a password-protected computer in a password-protected folder. All soft and hard copies of the questionnaire will be deemed destroyed when no longer needed or after three years of the dissertation report submission, whichever comes first.

2.2.11 Operational definition of variables

Burnout

To estimate burnout using the Oldenburg Burnout Inventory (OLBI), participants rated 16 items on Exhaustion and Disengagement using a 4-point Likert scale (1 = strongly agree to

4 = strongly disagree). Negative items are reverse-scored, and the sum of the scores obtained by each participant was used to assess the level of burnout experienced by them.

Burnout scores are classified into three categories by taking 33.3rd and 66.6th percentiles as cut-off according to the distribution of scores. The categories were: **low** (scores less than 36), **moderate** (scores between 36 and 39), and **high** (scores of 40 or more). The scores were also classified in a similar method and applied to individual dimensions of the Oldenburg Burnout Inventory (OLBI), specifically Disengagement and Exhaustion. For Disengagement, the thresholds were set at **low** (less than 18), **moderate** (between 18 and 19), and **high** (20 or more). Similarly, for Exhaustion, the thresholds were set at **low** (less than 19), **moderate** (between 19 and 21), and **high** (22 or more). Several studies on burnout among nurses and medical students have used the 33rd percentile cut-off to define burnout, similar to the classification used in the present study (Cook et al., 2021; de Oliva Costa et al., 2012). Further, we classified burnout into two categories: Low and Moderate to High.

Stress

Stress is measured using the Perceived Stress Scale – 10 (PSS-10). The scale consists of ten questions to measure the perceived stress level, out of which six questions are positively phrased and four questions are negatively phrased. Participants responded to the questions on a 5-point Likert scale ranging from 0 (never) to 4 (very often). Negative questions were reverse-scored. The total stress scores were categorised into three levels: **low** (0-13), **moderate** (14-26), and **high** (27-40). Participants with moderate to high perceived stress levels were considered one category, and those with low levels were considered another during the analysis (Swaminathan et al., 2016).

Anxiety and Depression

Anxiety and Depression were measured using the Patient Health Questionnaire (PHQ-4). The scale consists of four questions. Two for screening anxiety and two for screening depression. Participants responded to the questions on a 4-point Likert scale ranging from 0 (not at all) to 3 (nearly every day). The cut-off scores for both anxiety and depression were categorised into three levels: **normal** (0-2), **mild** (3-4), and **moderate to severe** (5-6). Those with scores greater than or equal to 3 will be considered to have anxiety and depression in their respective subscale scores (Kroenke et al., 2009; Obeid et al., 2024).

Other variables and their classifications are provided in the results section along with respective tables.

2.2.12 Data analysis

Data cleaning and analysis were done using SPSS version 27 for Windows. During the analysis phase, the internal consistency of the translated scale was assessed using the whole data collected, as the data collected through the physical mode was smaller in number compared to the online mode, for a comparison of internal consistency between the two modes. Frequencies and proportions were calculated for the categorical variables, and the mean with standard deviation was calculated for continuous variables. The prevalence (Proportion) of Moderate to High levels of burnout was estimated along with the 95% Confidence Intervals. We assessed the association of moderate to high burnout and its dimensions with depression, anxiety, stress, sociodemographic characteristics, occupational details, and habits to identify the factors that may be associated with burnout among the participants. The associations were tested using chi-square or Fisher's exact test. A multivariable binary logistic regression analysis was performed to identify the significant factors predicting moderate to high burnout in the study population.

2.2.13 Ethical consideration

The Institutional Ethics Committee of Sree Chitra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram, Kerala, reviewed and approved the study(SCT/IEC/2344/DECEMBER/2024) (see Annexure 15). Informed consent for participating in the study was obtained from the study participants. The consent form did not include any identifying information about the participants except their names, initials and contact details of the researcher, guide and the member secretary of the Institutional Review Board. No significant risks were anticipated for the participants.

Participants had the option to accept or decline participation and could withdraw at any time during the study without providing an explanation or facing any consequences. They were informed about the voluntary nature of their participation, the study's objectives, and the potential benefits and risks involved. Participants were also allowed to ask questions or raise concerns about the study.

Utmost priority was given to protecting the privacy and confidentiality of the participants, and the collected information was kept confidential and not shared with anyone outside the study team. At no stage, the identity of the participant revealed, and for this purpose, a unique identification number was given in each questionnaire.

CHAPTER 3

RESULT

This study was conducted in two phases. Part 1 consists of the translation and validation of the Malayalam version of the Oldenburg Burnout Inventory (OLBI), which involves several steps such as translation, back translation, content validity testing by expert rating, cognitive debriefing for clarity and understanding of the scale, and reliability assessment (Internal consistency and test-retest reliability). Part two covers the estimation of the prevalence of burnout and determining the factors associated with it among secondary school teachers.

3.1 Part 1- Translation and validation of Oldenburg Burnout Inventory (OLBI) to Malayalam

3.1.1 Translation

The processes of translation and back translation were described in the methodology chapter (see Section 2.1)

Version 1 was a reconciled form of the translations done by three different translators. All 16 items were retained in version 1, as none of the items were removed due to similarity (see Annexure 7)

3.1.2 Back translation

To assess similarity, the researcher compared the two independent back-translations of version 1-Malayalam with the original English version of OLBI. As a literal translation of English to Malayalam or vice versa can sometimes be meaningless due to incomplete sentence formation, we focused more on the meaning and approximate wordings of the items. The back translation of version 1 was almost similar concerning the wordings and

the meaning of each item. Rewording and re-arrangements were made to four items after the back translation (**Item 3, Item 5, Item 11, Item 13**) and led to the formation of **version 2** (see Annexure 7). The new version also had all 16 items, and none of them were removed due to similarity.

3.1.3 Content validity assessment

Most of the experts agreed that the translated items in version 2 reflected the meaning of the original items and, thus, reflected only minor cultural variations. For the content validity evaluation, nine experts were invited to rate the 16 items in the OLBI version 2. However, due to personal reasons, three declined to take part in this process; therefore, ratings from six were utilised in this evaluation. The experts were from diverse fields, which are mentioned in the table below:

Table 3.1 List of experts who participated in content validity assessment

Expert	Area of expertise
A	Social Worker / Counselling Psychologist
B	Public health expert
C	Public health expert, Social worker / Counselling Psychologist
D	Applied psychology
E	Counselling Psychologist
F	Public health expert

All of them are vastly experienced in their respective fields. Two of the experts mentioned above had hands-on experience in the translation and validation of a scale, which immensely contributed to the betterment of our translated scale.

The scores given by the experts, the ICVI values, and other relevant data are provided in the table (see Table 3.2). The ICVI for each item ranged from 0.83 to 1, which was within the acceptable limit. The probability of chance agreement of the items ranged from 0.016 to 0.094. The modified kappa value for each item ranged from 0.81 to 1, which is well above the recommended limit of 0.74 (see Table 3.2).

Table 3.2 The relevance rating by six experts on the translated items of OLB

Items	Exp	Exp	Exp	Exp	Exp	Exp	I-CVI	P _c	K	Evaluation
	A	B	C	D	E	F				
							<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>
Q1	1	1	1	1	1	1	1	0.016	1	Excellent
Q2	1	1	1	1	1	1	1	0.016	1	Excellent
Q3	1	1	1	0	1	1	0.83	0.094	0.81	Excellent
Q4	1	1	1	1	1	1	1	0.016	1	Excellent
Q5	1	1	1	1	1	1	1	0.016	1	Excellent
Q6	1	1	1	1	1	1	1	0.016	1	Excellent
Q7	1	1	1	1	1	0	0.83	0.094	0.81	Excellent
Q8	1	1	1	1	1	1	1	0.016	1	Excellent
Q9	1	1	1	1	1	0	0.83	0.094	0.81	Excellent
Q10	1	1	1	1	1	1	1	0.016	1	Excellent
Q11	1	1	1	1	1	1	1	0.016	1	Excellent
Q12	1	1	1	1	1	1	1	0.016	1	Excellent
Q13	1	1	1	1	1	1	1	0.016	1	Excellent
Q14	1	1	1	1	1	1	1	0.016	1	Excellent
Q15	1	1	1	1	1	1	1	0.016	1	Excellent
Q16	1	1	1	1	1	1	1	0.016	1	Excellent
Proportion relevance	1	1	1	0.94	1	0.88				

^a ICVI, item-level content validity index, ^b P_c, probability of chance agreement, ^c K = modified kappa value on the relevance, ^d Evaluation criteria for kappa: **Fair** = k of 0.40 to 0.59; **Good** = k of 0.60– 0.74; and **Excellent** = k > 0.74(Cicchetti and Sparrow, 1981; Fleiss et al., 2003), and **Exp** = Expert.

Formula 1: $SCVI/Ave = (\text{Sum of ICVI scores})/(\text{Number of item})$

$SCVI/Ave = 15.49/16$, which is **0.97**

Formula 2: $SCVI/Ave = (\text{Sum of proportion relevance rating})/(\text{Number of experts})$

$SCVI/Ave = 5.82/6$, which is **0.97**

The SCVI/Ave by both the formula mentioned in the methodology section was found to be 0.97, which was well above the acceptable limit. Some minor suggestions made by the experts on some items were considered, and changes were made accordingly to seven items (**Item numbers 2, 5, 6, 8, 9, 10, 11**). None of the items in the scale was removed as ICVI was well above the acceptable level for each item, and minor changes in some of the items led to the formation of **version 3** of the scale (see Annexure 7).

3.1.4 Cognitive Interviews

Cognitive interviews were performed with four school teachers not included in the sampled population. The respondents included three females and one male, all of whom had more than 10 years of teaching experience. On average, each interview lasted for 16 minutes. Teachers were asked to comment on the appropriateness and clarity of each item in the scale and provide open-ended suggestions for improvement. Though a majority of the items were well understood, minor suggestions were incorporated into the scale based on the suggestions and **Version 4** (see Annexure 7) was developed.

The following changes were made;

Item 3: “**eeyideyaayi kooduthalayil**” (ഈയിടെയായി കൂടുതലായി) was changed into “**mikkappozhum**” (മിക്കപ്പോഴും) as most of them interpreted that as more recently instead of more often.

Item 10: “**vinodhangalil**” (വിനോദങ്ങളിൽ) was changed to “**vinodhapravarthikalil**” (വിനോദപ്രവർത്തനങ്ങളിൽ) as the suggestions were to make it more specific.

Item 12: “palappozhum” (പലപ്പോഴും) was changed to “saadharanayaayi” (സാധാരണയായി)

All necessary changes were made, and all 16 items were retained in version 4.

3.1.5 Reliability assessment

The reliability of the translated Oldenburg Burnout Inventory (version 4) was evaluated using internal consistency and test-retest reliability methods.

3.1.5.1 Test-retest reliability

Test-retest reliability was assessed using a subsample of 40 participants, where the burnout was measured within a gap of two weeks. The average total score of the OLBI at the first time point was 37.5 (5.169) and at the second time point was 37.03 (5.265), respectively. Likewise, the minimum and maximum scores in the first time point were 23 and 50, and in the second time point, it was 21 and 46, respectively. Total scores in two-time points only showed minimal differences.

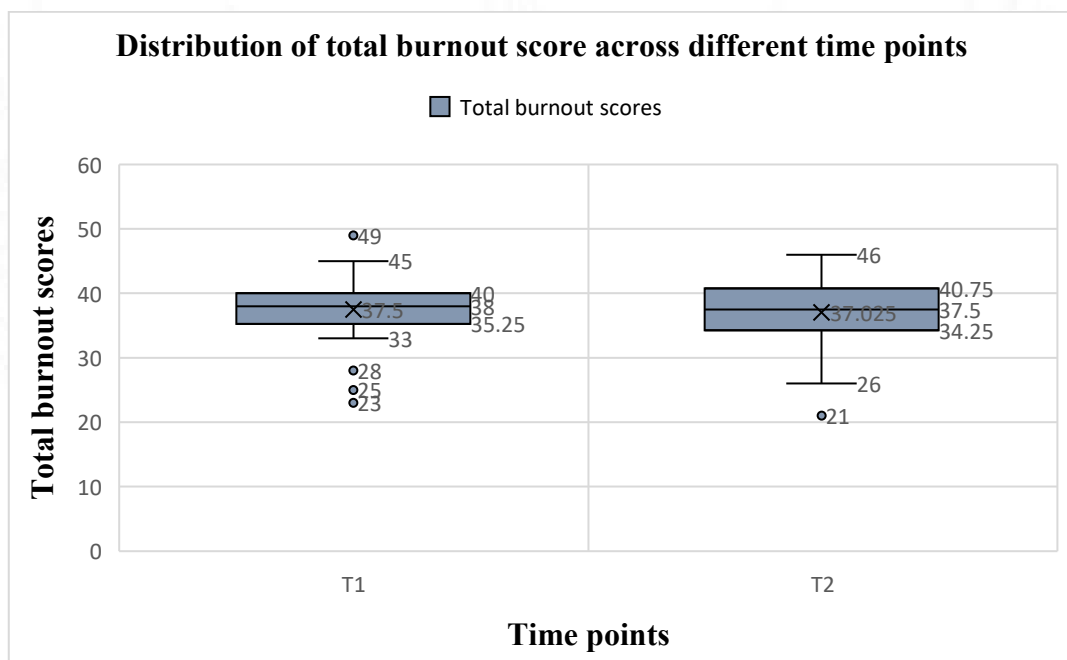


Figure 3.1 Box plot of the total burnout scores across the test and retest

However, a few participants allotted higher scores to certain items in the first round compared to the second round, which was reflected in the overall scores.

The mean value in the exhaustion dimension at the first time point is 19.30 (3.048), whereas in the second time point, it is 18.93 (3.206), respectively. The mean value in the disengagement dimension at the first time point is 18.20 (2.564), whereas in the second time point, it is 18.10 (2.458), respectively. So, the mean value in the dimensions also does not change much on the two occasions.

Following that, a cross-tabulation of each item in the scale to examine whether teachers provided consistent or differing responses across two different time points was conducted, and the corresponding results are shown below (see Table 3.3).

Table 3.3 shows the pattern of answers provided by teachers during the test and retest

Item	Teachers provided (N=40)	
	Same answers	Different answers
1	35	5
2	30	10
3	34	6
4	32	8
5	28	12
6	27	13
7	35	5
8	31	9
9	33	7
10	31	9
11	28	12
12	26	14
13	27	13
14	33	7
15	32	8
16	36	4

The results of the **Wilcoxon signed-rank test** showed that the p-value of item number 1 is statistically significant, implying that there is a significant difference in the response between test and retest(see Table 3.4). A few of the participants allotted a higher score for this item in the first round, in contrast to the second round. Apart from item 1, the p-value of all other items was not statistically significant, showing there was no significant difference in the response of the test and retest.

Table 3.4 Results of the Wilcoxon signed-rank test assessing the differences between test and retest responses for each item

Item	Wilcoxon signed-rank test (p-values)	Item	Wilcoxon signed-rank test (p-values)
1	0.025	9	0.705
2	0.527	10	0.317
3	0.414	11	1
4	1	12	0.593
5	0.248	13	0.134
6	0.166	14	0.705
7	0.655	15	0.48
8	0.317	16	1

Similarly, the total burnout scores and the scores of the two dimensions did not show any significant difference(see Table 3.5).

Table 3.5 Results of the Wilcoxon signed-rank test for the test-retest scores of the overall scale and its dimensions

	Wilcoxon signed-rank test(p-values)
Exhaustion dimension	0.174
Disengagement dimension	0.683
Overall burnout scale(OLBI)	0.212

The **Intraclass Correlation Coefficient (ICC)** values were estimated for each item in the scale based on a single measurement, absolute-agreement, two-way mixed-effects model. The result shows that the ICC values of the items ranged between 0.540 to 0.790, indicating that they have moderate to good test-retest reliability. Similarly, the ICC value for the overall scale is 0.857, while for the two dimensions, it is 0.851 for exhaustion and 0.785 for disengagement, both suggesting good test-retest reliability (see Table 3.6).

Table 3.6 Intraclass Correlation Coefficient (ICC) Values of Each Item, overall scale, and its dimensions

Item	ICC values (Single measure)	95% Confidence Interval		ICC p- values
		Lower bound	Upper bound	
1	0.677	0.455	0.817	<0.001
2	0.787	0.632	0.881	<0.001
3	0.703	0.505	0.831	<0.001
4	0.769	0.603	0.871	<0.001
5	0.540	0.282	0.726	<0.001
6	0.701	0.504	0.829	<0.001
7	0.781	0.623	0.878	<0.001
8	0.790	0.639	0.883	<0.001
9	0.790	0.639	0.883	<0.001
10	0.758	0.589	0.864	<0.001
11	0.562	0.304	0.742	<0.001
12	0.604	0.363	0.769	<0.001
13	0.598	0.360	0.764	<0.001
14	0.579	0.328	0.754	<0.001
15	0.693	0.490	0.825	<0.001
16	0.748	0.570	0.858	<0.001
Exhaustion dimension	0.851	0.737	0.918	<0.001
Disengagement dimension	0.785	0.629	0.88	<0.001
Overall burnout scale	0.857	0.747	0.922	<0.001

3.1.5.2 Internal consistency reliability

Cronbach's alpha coefficient was calculated separately for each item within the two dimensions of the scale and also for the overall scale.

Table 3.7 Internal consistency of the items in the overall scale (OLBI)

Item	Cronbach's alpha if the item is removed	Item	Cronbach's alpha if the item is removed
1	0.816	9	0.817
2	0.814	10	0.801
3	0.809	11	0.805
4	0.813	12	0.803
5	0.8	13	0.848
6	0.8	14	0.803
7	0.818	15	0.816
8	0.798	16	0.813
Cronbach's alpha of the Overall scale = 0.821			

Table 3.8 Internal consistency of the items in the exhaustion and disengagement dimensions

Item (Exhaustion)	Cronbach's alpha if the item is removed	Item (Disengagement)	Cronbach's alpha if the item is removed
2	0.785	1	0.531
4	0.784	3	0.472
5	0.762	6	0.463
8	0.761	7	0.525
10	0.764	9	0.522
12	0.768	11	0.499
14	0.771	13	0.645
16	0.796	15	0.525
Overall	0.797	Overall	0.560

The alpha value for the overall scale was 0.821. However, on the deletion of item 13, the alpha value becomes 0.848(see Table 3.7). Similarly, the alpha value for the exhaustion

dimension of the scale was 0.797 and removing any item didn't improve the alpha value of the dimension(see Table 3.8). The alpha value for the disengagement dimension was found to be 0.560, and on the deletion of item 13, the alpha value became 0.645(see Table 3.8).

To summarise, our findings primarily concentrated on translating and validating the Oldenburg Burnout Inventory (OLBI) into Malayalam to ensure its correctness and reliability. The translation process followed standard procedures with the help of language experts, while the validation process assessed the scale's psychometric properties with the support of content experts. The reliability analysis, including intraclass correlation coefficients (ICC), demonstrated moderate to good test-retest reliability for individual items and strong reliability for the overall scale and its two dimensions—exhaustion and disengagement. These findings indicate that the translated OLBI is a reliable tool for measuring burnout and can be effectively used in the target population (see Annexure 8).

3.2 Part 2 - Cross-Sectional Survey

The study subjects were obtained from 36 selected high schools(Govt-11, aided-22, and unaided-3) in the Kottayam district of Kerala. A total of 257 participants responded to the survey, of which 26.7 per cent of the teachers were from government high schools, 64.3 per cent were from aided schools, and 9 per cent were from unaided schools. About 78.4 per cent of the schools were located in the panchayat area, 20.4 per cent were in the municipality area, and 1.2 per cent were in the corporation area, respectively.

This section presents the participants' background details, along with details related to their occupation, work environment, burnout, stress, anxiety, and depression. Additionally, it describes various factors associated with burnout.

3.2.1 Background details of the study participants

The age distribution, which is shown in Figure 3.2, indicates there are two outliers, who are aged 67 and 87 years, respectively. These extreme ages are primarily due to some teachers still working in unaided schools, where retirement is decided by the management rather than a fixed criterion. Therefore, these outliers were removed from the analysis as the typical retirement age is below 60 years, and individuals above this age are not representative of the target population. Consequently, the effective sample size used for analysis is 255 participants.

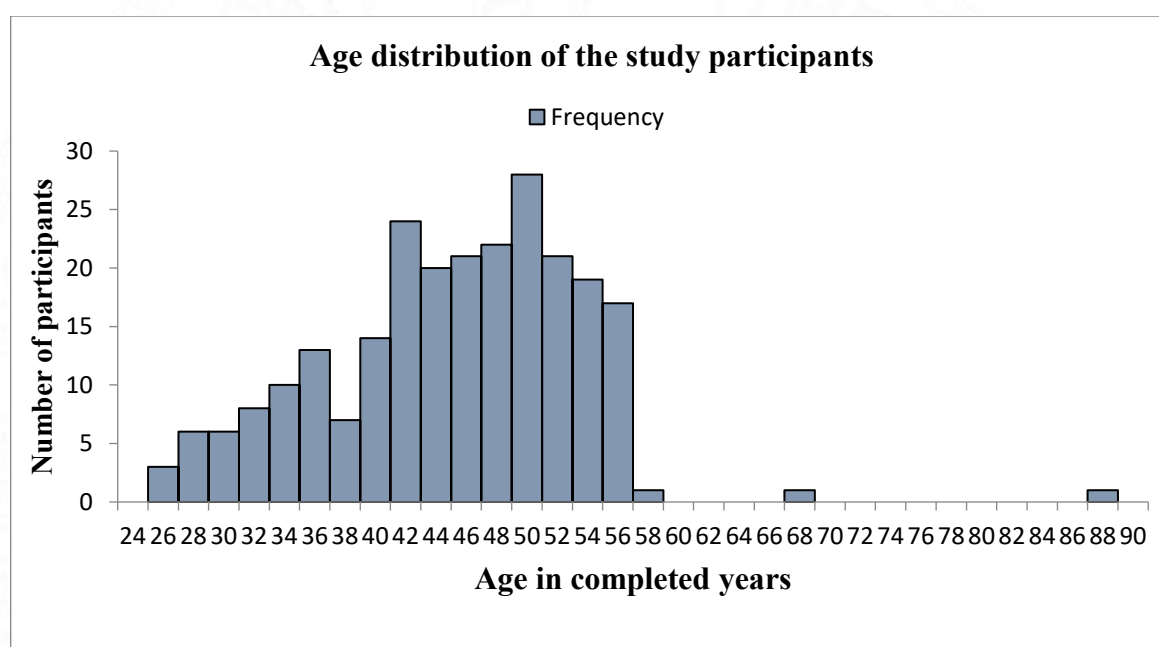


Figure 3.2 Age distribution of the study participants

The Mean, Standard Deviation, Median, and Range of the participants' ages were 44.32, 7.72, 45, and 26 to 58 years.

Among the study participants, most of the teachers (49%) were aged 45 years or younger, and almost 82 per cent were female. About 86 per cent of the teachers were married, and most of them had children, with 47 per cent having two children. Additionally, 23.5 per cent of the teachers travelled from distant locations, while most of them lived nearby.

Almost 87 per cent of the teachers were professionally qualified, holding a Bachelor of Education (B.Ed.), while 13 per cent had other qualifications, such as a general degree or postgraduate education.

Table 3.9 Socio-demographic characteristics of teachers

Variables	Categories	Frequency (N = 255)	Percentage^a (%)
Age	Up to 45 years	124	48.6%
	More than 45 years	116	45.5%
Sex	Male	46	18%
	Female	209	82%
Marital status	Never married	16	6.3%
	Currently married	218	85.5%
	Others	19	7.4%
Have children	Yes	216	84.7%
	No	19	7.5%
Number of children^b	One	46	21.3%
	Two	120	55.5%
	Three or more	35	16.2%
Current place of work concerning place of residence	In hometown	68	26.7%
	Nearby town/city	124	48.6%
	Relocated far away	60	23.5%
Educational qualifications completed	Professional	222	87.10%
	Others	33	12.9%
Monthly income	Less than 10000	15	5.9%
	10000 – 20000	20	7.8%
	20000 – 30000	18	7.1%
	30000 – 40000	28	11%
	More than 40000	169	66.3%
Other income earners in the family	Yes	195	76.5%
	No	55	21.6%
Sufficient family income	Always	71	27.8%
	Very Often	96	37.6%
	Sometimes	54	21.2%
	Rarely	8	3.1%
	Never	21	8.2%

a – The percentage may not add up to 100 as there are missing values for the variables

b - Number of children among those participants who said yes (N=216)

About 66 per cent of teachers had a monthly income of forty thousand or more, while some earned less than ten thousand. Most teachers had other income earners in their families, contributing to a sufficient family income to manage household expenses (see Table 3.9).

Table 3.10 Occupation-related characteristics of teachers

Variables	Categories	Frequency (N = 255)	Percentage ^a (%)
Years of experience	Up to 10 years	93	36.5%
	More than 10 years	162	63.5%
Nature of employment	Permanent	221	86.7%
	Temporary/contractual	34	13.3%
Class size	≤ 20	56	22%
	21 – 40	144	56.40%
	>40	52	20.4%
Subject taught^b	Science stream	57	22.4%
	Social science stream	35	13.7%
	Mathematics	47	18.4%
	Languages	118	46.3%
	IT	16	6.3%
	Others	8	3.2%
Total working hours	Up to 6 hours	28	11%
	More than 6 hours	227	89%

a – The percentage may not add up to 100 as there are missing values for the variables

b - Participants could select multiple educational qualifications so that the percentages may exceed 100%.

About 65 per cent of the teachers had ten or more years of experience. Only 13 per cent were working on a temporary or contractual basis. The majority of teachers taught classes with a number of students ranging from 21 to 40, and approximately 46 per cent of the teachers taught languages, followed by those teaching science, mathematics, and social science. About 89 per cent of the teachers worked more than six hours a day (see Table 3.10).

Most of the teachers reported duties other than teaching, and the different duties and responsibilities of teachers other than teaching are listed in Table 3.11.

Table 3.11 Distribution of teachers' reported duties other than teaching

Activity	Frequency (N = 255)	Percentage (%)
Exam duty	245	96.1%
Paper evaluation	236	92.5%
NSS, Scouts & Guides, and Red Cross	55	21.6%
National Literacy Mission	24	9.4%
School events	253	99.2%
Registers and records	236	92.5%
Admission campaign	210	82.4%
School health program	221	86.7%
Mid-day meal program	185	72.5%
Election duty	173	67.8%
Census/surveys	141	55.3%
Others	46	17.90%

The table presents the frequency of teachers who answered "Yes"

3.2.2 Teachers' Satisfaction with their students' performances and working environment

Table 3.12 Teachers' Satisfaction with their respective classes they teach

Variables	Frequency (%)		
	Not satisfied	Somewhat satisfied	Very satisfied
Class attendance	21(8.2%)	110(43.1%)	123(48.2%)
Student performance	42(16.5%)	169(66.3%)	43(16.9%)
Attentiveness in Class	36(14.1%)	164(64.3%)	54(21.2%)
Homework/assignment completion	53(20.8%)	157(61.6%)	43(16.9%)
Behaviour Towards the Teacher	44(17.3%)	122(47.8%)	88(34.5%)
Class cooperativeness	30(11.8%)	151(59.2%)	73(28.6%)

The percentage may not add up to 100 as there are missing values for the variables

Teachers were mostly satisfied with class attendance. However, around 10-20 per cent of teachers were not satisfied with homework/assignment completion, student performance, attentiveness in class, behaviour towards teacher, and class cooperativeness (see Table 3.12)

Table 3.13 Students' behaviour towards teachers

Variables	Categories	Frequency (N = 255)	Percentage ^a (%)
Experienced any conflicting/confronting behaviour	Yes	161	63.1%
	No	93	36.5%
How serious was the experience^b	Very serious	27	16.8%
	Somewhat serious	97	60.2%
	Not serious	37	23%
Did you manage it well^b	Yes	144	89.4%
	No	16	9.9%

a - The percentage may not add up to 100 as there are missing values for the variables

b - Out of the participants who experienced conflicting/confronting behaviour (N=161)

About 63 per cent of the teachers experienced conflicting or confronting behaviour from their students. Nearly 77 per cent of teachers reported this behaviour as somewhat to very serious. However, the majority of teachers, about 89.4 per cent, were able to manage it well (see Table 3.13).

More than 50 per cent of teachers were highly satisfied with basic facilities such as electricity, teaching aids, computer and internet access, drinking water, and toilet facilities, along with the functioning of the library and transport facilities. Whereas, about 40 per cent of teachers were not satisfied with the canteen facilities, followed by recreational facilities (see Table 3.14).

Table 3.14 Teachers' Satisfaction with the Working Environment

Facilities and equipment	Frequency (%)		
	Not satisfied	Somewhat satisfied	Very satisfied
Availability of lights, fans, power backup (UPS), etc	17(6.7%)	101(39.6%)	137(53.7%)
Adequate Teaching aids (<i>Board, projectors, lab equipment, etc.</i>)	20(7.8%)	106(41.6%)	129(50.6%)
Drinking water (<i>Availability and quality</i>)	9(3.5%)	61(23.9%)	184(72.2%)
Toilet facility (<i>Availability and maintenance</i>)	9(3.5%)	80(31.4%)	166(65.1%)
Functioning of the library	17(6.7%)	87(34.1%)	150(58.8%)
Computer and Internet access	15(5.9%)	96(37.6%)	144(56.5%)
Recreation (<i>Yoga or Meditation Rooms, Gardens or open spaces, etc.</i>)	59(23.1%)	113(44.3%)	83(32.5%)
Transport facility to reach school (<i>school bus</i>)	28(11%)	80(31.4%)	142(55.7%)
Functioning of the canteen	103(40.4%)	59(23.1%)	53(20.8%)

The percentage may not add up to 100, as there are missing values for the variables

About 64 per cent of teachers agreed that their school had an adequate number of teachers, while a significant proportion reported a staff shortage. Almost 84 per cent of teachers agreed that leave vacancies were filled accordingly in time at their respective schools (see Table 3.15).

Table 3.15 Teacher's Perception of Staff Shortage and Leave Vacancies

Variables	Frequency (N = 255)	Percentage (%)
Adequate School Staffing	163	63.9%
Timely Filling of Leave Vacancies	208	81.6%

The table presents the frequency of teachers who answered "Yes"

3.2.3 Lifestyle and general health-related characteristics of teachers

A very small number of teachers were reported to be using tobacco and alcohol (see Table 3.16a). Only a small proportion of teachers were regularly active with any exercises or physical activities, of which most of them were engaged in jogging or walking, followed by yoga (see Table 3.16b)

Table 3.16a Ever use of tobacco and alcohol among teachers

Variables	Frequency (N = 255)	Percentage (%)
Ever tobacco use	5	2%
Ever alcohol use	22	8.6%

The table presents the frequency of teachers who answered "Yes"

Table 3.16b Physical activities reported by the teachers

Physical activity	Frequency (%)		
	Regularly	Occasionally	Never
Outdoor games	5(2%)	120(47.1%)	120(47.1%)
Indoor games	3(1.2%)	132(51.8%)	109(42.7%)
Jogging/walking	59(23.1%)	142(55.7%)	47(18.4%)
Cycling	6(2.4%)	33(12.9%)	206(80.8%)
Swimming	2(0.8%)	22(8.6%)	222(87.1%)
Yoga	16(6.3%)	85(33.3%)	143(56.1%)
Others	9(3.5%)	46(18%)	69(27.1%)

The percentage may not add up to 100, as there are missing values for the variables

Further, the physical activity of the participants was classified as ‘regularly active’ if the study participants were regularly engaged in any of the listed activities in Table 3.16b and

‘not regularly active’ otherwise. It is observed that nearly 72 per cent of the participants were not engaged in any regular exercises or physical activities (see Table 3.16c)

Table 3.16c Physical activity status of teachers

Variables	Categories	Frequency (N = 255)	Percentage (%)
Physical activity^a	Regularly active	70	27.5%
	Not regularly active	183	71.8%

a-Participants were classified as "regularly active" if they engaged in any listed activity in Table 3.15b regularly; otherwise, they were categorised as "not regularly active."

The Self-reported health conditions and related information provided by the teachers are described in Table 3.17.

About 14 per cent of the teachers had hypertension, followed by thyroid complaints, varicose veins and diabetes. Among teachers who experienced regular illness, most of them suffered from lower back pain, followed by migraine and neck pain. A significant proportion (38%) reported an inadequate duration of sleep. Most of the teachers rated their health as average, while a small proportion rated it as poor. About 20 per cent of teachers took sick leave in the past year, with nearly half of them taking more than six days off (see Table 3.17).

Table 3.17 General health characteristics of teachers

Variables	Categories	Frequency (N = 255)	Percentage^a (%)
Self-reported health conditions	Diabetes	18	7.1%
	Hypertension	36	14.1%
	Asthma	9	3.5%
	Thyroid problems	31	12.2%
	Varicose veins	24	9.4%
	Heart disease	1	0.4%
	Others	23	9%
	No health conditions	113	44.3%
Regular medication status	Yes	76	29.8%
	No	153	60%
Regular experience of illness	Migraine	35	13.7%
	Lower back pain	46	18%
	Neck pain	35	13.7%
	Gastric complaints	27	10.6%
	No complaints	112	43.9%
Duration of sleep	Less than 6 hours	63	24.7%
	Greater than or equal to six hours	185	72.5%
Adequate sleep (participants' perception)	Yes	156	61.2%
	No	96	37.6%
Self-rated health	Very good	7	2.7%
	Good	59	23.1%
	Average	166	65.1%
	Poor	20	7.8%
	Very poor	1	0.4%
Sick leave availed in the past year	Yes	50	19.6%
	No	202	79.2%
Duration of sick leave availed^b	Up to six days	24	48%
	More than six days	23	46%

a - The percentage may not add up to 100 as there are missing values for the variables

b – Out of the number of participants who took sick leave (N=50)

3.2.4 Details of burnout, stress, anxiety and depression among teachers

Figures 3.3 to 3.5 show the distribution of total burnout scores and their two dimensions.

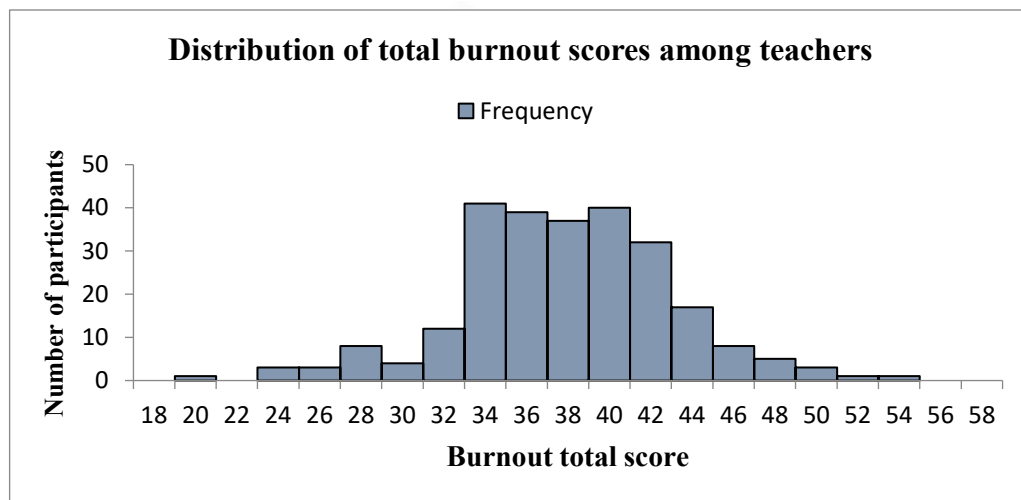


Figure 3.3 Distribution of total burnout scores among teachers

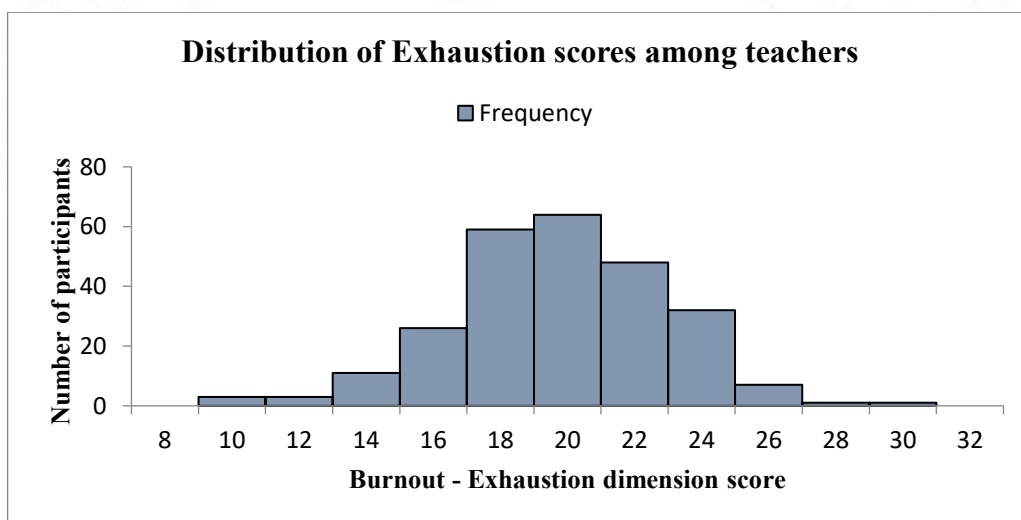


Figure 3.4 Distribution of exhaustion scores among teachers

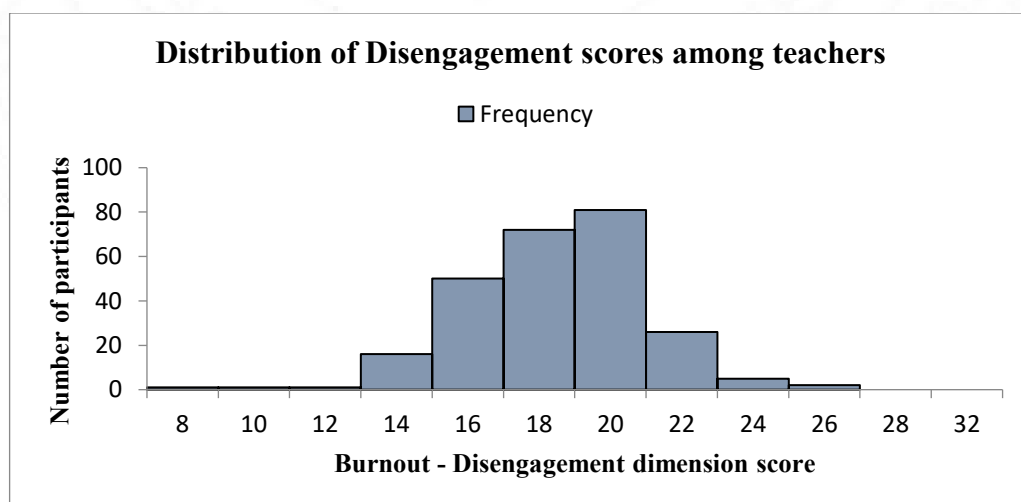


Figure 3.5 Distribution of disengagement scores among teachers

The median total score of the burnout among teachers was 37.3, ranging from 19 to 54. The distribution of the scores clearly shows that the majority of the total scores were clustered around 32 to 44. Similarly, the median score for the exhaustion dimension among teachers was 20, ranging from 9 to 29, and the median scores for the disengagement dimension were 28, ranging from 8 to 26.

The burnout scores were further classified, and the proportions across each category of total burnout and the two dimensions are listed in Table 3.18.

Table 3.18 Distribution of burnout among teachers

Variables	Categories	Frequency (N = 255)	Percentage (%)
Total burnout	Low (< 36)	88	34.5%
	Moderate (36 – 39)	83	32.6%
	High ($\geq$ 40)	84	32.9%
Exhaustion dimension	Low (< 19)	102	40%
	Moderate (19 - 21)	84	32.9%
	High ($\geq$ 22)	69	27.1%
Disengagement dimension	Low (< 18)	105	41.2%
	Moderate (18 – 19)	79	31%
	High ($\geq$ 20)	71	27.8%

The moderate and high burnout categories were combined for further analysis, and the proportion was 65.5 per cent (95% CI: 60-71%). Whereas, moderate to high levels of exhaustion, was reported at 60 per cent (95% CI: 54-66%), and disengagement was reported at 58.8 per cent (95% CI: 53–65%), respectively (see Table 3.19).

Table 3.19 Teachers with moderate to high level of burnout – Proportion and its 95% Confidence Interval

Variables	Frequency (N=255)	Percentage (%)	95% Confidence Interval	
			Lower Limit	Upper Limit
Burnout (Moderate-High)	167	65.5%	60%	71%
Exhaustion dimension (Moderate-High)	153	60%	54%	66%
Disengagement dimension (Moderate-High)	150	58.8%	53%	65%

Table 3.20 Stress, Anxiety and Depression among teachers

Variables	Frequency (N=255)	Percentage (%)	95% Confidence Interval	
			Lower Limit	Upper Limit
Stress (Moderate-High) (≥ 14)	167	65.5%	59.50%	71%
Anxiety (≥ 3)	34	13.3%	9.10%	17.50%
Depression (≥ 3)	20	7.8%	4.50%	11.10%

Similarly, moderate to high stress was observed among 65.5 per cent of teachers. Additionally, anxiety was observed in 13.3 per cent of teachers and depression was found in 7.8 per cent, respectively (see Table 3.20).

3.2.5 Work stress and coping strategies among teachers

Table 3.21 Distribution of work stress, coping strategies, work-life balance and counselling status among teachers

Variables	Categories	Frequency (N = 255)	Percentage (%)
Do you feel stressed during work	Yes	129	50.6%
Adopted Strategies to reduce or manage stress	Meditation	33	12.9%
	Breathing exercises	11	4.3%
	Walking	25	9.8%
	Listening to music	122	47.8%
	Eating	6	2.4%
	Others	23	9%
	Not adopted	35	13.7%
How satisfied are you with your Work-Life Balance	Very Dissatisfied	13	5.1%
	Dissatisfied	12	4.7%
	Neutral	31	12.2%
	Satisfied	166	65.1%
	Very Satisfied	22	8.6%
Have you received any mental health counselling	From school	19	7.5%
	From outside	17	6.7%
	Not yet	214	83.9%

About 51 per cent of teachers felt stressed during work. Teachers adopted several strategies to reduce stress, where a majority of them listen to music, followed by meditation and walking. About 65 per cent of teachers are satisfied with their Work-Life Balance, whereas a few teachers were not satisfied. Nearly 14 per cent of teachers combined received mental health counselling from school and outside institutions (see Table 3.21).

3.2.6 Factors associated with Burnout - Results from the Bivariate Analysis

Table 3.22 Association of Burnout with Socio-demographic and Occupation-related Characteristics of Teachers

Variable	N (255)	Burnout present n(%)	P value (Chi- square)	Crude OR (95% CI)	P value (OR)
Type of school					
Government	68	45(66.2%)	0.368	Reference	0.895
Aided	164	110(67.1%)		1.04 (0.57-1.9)	
Unaided	23	12(52.2%)		0.56 (0.21-1.46)	
Area of school					
Panchayat	200	137(68.5%)	0.054	1.81 (0.99-3.33)	0.056
Municipality/ corporation	55	30(54.5%)		Reference	
Age					
Up to 45 years	124	86(69.4%)	0.144	1.49 (0.87-2.53)	0.144
More than 45 years	116	70(60.3%)		Reference	
Sex					
Male	46	25(54.3%)	0.079	Reference	0.081
Female	209	142(67.9%)		1.78 (0.93-3.41)	
Current place of work concerning the place of residence					
In hometown	68	39(57.4%)	0.245	Reference	0.153
Nearby town/city	124	84(67.7%)		1.56 (0.85-2.88)	
Relocated far away	60	42(70%)		1.74 (0.83-3.61)	

Burnout was more common among teachers working in schools in panchayat areas, female teachers, and those who had relocated from a distant place, though these differences were not statistically significant at a five per cent alpha level. However, we observed a significant variation between burnout and sufficient family income (see Table 3.22).

Table 3.22 Contd.

Variable	N (255)	Burnout present n(%)	P value (Chi- square)	Crude OR (95% CI)	P value (OR)
Educational qualifications completed					
Professional	222	145(65.3%)	0.879	Reference	0.88
Others	33	22(66.7%)		1.06 (0.49-2.31)	
Sufficient family income					
Always/Very Often	167	102(61.1%)	0.033	Reference	0.034
Sometimes/Rarely/Never	83	62(74.7%)		1.88 (1.05-3.38)	
Years of experience					
Up to 10 years	93	63(67.7%)	0.587	1.17 (0.68-2.01)	0.567
More than 10 years	162	104(64.2%)		Reference	
Nature of employment					
Permanent	221	144(65.2%)	0.776	Reference	0.776
Temporary/contractual	34	23(67.6%)		1.12 (0.52-2.42)	

Teachers who sometimes or rarely or never had sufficient family income were nearly twice as likely to experience moderate to high burnout compared to those who always or very often had enough family income (OR = 1.88, 95% CI-1.05- 3.38). On the other hand, burnout levels did not vary significantly based on age, type of school, educational qualifications, years of experience, or nature of employment (see Table 3.22 Contd.).

In general, those who reported high satisfaction with the class performance and students' behaviour had a low level of burnout, and the associations were statistically significant. Among the overall satisfaction of teachers with the class, those who had low satisfaction (OR-5, 95% CI-2.36-10.61) and moderate satisfaction (OR-4.75, 95% CI-2.5- 9.1) were about five times more likely to experience moderate to high burnout as compared to those who were highly satisfied, which was statistically significant. (see Table 3.23)

Table 3.23 Teacher's satisfaction with the class & students' behaviour

Variable	N(255)	Burnout present n(%)	P value (Chi-square)	Crude OR (95% CI)	P value (OR)
Class attendance					
Not Satisfied	21	13(61.9%)	0.001	1.31 (0.51-3.4)	0.573
Somewhat Satisfied	110	86(78.2%)		2.9 (1.63-5.15)	<0.001
Very Satisfied	123	68(55.3%)		Reference	
Student performance					
Not Satisfied	42	29(69%)	0.001	3.1 (1.27-7.56)	0.013
Somewhat Satisfied	169	120(71%)		3.4 (1.70-6.8)	<0.001
Very Satisfied	43	18(41.9%)		Reference	
Attentiveness in Class					
Not Satisfied	36	28(77.8%)	<0.001	5.1 (1.96-13.2)	<0.001
Somewhat Satisfied	164	117(71.3%)		3.6 (1.9-6.9)	<0.001
Very Satisfied	54	22(40.7%)		Reference	
Homework/assignment completion					
Not Satisfied	53	38(71.7%)	0.014	2.9 (1.25-6.79)	0.013
Somewhat Satisfied	157	108(68.8%)		2.54 (1.27-5.04)	0.008
Very Satisfied	43	20(46.5%)		Reference	
Behaviour Towards the Teacher					
Not Satisfied	44	31(70.5%)	<0.001	2.7 (1.26-5.9)	0.011
Somewhat Satisfied	122	95(77.9%)		4.03 (2.22-7.34)	<0.001
Very Satisfied	88	41(46.6%)		Reference	
Class cooperativeness					
Not Satisfied	30	24(80%)	<0.001	5.7 (2.1-15.7)	<0.001
Somewhat Satisfied	157	113(74.8%)		4.3 (2.4-7.7)	<0.001
Very Satisfied	73	30(41.1%)		Reference	
Overall satisfaction of the teacher with the class ^a					
Low satisfaction (up to 11)	66	50(75.8%)	<0.001	5.0 (2.36-10.61)	<0.001
Moderate satisfaction (12-14)	123	92(74.8%)		4.75 (2.5-9.1)	<0.001
High satisfaction (>14)	65	25(38.5%)		Reference	
Experienced any conflicting/confronting behaviour					
No	93	50(53.8%)	0.003	Reference	
Yes	161	116(72%)		2.22 (1.30-3.8)	0.003

a – All the individual variables were coded 1 to 3, and the total sum ranged from 6 to 18. Overall satisfaction is categorised into three groups based on the distribution of total scores obtained by summing all individual items under the Teacher's satisfaction with the class variable.

Similarly, those teachers who experienced any conflicting/confronting behaviour from the students were two times more likely to experience moderate to high burnout compared to those who didn't (OR-2.22,95% CI-1.30- 3.8; see Table 3.23).

Table 3.24 Teacher's Satisfaction with the Working Environment

Variable	N(255)	Burnout present n(%)	P value (Chi-square)	Crude OR (95% CI)	P value (OR)
Lights, Fans, power backup (UPS), etc					
Not Satisfied	17	10(58.8%)	0.279	0.87 (0.31-2.44)	0.874
Somewhat Satisfied	101	72(71.3%)		1.52 (0.87-2.64)	1.519
Very Satisfied	137	85(62%)		Reference	
Adequate Teaching aids (Board, projectors, lab equipment, etc.)					
Not Satisfied	20	17(85%)	0.021	4.08 (1.14-14.6)	0.031
Somewhat Satisfied	106	75(70.8%)		1.74 (1.01-3.01)	0.046
Very Satisfied	129	75(58.1%)		Reference	
Drinking water (Availability and quality)					
Not Satisfied	9	6(66.7%)	0.934	1.09 (0.26-4.51)	0.903
Somewhat Satisfied	61	41(67.2%)		1.12 (0.61-2.07)	0.718
Very Satisfied	184	119(64.7%)		Reference	
Toilet facility (Availability and maintenance)					
Not Satisfied	9	6(66.7%)	0.749	1.13 (0.27-4.7)	0.864
Somewhat Satisfied	80	55(68.8%)		1.25 (0.71-2.20)	0.45
Very Satisfied	166	106(63.9%)		Reference	
Functioning of the library					
Not Satisfied	17	10(58.8%)	0.008	1.01 (0.363-2.79)	0.99
Somewhat Satisfied	87	68(78.2%)		2.52 (1.38-4.61)	0.003
Very Satisfied	150	88(58.7%)		Reference	

A lower proportion of moderate to high burnout was observed among teachers who were very satisfied with Adequate Teaching aids, Functioning of the library, Computer and Internet access, and Transport facility to reach school, which was statistically significant. (see Table 3.24)

Table 3.24 Contd.

Variable	N(255)	Burnout present n(%)	P value (Chi-square)	Crude OR (95% CI)	P value (OR)
Computer and Internet access					
Not Satisfied	15	9(60%)	0.004	1.10 (0.373-3.26)	0.86
Somewhat Satisfied	96	75(78.1%)		2.63 (1.46-4.72)	0.001
Very Satisfied	144	83(57.6%)		Reference	
Recreation (Yoga or Meditation Rooms, Gardens or open spaces, etc.)					
Not Satisfied	59	43(72.9%)	0.357	1.44 (0.69-2.99)	0.325
Somewhat Satisfied	113	70(61.9%)		0.87 (0.49-1.58)	0.655
Very Satisfied	83	54(65.1%)		Reference	
Transport facility to reach school (school bus)					
Not Satisfied	28	21(75%)	0.048	2.07 (0.83-5.19)	0.12
Somewhat Satisfied	80	59(73.8%)		1.94 (1.07-3.54)	0.03
Very Satisfied	142	84(59.2%)		Reference	
Functioning of the canteen					
Not Satisfied	103	74(71.8%)	0.337	1.68 (0.83-3.37)	0.148
Somewhat Satisfied	59	41(69.5%)		1.49 (0.68-3.26)	0.313
Very Satisfied	53	37(60.4%)		Reference	
Overall satisfaction of teachers with the working environment ^a					
Low satisfaction (up to 18)	67	53(79.1%)	0.024	2.55 (1.20-5.43)	0.015
Moderate satisfaction (19-23)	116	71(61.2%)		1.06 (0.58-1.94)	0.839
High satisfaction (>23)	72	43(59.7%)		Reference	
Adequate School Staffing (Perceived)					
No	92	71(77.2%)	0.003	2.36 (1.32-4.21)	0.004
Yes	163	96(58.9%)		Reference	

a – All the individual variables were coded 1 to 3, and the total sum ranged from 9 to 27. Overall satisfaction is categorised into three groups based on the distribution of total scores obtained by summing all individual items under the working environment variable.

Among the overall satisfaction of teachers with the working environment, those who had a low satisfaction were nearly three times more likely to experience moderate to high burnout as compared to those who were highly satisfied (OR-2.5, 95% CI-1.20- 5.43), which was statistically significant. Similarly, those teachers who felt inadequate school staffing were

two times more likely to experience moderate to high burnout compared to those who felt adequate school staffing (OR-2.36, 95% CI-1.32- 4.21). (see Table 3.24 Contd.)

Table 3.25 Association of Burnout with Physical activity status of teachers

Variable	N(255)	Burnout present n(%)	P value (Chi-square)	Crude OR (95% CI)	P value (OR)
Outdoor games					
Regularly	5	1(20%)	0.001 (Fisher's exact)	Reference	0.128
Occasionally	120	70(58.3%)		5.6 (0.61-51.6)	
Never	120	91(75.8%)		12.6 (1.35-116.8)	
Indoor games					
Regularly	3	1(33.3%)	0.003 (Fisher's exact)	Reference	0.405
Occasionally	132	77(58.3%)		2.8 (0.25-31.7)	
Never	109	83(76.1%)		6.4 (0.56-73.3)	
Jogging/walking					
Regularly	59	30(50.8%)	<0.001	Reference	0.1
Occasionally	142	90(63.4%)		1.67 (0.91-3.1)	
Never	47	42(89.4%)		8.1 (2.82-23.4)	
Cycling					
Regularly	6	3(50%)	0.029 (Fisher's exact)	Reference	0.95
Occasionally	33	16(48.5%)		0.94 (0.17-5.4)	
Never	206	144(69.9%)		2.3 (0.46-11.83)	
Swimming					
Regularly	2	1(50%)	0.039 (Fisher's exact)	Reference	0.902
Occasionally	22	10(45.5%)		0.83 (0.05-15.1)	
Never	222	153(68.9%)		2.22 (0.14-35.97)	
Yoga					
Regularly	16	6(37.5%)	0.011	Reference	0.086
Occasionally	85	52(61.2%)		2.63 (0.87-7.91)	
Never	143	103(72%)		4.3 (1.46-12.59)	
Physical activity status ^a					
Regularly active	70	38(54.3%)	0.024	Reference	0.025
Not regularly active	183	127(69%)		1.91 (1.09-3.4)	

a – Physical activity status is categorised as "regularly active" for individuals who engage in any listed activities regularly, while others are classified as "not regularly active."

Those teachers who were regularly engaged in any of the physical activities, such as outdoor games, indoor games, jogging or walking, swimming, cycling, and yoga were had a lower level of moderate to high burnout, and the association of these activities with burnout was statistically significant. Within the physical activity status variable, teachers who are not regularly physically active were two times more likely to experience moderate to high burnout compared to those who were regularly physically active (OR-1.91, 95% CI-1.09- 3.4), which was statistically significant (see Table 3.25)

Table 3.26 Association of Burnout with General health characteristics of teachers

Variable	N(255)	Burnout present n(%)	P value (Chi-square)	Crude OR (95% CI)	P value (OR)
Self-reported health issues					
Health issues absent	113	63(55.8%)	0.004	Reference	0.004
Any health issues present	142	104(73.2%)		2.17 (1.29-3.67)	
Regular experience of illness					
No illness experienced	112	64(57.1%)	0.013	Reference	0.014
Illness experienced	143	103(72%)		1.93 (1.15-3.26)	
Duration of sleep					
Less than 6 hours	63	48(76.2%)	0.043	1.95 (1.015-3.7)	0.045
Greater than or equal to six hours	185	115(62.2%)		Reference	
Adequate sleep (participants' perception)					
No	96	76(79.2%)	<0.001	2.79 (1.55-5.01)	<0.001
Yes	156	90(57.7%)		Reference	
Self-rated health					
Good	66	26(39.4%)	<0.001	Reference	<0.001
Average	166	122(73.5%)		4.3 (2.34-7.79)	
Poor	21	18(85.7%)		9.2 (2.47-34.49)	

Teachers with self-reported health issues (OR- 2.17, 95% CI-1.29- 3.67) and those who regularly experience illness (OR- 1.93, 95% CI-1.15- 3.26) were two times more likely to

experience moderate to high burnout compared to those who didn't have any issues or illness. Similarly, there was a strong association observed between burnout and adequate sleep status and self-rated health among teachers. Those perceiving their sleep as inadequate had almost three times higher chance of experiencing burnout as compared to those who had adequate sleep (OR-2.79, 95% CI-1.55- 5.01). Similarly, those who rated their health status as poor had almost a nine times higher chance of experiencing burnout as compared to those who rated it as good (OR-9.2, 95% CI-2.47- 34.49). All of which discussed here were statistically significant (see Table 3.26)

Table 3.27 Association of Burnout with Stress, anxiety, depression, job stress, and work-life balance

Variable	N(255)	Burnout present n(%)	P value (Chi-square)	Crude OR (95% CI)	P value (OR)
Status of stress					
low	88	33(37.5%)	<0.001	Reference	<0.001
Moderate to high	167	134(80.2%)		6.8 (3.81-12.03)	
Anxiety					
Absent	221	136(61.5%)	<0.001	Reference	0.003
Present	34	31(91.2%)		6.46 (1.92-21.78)	
Depression					
Absent	235	148(63%)	0.004	Reference	0.02
Present	20	19(95%)		11.17 (1.47-84.9)	
Mental health distress status ^a (combined)					
Mental health distress absent	88	33(37.5%)	<0.001	Reference	<0.001
Any mental health distress present	167	134(80.2%)		6.77 (3.81-12.03)	
Do you feel stressed during work?					
No	118	56(47.5%)	<0.001	Reference	<0.001
Yes	129	105(81.4%)		4.8 (2.73-8.58)	
How satisfied are you with your Work-Life Balance?					
Very Dissatisfied/ Dissatisfied	25	14(56%)	0.02	0.74 (0.32-1.72)	0.48
Neutral	31	27(87.1%)		3.91 (1.31-11.65)	0.014
Satisfied/Very Satisfied	188	119(63.3%)		Reference	

a – Mental health distress status is categorised as "present" for individuals experiencing any form of distress, while others are classified as "absent."

We observed that stress, anxiety and depression were highly associated with moderate to high burnout. Those teachers with moderate to high stress were seven times more likely to experience burnout as compared to those who had low stress (OR-6.8, 95% CI-3.81- 12.03). Similarly, those teachers who had anxiety were six times (OR-6.46, 95% CI-1.92- 21.78), and those who had depression were eleven times (OR-11.17, 95% CI-1.47- 84.89) more likely to experience burnout compared to those who didn't have anxiety and depression. Teachers who felt stressed during work and who reported their work-life balance as neutral were at higher risk of experiencing burnout (see Table 3.27)

3.2.7 Burnout and associated factors - Results from the multivariable logistic regression analysis

Multivariate logistic regression analysis was done with variables that showed significant association in bivariate logistic regression, and some variables that can act as potential covariates, like age and sex, were also added in the initial step of multivariate analysis. Initially, the analysis included a total of sixteen variables such as age, sex, overall satisfaction of teacher with the class, conflicting or confronting behaviour experienced, overall satisfaction with the working environment, adequate school staff, physical activity status, self-reported health issues, regular experience of illness, adequate sleep, self-rated health status, stress, anxiety, depression, job stress, and work-life balance.

However, the variables like age and sex were later removed from the Model as these variables showed little variation in effect when added and removed from the model. We included Job stress initially, but removed it later as stress status had already been assessed using the PSS-10, and those two variables were correlating with each other. Work-life balance was removed because the variable showed some inconsistent results when exploring its association with burnout. Variables such as the experience of conflicting

interests were correlated with overall satisfaction with the class; similarly, staff shortages were correlated with overall satisfaction with the working environment, and self-reported health issues and the regular experience of illness were correlated with self-rated health status.

Thus, we come up with eight variables for an adjusted analysis (Model 1), and Table 3.28a shows the crude and adjusted odds ratios and 95% confidence intervals for the Odds Ratios. Here, we adjusted all eight variables to each other. Therefore, Model 1 ultimately included variables that were independent and explored their association with burnout while adjusting for other variables.

Stepwise regression analysis was done using the backward conditional method, with the variables in Model one resulting in Model two, which showed the potential variables that act as a strong predictor for experiencing moderate to high burnout (See Table 3.28b, Model 2).

A linear regression analysis was also conducted using the key predictors of burnout to assess whether the direction and strength of associations remained consistent across different analytical methods, and the results are presented in the annexure (see Annexure 11).

Table 3.28a Association of independent variables with burnout (Model 1)

Variable	Crude OR (95% CI)	P value (OR)	Model 1	
			Adjusted OR (AOR)	P value (AOR)
Overall satisfaction of the teacher with the class ^a				
Low or Moderate satisfaction	4.8 (2.66-8.8)	<0.001	3.48 (1.7-7.13)	<0.001
High satisfaction	Reference		Reference	
Overall satisfaction of teachers with the working environment				
Low satisfaction	2.55 (1.20-5.43)	0.015	1.06 (0.42-2.7)	0.895
Moderate satisfaction	1.06 (0.58-1.94)		0.77 (0.37-1.63)	
High satisfaction	Reference		Reference	
Physical activity status				
Regularly active	Reference		Reference	
Not regularly active	1.91 (1.09-3.4)	0.025	1.44 (0.71-2.91)	0.318
Adequate sleep (participants' perception)				
No	2.79 (1.55-5.01)	<0.001	1.52 (0.77-3.01)	0.23
Yes	Reference		Reference	
Self-rated health				
Good	Reference		Reference	
Average	4.3 (2.34-7.79)	<0.001	2.39 (1.15-4.98)	0.019
Poor	9.2 (2.47-34.49)		4.34 (0.97-19.45)	
Status of stress				
low	Reference		Reference	
Moderate to high	6.8 (3.81-12.03)	<0.001	4.13 (2.13-7.99)	<0.001
Anxiety				
Absent	Reference		Reference	
Present	6.46 (1.92-21.78)	0.003	1.88 (0.48-7.4)	0.368
Depression				
Absent	Reference		Reference	
Present	11.17 (1.47-84.89)	0.02	2.43 (0.28-20.96)	0.42

a - The low and moderate satisfaction categories from the overall satisfaction with the class variable were combined into a single category as they showed similar levels of burnout, and the other category (high satisfaction) was kept as such.

Table 3.28b Association of independent variables with burnout (Model 2)

Variable	Model 2	
	Adjusted OR (AOR)	P value (AOR)
Overall satisfaction of the teacher with the class		
Low or Moderate satisfaction	3.83(1.92-7.66)	<0.001
High satisfaction	Reference	
Self-rated health		
Good	Reference	
Average	2.84 (1.42-5.7)	0.003
Poor	6.01 (1.44-25.15)	0.014
Status of stress		
low	Reference	
Moderate to high	5.06 (2.69-9.53)	<0.001

a – Model 2 was derived using stepwise logistic regression with the backward (conditional) method to identify and see the adjusted effect of strong independent predictors of moderate to high burnout. The final model includes three variables, with their adjusted odds ratios (AOR), confidence intervals, and corresponding p-values presented. Criteria used- Pin(0.1), Pout(0.15), i.e. excluded variables whose p values are greater than 0.15 and included those whose p values are less than 0.1

b - The low and moderate satisfaction categories from the overall satisfaction with the class variable were combined into a single category as they showed similar levels of burnout, and the other category (high satisfaction) was kept as such.

We observed that teachers who were having a low or moderate satisfaction with the class were nearly four times more likely to experience moderate to high burnout as compared to those who were highly satisfied (AOR- 3.83, 95% CI-1.92- 7.66). Similarly, Teachers who rated their health status as average were nearly three times more likely (AOR-2.84, 95% CI-1.42- 5.7), and those who rated it as poor were six times more likely (AOR-6.01, 95% CI-1.44- 25.15) to experience moderate to high burnout compared to those with good health status. Teachers who were stressed were five times more likely to experience moderate to high burnout compared to those who were not (AOR- 5.06, 95% CI-2.69- 9.53). All three variables were statistically significant after adjusting for other variables in the model (See Table 3.28b, Model 2).

3.2.8 Factors Associated with the Exhaustion and Disengagement - Results from the Bivariate and Multivariate Analysis

The difference in the proportion of exhaustion concerning the variables mentioned in Table 3.29 was similar to what was observed when we explored the factors associated with burnout. However, a higher proportion of females experienced moderate to high exhaustion compared to males, which was highly significant. The association between exhaustion and sex was the only difference observed compared to our earlier analysis of factors associated with burnout. Here, we also observed that overall satisfaction with the working environment and work-life balance wasn't associated with exhaustion (see Table 3.29).

Variables associated with exhaustion from the bivariate analysis shown in Table 3.29 were taken for multivariate logistic regression. Similar to the multivariate analysis done for burnout, a few variables, such as experience of conflicting behaviour, self-reported health issues, and regular experience of illness, were not included in this multivariate analysis due to the same reason mentioned earlier (see Table 3.30).

Table 3.29 Results of the bivariate analysis of factors associated with the Exhaustion

Variable	N(255)	Exhaustion present n(%)	P value (Chi-square)
Sex			
Male	46	13(28.3%)	<0.001
Female	209	140(67%)	
Overall satisfaction of the teacher with the class			
Low satisfaction	66	49(74.2%)	<0.001
Moderate satisfaction	123	84(68.3%)	
High satisfaction	65	20(30.8%)	
Adequate School Staffing			
No	92	63(68.5%)	0.038
Yes	163	90(55.2%)	
Physical activity status			
Regularly active	70	34(48.6%)	0.021
Not regularly active	183	118(64.5%)	
Adequate sleep (participants' perception)			
No	96	80(83.3%)	<0.001
Yes	156	73(46.8%)	
Self-rated health			
Good	66	20(30.3%)	<0.001
Average	166	114(68.7%)	
Poor	21	19(90.5%)	
Status of stress			
low	88	30(34.1%)	<0.001
Moderate to high	167	123(73.7%)	
Anxiety			
Absent	221	123(55.7%)	<0.001
Present	34	30(88.2%)	
Depression			
Absent	235	134(57%)	<0.001
Present	20	19(95%)	

Table 3.30 Factors associated with the Exhaustion –Results from binary Logistic regression analysis

Variable	Crude OR(COR) (95% CI)	P value (COR)	Adjusted OR(AOR) (95% CI)	P value (AOR)
Sex				
Male	Reference		Reference	
Female	5.15(2.55-10.41)	<0.001	3.78(1.6-9.04)	0.003
Overall satisfaction of the teacher with the class^a				
Low or Moderate satisfaction	5.34(2.89-9.86)	<0.001	4.41(2.0-9.71)	<0.001
High satisfaction	Reference		Reference	
Adequate School Staffing				
No	1.76(1.03-3.02)	0.039	1.01(0.50-2.03)	0.982
Yes	Reference		Reference	
Physical activity status				
Regularly active	Reference		Reference	
Not regularly active	1.92(1.10-3.36)	0.022	1.81(0.86-3.81)	0.116
Adequate sleep (participants' perception)				
No	5.69(3.1-10.59)	<0.001	3.76(1.83-7.75)	<0.001
Yes	Reference		Reference	
Self-rated health				
Good	Reference		Reference	
Average	5.04(2.72-9.36)	<0.001	2.45(1.15-5.22)	0.020
Poor	21.85(4.64-102.8)	<0.001	8.42(1.43-49.65)	0.019
Status of stress				
low	Reference		Reference	
Moderate to high	5.41(3.09-9.46)	<0.001	2.68(1.32-5.42)	0.006
Anxiety				
Absent	Reference		Reference	
Present	5.98(2.04-17.54)	0.001	1.58(0.44-5.72)	0.487
Depression				
Absent	Reference		Reference	
Present	14.32 (1.89-108.76)	0.010	4.41(0.51-38.3)	0.178

a - The low and moderate satisfaction categories from the overall satisfaction with the class variable were combined into a single category as they showed similar levels of burnout, and the other category (high satisfaction) was kept as such.

After adjusting for other variables, we observed that sex, overall satisfaction with the class, adequate sleep, self-rated health, and stress were the strong predictors for experiencing moderate to high exhaustion. Female teachers were nearly four times more likely to experience moderate to high exhaustion compared to males (AOR-3.78, 95%CI-1.6-9.04). Similarly, teachers who perceived their sleep as inadequate were nearly four times more likely to experience moderate to high exhaustion compared to those who had adequate sleep (AOR-3.76, 95% CI - 1.83- 7.75). Teachers with low overall satisfaction with class, poor self-rated health, and moderate to high stress were having a higher risk of experiencing moderate to high exhaustion, which was highly significant (see Table 3.30).

The pattern we observed for the disengagement dimension was similar to what we observed earlier (see Table 3.31). Some variation in the proportion was seen in the self-rated health status and disengagement, though it was statistically significant. We observed that disengagement was not associated with regular experience of illness, and sex doesn't have much influence on disengagement as compared to exhaustion.

Variables associated with disengagement from the bivariate analysis, shown in Table 3.31, were taken for multivariate logistic regression. The exclusion criteria for some variables were similar to what we explained earlier (see Table 3.32).

Table 3.31 Results of the bivariate analysis of factors associated with the Disengagement

Variable	N(255)	Disengagement present n(%)	P value (Chi-square)
Overall satisfaction of the teacher with the class			
Low satisfaction	66	49(74.2%)	<0.001
Moderate satisfaction	123	79(64.2%)	
High satisfaction	65	22(33.8%)	
Overall satisfaction of teachers with the working environment			
Low satisfaction	67	54(80.6%)	<0.001
Moderate satisfaction	116	65(56%)	
High satisfaction	72	31(43.1%)	
Physical activity status			
Regularly active	70	30(42.9%)	0.002
Not regularly active	183	118(64.5%)	
Adequate sleep (participants' perception)			
No	96	65(67.7%)	0.03
Yes	156	84(53.8%)	
Self-rated health			
Good	66	27(40.9%)	0.001
Average	166	106(63.9%)	
Poor	21	16(76.2%)	
Status of stress			
low	88	32(36.4%)	<0.001
Moderate to high	167	118(70.7%)	
Anxiety			
Absent	221	124(56.1%)	0.025
Present	34	26(76.5%)	
Depression			
Absent	235	133(56.6%)	0.013
Present	20	17(85%)	

Table 3.32 Factors associated with the Disengagement –Results from binary Logistic regression analysis

Variable	Crude OR(COR) (95% CI)	P value (OR)	Adjusted OR(AOR) (95% CI)	P value (AOR)
Overall satisfaction of the teacher with the class^a				
Low or Moderate satisfaction	4.1 (2.26-7.45)	<0.001	2.75 (1.4-5.4)	0.003
High satisfaction	Reference		Reference	
Overall satisfaction of teachers with the working environment				
Low satisfaction	5.5 (2.56-11.8)	<0.001	3.59 (1.54-8.34)	0.003
Moderate satisfaction	1.69 (0.93-3.1)	0.085	1.55 (0.79-3.1)	0.207
High satisfaction	Reference		Reference	
Physical activity status				
Regularly active	Reference		Reference	
Not regularly active	2.42 (1.38-4.25)	0.002	1.9 (0.99-3.63)	0.054
Adequate sleep (participants' perception)				
No	1.8 (1.06-3.06)	0.031	1.17 (0.63-2.18)	0.61
Yes	Reference		Reference	
Self-rated health				
Good	Reference		Reference	
Average	2.6 (1.4-4.6)	0.002	1.25 (0.62-2.5)	0.537
Poor	4.6 (1.51-14.13)	0.007	2.19 (0.61-7.83)	0.228
Status of stress				
low	Reference		Reference	
Moderate to high	4.21 (2.44-7.29)	<0.001	2.85 (1.51-5.38)	0.001
Anxiety				
Absent	Reference		Reference	
Present	2.54 (1.10-5.86)	0.029	1.14 (0.41-3.2)	0.809
Depression				
Absent	Reference		Reference	
Present	4.35 (1.24-15.2)	0.022	1.68 (0.41-6.96)	0.472

a - The low and moderate satisfaction categories from the overall satisfaction with the class variable were combined into a single category as they showed similar levels of burnout, and the other category (high satisfaction) was kept as such

After adjusting for other variables, we observed that overall satisfaction with the class, overall satisfaction with the working environment, physical activity, and stress were the independent predictors for experiencing disengagement. Teachers who have low satisfaction with their working environment were nearly four times more likely to experience moderate to high disengagement compared to those who were highly satisfied (AOR-3.59, 95% CI- 1.54-8.34). Similarly, those who were not regularly physically active have nearly two times higher chance of experiencing moderate to high disengagement compared to those who were regularly active (AOR-1.9, 95% CI-0.99- 3.63). Self-rated health status was not a predictor for disengagement compared to overall burnout and exhaustion dimensions. Teachers with low overall satisfaction with class and moderate to high stress were having a higher chance of experiencing moderate to high exhaustion, which was highly significant (see Table 3.32).

CHAPTER 4

DISCUSSION AND CONCLUSION

Burnout is an occupational phenomenon, and identifying it can be challenging. It is a growing public health concern, particularly among individuals in emotionally demanding professions. Among those, the teaching profession is more vulnerable to burnout due to its demanding nature. Teachers are more prone to experience burnout because of the demand for constant interactions with the students and parents, high expectations from the institutions and society, increased workloads, and the challenges that the modern world presents.

Burnout becomes a part of work life and, unknowingly, leads to various other health conditions later if not recognised and managed well. Teachers' well-being is crucial for maintaining the quality of education and building better future generations. Therefore, understanding the extent of the issue among teachers becomes important for developing feasible interventions which will help them improve their well-being and productivity, ultimately enabling them to perform well and contribute to the education system and society.

This study was conducted among 255 high school teachers in the Kottayam district of Kerala to estimate the prevalence of burnout and determine the factors that are associated with burnout. We used the Oldenburg Burnout Inventory as the measuring tool, translating and validating it in Malayalam before use.

The study observed that 65 per cent of teachers experienced moderate to high levels of burnout, with a score greater than or equal to 36.

Several factors associated with experiencing burnout were identified in this study. The role of perceived stress, self-rated health and teachers' satisfaction with the class and students'

behaviour in experiencing moderate to high burnout were explored in this study. Further details regarding the translation and validation of the tool, the level of burnout, and the associated factors are discussed in detail in the following sections.

4.1 Translation and validation of the Oldenburg Burnout Inventory in Malayalam

We chose the Oldenburg Burnout Inventory for the study as it is one of the widely used tools for assessing burnout among different occupational groups, including teachers. Compared to other available tools, OLBI was freely available for academic purposes, measured the two core dimensions of burnout (Exhaustion and Disengagement), and addressed a major shortcoming of the Maslach Burnout Inventory by including statements in both positive and negative directions, reducing the response bias.

We found that a Malayalam version of the OLBI was unavailable. Since the study was conducted among secondary school teachers in Kerala, to ensure the cultural and linguistic appropriateness, it was essential to translate and validate the tool to Malayalam. The translation and validation process followed the standard guidelines to ensure methodological rigor and maintain the integrity of the tool. Permission was obtained from the author before initiating the translation and validation process of the tool. The procedure begins with the initial translation of the original tool; followed by back-translation, content validity assessment, cognitive debriefing and finally, the reliability assessment.

The translation and back-translation of OLBI followed a rigorous process to ensure it was conceptually meaningful rather than a literal translation. Various challenges were faced during the process, such as difficulty in finding appropriate Malayalam words equivalent to the original English terms, constructing meaningful sentences that retained the conceptual similarity of the statements in the tool, and partial reliance on Google translation by some individuals involved in the process. Additionally, variations in the translations

provided by different individuals made it challenging to differentiate the intended conceptual meaning. However, these differences also contributed to refining and improving the translated tool. The challenges faced were similar to translation studies of the Oldenburg Burnout Inventory in other languages (Mahadi et al., 2018; Subburaj and Vijayadurai, 2016; Xu et al., 2021).

We observed an excellent content validity for the translated OLBI, where the Item Content Validity Index and Scale Content Validity Index values were well beyond the recommended threshold values, consistent with the findings from the Chinese validation study of OLBI (Xu et al., 2021). The expert opinions and the cognitive interviews confirmed that the translated items retain the intended meaning and were well understood by the experts and the teachers themselves, ensuring the translated tool has good face validity in addition to content validity.

The OLBI Malayalam version showed a good test-retest reliability, where the ICC values were well beyond the acceptable threshold values, ensuring its temporal stability. Although the results of test-retest assessments demonstrated consistency over time, minor variations in the individual responses, for instance, the item 1 (**I always find new and interesting aspects in my work**) shown in the results section (see Table 3.4), could be attributed to changes in workload, personal experiences, and other factors that happened over the test and retest interval. We observed a high ICC value for the overall scale and its dimensions, which was consistent with the findings of the study by Smith *et al.* among Doctor of Physical Therapy students, suggesting a strong temporal stability, though the reported ICC values were slightly higher than ours (Smith et al., 2022).

The internal consistency of the OLBI Malayalam version was satisfactory, with a Cronbach's alpha coefficient of 0.821 for the overall scale, which exceeded the

recommended threshold value. The observed results were comparable with the results of other validation studies of OLBI (Mahadi et al., 2018; Subburaj and Vijayadurai, 2016; Xu et al., 2021), though some variations were identified. We observed some inconsistency with the alpha value of the Disengagement dimension, which could be attributed to the findings reported by Mahadi *et al.* during the factorial analysis in the translation of OLBI to the Malay language, where certain items were removed from the final translated scale due to poor factor loading (Mahadi et al., 2018). Similarly, weak correlations for a few items in the disengagement dimension were observed from the study of translating the OLBI to the Chinese language (Xu et al., 2021).

In our study, the disengagement dimension demonstrated a lower reliability compared to the exhaustion dimension, which was similar to the observation made by Ogunsuji *et al.*, where they identified a borderline alpha value for the Disengagement dimension (Ogunsuji et al., 2022). The lower alpha values of the disengagement dimension suggest further exploration by doing a goodness of fit or factorial analysis, which may help in identifying the issues (Mahadi et al., 2018). However, these were slight differences that could be due to cultural variations, linguistic modifications, or differences in the occupational context of teachers in Kerala. Hence, these factors strongly reinforce the importance of conducting a localised validation of the tools before using them in different cultural settings. However, a relatively high alpha value for the overall translated scale in our study suggests that the translated tool is reliable.

The OLBI Malayalam version developed in this study is primarily validated for use among secondary school teachers. Though its application in other occupational groups is possible, further validation is recommended to account for the differences in job characteristics, stressors and work culture that may influence the interpretation of items and the experience of burnout.

So, the results of our study establish that the Malayalam-translated OLBI is a reliable and consistent tool for measuring burnout among secondary school teachers. The strong test-retest reliability and internal consistency emphasise its suitability for future research. Further validation across different populations will enhance its applicability, supporting more effective burnout monitoring, occupational well-being initiatives, and evidence-based interventions in Kerala and beyond.

4.2 Characteristics of the teachers who participated in the survey

The majority of teachers were aged between 36 to 56 years. However, there were two outliers initially who were aged more than 65 years, which were then removed from the analysis as they are unrepresentative of the target population. The extremes of age observed were primarily due to the absence of fixed criteria for retirement in some of the unaided and aided schools. The majority of teachers in this study were females, which is consistent with the existing literature on teaching professions. This overrepresentation of female teachers in the study also aligns with the district-level and state-level statistics on the proportion of female to male teachers in the state of Kerala. This higher representation of females could be attributed to the profession being stable and socially respected. The demanding nature of work, apart from teaching, such as class material preparation, lesson planning, paper correction, and other extracurricular and administrative duties, was also observed in the study.

4.3 Teachers' satisfaction with the class performance and their working environment

Satisfaction plays a crucial role in teachers' well-being and job performance. More than 50 per cent of teachers had an average level of satisfaction, and the remaining reported being very satisfied or not satisfied with their class and working environment. From those who reported not satisfied, majority were from aided schools, followed by government schools.

But in the case of drinking water availability, computer and internet access, recreation, and transport facilities, the majority who reported not satisfied were from government schools, followed by aided schools.

In recent times, teachers across Kerala have faced an increasing number of instances concerning conflicting and confronting behaviour in the workplace. This could be attributed to factors such as changing student behaviour and increased parental expectations, demands, and involvement. From our study, we observed that a significant proportion of the teachers experienced any form of conflicting or confronting behaviour from students, and only a few reported it as being not serious, which is in line with the recent incidents of verbal abuse and disrespectful behaviour from students. The conflicts could be attributed to the growing influence of social media, shifting societal dynamics, changing perspectives among the younger generation regarding their future, and the generation gap between teachers and students.

Staff shortage was reported by a significant proportion of teachers, and this could impact the workload faced by teachers in some schools. Among those who felt their school lacked sufficient staff, the majority were from aided schools, followed by government schools.

4.4 Level of Burnout Among Teachers

The distribution of burnout scores shown in the results section indicated that a large proportion of teachers were falling between the scores of 32 and 44. A similar trend was seen for both dimensions of burnout. A higher burnout score indicates a greater level of burnout. But for the sake of analysis, we have categorised the burnout scores into three categories using the 33rd and 66th percentiles cut-off. The categorisation is consistent with prior research that applied a percentile-based approach. The selected threshold (>36) is close to the midpoint of the OLBI score range (16–64), and a cut-off score of 30 or above

is having higher sensitivity and specificity for detecting burnout as identified by Nguyen Huynh et al. ensuring that those experiencing moderate-to-high burnout are meaningfully identified (Nguyen Huynh et al., 2021). Those with moderate to high levels of burnout are taken as one category, and those with low levels as another, as we move forward with the analysis.

The study found that nearly seven out of ten teachers were experiencing moderate to high burnout, which reflects a significant concern among secondary school teachers in general. The observed prevalence of burnout was much higher than the anticipated prevalence of 36 per cent from the study by Ozoemena *et al.* among Nigerian teachers (Ozoemena et al., 2021). However, in the study among Nigerian teachers, they used the Maslach Burnout Inventory-General Survey, which is different from the scale we used in terms of the scoring system, the method used for determining cut-off, and the measurement of three dimensions instead of two, which could have impacted the difference in the prevalence of burnout observed. Additionally, the higher prevalence may be attributed to the difference in population characteristics, measurement differences concerning the tool used, and changes over the five-year gap between the anticipated study and the present study may have influenced the observed prevalence. Teachers may experience a higher level of burnout at the end of an academic year due to final exams and their preparations, which can also influence the higher prevalence observed in our study, as the data collection was during January. The assumption is in line with the study by Marić *et al.*, where the authors rightly pointed out a possible chance of seasonal variation in the levels of burnout during different periods of an academic year (Marić et al., 2020). So, the influence of the period of measurement on burnout cannot be discarded.

A possible healthy worker effect should also be considered, as teachers with severe burnout might have already left the profession. However, this effect is likely to be more in unaided

schools due to higher job turnover, poor salaries, and lesser job security compared to government schools, which offer greater job security and better salaries.

The literature review indicated that burnout levels among teachers ranged from 11.56% to 78.8% (see Annexure 1). The prevalence observed in this study is higher than in most of the studies discussed (Bezie et al., 2025; Guider et al., 2024). However, it is nearly comparable to studies conducted in India and China (Li et al., 2020; Rana and Soodan, 2019) and lower than the study conducted in Cameroon (Manga et al., 2020). Similarly, a high prevalence of exhaustion was reported by Manga et al., and a high prevalence of disengagement was reported by Roy et al. (Manga et al., 2020; Roy et al., 2024). However, the use of different scales for measuring burnout and adopting different cut-off methods for its categorisation across studies could limit the valid comparison of the proportions.

4.5 Factors associated with burnout and its dimensions

The study identified several factors that are associated with burnout and its dimensions as reported in the literature. However, we also identified several factors that are associated with burnout, as discussed in the literature review, showed no association in our study, which reflects that factors associated with burnout differ according to the work culture, population characteristics, and across different regions of study.

Previous research highlights the complex relationship between sex and burnout (Al-Asadi et al., 2018; Guider et al., 2024; Paudel et al., 2024). The results of our study about the relationship between burnout and sex were consistent with the previous literature. We observed that a higher proportion of females were experiencing moderate to high burnout compared to males, though it was not statistically significant. However, the study observed that females were nearly four times more likely to experience exhaustion compared to males, which was highly significant after adjusting for other variables (see Table 3.29).

This observation was consistent with previous literature emphasising that females are more exhausted than males may be due to greater emotional involvement with students, other responsibilities in the workplace as well as home, greater societal expectations, and ultimately the gendered nature of teaching as a profession (Guider et al., 2024; Okwaraji and Aguwa, 2015). Males and females had nearly equal chances of experiencing disengagement, though the difference was not statistically significant.

In the study, we identified that nearly 15 per cent of teachers had a monthly income of less than 20000 rupees, which highlights the financial constraints faced by a small segment of teachers who are predominantly working temporarily or in unaided schools. Previous literature emphasised that low salaries in this profession are associated with burnout (Ozoemena et al., 2021; Roy et al., 2024). This may potentially make their family difficult to meet their monthly needs. Though in our study, monthly income wasn't associated with burnout or its dimensions, sufficient family income, as perceived by the teachers, was significantly associated with burnout. There is a two times higher chance of experiencing moderate to high burnout for those who have sufficient family income sometimes or rarely, or never, as compared to those who have it often or always.

As explained earlier in the satisfaction of teachers with the class and working environment, the general trend observed was that those who are highly satisfied have a low level of burnout, as well as exhaustion and disengagement. In line with the recent issues happening around, overall satisfaction of teachers with the class was identified as a strong independent predictor for experiencing moderate to high burnout as well as exhaustion and disengagement (see Table 3.28a, 3.28b, 3.30, 3.32). Similarly, those who experienced conflicting behaviour from students were strongly associated with burnout as well as with its dimensions. The observation was consistent with the study done among primary school

teachers in Iraq, where student misbehaviour was an independent predictor for burnout among teachers(Al-Asadi et al., 2018).

A positive work environment is very important to keep the teachers motivated and satisfied, and also to reduce stress. The current study observed that satisfaction with the working environment was associated with burnout and with the disengagement dimension. The observation was consistent with the previous studies in India and Ethiopia, where the researchers identified the working environment as a significant predictor for experiencing burnout(Bezie et al., 2025; Rana and Soodan, 2019).

We observed that many teachers in the study were not regularly physically active, which may be attributed to time constraints. We identified that those who engage in physical activity have a lower chance of experiencing moderate to high burnout, as well as exhaustion and disengagement, and the association was consistent with the previous literature(Guider et al., 2024; Paudel et al., 2024). Though physical activity was associated, we observed that physical activity was only an independent predictor for experiencing moderate to high disengagement.

The relationship between sleep and burnout or its dimensions can be bidirectional. There are studies which identified that sleep, in its quality or quantity, is associated with burnout(Arvidsson et al., 2016; Paudel et al., 2024; Silva et al., 2015). But the direction can also be either way. Burnout and emotional exhaustion can lead to sleeping problems, or sleeping problems can increase the vulnerability to burnout due to impairment in cognitive or emotional regulation. We observed in our study that adequate sleep, as perceived by the teachers, was an independent factor for experiencing moderate to high exhaustion.

The study observed self-rated health status as an independent factor for experiencing moderate to high burnout and exhaustion. One rates their health status as good or poor

depending on their diseases or illnesses they experience. Poor health conditions may also lead to burnout as it will hinder us from doing the work we are assigned to, and burnout may lead to poor health status by regularly causing issues like fatigue, migraine or back pain. The association seen in our study is consistent with the studies we discussed in our literature review section (Arvidsson et al., 2016; Paudel et al., 2024; Piperac et al., 2024).

We have already discussed the relationship of stress, anxiety, and depression with burnout in our introduction chapter in detail. Before going into it, moderate to high stress was seen in a larger proportion of the teachers, and a small proportion were experiencing anxiety and depression (see Table 3.20). Studies done among teachers in Ethiopia, Spain, and Serbia observed a significant association of stress, anxiety and depression with burnout, which was consistent with what we observed from our study (Bezie et al., 2025; Méndez et al., 2020; Piperac et al., 2024). However, in the present study, stress was identified as a strong independent predictor for experiencing moderate to high burnout as well as exhaustion and disengagement.

Despite the high prevalence of burnout, only a small proportion of teachers reported receiving professional mental health counselling indicates potential barriers such as stigma, lack of awareness, or limited access to mental health services.

Multivariate logistic analysis was done to assess the actual effect of each variable after adjusting for the other variables in the model. Initially, all variables which was associated with burnout, along with variables that can act as confounders, were considered for the adjusted analysis. Later, we removed certain variables that were correlated with some other variables, along with the previously suspected confounders, which showed a minimal effect. Teachers' satisfaction with class performance, perceived stress, and self-rated health status were identified as having a higher impact on experiencing moderate to high burnout

in the final model. The same approach was applied separately for the two dimensions, as mentioned in the results section (see Table 3.30 and Table 3.32).

To further validate the categorisation of burnout, a linear regression analysis was done. Unlike logistic regression, which considers burnout a binary variable, linear regression treats burnout as a continuous variable, allowing us to examine both the strength and direction of association between burnout score and identified key predictors. So, the result showed that the key predictors identified during the logistic regression had a similarly strong association with burnout in the linear regression, which reinforces the robustness of our categorisation approach (see Annexure 11).

4.6 Coping strategies for managing stress among teachers

Managing stress is essential for preventing burnout among teachers. In this study, teachers adopted many strategies to cope with stress, such as listening to music, meditation, spending time with close ones, dancing and reading. We earlier discussed the importance of physical activity on burnout; engaging regularly in physical activities itself is a coping strategy. Unfortunately, due to various constraints, most of them are not regularly active. An effective adoption of these strategies is necessary to manage stress, and that varies with individual and workplace characteristics.

The government of Kerala has several programs and initiatives that address most of the issues faced by students at both the district and state levels. ‘Lifestyle Education and Awareness Program’ (LEAP) is one such program by the health sector that focuses on lifestyle problems, including counselling for mental health issues among school-going adolescents (Ramkumar, 2015). ‘Thalir’ is another program from the health sector that focuses on sensitisation and awareness of various issues, including mental health issues

among school-going adolescents(Ramkumar, 2015). A major shortcoming is that most of these policies and programs focus solely on students and not on the well-being of teachers.

4.7 Strengths and limitations of the study

Strengths

A key strength of our study is the rigorous translation and validation process that ensured conceptual equivalence between the Malayalam and original OLBI versions. Additionally, the use of test-retest reliability, along with internal consistency, strengthened the reliability assessment of the tool.

This study addresses the gap in the literature on burnout among teachers in the Indian context, contributing valuable insights to an underexplored area. A detailed literature review, including a systematic review of burnout among teachers, helps to include all essential components in the questionnaire, which helps to explore a well-informed understanding of burnout and key factors associated with it. Finally, this study comprehensively explored most of the potential factors associated with burnout, and it identified predictors that align closely with the real-world challenges and issues faced by teachers in today's society.

Limitations

Further exploration in the validation process to provide a conclusive answer regarding the potential issues in a few items was beyond the scope of this dissertation and was identified as one of the limitations of the study

We adopted the 33rd percentile cut-off criterion for categorising burnout and its dimensions, as previous studies have used different classification methods, and a standardised cut-off for the OLBI is not universally established. As a result, our findings

may differ slightly from those of other studies, which used different cut-off criteria. In addition, the central tendency of burnout scores can vary depending on the population, cultural variations, and working environment. For instance, there may be populations with scores generally located at the lower end or populations where the burnout scores are generally located at the higher end. Taking cut-offs using percentile values in such populations may not be appropriate for differentiating the populations with different levels of burnout. However, the cut-off taken in our study was 35, and a score of ≥ 36 was considered as moderate to high burnout, which also supports logically that this is close to the mid-score of the total range of the original scale. In addition, we also found that a study conducted by Nguyen Huynh et al. suggested the OLBI has its highest sensitivity and specificity to detect burnout when taking a cut-off score of greater than 30, and the specificity reduces significantly when the cut-off is greater than 44. Hence, our estimates of moderate to high burnout seem to be a realistic estimate. However, when our findings are compared with future research, careful attention should be given to the criteria used for burnout classification.

The study is a cross-sectional design, which limits its ability to establish causal relationships between burnout and associated factors. Since exposures and outcomes were measured at the same time, it is unclear whether identified factors contribute to burnout or if burnout influences these factors. Biases like recall bias, social desirability bias, and response bias should be considered, as the data were collected using a self-administered questionnaire.

The study provides valuable insights into burnout among secondary teachers in the Kottayam district and possibly Kerala, but due to differences in culture, work characteristics, and other circumstances, its generalizability is limited to other states or countries.

4.8 Conclusion and Recommendations

Teaching is a profession that presents various challenges in LMICs like India, and addressing burnout among secondary school teachers is critical for sustaining a healthy and motivated teaching workforce.

The translated and validated OLBI tool detected that a significant proportion of teachers experience moderate to high burnout. Key predictors found for experiencing moderate to high burnout were satisfaction with the class, self-rated health status, and perceived stress. Burnout levels are low when you are highly satisfied with the class or have a good health status. Higher levels of stress indicate a higher level of burnout. Similarly, for exhaustion, the key predictors were sex, satisfaction with the class, adequate sleep, self-rated health status, and perceived stress. For disengagement, satisfaction with the class, satisfaction with the working environment, physical activity status, and perceived stress were the key predictors.

The findings of the study highlight an urgent need for initiatives to support teachers' well-being, such as mental health support programs, workload management, and policy-driven interventions. Policymakers, school administrators, and mental health professionals must collaborate to implement evidence-based strategies to enhance their well-being, which will ultimately enhance the quality of education in Kerala. Future studies should explore burnout trends over time and assess the effectiveness of workplace interventions.

So, the recommendations focused on the study findings are as follows;

Teachers' Wellness Programs: As most programs focus solely on student well-being, an inclusive approach that addresses teacher well-being will be beneficial. Promoting regular physical activity, improving sleep hygiene, and developing recreational facilities in schools are feasible strategies to enhance teachers' physical health and reduce burnout.

Strengthening supportive relationships at home and in the workplace can also improve psychosocial well-being and lower stress levels.

Conflict Management & Peer Support: Implement programs to manage conflicts, provide peer support, and promote a respectful work culture. Initiatives to reduce burnout through peer support groups, so that sharing experiences with colleagues will develop a sense of belongingness between them.

Supportive Working Environment: Strengthen resource allocation, enhance professional support, and improve workload management.

Finally, promoting research across all teaching levels can help identify specific burnout factors and guide targeted interventions.

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ANNEXURES

ANNEXURE 1: Summary of studies on burnout among teachers

SI. No	Author and Year of Publication	Country	Sample size	Scale used	Key findings
1.	(Shukla and Trivedi, 2008)	India	320	MBI	Prevalence: EE-23.75%, DP-20%, and PA-28.43% (dimensions) Findings: Males and females are at equal risk of developing burnout The science stream showed a higher level of burnout compared to the arts stream
2.	(Okwaraji and Aguwa, 2015)	Nigeria	432	MBI	Prevalence: EE-40%, DP-39%, and PA-36.5%(dimensions) Factors associated: EE- age greater than 35 years, females, married, and more than five years of service DP- females and married PA- age less than 35 years, males and singles

3.	(Silva et al., 2015)	Sri Lanka	660	MBI	Prevalence: 11.56% (total) Factors associated: years of experience, distance from school, sleeping less than 7 hours a day, doing homework for more than 5 hours a week, and participating in school activities on weekends
4.	(Arvidsson et al., 2016)	Sweden	490	MBI	Prevalence: 15% high burnout (total) Factors associated: teachers teaching seventh and ninth standard, musculoskeletal pain, sleep problems, increased job demand and emotional demand, decreased job control, job support and self-efficacy
5.	(Al-Asadi et al., 2018)	Iraq	706	OLBI	Prevalence: 24.5% (total) Factors associated: age, marital status, sex, workload, number of students, and behaviour of students Experience and training were negatively associated with burnout.
6.	(Molero Jurado et al., 2019)	Italy	500	LBQ	Prevalence: 32.6% (total) Factors associated: perceived self-efficacy, job satisfaction, and low professional commitment

7.	(Rana and Soodan, 2019)	India	412	MBI	Prevalence: 59% (total) Factors associated: work-life balance, managerial role, job environment and personal stress
8.	(Li et al., 2020)	China	1795	MBI	Prevalence: 53.2% (total) Factors associated: type of school, income satisfaction, depression and perceived stress Burnout was significantly low among obese and overweight teachers compared to teachers who were normal in weight.
9.	(Manga et al., 2020)	Cameroon	330	MBI	Prevalence: total prevalence of 78.8%. EE-53.4%, DP-16.4%, and PA-37.6% (dimensions) Factors associated: teaching hours, increased student-to-teacher ratio, and practice of vacation in schools
10.	(Marić et al., 2020)	Republic of Srpska	952	MBI	Prevalence: high levels of EE-5.1%, DP-3.8%, and 23% (dimensions) Factors associated: Type-A behaviour, work-life characteristics, and job demand

11.	(Méndez et al., 2020)	Spain	210	MBI	Prevalence: 18.3% high-level burnout (total) Factors associated: self-esteem and depression Self-esteem alleviates the effect of burnout by improving the quality of life
12.	(Ozoemena et al., 2021)	Nigeria	253	MBI	Prevalence: total prevalence of 36%. EE-15.8%, DP-26.1%, and PA-84.6% (dimensions) Factors associated: age, monthly income, educational qualification, marital status, and psychological distress
13.	(Quina Galdino et al., 2021)	Brazil	368	MBI	Prevalence: 28% (total) Factors associated: workaholics and poor quality of life
14.	(Agyapong et al., 2024)	Canada	780	MBI	Prevalence: EE-76.9%, DP-23.2%, and PA-30.8% (dimensions) Factors associated: Age, number of children, location of school, teaching experience, type of school, and role ambiguity
15.	(Guider et al., 2024)	Morocco	147	MBI	Prevalence: total prevalence of 39%. EE-43%, DP-23%, and PA-25% (dimensions) Factors associated: gender, number of classes taught, size of the class, working hours, and physical activity

16.	(Paudel et al., 2024)	Nepal	218	MBI	Prevalence: EE-31%, DP-35%, and PA-27% (dimensions) Factors associated: age, gender, poor health status, lack of physical fitness, sedentary behaviour, sleep quality, years of experience, and poor ability to work Alcohol intake and teaching special need children associated with the Depersonalization dimension
17.	(Piperac et al., 2024)	Serbia	482	CBI	Prevalence: 27.1% (total) Factors associated: marital status, having poor self-rated health, high scores of anxiety and depression
18.	(Roy et al., 2024)	Bangladesh	242	MBI	Prevalence: EE-48.35%, DP-51.24%, and PA-45.04% (dimensions) Factors associated: monthly income, poor resources, lack of training, additional classes and duties, additional duties, conflicts with other teachers, working hours, and strict administration.
19.	(Bezie et al., 2025)	Ethiopia	422	CBI	Prevalence: 39.7% (total) Factors associated: conditions related to work, work-family conflicts, job satisfaction, and perceived stress

EE- Emotional Exhaustion, DP- Depersonalization, PA- low Personal Accomplishment, MBI- Maslach Burnout Inventory, CBI- Copenhagen Burnout Inventory, LBQ- Link Burnout Questionnaire, OLBI- Oldenburg Burnout Inventory

**ANNEXURE 2: Participant information sheet, Consent form, and Template for
content validity assessment**

Achutha Menon Centre for Health Science Studies (AMCHSS)

Sree Chitra Tirunal Institute for Medical Sciences & Technology (SCTIMST)

Thiruvananthapuram -11

Participant information sheet – Content validity (ENGLISH ONLY)

Study Title: The prevalence and associated factors of burnout among secondary school teachers in Kottayam district, Kerala

Greetings, I am Dr Ritwik, doing Master of Public Health (MPH) course at Achutha Menon Centre for Health Science Studies (AMCHSS) of the Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum.

As part of the MPH course requirement, I intend to do a research on “The prevalence and associated factors of burnout among secondary school teachers in Kottayam district.” This study is being done under the supervision of Dr. Jissa V.T., Scientist D, Achutha Menon Centre for Health Science Studies, Thiruvananthapuram.

To study burnout among school teachers, I am using the Oldenburg burnout inventory, which is one powerful tool for capturing burnout. However, the Malayalam-translated version is not available, and thus, my study also aims to translate the Oldenburg Burnout Inventory (OLBI) into Malayalam and validate it.

Using the translated and validated version of the OLBI, I will determine the prevalence of burnout among secondary school teachers in the Kottayam district. I will also be testing the reliability and validity of the translated scale using the data.

As part of the validation process of the tool, I am seeking the opinions of eminent persons who can offer guidance on this. I have approached you because you are one such expert. Given your experience in your area of work, I would like your views on the translated scale for my study.

This would take approximately 10-20 minutes of your valuable time. Kindly read the enclosed questionnaire and give me suggestions on the appropriateness of the questions.

Participating in this study imposes no risk to you. There is no direct benefit for you from this study but from a public health viewpoint, your information may prove to be of great

importance for understanding the level of burnout among teachers and developing a Malayalam version of the burnout measurement scale.

You will not be identified individually in any of the reports or publications that are developed from the research.

Your participation in this study is voluntary and you have the right to withdraw your participation at any time during the interview without any explanation. Refusal to participate will not involve any penalty or loss of benefits to which you are otherwise entitled.

For any clarification regarding the study, you can contact me. For any queries on the authentication of this study, you can get the Member Secretary, Institutional Review Board (IRB) of SCTIMST.

Principal Investigator

Dr. Ritwik

MPH Student

AMCHSS, SCTIMST,

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IRB Member Secretary

Dr. Srinivas G

Member Secretary

Institutional Review Board, SCTIMST, Thiruvananthapuram

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Achutha Menon Centre for Health Science Studies (AMCHSS)
Sree Chitra Tirunal Institute for Medical Sciences & Technology (SCTIMST)
Thiruvananthapuram -11

**The prevalence and associated factors of burnout among secondary school teachers
in Kottayam district, Kerala**

Consent form – Content validity (ENGLISH ONLY)

- ☐ I confirm that I have read and understood the information provided in the participant information sheet dated for the study titled “The prevalence and associated factors of burnout among secondary school teachers in Kottayam district”.
- ☐ I have been allowed to seek clarification regarding my participation in this study.
- ☐ I understood that my participation is voluntary and that I am free to withdraw my participation at any moment during the study.
- ☐ I have been informed that there are no benefits, financial or otherwise that accrue to me due to my participation in this study. I also understand that my identity or details of the information provided will be used only for research purposes and that my individual details will not be revealed in any research reports or publications.

I agree to participate in this study _____ Yes/No

Signature of the participant:

Name of the participant:

Date:

A copy of this consent form has been provided to the participant.

Name of the Principal Investigator taking the consent:

Signature of the Principal Investigator taking the consent:

Date:

**Template for content validity rating by experts of OLBI – Self-administered,
collected by Principal Investigator**

Self-administered, collected by the Principal Investigator

Question	Response
Name (optional)	
Designation of the expert	☐ Clinical psychology/Psychiatry ☐ Social worker / Counselling Psychologist ☐ Public health expert ☐ Other (please specify _____)

OLBI – Both English and Malayalam versions are given

English and Malayalam versions of each item of the tool are given below.

For each item, answer the questions given below.

Question	Response
Does the translated statement indicate the same as that of the original English statement?	☐ Yes ☐ No
If "No," please explain why it is different and suggest how it should be modified.	
Is there a chance of cultural variation in meaning?	☐ Yes ☐ No
If yes, can you explain the possible cultural variation and how this can be addressed or resolved?	
Overall, how would you rate the relevance of the translation?	☐ Not relevant ☐ Somewhat relevant ☐ Quite relevant ☐ Highly relevant

Thank you very much for your time.

**ANNEXURE 3: Participant information sheet, Consent form, and Template for
Cognitive debriefing (English)
Achutha Menon Centre for Health Science Studies (AMCHSS)
Sree Chitra Tirunal Institute for Medical Sciences & Technology (SCTIMST)
Thiruvananthapuram -11**

Participant information sheet – Cognitive debriefing

Study Title: The prevalence and associated factors of burnout among secondary school teachers in Kottayam district, Kerala

Greetings, I am Dr Ritwik, doing Master of Public Health (MPH) course at the Achutha Menon Centre for Health Science Studies (AMCHSS) of the Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum.

As part of the MPH course requirement, I intend to do a research on “The prevalence and associated factors of burnout among secondary school teachers in Kottayam district.” This study is being done under the supervision of Dr. Jissa V.T., Scientist D, Achutha Menon Centre for Health Science Studies, Thiruvananthapuram.

To study burnout among school teachers, I am using the Oldenburg burnout inventory, which is one powerful tool for capturing burnout. However, the Malayalam-translated version is not available, and thus, my study also aims to translate the Oldenburg Burnout Inventory (OLBI) into Malayalam and validate it.

Using the translated and validated version of the OLBI, I will determine the prevalence of burnout among secondary school teachers in the Kottayam district. I will also be testing the reliability and validity of the translated scale using the data.

As part of the validation process of the tool, I will be interviewing a few secondary school teachers. Firstly, I need to see how well the translated questions are understood by such teachers. That is why I have approached you.

I will be asking you some questions and noting your answers. Then I will ask about your understanding of each question. It will take about 10-15 minutes of your valuable time. I will make a recording of the interview if you would permit me so that I can make a more accurate transcript of what is being said during the interview. This interview will not be heard by anyone other than the researcher.

Participating in this study imposes no risk to you. There is no direct benefit for you from this study but from a public health viewpoint, your information may prove to be of great importance for understanding the level of burnout among teachers and developing a Malayalam version of the burnout measurement scale.

You will not be identified individually in any of the reports or publications that are developed from the research.

Your participation in this study is voluntary and you have the right to withdraw your participation at any time during the interview without any explanation. Refusal to participate will not affect your usual benefits and services in any way.

For any clarification regarding the study, you can contact me and for any queries on the authentication of this study, you can get the Member Secretary, Institutional Review Board (IRB) of SCTIMST.

Principal Investigator

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Achutha Menon Centre for Health Science Studies (AMCHSS)
Sree Chitra Tirunal Institute for Medical Sciences & Technology (SCTIMST)
Thiruvananthapuram -11

**The prevalence and associated factors of burnout among secondary school teachers
in Kottayam district, Kerala**

Consent form – Cognitive debriefing

☐ I confirm that I have read and understood the information provided in the participant information sheet dated for the study titled “The prevalence and associated factors of burnout among secondary school teachers in Kottayam district”.

☐ I have been allowed to seek clarification regarding my participation in this study.

☐ I understood that my participation is voluntary and that I am free to withdraw my participation at any moment during the study.

☐ I have been informed that there are no benefits, financial or otherwise that accrue to me due to my participation in this study. I also understand that my identity or details of the information provided will be used only for research purposes and that my individual details will not be revealed in any research reports or publications.

I agree to participate in this study _____ Yes/No

I consent to record this interview _____ Yes/No

Signature of the participant:

Name of the participant:

Date:

A copy of this consent form has been provided to the participant.

Name of the Principal Investigator taking the consent:

Signature of the Principal Investigator taking the consent:

Date:

Template for cognitive interview of OLBI (English)

Interview by Principal Investigator

OLBI Malayalam versions are given

Administer the tool from beginning to end. For questions where the participants ask for clarifications, note down the Query/clarification. After administration of the tool, ask the following questions for each item.

Question	Response
What did you understand when I asked this question?	
I will be reading the participants' responses to the question and asking them: Can you help me understand the reason for your response?	

Thank you very much for your time

ANNEXURE 4: Participant information sheet, Consent form, and Template for Cognitive debriefing (Malayalam)

അച്ചുതമേനോൻ സെന്റർ ഫോർ ഹെൽത്ത് സയൻസ് സ്റ്റഡീസ് (AMCHSS)

ശ്രീചിത്ര തിരുനാൾ ഇൻസ്റ്റിറ്റ്യൂട്ട് ഫോർ മെഡിക്കൽ സയൻസെസ്
ആൻറ് ടെക്നോളജി (SCTIMST)

തിരുവനന്തപുരം 11

പങ്കെടുക്കുന്നവർക്കുള്ള കാര്യവിവരണപത്രം (കൊഗ്നിറ്റീവ് അഭിമുഖം)

പഠനത്തിന്റെ തലക്കെട്ട് : കോട്ടയം ജില്ലയിലെ സെക്കൻഡറി സ്കൂൾ അധ്യാപകർക്കിടയിലെ ബേർണൗടിന്റെ അളവും ബന്ധപ്പെട്ട ഘടകങ്ങളും.

നമസ്കാരം, ഞാൻ ഡോ. ജുഗ്വിക്, തിരുവനന്തപുരം ശ്രീചിത്ര തിരുനാൾ ഇൻസ്റ്റിറ്റ്യൂട്ട് ഫോർ മെഡിക്കൽ സയൻസെസ് ആൻറ് ടെക്നോളജിയിലെ അച്ചുതമേനോൻ സെന്റർ ഫോർ ഹെൽത്ത് സയൻസ് സ്റ്റഡീസിൽ മാസ്റ്റർ ഓഫ് പബ്ലിക് ഹെൽത്ത് (MPH) കോഴ്സ് പഠിക്കുന്നു.

എം.പി.എച്ച് പഠനത്തിന്റെ ഭാഗമായി “കോട്ടയം ജില്ലയിലെ സെക്കൻഡറി സ്കൂൾ അധ്യാപകർക്കിടയിലെ ബേർണൗടിന്റെ അളവും ബന്ധപ്പെട്ട ഘടകങ്ങളും” എന്ന വിഷയത്തിൽ ഒരു ഗവേഷണം നടത്താൻ ഞാൻ ഉദ്ദേശിക്കുന്നു. അച്ചുതമേനോൻ സെന്റർ ഫോർ ഹെൽത്ത് സയൻസ് സ്റ്റഡീസിലെ സയൻസിസ്റ്റ് ഡോ. ജിസ്റ്റ വി.ടിയുടെ മേൽനോട്ടത്തിലാണ് ഈ പഠനം നടക്കുന്നത്.

ഓൾഡൻബർഗ് ബേർണൗട്ട് ഇൻവെൻറ്ററിയാണ് സ്കൂൾ അധ്യാപകർക്കിടയിലെ ബേർണൗട്ട് പഠിക്കാൻ ഞാൻ ഉപയോഗിക്കുന്നത്, അത് ബേർണൗട്ട് കണ്ടെത്താനുള്ള ഒരു ശക്തമായ ഉപകരണമാണ്. എന്നിരുന്നാലും, ഇതിന്റെ മലയാളം വിവർത്തനം ലഭ്യമല്ല. ആകയാൽ, ഓൾഡൻബർഗ് ബേർണൗട്ട് ഇൻവെൻറ്ററി (OLBI) മലയാളത്തിലേക്ക് വിവർത്തനം ചെയ്ത് സാധൂകരിക്കാനും എന്റെ പഠനം ലക്ഷ്യമിടുന്നു.

വിവർത്തനം ചെയ്ത് സാധൂകരിച്ച ഓൾഡൻബർഗ് ബേർണൗട്ട് ഇൻവെൻറ്ററി (OLBI) യുടെ പതിപ്പ് ഉപയോഗിച്ച് കോട്ടയം ജില്ലയിലെ സ്കൂൾ അധ്യാപകരിലെ ബേർണൗടിന്റെ അളവ് നിർണ്ണയിക്കും. പരിഭാഷപ്പെടുത്തിയ സ്കെയിലിന്റെ വിശ്വാസ്യതയും സാധുതയും ഡാറ്റ ഉപയോഗിച്ച് പരിശോധിക്കുകയും ചെയ്യും.

ഉപകരണം സാധൂകരിക്കുന്നതിന്റെ ഭാഗമായി കുറച്ച് സെക്കൻഡറി സ്കൂൾ അധ്യാപകരുമായി ഞാൻ അഭിമുഖം നടത്തേണ്ടതുണ്ട്. വിവർത്തനം ചെയ്ത ചോദ്യങ്ങൾ അത്തരം അധ്യാപകർ എങ്ങനെ മനസ്സിലാക്കി എന്നതാണ് പ്രഥമമായി എനിക്ക് കണ്ടെത്തേണ്ടത്. അതുകൊണ്ടാണ് ഞൻ താങ്കളെ ഇപ്പോൾ സമീപിച്ചിരിക്കുന്നത്.

ഞാൻ താങ്കളോട് ചില ചോദ്യങ്ങൾ ചോദിക്കുകയും താങ്കളുടെ ഉത്തരം രേഖപ്പെടുത്തുകയും ചെയ്യും. അതിനുശേഷം ഓരോ ചോദ്യവും താങ്കൾ എത്രത്തോളം മനസ്സിലാക്കി എന്ന് ചോദിക്കുന്നതാണ്. ഇതിന് താങ്കളുടെ വിലപ്പെട്ട 10 - 15 മിനിറ്റ് സമയം ആവശ്യമായി വന്നേക്കാം. താങ്കൾ അനുവദിക്കുമെങ്കിൽ, ഞാൻ ഈ അഭിമുഖം റെക്കോർഡ് ചെയ്യുന്നതായിരിക്കും. അതുകൊണ്ട് അഭിമുഖത്തിൽ പറയപ്പെടുന്നതിന്റെ കൂടുതൽ കൃത്യമായ പകർപ്പ് എനിക്ക് തയ്യാറാക്കാൻ കഴിയും. ഗവേഷകൻ ഒഴിച്ച് മറ്റാരും ഈ അഭിമുഖം കേൾക്കുന്നതായിരിക്കില്ല.

ഈ പഠനത്തിലേ പങ്കാളിത്തം താങ്കൾക്ക് ഒരു അപായവും ഉണ്ടാക്കില്ല. ഈ പഠനത്തിൽ നിന്നും ഒരു പ്രയോജനവും താങ്കൾക്കുണ്ടാകില്ല, പക്ഷേ , അധ്യാപകരിലെ ബേർണൌടിന്റെ തോത് മനസ്സിലാക്കാനും, ബേർണൌട്ട് അലക്കാനുള്ള സ്കെയിലിന്റെ ഒരു മലയാളം വിവർത്തനം വികസിപ്പിക്കുന്നതിലും പൊതുജനാരോഗ്യത്തിന്റെ കാഴ്ചപ്പാടിൽ താങ്കൾ നൽകുന്ന വിവരങ്ങൾക്ക് വളരെ പ്രധാന്യമുള്ളതായി തെളിഞ്ഞേക്കാം.

ഈ ഗവേഷണത്തിൽനിന്നും ഉരുത്തിരിയുന്ന റിപ്പോർട്ടിലോ പ്രസിദ്ധീകരണത്തിലോ താങ്കളെ വ്യക്തിപരമായി തിരിച്ചറിയാൻ പറ്റുന്നതായിരിക്കില്ല.

ഈ പഠനത്തിലെ താങ്കളുടെ പങ്കാളിത്തം സ്വയമേവയാണ്, ഒരു വിശദീകരണവുമില്ലാതെ അഭിമുഖത്തിന്റെ ഏത് ഘട്ടത്തിലും പിന്മാറാൻ താങ്കൾക്ക് അവകാശമുണ്ട്. താങ്കളുടെ പതിവ് നേട്ടങ്ങളെയോ സേവനങ്ങളെയോ പങ്കെടുക്കാൻ വിസമ്മതിക്കുന്നത് ഒരു വിധത്തിലും ബാധിക്കില്ല.

പഠനസംബന്ധമായ ഏത് വിശദീകരണങ്ങൾക്കും താങ്കൾക്ക് എന്നെ ബന്ധപ്പെടാം. ഈ പഠനത്തിന്റെ ആധികാരികതയെ സംബന്ധിച്ച അന്വേഷണങ്ങൾക്ക് എസ്. സി. റ്റി. ഐ. എം. എസ്.റ്റിയിലെ (SCTIMST) ഇൻസ്റ്റിറ്റ്യൂഷണൽ എത്തിക്സ് കമ്മിറ്റി (IEC) മെമ്പർ സെക്രട്ടറിയെ സമീപിക്കാം.

മുഖ്യ ഗവേഷകൻ	ഗൈഡ്
ഡോ. ഋത്വിക്	ഡോ. ജിസ്സ വി. ടി.
എം. പി. എച്ച്. വിദ്യാർത്ഥി	സയൻസിസ്റ്റ് ഡി
AMCHSS, SCTIMST,	AMCHSS, SCTIMST,
മെഡിക്കൽ കോളേജ് (പി.ഒ),	മെഡിക്കൽ കോളേജ് (പി.ഒ),
തിരുവനന്തപുരം-11	തിരുവനന്തപുരം-11
ഇമെയിൽ ഐ. ഡി:	ഇമെയിൽ ഐ.ഡി: jissa@sctimst.ac.in
drritwiksivadas96@gmail.com	ഫോൺ: +91 471 2524270
മൊബൈൽ: +91 9544384427	

ഐ. ആർ. ബി. മെമ്പർ സെക്രട്ടറി

ഡോ. ശ്രീനിവാസ് ജി

മെമ്പർ സെക്രട്ടറി

ഇൻസ്റ്റിറ്റ്യൂഷണൽ റിവ്യൂ ബോർഡ് , SCTIMST, തിരുവനന്തപുരം

കോൺടാക്റ്റ് നമ്പർ: 04712524689 (ഓഫീസ്)

ഇമെയിൽ ഐ.ഡി: iec.mem.sec@sctimst.ac.in

അച്ചുതമേനോൻ സെന്റർ ഫോർ ഹെൽത്ത് സയൻസ് സ്റ്റഡീസ് (AMCHSS)
ശ്രീചിത്ര തിരുനാൾ ഇൻസ്റ്റിറ്റ്യൂട്ട് ഫോർ മെഡിക്കൽ സയൻസസ്
ആൻറ് ടെക്നോളജി (SCTIMST)

തിരുവനന്തപുരം 11

സമ്മതപത്രം (കൊഗ്നിറ്റീവ് അഭിമുഖം)

- ☐ “കോട്ടയം ജില്ലയിലെ സെക്കൻഡറി സ്കൂൾ അധ്യാപകർക്കിടയിലെ ബേർണൗടിയുടെ അളവും ബന്ധപ്പെട്ട ഘടകങ്ങളും” എന്ന പഠനവുമായി ബന്ധപ്പെട്ട പങ്കെടുക്കുന്നവർക്കുള്ള കാര്യവിവരണപത്രത്തിൽ നൽകിയിരിക്കുന്ന വിവരങ്ങൾ ഞാൻ വായിക്കുകയും മനസ്സിലാക്കുകയും ചെയ്തിട്ടുണ്ടെന്ന് ഞാൻ സ്ഥിരീകരിക്കുന്നു.
- ☐ ഈ പഠനത്തിൽ എന്റെ പങ്കാളിത്തത്തെക്കുറിച്ചുള്ള വിശദീകരണങ്ങൾ തേടാമെന്ന് എന്നെ അറിയിച്ചിട്ടുണ്ട്.
- ☐ എന്റെ പങ്കാളിത്തം സ്വമേധയാ ഉള്ളതാണെന്നും പഠന സമയത്ത് ഏത് നിമിഷവും എന്റെ പങ്കാളിത്തം പിൻവലിക്കാൻ എനിക്ക് സ്വാതന്ത്ര്യമുണ്ടെന്നും ഞാൻ മനസ്സിലാക്കുന്നു.
- ☐ സാമ്പത്തികമോ മറ്റുതരത്തിലുള്ളതോ ആയ ഒരു നേട്ടവും ഈ പഠനത്തിൽ പങ്കെടുക്കുന്നതുകൊണ്ട് എനിക്ക് ലഭിക്കില്ലെന്നും അറിയിച്ചിട്ടുണ്ട്. എന്റെ വ്യക്തിവിവരങ്ങളോ ഞാൻ നൽകിയ മറ്റ് വിവരങ്ങളുടെ വിശദാംശങ്ങൾ ഗവേഷണത്തിനു മാത്രമേ ഉപയോഗിക്കൂ എന്നും, ഒരു ഗവേഷണ റിപ്പോർട്ടിലും പ്രസിദ്ധീകരണങ്ങളിലും എന്റെ വ്യക്തികത വിവരങ്ങൾ വെളിപ്പെടുത്തില്ലെന്നും ഞാൻ മനസ്സിലാക്കുന്നു.

ഞാൻ ഈ പഠനത്തിൽ പങ്കെടുക്കാൻ സമ്മതിക്കുന്നു.....അതെ / ഇല്ല
ആഭിമുഖം ശബ്ദലേഖനം ചെയ്യാൻ ഞാൻ സമ്മതിക്കുന്നു.....അതെ / ഇല്ല
പങ്കെടുക്കുന്നയാളുടെ ഒപ്പ് :

പങ്കെടുക്കുന്നയാളുടെ പേര് :

തീയതി :

ഈ സമ്മതപത്രത്തിന്റെ ഒരു പകർപ്പ് ഞാൻ പങ്കെടുക്കുന്നയാളക്ക് നൽകിയിട്ടുണ്ട്

സമ്മതപത്രം വാങ്ങുന്ന പ്രധാന ഗവേഷകന്റെ ഒപ്പ് :

സമ്മതപത്രം വാങ്ങുന്ന പ്രധാന ഗവേഷകന്റെ പേര് :

തീയതി :

ഓൾഡൻബർഗ് ബേർണൗട് ഇൻവെന്ററി യുടെ കൊഗ്നിറ്റീവ് അഭിമുഖത്തിനുള്ള രൂപ രേഖ - മുഖ്യ ഗവേഷകൻ നടത്തേണ്ട

അഭിമുഖം - മലയാളം പതിപ്പ്

മലയാളം പതിപ്പ് നൽകപ്പെടും

തുടക്കം മുതൽ അവസാനം വരെ ചോദ്യാവലികൾ പ്രകാരം ചോദ്യങ്ങൾ ചോദിക്കുക. പങ്കെടുക്കുന്നയാൾ വിശദീകരണം ആവശ്യപ്പെടുന്ന ചോദ്യങ്ങൾക്ക് , ചോദ്യം/വ്യക്തത രേഖപ്പെടുത്തുക. ഓരോ ഇനത്തിനും താഴെക്കൊടുത്തിരിക്കുന്ന ചോദ്യങ്ങൾ ചോദിക്കുക

ഓരോ ഇനവും വീണ്ടും വായിക്കുക, എന്നിട്ട് ചോദിക്കുക

ചോദ്യം	ഉത്തരം
ഞാൻ ഈ ചോദ്യം ചോദിച്ചപ്പോൾ നിങ്ങൾക്ക് എന്താണ് മനസ്സിലായത് ?	
മുകളിലത്തെ ചോദ്യത്തിനുള്ള പ്രതികരണം ഞാൻ വായിക്കുകയും അവരോട് ഈ ചോദ്യം ചോദിക്കുകയും ചെയ്യും: നിങ്ങളുടെ പ്രതികരണത്തിന്റെ കാരണം മനസ്സിലാക്കാൻ എന്നെ സഹായിക്കാമോ ?	

നിങ്ങളുടെ സമയത്തിന് വളരെ നന്ദി

ANNEXURE 5: Consent form for Test-retest reliability(English)
Achutha Menon Centre for Health Science Studies (AMCHSS)

Sree Chitra Tirunal Institute for Medical Sciences & Technology (SCTIMST)

Thiruvananthapuram -11

**The prevalence and associated factors of burnout among secondary school teachers
in Kottayam district, Kerala**

Consent form – Test-retest reliability (Subjects)

- ☐ I confirm that I have been contacted again as part of the research process to confirm some of my responses
- ☐ I understand that this will take about 10 minutes of my time
- ☐ I understood that my participation is voluntary and that I am free to withdraw my participation at any moment during the study.
- ☐ I have been informed that there are no benefits, financial or otherwise that accrue to me due to my participation in this study. I also understand that my identity or details of the information provided will be used only for research purposes and that my individual details will not be revealed in any research reports or publications.

I agree to participate in this study

Yes/No

Signature of the participant:

Name of the participant:

Date:

A copy of this consent form has been provided to the participant.

Name of the Principal Investigator taking the consent:

Signature of the Principal Investigator taking the consent:

Date:

ANNEXURE 6: Consent form for Test-retest reliability(Malayalam)
അച്ചുതമേനോൻ സെന്റർ ഫോർ ഹെൽത്ത് സയൻസ് സ്റ്റഡീസ് (AMCHSS)
ശ്രീചിത്ര തിരുനാൾ ഇൻസ്റ്റിറ്റ്യൂട്ട് ഫോർ മെഡിക്കൽ സയൻസെസ്
ആൻറ് ടെക്നോളജി (SCTIMST)

തിരുവനന്തപുരം 11

കോട്ടയം ജില്ലയിലെ സെക്കൻഡറി സ്കൂൾ അധ്യാപകർക്കിടയിലെ
 ബേർണാർഡിന്റെ അളവും ബന്ധപ്പെട്ട ഘടകങ്ങളും

സമ്മതപത്രം - ടെസ്റ്റ്-റീടെസ്റ്റ് റിലയബിലിറ്റി (പഠന വിധേയർ)

- ☐ എന്റെ ചില പ്രതികരണങ്ങൾ സ്ഥിരീകരിക്കുന്നതിന് ഗവേഷണ പ്രക്രിയയുടെ ഭാഗമായി വീണ്ടും ബന്ധപ്പെടുമെന്ന് എന്നെ അറിയിച്ചിട്ടുണ്ട്.
- ☐ ഇത് ഏകദേശം 10 മിനിറ്റ് സമയമെടുക്കുമെന്ന് ഞാൻ മനസ്സിലാക്കുന്നു.
- ☐ ഈ പഠനത്തിൽ എന്റെ പങ്കാളിത്തത്തെക്കുറിച്ച് വിശദീകരണം തേടാൻ എനിക്ക് അനുമതി ലഭിച്ചിട്ടുണ്ട്.
- ☐ എന്റെ പങ്കാളിത്തം സ്വമേധയാ ഉള്ളതാണെന്നും പഠന സമയത്ത് ഏത് നിമിഷവും എന്റെ പങ്കാളിത്തം പിൻവലിക്കാൻ എനിക്ക് സ്വാതന്ത്ര്യമുണ്ടെന്നും ഞാൻ മനസ്സിലാക്കുന്നു.
- ☐ സാമ്പത്തികമോ മറ്റുതരത്തിലുള്ളതോ ആയ ഒരു നേട്ടവും ഈ പഠനത്തിൽ പങ്കെടുക്കുന്നതുകൊണ്ട് എനിക്ക് ലഭിക്കില്ലെന്നും അറിയിച്ചിട്ടുണ്ട്. എന്റെ വ്യക്തിവിവരങ്ങളോ ഞാൻ നൽകിയ മറ്റ് വിവരങ്ങളുടെ വിശദാംശങ്ങൾ ഗവേഷണത്തിനു മാത്രമേ ഉപയോഗിക്കൂ എന്നും, ഒരു ഗവേഷണ റിപ്പോർട്ടിലും പ്രസിദ്ധീകരണങ്ങളിലും എന്റെ വ്യക്തികത വിവരങ്ങൾ വെളിപ്പെടുത്തില്ലെന്നും ഞാൻ മനസ്സിലാക്കുന്നു.

ഞാൻ ഈ പഠനത്തിൽ പങ്കെടുക്കാൻ സമ്മതിക്കുന്നു.....അതെ / ഇല്ല
 പങ്കെടുക്കുന്നയാളുടെ ഒപ്പ് :

പങ്കെടുക്കുന്നയാളുടെ പേര് :

തീയതി :

ഈ സമ്മതപത്രത്തിന്റെ ഒരു പകർപ്പ് ഞാൻ പങ്കെടുക്കുന്നയാളക്ക് നൽകിയിട്ടുണ്ട്

സമ്മതപത്രം വാങ്ങുന്ന പ്രധാന ഗവേഷകന്റെ ഒപ്പ് :

സമ്മതപത്രം വാങ്ങുന്ന പ്രധാന ഗവേഷകന്റെ പേര് :

തീയതി :

ANNEXURE 7: Oldenburg Burnout Inventory – item details during the Translation and Validation process

Item	Original OLBI (English)	Version 1 (After Translation)	Version 2 (After Back translation)	Version 3 (After content validation)	Version 4 (After cognitive debriefing)
1	I always find new and interesting aspects in my work	എന്റെ ജോലിയിൽ എല്ലായ്പ്പോഴും ഞാൻ പുതിയതും താല്പര്യമുണർത്തുന്നതുമായ തലങ്ങൾ കണ്ടെത്താറുണ്ട്	എന്റെ ജോലിയിൽ എല്ലായ്പ്പോഴും ഞാൻ പുതിയതും താല്പര്യമുണർത്തുന്നതുമായ തലങ്ങൾ കണ്ടെത്താറുണ്ട്.	എന്റെ ജോലിയിൽ എല്ലായ്പ്പോഴും ഞാൻ പുതിയതും താല്പര്യമുണർത്തുന്നതുമായ തലങ്ങൾ കണ്ടെത്താറുണ്ട്.	എന്റെ ജോലിയിൽ എല്ലായ്പ്പോഴും ഞാൻ പുതിയതും താല്പര്യമുണർത്തുന്നതുമായ തലങ്ങൾ കണ്ടെത്താറുണ്ട്
2	There are days when I feel tired before I arrive at work	ജോലിക്ക് എത്തുന്നതിന് മുൻപേ തന്നെ എനിക്ക് ക്ഷീണം അനുഭവപ്പെടുന്ന ദിവസങ്ങൾ ഉണ്ടാവാറുണ്ട്	ജോലിക്കു എത്തുന്നതിന് മുൻപേ തന്നെ എനിക്ക് ക്ഷീണം അനുഭവപ്പെടുന്ന ദിവസങ്ങൾ ഉണ്ടാകാറുണ്ട്.	ചില ദിവസങ്ങളിൽ ജോലിക്കു എത്തുന്നതിന് മുൻപേ തന്നെ എനിക്ക് ക്ഷീണം അനുഭവപ്പെടാറുണ്ട്	ചില ദിവസങ്ങളിൽ ജോലിക്കു എത്തുന്നതിന് മുൻപേ തന്നെ എനിക്ക് ക്ഷീണം അനുഭവപ്പെടാറുണ്ട്
3	It happens more and more often that I talk about my work in a negative way	എന്റെ ജോലിയെ കുറിച്ച് ഞാൻ മോശമായി സംസാരിക്കുന്ന സാഹചര്യങ്ങൾ ഇടയ്ക്കിടെ ഉണ്ടാകാറുണ്ട്	എന്റെ ജോലിയെക്കുറിച്ച് ഞാൻ മോശമായി സംസാരിക്കുന്ന സാഹചര്യങ്ങൾ ഇായിടെയായി കൂടുതലായി ഉണ്ടാകാറുണ്ട്	എന്റെ ജോലിയെക്കുറിച്ച് ഞാൻ മോശമായി സംസാരിക്കുന്ന സാഹചര്യങ്ങൾ ഇായിടെയായി കൂടുതലായി ഉണ്ടാകാറുണ്ട്	എന്റെ ജോലിയെക്കുറിച്ച് ഞാൻ മോശമായി സംസാരിക്കുന്ന സാഹചര്യങ്ങൾ മിക്കപ്പോഴും ഉണ്ടാകാറുണ്ട്
4	After work, I tend to need more time than in the past in order to relax and feel better	ജോലിസമയം കഴിഞ്ഞ് ഒന്നു ശാന്തമാകുന്നതിന് നേരത്തെ ഉണ്ടായിരുന്നതിനേക്കാൾ കൂടുതൽ സമയം എനിക്കിപ്പോൾ ആവശ്യമായി വരുന്നുണ്ട്	ജോലിസമയം കഴിഞ്ഞ് ഒന്നു ശാന്തമാകുന്നതിന് നേരത്തെ ഉണ്ടായിരുന്നതിനേക്കാൾ കൂടുതൽ സമയം എനിക്കിപ്പോൾ ആവശ്യമായി വരുന്നുണ്ട്.	ജോലിസമയം കഴിഞ്ഞ് ഒന്നു ശാന്തമാകുന്നതിന് നേരത്തെ ഉണ്ടായിരുന്നതിനേക്കാൾ കൂടുതൽ സമയം എനിക്കിപ്പോൾ ആവശ്യമായി വരുന്നുണ്ട്.	ജോലിസമയം കഴിഞ്ഞ് ഒന്നു ശാന്തമാകുന്നതിന് നേരത്തെ ഉണ്ടായിരുന്നതിനേക്കാൾ കൂടുതൽ സമയം എനിക്കിപ്പോൾ ആവശ്യമായി വരുന്നുണ്ട്

5	I can tolerate the pressure of my work very well	എന്റെ ജോലി സംബന്ധമായ സമ്മർദ്ദങ്ങൾ എനിക്ക് താങ്ങാൻ പറ്റുന്നവയാണ്	എന്റെ ജോലിസമ്പന്ധമായ സമ്മർദ്ദങ്ങളെ എനിക്ക് നന്നായി താങ്ങാൻ പറ്റുന്നുണ്ട്.	എന്റെ ജോലിസമ്പന്ധമായ സമ്മർദ്ദങ്ങൾ എനിക്ക് നന്നായി താങ്ങാൻ കഴിയുന്നുണ്ട്.	എന്റെ ജോലിസമ്പന്ധമായ സമ്മർദ്ദങ്ങൾ എനിക്ക് നന്നായി താങ്ങാൻ കഴിയുന്നുണ്ട്
6	Lately, I tend to think less at work and do my job almost mechanically	ഈയിടെയായി, ജോലി സമയത്ത് ജോലിയെപ്പറ്റി ഏറെ ചിന്തിക്കാതെ യാന്ത്രികമായി ഞാൻ ജോലിചെയ്യുന്ന പ്രവണതയുണ്ട്	ഈയിടെയായി, ജോലിസമയത്ത് ജോലിയെപ്പറ്റി ഏറെ ചിന്തിക്കാതെ യാന്ത്രികമായി ഞാൻ ജോലിചെയ്യുന്ന പ്രവണതയുണ്ട്.	ഈയിടെയായി, ജോലിയെപ്പറ്റി ഏറെ ചിന്തിക്കാതെ ഞാൻ യാന്ത്രികമായി ജോലിചെയ്യുന്ന പ്രവണതയുണ്ട്	ഈയിടെയായി, ജോലിയെപ്പറ്റി ഏറെ ചിന്തിക്കാതെ ഞാൻ യാന്ത്രികമായി ജോലിചെയ്യുന്ന പ്രവണതയുണ്ട്
7	I find my work to be a positive challenge	എന്റെ ജോലിയെ ഞാൻ പ്രോത്സാഹനമായ ഒരു വെല്ലുവിളി ആയിട്ടാണ് കാണുന്നത്	എന്റെ ജോലിയെ ഞാൻ പ്രോത്സാഹനാജനകമായ ഒരു വെല്ലുവിളി ആയിട്ടാണ് കാണുന്നത്.	എന്റെ ജോലിയെ ഞാൻ പ്രോത്സാഹനപരമായ ഒരു വെല്ലുവിളി ആയിട്ടാണ് കാണുന്നത്.	എന്റെ ജോലിയെ ഞാൻ ഒരു പ്രോത്സാഹനപരമായ വെല്ലുവിളി ആയിട്ടാണ് കാണുന്നത്
8	During my work, I often feel emotionally drained	എന്റെ ജോലികൾക്കിടയിൽ എനിക്ക് പലപ്പോഴും വൈകാരികമായ തളർച്ച അനുഭവപ്പെടാറുണ്ട്.	എന്റെ ജോലികൾക്കിടയിൽ എനിക്ക് പലപ്പോഴും വൈകാരികമായ തളർച്ച അനുഭവപ്പെടാറുണ്ട്.	എന്റെ ജോലികൾക്കിടയിൽ എനിക്ക് പലപ്പോഴും മാനസികമായ തളർച്ച അനുഭവപ്പെടാറുണ്ട്.	എന്റെ ജോലികൾക്കിടയിൽ എനിക്ക് പലപ്പോഴും മാനസികമായ തളർച്ച അനുഭവപ്പെടാറുണ്ട്
9	Over time, one can become disconnected from this type of work	കാലക്രമേണ, ഇത്തരത്തിലുള്ള ജോലിയിൽ നിന്നും ഒരാൾ അകന്നുപോകാനുള്ള സാധ്യത കൂടുതലാണ്	കാലക്രമേണ, ഇത്തരത്തിലുള്ള ജോലിയിൽ നിന്നും ഒരാൾ അകന്നുപോകാനുള്ള സാധ്യത കൂടുതലാണ്.	കാലക്രമേണ, ഇത്തരത്തിലുള്ള ജോലിയിൽ നിന്നും ഒരാൾ അകന്നുപോകാനുള്ള സാധ്യതയുണ്ട്	കാലക്രമേണ, ഇത്തരത്തിലുള്ള ജോലിയിൽ നിന്നും ഒരാൾ അകന്നുപോകാനുള്ള സാധ്യതയുണ്ട്
10	After working, I have enough energy for my leisure activities	ജോലിക്കുശേഷം എന്റെ ഒഴിവുസമയപ്രവർത്തനങ്ങൾ ചെയ്യാൻ എനിക്ക് വേണ്ടുവോളം ഊർജ്ജം ഉണ്ടാകാറുണ്ട്	ജോലിയി്ക്കുശേഷം എന്റെ ഒഴിവുസമയപ്രവർത്തനങ്ങൾ ചെയ്യാൻ എനിക്ക് വേണ്ടുവോളം ഊർജ്ജം ഉണ്ടാകാറുണ്ട്.	ജോലിയി്ക്കുശേഷം വിനോദങ്ങളിൽ ഏർപ്പെടാൻ എനിക്ക് വേണ്ടുവോളം ഊർജ്ജം ഉണ്ടാകാറുണ്ട്	ജോലിയി്ക്കുശേഷം വിനോദപ്രവർത്തനങ്ങളിൽ ഏർപ്പെടാൻ എനിക്ക് വേണ്ടുവോളം ഊർജ്ജം ഉണ്ടാകാറുണ്ട്

11	Sometimes I feel sickened by my work tasks	ചിലസമയങ്ങളിലൊക്കെ, ജോലി സംബന്ധമായ പ്രവർത്തികളാൽ എനിക്ക് വല്ലായ്മ തോന്നാറുണ്ട്	ചിലസമയങ്ങളിൽ, എന്റെ ജോലികൾ എന്നെ അസ്വസ്ഥനാക്കാറുണ്ട് .	ചിലസമയങ്ങളിൽ, എന്റെ ജോലിയുമായി ബന്ധപ്പെട്ട ചുമതലകൾ എന്നെ അസ്വസ്ഥനാക്കാറുണ്ട്	ചിലസമയങ്ങളിൽ, എന്റെ ജോലിയുമായി ബന്ധപ്പെട്ട ചുമതലകൾ എന്നെ അസ്വസ്ഥനാക്കാറുണ്ട്
12	After my work, I usually feel worn out and weary	ജോലിക്കുശേഷം പലപ്പോഴും എനിക്ക് ക്ഷീണവും മടുപ്പും തോന്നാറുണ്ട്	ജോലിക്കുശേഷം പലപ്പോഴും എനിക്ക് ക്ഷീണവും മടുപ്പും തോന്നാറുണ്ട്.	ജോലിക്കുശേഷം പലപ്പോഴും എനിക്ക് ക്ഷീണവും മടുപ്പും തോന്നാറുണ്ട്.	ജോലിക്കുശേഷം, സാധാരണയായി എനിക്ക് ക്ഷീണവും മടുപ്പും തോന്നാറുണ്ട്
13	This is the only type of work that I can imagine myself doing	ഈ ജോലിയല്ലാതെ വേറെ ഒരു ജോലിയും ഞാൻ ചെയ്യുന്നതായി എനിക്ക് സങ്കൽപ്പിക്കാനാവില്ല	ഞാൻ ചെയ്യുന്നതായി എനിക്ക് സങ്കൽപ്പിക്കാൻ പറ്റുന്ന ഒരേയൊരു ജോലി ഇതുമാത്രമാണ്.	ഞാൻ ചെയ്യുന്നതായി എനിക്ക് സങ്കൽപ്പിക്കാൻ പറ്റുന്ന ഒരേയൊരു ജോലി ഇതുമാത്രമാണ്.	ഞാൻ ചെയ്യുന്നതായി എനിക്ക് സങ്കൽപ്പിക്കാൻ പറ്റുന്ന ഒരേയൊരു ജോലി ഇതുമാത്രമാണ്
14	Usually, I can manage the amount of my work well	സാധാരണയായി എന്റെ ജോലിഭാരം എനിക്ക് നന്നായി കൈകാര്യം ചെയ്യാൻ കഴിയും	സാധാരണയായി എന്റെ ജോലിഭാരം എനിക്ക് നന്നായി കൈകാര്യം ചെയ്യാൻ കഴിയും	സാധാരണയായി എന്റെ ജോലിഭാരം എനിക്ക് നന്നായി കൈകാര്യം ചെയ്യാൻ കഴിയും	സാധാരണയായി എന്റെ ജോലിഭാരം എനിക്ക് നന്നായി കൈകാര്യം ചെയ്യാൻ കഴിയും.
15	I feel more and more engaged in my work	ഞാൻ എന്റെ ജോലിയിൽ വളരെയധികം വ്യാപൃതനാണെന്ന് എനിക്ക് തോന്നുന്നു	ഞാൻ എന്റെ ജോലിയിൽ വളരെയധികം വ്യാപൃതനാണെന്ന് എനിക്ക് തോന്നുന്നു.	ഞാൻ എന്റെ ജോലിയിൽ വളരെയധികം വ്യാപൃതനാണെന്ന് എനിക്ക് തോന്നുന്നു.	ഞാൻ എന്റെ ജോലിയിൽ വളരെയധികം വ്യാപൃതനാണെന്ന് എനിക്ക് തോന്നുന്നു
16	When I work, I usually feel energized	ജോലി ചെയ്യുന്ന സമയത്ത് എനിക്ക് ഊർജസ്വലത അനുഭവപ്പെടാറുണ്ട്	ജോലി ചെയ്യുന്ന സമയത്ത് സാധാരണയായി എനിക്ക് ഊർജസ്വലത അനുഭവപ്പെടാറുണ്ട്.	ജോലി ചെയ്യുന്ന സമയത്ത് സാധാരണയായി എനിക്ക് ഊർജസ്വലത അനുഭവപ്പെടാറുണ്ട്.	ജോലി ചെയ്യുന്ന സമയത്ത് സാധാരണയായി എനിക്ക് ഊർജസ്വലത അനുഭവപ്പെടാറുണ്ട്

ANNEXURE 8: Final Scale-Oldenburg Burnout Inventory Malayalam

ഓൾഡൻബർഗ് ബേൺ ഔട്ട് ഇൻവെന്ററി

പേര് :

തീയതി :

നിർദ്ദേശങ്ങൾ: താങ്കൾ യോജിക്കുന്നതോ വിധോജിക്കുന്നതോ ആയ പ്രസ്താവനകളുടെ ഒരു പരമ്പര ചുവടെ നൽകിയിരിക്കുന്നു. സ്കെയിൽ ഉപയോഗിച്ച് ഓരോ പ്രസ്താവനയുമായി പൊരുത്തപ്പെടുന്ന നമ്പർ തിരഞ്ഞെടുത്ത് താങ്കളുടെ യോജിപ്പിന്റെ അളവ് സൂചിപ്പിക്കുക.

		ശക്തമായി യോജിക്കുന്നു	യോജിക്കുന്നു	വിധോജിക്കുന്നു	ശക്തമായി വിധോജിക്കുന്നു
1.	എന്റെ ജോലിയിൽ എല്ലായ്പ്പോഴും ഞാൻ പുതിയതും താൽപ്പര്യമുണർത്തുന്നതുമായ തലങ്ങൾ കണ്ടെത്താറുണ്ട്. (D)	1	2	3	4
2.	ചില ദിവസങ്ങളിൽ ജോലിക്കു എത്തുന്നതിന് മുൻപേ തന്നെ എനിക്ക് ക്ഷീണം അനുഭവപ്പെടാറുണ്ട്. (E.R)	1	2	3	4
3.	എന്റെ ജോലിയെക്കുറിച്ച് ഞാൻ മോശമായി സംസാരിക്കുന്ന സാഹചര്യങ്ങൾ മിക്കപ്പോഴും ഉണ്ടാകാറുണ്ട്. (D.R.)	1	2	3	4
4.	ജോലിസമയം കഴിഞ്ഞ് ഒന്നു ശാന്തമാകുന്നതിന് നേരത്തെ ഉണ്ടായിരുന്നതിനേക്കാൾ കൂടുതൽ സമയം എനിക്കിപ്പോൾ ആവശ്യമായി വരുന്നുണ്ട്. (E.R)	1	2	3	4
5.	എന്റെ ജോലിസമ്പന്ധമായ സമ്മർദ്ദങ്ങൾ എനിക്ക് നന്നായി താങ്ങാൻ കഴിയുന്നുണ്ട്. (E)	1	2	3	4
6.	ഈയിടെയായി, ജോലിയെപ്പറ്റി ഏറെ ചിന്തിക്കാതെ ഞാൻ യാത്രികമായി ജോലിചെയ്യുന്ന പ്രവണതയുണ്ട്. (D.R.)	1	2	3	4
7.	എന്റെ ജോലിയെ ഞാൻ ഒരു പ്രോത്സാഹനപരമായ വെല്ലുവിളി ആയിട്ടാണ് കാണുന്നത്. (D)	1	2	3	4
8.	എന്റെ ജോലികൾക്കിടയിൽ എനിക്ക് പലപ്പോഴും മാനസികമായ തളർച്ച അനുഭവപ്പെടാറുണ്ട്. (E.R.)	1	2	3	4

9.	കാലക്രമേണ, ഇത്തരത്തിലുള്ള ജോലിയിൽ നിന്നും ഒരാൾ അകന്നുപോകാനുള്ള സാധ്യതയുണ്ട്. (D.R.)	1	2	3	4
10.	ജോലിയിൽക്കുശേഷം വിനോദപ്രവർത്തികളിൽ ഏർപ്പെടാൻ എനിക്ക് വേണ്ടുവോളം ഊർജ്ജം ഉണ്ടാകാറുണ്ട്. (E)	1	2	3	4
11.	ചിലസമയങ്ങളിൽ, എന്റെ ജോലിയുമായി ബന്ധപ്പെട്ട ചുമതലകൾ എന്നെ അസ്വസ്ഥനാക്കാറുണ്ട്. (D.R.)	1	2	3	4
12.	ജോലിക്കുശേഷം, സാധാരണയായി എനിക്ക് ക്ഷീണവും മടുപ്പും തോന്നാറുണ്ട്. (E.R.)	1	2	3	4
13.	ഞാൻ ചെയ്യുന്നതായി എനിക്ക് സങ്കൽപ്പിക്കാൻ പറ്റുന്ന ഒരേയൊരു ജോലി ഇതുമാത്രമാണ്. (D)	1	2	3	4
14.	സാധാരണയായി എന്റെ ജോലിഭാരം എനിക്ക് നന്നായി കൈകാര്യം ചെയ്യാൻ കഴിയും. (E)	1	2	3	4
15.	ഞാൻ എന്റെ ജോലിയിൽ വളരെയധികം വ്യാപൃതനാണെന്ന് എനിക്ക് തോന്നുന്നു. (D)	1	2	3	4
16.	ജോലി ചെയ്യുന്ന സമയത്ത് സാധാരണയായി എനിക്ക് ഊർജ്ജസ്വലത അനുഭവപ്പെടാറുണ്ട്. (E)	1	2	3	4

Note: Disengagement items are 1, 3(R), 6(R), 7, 9(R), 11(R), 13, 15. Exhaustion items are 2(R), 4(R), 5, 8(R), 10, 12(R), 14, 16. (R) means reversed item when the scores should be such that higher scores indicate more burnout.

Disengagement sub-total:	Exhaustion sub-total:	Full scale total:
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Delgadillo et al (2018) reported: "Therapists are identified as having low, medium or high OLBI-D scores, based on scores above or below 1 standard deviation of the mean ($M = 2.15$, $SD = 0.52$; ≤ 1.62 = low, 1.63 to 2.67 = medium, ≥ 2.68 = high)." Demerouti E, Mostert K and Bakker AB (2010) Burnout and work engagement: a thorough investigation of the independency of both constructs. *Journal of Occupational Health Psychology* 15(3): 209–222.

ANNEXURE 9: Participant information sheet, Consent form, and Tool for Cross-sectional survey (English)

Achutha Menon Centre for Health Science Studies (AMCHSS)

Sree Chitra Tirunal Institute for Medical Sciences & Technology (SCTIMST)

Thiruvananthapuram -11

Participant information sheet – Subjects

Study Title: The prevalence and associated factors of burnout among secondary school teachers in Kottayam district, Kerala

Greetings, I am Dr Ritwik, doing Master of Public Health (MPH) course at Achutha Menon Centre for Health Science Studies (AMCHSS) of the Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum.

As part of the MPH course requirement, I intend to do a research on “The prevalence and associated factors of burnout among secondary school teachers in Kottayam district.” This study is being done under the supervision of Dr. Jissa V.T., Scientist D, Achutha Menon Centre for Health Science Studies, Thiruvananthapuram.

Burnout is defined by the World Health Organization as a syndrome caused by chronic workplace stress that has not been successfully managed. It is characterized by three dimensions: feelings of energy depletion or exhaustion; feelings of negativism about one's job; and reduced professional efficacy.

Studying burnout in school teachers is essential because it plays a critical role in shaping student's academic and personal development. Teachers often face high workloads, emotional demands, and limited resources, which can lead to burnout. This not only affects their well-being but also reduces job satisfaction, performance, and the quality of education. Understanding burnout in teachers helps identify factors that contribute to stress and can guide interventions to improve mental health, job retention, and educational outcomes.

The study needs to interview teachers like you to gather information related to the topic. If you are willing to participate in my study, I will be asking you about your background details such as socio-demographics, work, habits and general health. Also, there will be questions to assess burnout, depression, anxiety, and stress. It can take around 20-30 minutes for the interview or to fill up the questionnaire.

In this study, your participation is purely voluntary. You are free to take your own time to answer the questions and if you are not willing to answer any of the questions you can ask me to skip the question. You have the complete right to withdraw your participation from the study at any time during the interview.

Though there might not be any direct benefit for you from this study, the information you share will be useful to understand what percentage of teachers are reporting burnout and how different factors contribute to burnout among teachers. It may help to suggest policy recommendations regarding the teaching profession and its practices to enhance teacher's psychological well-being. I assure you that all information you will be sharing with me will be highly confidential and only a summary of the information will be used for research and publication purposes.

For any clarification regarding the study, you can contact me and for any queries on the authentication of this study, you can get the Member Secretary, Institutional Review Board (IRB) of SCTIMST.

Principal Investigator

Dr. Ritwik

MPH Student

AMCHSS, SCTIMST,

Medical College (PO),
Thiruvananthapuram-11

Email id: driritwiksivadas96@gmail.com

Mobile: +91 9544384427

Guide

Dr. Jissa V.T.

Scientist D

AMCHSS, SCTIMST,

Medical College (PO),
Thiruvananthapuram-11

Email: jissa@sctimst.ac.in

Phone: +91 471 2524270

IRB Member Secretary

Dr. Srinivas G

Member Secretary

Institutional Review Board, SCTIMST, Thiruvananthapuram

Contact Number: 04712524689 (office)

Email id: iec.mem.sec@sctimst.ac.in

Achutha Menon Centre for Health Science Studies (AMCHSS)
Sree Chitra Tirunal Institute for Medical Sciences & Technology (SCTIMST)
Thiruvananthapuram -11

**The prevalence and associated factors of burnout among secondary school teachers
in Kottayam district, Kerala**

Consent form – Subjects

I----- have read/ heard and understood all the information provided in the research information sheet. I understand that my participation in this study is entirely voluntary. By signing/ giving a thumb impression, I confirm my voluntary participation in this study. I understand that I can withdraw my participation at any time during the interview without any explanation and I also understand that my identity and personal information will be kept confidential. I have been informed who should be contacted for further clarification.

I agree to participate in this study

Yes/No

Signature of the participant:

Name of the participant:

Date:

A copy of this consent form has been provided to the participant.

Name of the Principal Investigator taking the consent:

Signature of the Principal Investigator taking the consent:

Date:

Structured questionnaire (English)

Prevalence of burnout among secondary school teachers in Kottayam district, Kerala

Questionnaire survey (self-administered)

Section 1. Survey details

<i>Q. No</i>	<i>Survey details</i>										
1.1	Unique ID (Enter the ID given to you)	<table border="1" style="width: 100%; height: 20px; margin-bottom: 5px;"> <tr> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> </tr> </table> <i>(School type/ subdistrict/school code/serial number)</i> E.g. <table border="1" style="width: 100%; height: 20px; margin-top: 5px;"> <tr> <td style="width: 25%; text-align: center;">G</td> <td style="width: 25%; text-align: center;">KTM</td> <td style="width: 25%; text-align: center;">01</td> <td style="width: 25%; text-align: center;">01</td> </tr> </table>						G	KTM	01	01
G	KTM	01	01								
1.2	Name of School (Optional):										
1.3	Type of school	1. Government ☐ 2. Aided ☐ 3. Unaided ☐									
1.4	Area of school	1. Panchayat ☐ 2. Municipality ☐ 3. Corporation ☐									

Section 2. Socio-Demographic Questions

	<i>Variables</i>	<i>Options (please tick (✓) the best choice)</i>
2.1	What is your age? (In completed years)	
2.2	Sex	1. Male ☐ 2. Female ☐ 3. Others ☐

2.3	What is your current marital status? (Proceed to question 2.6 if you choose option 1)	1. Never married ☐ 2. Currently married ☐ 3. Separated ☐ 4. Widowed ☐ 5. Divorced ☐ 6. Others (specify) _____
2.4	Do you have any children?	1. Yes ☐ 2. No ☐
2.5	If yes, how many?	
2.6	Where is your current place of work in relation to your place of residence?	1. In hometown ☐ 2. Nearby town/city ☐ 3. Relocated far away ☐
2.7	What educational qualifications have you completed? (please tick as applicable)	☐ Diploma in Education (D.Ed.) completed ☐ Bachelor of Education (B.Ed.) completed ☐ Master of Education (M.Ed.) completed ☐ Doctor of Philosophy (Ph.D.) or Doctorate completed ☐ Postgraduate Diploma in Education (PGDE) completed ☐ Teacher Eligibility Test (TET) Qualified ☐ Graduation completed (other than B.Ed.) (e.g. BA/BSc) ☐ Post Graduation completed (other than M.Ed.) (e.g. MA/MSc) ☐ Others (specify) _____
2.8	What is your average monthly income? (Average income in the last month in Rupees)	☐ Less than 10000 ☐ 10000 – 20000 ☐ 20000 – 30000 ☐ 30000 – 40000 ☐ More than 40000
2.9	Are there any other income earners in your family?	1. Yes ☐ 2. No ☐

2.10	Is your family's income sufficient to meet your and your family's monthly needs?	☐ Always ☐ Very Often ☐ Sometimes ☐ Rarely ☐ Never
Please ensure you have correctly marked your responses to all the questions.		

Section 3. Occupation related questions

3.1	How many years have you been working as a teacher?	
3.2	Nature of employment	1. Permanent ☐ 2. Temporary/contractual ☐
3.3	In general, what is the average number of students in a class you teach?	1. ≤ 20 ☐ 2. 21 – 30 ☐ 3. 31 – 40 ☐ 4. 41 – 50 ☐ 5. ≥ 51 ☐
3.4	What subjects do you teach? (Select multiple options if applicable)	☐ Science (physics/biology/chemistry) ☐ Social science (history/geography/politics/economics) ☐ Mathematics ☐ Language (English/Hindi/Malayalam/Arabic/others) ☐ Arts/craft ☐ Physical education ☐ Yoga ☐ Others Specify _____

3.5 How many hours do you usually spend on school-related tasks during a regular workday?

SI no.		Hours spend
	At school	
1.	Teaching classes	
2.	Preparing classes and materials	
3.	Engage in other duties (for example, administration, school health programs, cultural programs, exam duties, etc)	

	Total hours spent (1+2+3)	
	<i>At home</i>	
1.	Preparation of classes	
2.	Non-teaching duties (paper evaluation, documentation, etc.)	
3.	Others, please specify _____	
	Total hours spend (1+2+3)	

3.6 What are the other activities you are involved in, in addition to teaching?

<i>Si No</i>	<i>Activity</i>	<i>Options (please tick (✓) the best choice)</i>
1.	Exam duty	1. Yes ☐ 2. No ☐
2.	Paper evaluation	1. Yes ☐ 2. No ☐
3.	NSS, Scouts & Guides, and Red Cross	1. Yes ☐ 2. No ☐
4.	National Literacy Mission	1. Yes ☐ 2. No ☐
5.	School events including events conducted by the government (Annual day, Sports & Arts, School Kalolsavam and Sasthrolsavam, Independence Day, Republic Day, etc.)	1. Yes ☐ 2. No ☐
6.	Registers and records	1. Yes ☐ 2. No ☐
7.	Admission campaign	1. Yes ☐ 2. No ☐
8.	School health program	1. Yes ☐ 2. No ☐
9.	Mid-day meal program	1. Yes ☐ 2. No ☐
10.	Election duty	1. Yes ☐ 2. No ☐
11.	Census/surveys	1. Yes ☐ 2. No ☐
12.	Any other, please specify	

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3.7 How satisfied are you with your class in general on the following matters?

(Please tick the box that best reflects your opinion.)

	<i>Not Satisfied</i>	<i>Somewhat Satisfied</i>	<i>Very Satisfied</i>
Class Attendance			
Student Performance			
Attentiveness in Class			
Homework/Assignment Completion			
Behavior Towards the Teacher			
Class Cooperativeness			

3.8 Have you ever experienced any conflicting/confronting behaviour from your students?

1. Yes ☐
2. No ☐

3.9 If yes, how serious was it?

- ☐ Very serious
- ☐ Somewhat serious
- ☐ Not serious

3.10 Did you manage it well?

1. Yes ☐
2. No ☐

3.11 Working Environment

How satisfied are you with the following facilities available in your school?

(Please tick the box that best reflects your opinion)

Facilities & Equipment	<i>Not Satisfied</i>	<i>Somewhat Satisfied</i>	<i>Very Satisfied</i>
Lights, Fans, power backup (UPS), etc			
Teaching aids (<i>Board, projectors, lab equipment, etc.</i>)			

Drinking water			
Toilet facility			
Functioning of library			
Computer and Internet access			
Recreations (<i>Yoga or Meditation Rooms, Gardens or open spaces, etc.</i>)			
Transport facility to reach school (school bus)			
Functioning of canteen			

Does your school have enough staff to handle both academic and extracurricular needs?

1. Yes ☐
2. No ☐

Are leave vacancies in your school promptly filled to ensure continuity of work?

1. Yes ☐
2. No ☐

Section 4. Habits and hobbies

4.1 Do you currently smoke any tobacco products, such as cigarettes, bidis, etc.?

3. Yes ☐
4. No ☐

4.2 In the past, did you ever smoke any tobacco products?

1. Yes ☐
2. No ☐

4.3 Do you currently use any smokeless tobacco products such as chewing tobacco, betel, etc.?

1. Yes ☐
2. No ☐

4.4 Have you ever consumed any alcohol such as beer, wine, or spirits?

1. Yes ☐
2. No ☐

4.5 How often do you engage in the physical activities given below? (Please tick the best applicable column)

	Regularly	Occasionally (once a week, on holidays, etc)	Never
Outdoor games			
Indoor games			
Jogging/ Walking			
Cycling			
Swimming			
Yoga			
Others specify if any			
1.			
2.			

Section 5. General Health

5.1	Have you ever been diagnosed with any of the conditions given?	☐ Diabetes ☐ Hypertension ☐ Asthma ☐ Thyroid problems ☐ Varicose veins ☐ Heart disease ☐ Others (Specify)_____
5.2	Do you take regular medication for any previously given conditions?	1. Yes ☐ 2. No ☐
5.3	Do you regularly experience any of the listed illnesses?	☐ Migraine ☐ Lower back pain ☐ Neck pain ☐ Gastric complaints

5.4	On a typical day, how many hours do you sleep at night?	
5.5	Do you think you get adequate sleep?	1. Yes ☐ 2. No ☐
5.6	How would you describe your health status?	☐ Very good ☐ Good ☐ Average ☐ Poor ☐ Very poor
5.7	Did you take sick leave (except for pregnancy or maternity leave) in the past year?	1. Yes ☐ 2. No ☐
5.8	If yes, how many days in total have you taken leave?	
5.9	Could you specify the reason for your sick leave?	

Evaluation of Psychological Health Indicators

Section 6. Burnout (Oldenburg Burnout Inventory)

The following questions are to assess the Burnout you may experience during your teaching career. This is a series of statements with which you may agree or disagree. Using the scale, please indicate the degree of your agreement by selecting that corresponds with each statement using a tick mark (✓).

<i>Q. No</i>	<i>Oldenburg Burnout Inventory</i>	<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
6.1	I always find new and interesting aspects in my work	1	2	3	4
6.2	There are days when I feel tired before I arrive at work	1	2	3	4
6.3	It happens more and more often that I talk about my work in a negative way	1	2	3	4

6.4	After work, I tend to need more time than in the past in order to relax and feel better	1	2	3	4
6.5	I can tolerate the pressure of my work very well	1	2	3	4
6.6	Lately, I tend to think less at work and do my job almost mechanically	1	2	3	4
6.7	I find my work to be a positive challenge	1	2	3	4
6.8	During my work, I often feel emotionally drained	1	2	3	4
6.9	Over time, one can become disconnected from this type of work	1	2	3	4
6.10	After working, I have enough energy for my leisure activities	1	2	3	4
6.11	Sometimes I feel sickened by my work tasks	1	2	3	4
6.12	After my work, I usually feel worn out and weary (<i>worn out and weary means extremely tired or exhausted</i>)	1	2	3	4
6.13	This is the only type of work that I can imagine myself doing	1	2	3	4
6.14	Usually, I can manage the amount of my work well	1	2	3	4
6.15	I feel more and more engaged in my work	1	2	3	4
6.16	When I work, I usually feel energized	1	2	3	4

Section 7. Stress, Anxiety, and Depression

This is the final section, which is divided into three subsections. Each part focuses on a different mental health issue, such as Stress, Anxiety, and Depression. These three are closely linked to burnout and As chronic stress accumulates, it increases the risk of burnout, which in turn exacerbates anxiety and depression, creating a cyclical pattern that further deteriorates teachers' well-being and professional performance.

7A. Stress - Perceived Stress Scale 10 (PSS-10)

INSTRUCTIONS: The questions in this scale ask you about your feelings and thoughts during the last month. In each case, please indicate your response by placing an “✓” over the square representing HOW OFTEN you felt or thought a certain way.

Q. No		Never	Almost Never	Some times	Fairly Often	Very Often
A.1	In the last month, how often have you been upset because of something that happened unexpectedly?	0	1	2	3	4
A.2	In the last month, how often have you felt that you were unable to control the important things in your life?	0	1	2	3	4
A.3	In the last month, how often have you felt nervous and “stressed”?	0	1	2	3	4
A.4	In the last month, how often have you felt confident about your ability to handle your personal problems?	0	1	2	3	4
A.5	In the last month, how often have you felt that things were going your way?	0	1	2	3	4

A.6	In the last month, how often have you found that you could not cope with all the things that you had to do?	0	1	2	3	4
A.7	In the last month, how often have you been able to control irritations in your life?	0	1	2	3	4
A.8	In the last month, how often have you felt that you were on top of things?	0	1	2	3	4
A.9	In the last month, how often have you been angered because of things that were outside your control?	0	1	2	3	4
A.10	In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	0	1	2	3	4

7B. Anxiety and Depression- PATIENT HEALTH QUESTIONNAIRE(PHQ-4)

Over the last 2 weeks, how often have you been bothered by any of the following problems? (Use “✓” to indicate your answer)		Not at all	Several days	More than half the days	Nearly every day
B. 1	Feeling nervous, anxious, or on edge	0	1	2	3
B. 2	Not being able to stop or control worrying	0	1	2	3
B. 3	Little interest or pleasure in doing things	0	1	2	3

B. 4	Feeling down, depressed, or hopeless	0	1	2	3
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7C

Q. No	Questions	Options (please tick (✓) the best choice)
C. 1	Do you feel stressed during work?	1. Yes ☐ 2. No ☐
C. 2	Do you use any of the following strategies to reduce or manage stress? (select multiple options if applicable)	☐ Meditation ☐ Breathing exercises ☐ Walking ☐ Listening to music ☐ Eating Others (specify) _____
C. 3	On a scale of 0 to 5, how satisfied are you with your work-life balance?	☐ Very Dissatisfied ☐ Dissatisfied ☐ Neutral ☐ Satisfied ☐ Very Satisfied
C. 4	Have you received any mental health counselling?	1. Yes, from school ☐ 2. Yes, from outside ☐ 3. Not yet ☐

Thank you for your valuable time.

ANNEXURE 10: Participant information sheet, Consent form, and Tool for Cross-sectional survey (Malayalam)

അച്ചുതമേനോൻ സെന്റർ ഫോർ ഹെൽത്ത് സയൻസ് സ്റ്റഡീസ് (AMCHSS)

ശ്രീചിത്ര തിരുനാൾ ഇൻസ്റ്റിറ്റ്യൂട്ട് ഫോർ മെഡിക്കൽ സയൻസെസ്
ആൻറ് ടെക്നോളജി (SCTIMST)

തിരുവനന്തപുരം 11

പങ്കെടുക്കുന്നവർക്കുള്ള കാര്യവിവരണപത്രം (പഠനവിധേയർ)

പഠനത്തിന്റെ തലക്കെട്ട് : കോട്ടയം ജില്ലയിലെ സെക്കൻഡറി സ്കൂൾ അധ്യാപകർക്കിടയിലെ ബേർണൗസിന്റെ അളവും ബന്ധപ്പെട്ട ഘടകങ്ങളും.

നമസ്കാരം, ഞാൻ ഡോ. ജുഗ്വിക്, തിരുവനന്തപുരം ശ്രീചിത്ര തിരുനാൾ ഇൻസ്റ്റിറ്റ്യൂട്ട് ഫോർ മെഡിക്കൽ സയൻസെസ് ആൻറ് ടെക്നോളജിയിലെ അച്ചുതമേനോൻ സെന്റർ ഫോർ ഹെൽത്ത് സയൻസ് സ്റ്റഡീസിൽ മാസ്റ്റർ ഓഫ് പബ്ലിക് ഹെൽത്ത് (MPH) കോഴ്സ് പഠിക്കുന്നു.

എം.പി.എച്ച് പഠനത്തിന്റെ ഭാഗമായി “കോട്ടയം ജില്ലയിലെ സെക്കൻഡറി സ്കൂൾ അധ്യാപകർക്കിടയിലെ ബേർണൗസിന്റെ അളവും ബന്ധപ്പെട്ട ഘടകങ്ങളും” എന്ന വിഷയത്തിൽ ഒരു ഗവേഷണം നടത്താൻ ഞാൻ ഉദ്ദേശിക്കുന്നു. അച്ചുതമേനോൻ സെന്റർ ഫോർ ഹെൽത്ത് സയൻസ് സ്റ്റഡീസിലെ സയൻസിസ്റ്റ് ഡോ. ജിസ്റ്റ വി.ടിയുടെ മേൽനോട്ടത്തിലാണ് ഈ പഠനം നടക്കുന്നത്.

ജോലിസ്ഥലത്തെ വിട്ടുമാറാത്ത സമ്മർദ്ദം ഫലപ്രദമായി കൈകാര്യം ചെയ്യാൻ പറ്റാത്തത് മൂലമുണ്ടാകുന്ന ഒരു സിൻഡ്രോം എന്നാണ് ലോകാരോഗ്യ സംഘടന ബേർണൗസിനെ നിർവ്വചിച്ചിരിക്കുന്നത്. മൂന്ന് തലങ്ങളായി അതിനെ വിശേഷിപ്പിക്കുന്നു: ഊർജ്ജകുറവുമോ ക്ഷീണമോ അനുഭവപ്പെടുക, ഒരാളുടെ ജോലിയെക്കുറിച്ചുള്ള നിഷേധാത്മക വികാരങ്ങൾ, പിന്നെ തൊഴിൽപരമായ കാര്യക്ഷമതയുടെ കുറവ്.

വിദ്യാർത്ഥികളുടെ അക്കാദമിക്, വ്യക്തിഗത വികസനം രൂപപ്പെടുത്തുന്നതിൽ നിർണായക പങ്ക് വഹിക്കുന്നതിനാൽ സ്കൂൾ അധ്യാപകരിൽ ബേർണൗസ് പഠിക്കുന്നത് അത്യന്താപേക്ഷിതമാണ്. വലിയ ജോലിഭാരം, വൈകാരികമായ ബുദ്ധിമുട്ടുകൾ, പരിമിതമായ വിഭവങ്ങൾ എന്നിവ അധ്യാപകർ പലപ്പോഴും നേരിടുന്നത് ബേർണൗസിലേക്ക് നയിച്ചേക്കാം. ഇത് അവരുടെ സൗഖ്യത്തെ മാത്രമല്ല, തൊഴിൽ സംതൃപ്തി, തൊഴിൽ നിർവ്വഹണം, വിദ്യാഭ്യാസത്തിന്റെ ഗുണനിലവാരം എന്നിവയെയും ബാധിക്കും. അധ്യാപകരിലെ ബേർണൗസ് മനസ്സിലാക്കുന്നത് സമ്മർദ്ദത്തിന് കാരണമാകുന്ന ഘടകങ്ങൾ കണ്ടെത്താൻ സഹായിക്കുകയും അത് മാനസിക ആരോഗ്യം മെച്ചപ്പെടുത്തുന്നതിനും തൊഴിൽ നിലനിർത്തുന്നതിനും വിദ്യാഭ്യാസപരമായ നേട്ടങ്ങൾക്കും സഹായമാകും.

ഈ വിഷയവുമായി ബന്ധപ്പെട്ട വിവരങ്ങൾ ശേഖരിക്കുന്നതിന് അധ്യാപകരുമായി അഭിമുഖം നടത്തേണ്ടത് അനിവാര്യമാണ്. എന്റെ പഠനത്തിൽ പങ്കെടുക്കാൻ നിങ്ങൾ തയ്യാറാണെങ്കിൽ, ശോഷിയോ-ഡെമോഗ്രാഫിക്, ജോലി, ശീലങ്ങൾ, പൊതുവായ ആരോഗ്യം എന്നിവ പോലുള്ള നിങ്ങളുടെ പശ്ചാത്തല വിശദാംശങ്ങളെക്കുറിച്ച് ഞാൻ നിങ്ങളോട് ചോദിക്കുന്നതായിരിക്കും. മാത്രമല്ല ഇതിനോടൊപ്പം ബേർണൗസ്, വിഷാദം, ഉത്കണ്ഠ, സമ്മർദ്ദം എന്നിവ വിലയിരുത്താനുള്ള ചോദ്യങ്ങളും ഉണ്ടായിരിക്കുന്നതാണ്. ഇന്റർവ്യൂ അല്ലെങ്കിൽ

ചോദ്യാവലി പൂരിപ്പിക്കാൻ താങ്കളുടെ വിലപ്പെട്ട 20-30 മിനിറ്റ് ആവശ്യമായി വന്നേക്കാം.

ഈ പഠനത്തിൽ താങ്കളുടെ പങ്കാളിത്തം തികച്ചും സ്വമേധയായാണ്. ചോദ്യങ്ങൾക്ക് ഉത്തരം നൽകാൻ താങ്കൾക്ക് ആവശ്യമായ സമയമെടുക്കാം, ഏതെങ്കിലും ചോദ്യത്തിന് ഉത്തരം നൽകാൻ നിങ്ങൾ തയ്യാറല്ലെങ്കിൽ, നിങ്ങൾക്ക് ആ ചോദ്യങ്ങൾ ഒഴിവാക്കാം. അഭിമുഖ്യത്തിനിടയിലെപ്പോഴും താങ്കളുടെ പങ്കാളിത്തം പിന്നവലിക്കാനും താങ്കൾക്ക് പൂർണ്ണമായ അവകാശമുണ്ട്.

താങ്കൾക്ക് ഈ പഠനത്തിൽ നിന്നും നേരിട്ട് നേട്ടങ്ങളുണ്ടാവില്ലെങ്കിലും, എത്ര ശതമാനം അധ്യാപകർ ബേർണൗട്ട് അനുഭവിക്കുന്നു എന്നും അധ്യാപകർക്കിടയിലെ ബേർണൗട്ടിന് എങ്ങനെ വ്യത്യസ്ത ഘടകങ്ങൾ ഇടയാക്കുന്നു എന്നും മനസ്സിലാക്കാൻ താങ്കൾ പങ്കുവെക്കുന്ന വിവരങ്ങൾ സഹായകരമാകും. അധ്യാപകന്റെ മാനസിക ക്ഷേമം മെച്ചപ്പെടുത്തുന്നതിനായി അധ്യാപന തൊഴിലിനെക്കുറിച്ചും അതിന്റെ രീതികളെക്കുറിച്ചും നയപരമായ ശുപാർശകൾ നിർദ്ദേശിക്കാൻ ഇത് സഹായിച്ചേക്കാം. താങ്കൾ എന്നോട് പങ്കുവെക്കുന്ന വിവരങ്ങൾ തികച്ചും രഹസ്യമായിരിക്കുമെന്നും വിവരങ്ങളുടെ സംക്ഷിപ്തം മാത്രമേ ഗവേഷണത്തിനും പ്രസിദ്ധീകരണത്തിനും ഉപയോക്താക്കൾക്കുള്ളൂ എന്നും ഞാൻ താങ്കൾക്ക് ഉറപ്പ് നൽകുന്നു.

പഠനസംബന്ധമായ ഏത് വിശദീകരണങ്ങൾക്കും താങ്കൾക്ക് എന്നെ ബന്ധപ്പെടാം. ഈ പഠനത്തിന്റെ ആധികാരികതയെ സംബന്ധിച്ച അന്വേഷണങ്ങൾക്ക് എസ്. സി. റ്റി. ഐ. എം. എസ്.റ്റിയിലെ (SCTIMST) ഇൻസ്റ്റിറ്റ്യൂഷണൽ എത്തിക്സ് കമ്മിറ്റി (IEC) മെമ്പർ സെക്രട്ടറിയെ സമീപിക്കാം.

മുഖ്യ ഗവേഷകൻ

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മെമ്പർ സെക്രട്ടറി

ഇൻസ്റ്റിറ്റ്യൂഷണൽ റിവ്യൂ ബോർഡ്, SCTIMST, തിരുവനന്തപുരം

കോൺടാക്റ്റ് നമ്പർ: 04712524689 (ഓഫീസ്)

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അച്ചുതമേനോൻ സെന്റർ ഫോർ ഹെൽത്ത് സയൻസ് സ്റ്റഡീസ് (AMCHSS)
ശ്രീചിത്ര തിരുനാൾ ഇൻസ്റ്റിറ്റ്യൂട്ട് ഫോർ മെഡിക്കൽ സയൻസസ്
ആൻറ് ടെക്നോളജി (SCTIMST)

തിരുവനന്തപുരം 11

കോട്ടയം ജില്ലയിലെ സെക്കൻഡറി സ്കൂൾ അധ്യാപകർക്കിടയിലെ
ബേർണൗടിന്റെ അളവും ബന്ധപ്പെട്ട ഘടകങ്ങളും

സമ്മതപത്രം (പഠന വിധേയർ)

ഞാൻ ഗവേഷണ സംബന്ധമായി എനിക്ക് നൽകിയ
കാര്യവിവരണപത്രത്തിലെ വിവരങ്ങൾ ഞാൻ വായിക്കുകയും
മനസ്സിലാക്കുകയും ചെയ്തതായി ഉറപ്പാക്കുന്നു. എന്റെ പങ്കാളിത്തം
സ്വമേധയായാണെന്നും പഠനകാലത്തെപ്പോഴും എന്റെ പങ്കാളിത്തം
പിൻവലിക്കാൻ എനിക്ക് സ്വാതന്ത്ര്യമുണ്ടെന്നും മനസ്സിലാക്കുന്നു. ഒപ്പ്
നൽകിയത്തിലൂടെ ഈ പഠനത്തിലെ എന്റെ പങ്കാളിത്തം സ്വമേധയായാണെന്ന്
ഞാൻ ഉറപ്പാക്കുന്നു. ഒരു വിശദീകരണവുമില്ലാതെ അഭിമുഖത്തിനിടയിൽ
എപ്പോൾ വേണമെങ്കിലും എന്റെ പങ്കാളിത്തം പിൻവലിക്കാൻ കഴിയുമെന്ന് ഞാൻ
മനസ്സിലാക്കുന്നു. എന്റെ വ്യക്തിഗത വിവരങ്ങളും തിരിച്ചറിയാൻ പാകത്തിലുള്ള
വിവരങ്ങളും രഹസ്യമായി സൂക്ഷിക്കുമെന്ന് ഞാൻ മനസ്സിലാക്കുന്നു. കൂടുതൽ
വിശദീകരണത്തിനായി ആരെയാണ് ബന്ധപ്പെടേണ്ടതെന്ന് അറിയിച്ചിട്ടുണ്ട്.

ഞാൻ ഈ പഠനത്തിൽ പങ്കെടുക്കാൻ സമ്മതിക്കുന്നു.....അതെ / ഇല്ല

പങ്കെടുക്കുന്നയാളുടെ ഒപ്പ് :

പങ്കെടുക്കുന്നയാളുടെ പേര് :

തീയതി :

ഈ സമ്മതപത്രത്തിന്റെ ഒരു പകർപ്പ് ഞാൻ പങ്കെടുക്കുന്നയാളക്ക് നൽകിയിട്ടുണ്ട്

സമ്മതപത്രം വാങ്ങുന്ന പ്രധാന ഗവേഷകന്റെ ഒപ്പ് :

സമ്മതപത്രം വാങ്ങുന്ന പ്രധാന ഗവേഷകന്റെ പേര് :

തീയതി :

Structured questionnaire (Malayalam)

പ്രവലൻസ് ഓഫ് ബർണൗട്ട് എമംഗ് സെക്കൻഡറി സ്കൂൾ
ടീച്ചേഴ്സ് ഇൻ കോട്ടയം ഡിസ്ട്രിക്ട്, കേരള

ചോദ്യാവലി സർവ്വേ

വിഭാഗം 1. സർവ്വേ വിശദാംശങ്ങൾ

ചോദ്യം നമ്പർ	സർവ്വേ വിശദാംശങ്ങൾ									
1.1	യൂണിക് ഐഡി (നിങ്ങൾക്ക് നൽകിയ ഐഡി എഴുതുക)	<table border="1"> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </table> (School type/ subdistrict/school code/serial number) E.g. <table border="1"> <tr> <td>G</td> <td>KTM</td> <td>01</td> <td>01</td> </tr> </table>					G	KTM	01	01
G	KTM	01	01							
1.2	സ്കൂളിന്റെ പേര് (ഓപ്ഷണൽ):									
1.3	സ്കൂൾ ഏതു താരമാണ്	4. ഗവണ്മെന്റ് ☐ 5. എയ്ഡഡ് ☐ 6. അൺഎയ്ഡഡ് ☐								
1.4	സ്കൂൾ സ്ഥിതി ചെയ്യുന്ന പ്രദേശം	1. പഞ്ചായത്ത് ☐ 2. നഗരസഭ ☐ 3. കോർപ്പറേഷൻ ☐								

വിഭാഗം 2 : വ്യക്തിഗത വിവരങ്ങൾ

ചോദ്യം നമ്പർ	വേരിയബിളുകൾ	ഓപ്ഷനുകൾ (ദയവായി ഏറ്റവും അനുയോജ്യമായ ചോയ്സ് ടിക്ക് (✓) ചെയ്യുക)
2.1	നിങ്ങളുടെ പ്രായം എത്രയാണ്? (പൂർത്തിയായ വർഷങ്ങളിൽ)	

2.2	ലിംഗം	1. പുരുഷൻ ☐ 2. സ്ത്രീ ☐ 3. മറ്റുള്ളവ ☐
2.3	നിങ്ങളുടെ ഇപ്പോഴത്തെ വൈവാഹിക നില എന്താണ്? (ഓപ്ഷൻ 1 തിരഞ്ഞെടുക്കുകയാണെങ്കിൽ ചോദ്യം 2.6 ലേക്ക് പോകുക)	☐ വിവാഹം കഴിച്ചിട്ടില്ല ☐ നിലവിൽ വിവാഹിതയാണ് ☐ വേർപിരിഞ്ഞു ☐ വിധവ /വിഭാര്യൻ ☐ വിവാഹമോചിത / വിവാഹമോചിതൻ ☐ മറ്റുള്ളവ (വ്യക്തമാക്കുക)_____
2.4	കുട്ടികളുണ്ടോ?	1. ഉണ്ട് ☐ 2. ഇല്ല ☐
2.5	ഉണ്ടെങ്കിൽ എത്ര?	
2.6	നിങ്ങൾ താമസിക്കുന്ന സ്ഥലവുമായി ബന്ധപ്പെട്ട് നിങ്ങളുടെ നിലവിലെ ജോലി സ്ഥലം എവിടെയാണ്?	☐ ജന്മനാട്ടിൽ ☐ അടുത്തുള്ള പട്ടണം/നഗരം ☐ ദൂരെയുള്ള സ്ഥലത്തേക്ക് മാറി
2.7	നിങ്ങൾ പൂർത്തിയാക്കിയ വിദ്യാഭ്യാസ യോഗ്യതകൾ എന്തൊക്കെയാണ്? (ദയവായി ടിക്ക് ചെയ്യുക)	☐ ഡിപ്ലോമ ഇൻ എഡ്യൂക്കേഷൻ (ഡി.എഡ്.) പൂർത്തിയാക്കി ☐ ബാച്ലർ ഓഫ് എഡ്യൂക്കേഷൻ (ബി. എഡ്.) പൂർത്തിയാക്കി ☐ മാസ്റ്റർ ഓഫ് എഡ്യൂക്കേഷൻ (എം. എഡ്.) പൂർത്തിയാക്കി ☐ ഡോക്ടർ ഓഫ് ഫിലോസഫി (പിഎച്ച്ഡി) അല്ലെങ്കിൽ ഡോക്ടറേറ്റ് പൂർത്തിയാക്കി ☐ പോസ്റ്റ്ഗ്രാജുവേറ്റ് ഡിപ്ലോമ ഇൻ എഡ്യൂക്കേഷൻ (PGDE) പൂർത്തിയാക്കി

		☐ ടീച്ചർ എലിജിബിലിറ്റി ടെസ്റ്റ് (TET) യോഗ്യത നേടി ☐ ബിരുദം പൂർത്തിയാക്കി (ബി.എഡ്. ഒഴികെ) (ഉദാ. ബി.എ./ബി.എസ്സി.) ☐ ബിരുദാനന്തര ബിരുദം പൂർത്തിയാക്കി (എം.എഡ്. ഒഴികെ) (ഉദാ. എം.എ/എം.എസ്സി.) ☐ മറ്റുള്ളവ (വ്യക്തമാക്കുക)_____
2.8	നിങ്ങളുടെ ശരാശരി പ്രതിമാസ വരുമാനം എത്രയാണ്? (കഴിഞ്ഞ മാസത്തെ ശരാശരി വരുമാനം, രൂപയിൽ)	☐ 10000-ൽ താഴെ ☐ 10000 - 20000 ☐ 20000 - 30000 ☐ 30000 - 40000 ☐ 40000-ൽ കൂടുതൽ
2.9	നിങ്ങളുടെ കുടുംബത്തിൽ മറ്റ് വരുമാനക്കാർ ഉണ്ടോ?	1. ഉണ്ട് ☐ 2. ഇല്ല ☐
2.10	നിങ്ങളുടെയും നിങ്ങളുടെ കുടുംബത്തിന്റെയും പ്രതിമാസ ആവശ്യങ്ങൾ നിറവേറ്റാൻ നിങ്ങളുടെ കുടുംബത്തിന്റെ വരുമാനം മതിയാകാറുണ്ടോ?	☐ എപ്പോഴും ☐ പലപ്പോഴും ☐ ചിലപ്പോൾ ☐ അപൂർവ്വമായി ☐ ഒരിക്കലുമില്ല
എല്ലാ ചോദ്യങ്ങൾക്കും ഉത്തരങ്ങൾ കൃത്യമായി അടയാളപ്പെടുത്തിയിട്ടുണ്ടെന്ന് ഉറപ്പാക്കുക.		

വിഭാഗം 3. തൊഴിൽ സംബന്ധമായ ചോദ്യങ്ങൾ

3.1	നിങ്ങൾ എത്ര വർഷമായി ഒരു അധ്യാപകനായി/ അധ്യാപികയായി ജോലി ചെയ്യുന്നു?	
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3.2	തൊഴിൽ കാലാവധി	1. സ്ഥിരം ☐ 2. താൽക്കാലികം / കരാർ ☐
3.3	സാധാരണയായി, നിങ്ങൾ പഠിപ്പിക്കുന്ന ഒരു ക്ലാസിലെ വിദ്യാർത്ഥികളുടെ ശരാശരി എണ്ണം എത്രയാണ്?	6. ≤ 20 ☐ 7. 21 – 30 ☐ 8. 31 – 40 ☐ 9. 41 – 50 ☐ 10. ≥ 51 ☐
3.4	ഏതൊക്കെ വിഷയങ്ങളാണ് നിങ്ങൾ പഠിപ്പിക്കുന്നത്? (ബാധകമെങ്കിൽ ഒന്നിലധികം ഓപ്ഷനുകൾ തിരഞ്ഞെടുക്കുക)	☐ സയൻസ് (ഫിസിക്സ്/ബയോളജി/കെമിസ്ട്രി) ☐ സാമൂഹിക ശാസ്ത്രം (ചരിത്രം/ഭൂമിശാസ്ത്രം/രാഷ്ട്രീയം/സാമ്പത്തികശാസ്ത്രം) ☐ ഗണിതം ☐ ഭാഷ (ഇംഗ്ലീഷ്/ഹിന്ദി/മലയാളം/അറബിക്/മറ്റുള്ളവ) ☐ കല/കരകൗശല ☐ ഫിസിക്കൽ എഡ്യൂക്കേഷൻ ☐ യോഗ ☐ മറ്റുള്ളവ വ്യക്തമാക്കുക _____

3.5 ഒരു സാധാരണ പ്രവൃത്തിദിനത്തിൽ സ്കൂൾ സംബന്ധമായ ജോലികൾക്കായി എത്ര മണിക്കൂർ ചെലവഴിക്കുന്നു?

സ്ഐ. നം.		ചെലവഴിച്ച മണിക്കൂറുകൾ
	<i>സ്കൂളിൽ ആയിരിക്കുമ്പോൾ</i>	
1.	ക്ലാസുകൾ എടുക്കുന്നത്	
2.	ക്ലാസുകളും ക്ലാസ്സിലേക്ക് വേണ്ട വസ്തുക്കളും തയ്യാറാക്കുന്നു	
3.	മറ്റ് ചുമതലകളിൽ ഏർപ്പെടുക (ഉദാഹരണത്തിന് അഡ്മിനിസ്ട്രേഷൻ, സ്കൂൾ ആരോഗ്യ പരിപാടികൾ, സാംസ്കാരിക പരിപാടികൾ, പരീക്ഷാ ഡ്യൂട്ടികൾ തുടങ്ങിയവ)	
	മൊത്തത്തിൽ ചിലവാക്കിയ മണിക്കൂറുകൾ (1+2+3)	
	<i>വീട്ടിൽ ആയിരിക്കുമ്പോൾ</i>	
1.	ക്ലാസുകൾ തയ്യാറാക്കൽ	

2.	അധ്യാപനേതര ചുമതലകൾ (പേപ്പർ വിലയിരുത്തൽ, ഡോക്യുമെന്റേഷൻ, etc)	
3.	മറ്റുള്ളവ, ദയവായി വ്യക്തമാക്കുക _____	
	മൊത്തത്തിൽ ചിലവാക്കിയ മണിക്കൂറുകൾ (1+2+3)	

3.6 പഠിപ്പിക്കുന്നതിനു പുറമെ നിങ്ങൾ ചെയ്യുന്ന മറ്റ് പ്രവർത്തനങ്ങളെന്തെല്ലാമാണ്?

സ്ഐ. നം.	പ്രവർത്തി	ഓപ്ഷനുകൾ(ദയവായി മികച്ച ചോയ്സ് ടിക്ക് (✓)ചെയ്യുക
1.	പരീക്ഷാ ഡ്യൂട്ടി	1. ഉണ്ട് ☐ 2. ഇല്ല ☐
2.	പേപ്പർ മൂല്യനിർണ്ണയം	1. ഉണ്ട് ☐ 2. ഇല്ല ☐
3.	എൻ. എസ്. എസ്. , സ്കൗട്ട്സ് & ഗൈഡ്സ്, റെഡ് ക്രോസ്	1. ഉണ്ട് ☐ 2. ഇല്ല ☐
4.	ദേശീയ സാക്ഷരതാ മിഷൻ	1. ഉണ്ട് ☐ 2. ഇല്ല ☐
5.	സർക്കാർ നടത്തുന്ന പരിപാടികൾ ഉൾപ്പെടെയുള്ള സ്കൂൾ ഇവന്റുകൾ (വാർഷിക ദിനം, കായികം & കലകൾ, സ്കൂൾ കലോത്സവം & ശാസ്ത്രോത്സവം, സ്വാതന്ത്ര്യദിനം, റിപ്പബ്ലിക് ദിനം, തുടങ്ങിയവ.)	1. ഉണ്ട് ☐ 2. ഇല്ല ☐
6.	രജിസ്റ്ററുകളും റെക്കോർഡുകളും	1. ഉണ്ട് ☐ 2. ഇല്ല ☐
7.	പ്രവേശന കാമ്പയിൻ	1. ഉണ്ട് ☐ 2. ഇല്ല ☐
8.	സ്കൂൾ ആരോഗ്യ പരിപാടികൾ	1. ഉണ്ട് ☐ 2. ഇല്ല ☐

9.	ഉച്ചഭക്ഷണ പരിപാടികൾ	1. ഉണ്ട് ☐ 2. ഇല്ല ☐
10.	തെരഞ്ഞെടുപ്പ് ഡ്യൂട്ടി	1. ഉണ്ട് ☐ 2. ഇല്ല ☐
11.	സെൻസസ് / സർവ്വേകൾ	1. ഉണ്ട് ☐ 2. ഇല്ല ☐
12.	മറ്റെന്തെങ്കിലുമുണ്ടെങ്കിൽ ദയവായി വ്യക്തമാക്കുക	

3.7 താഴെ പറയുന്ന വിഷയങ്ങളിൽ പൊതുവെ നിങ്ങൾ എത്രത്തോളം നിങ്ങളുടെ ക്ലാസുകളിൽ സംതുപ്തനാണ്?

(നിങ്ങളുടെ അഭിപ്രായം മികച്ച രീതിയിൽ പ്രതിഫലിപ്പിക്കുന്ന ബോക്സ് ടിക്ക് ചെയ്യുക)

	തൃപ്തികരമല്ല	അല്പം തൃപ്തികരമാണ്	വളരെ തൃപ്തികരം
ക്ലാസ്സുകളിലെ ഹാജർ			
വിദ്യാർത്ഥികളുടെ പ്രകടനം			
ക്ലാസിലെ ശ്രദ്ധ			
ഹോംവർക്ക് / അസൈൻമെന്റ് പൂർത്തിയാക്കൽ			
അധ്യാപകനോടുള്ള പെരുമാറ്റം			
ക്ലാസ്സുകളിലെ സഹകരണം			

3.8 വിദ്യാർത്ഥികളിൽ നിന്ന് അഭിപ്രായവ്യത്യാസങ്ങളോ അല്ലെങ്കിൽ എതിർക്കുന്ന രീതിയിലുള്ള പെരുമാറ്റങ്ങളോ നിങ്ങൾ എപ്പോഴെങ്കിലും അനുഭവിച്ചിട്ടുണ്ടോ?

1. ഉണ്ട് ☐
2. ഇല്ല ☐

3.9 ഉണ്ടെങ്കിൽ അത് എത്രമാത്രം ഗൗരവമുള്ളതായിരുന്നു?

- ☐ വളരെ ഗൗരവമുള്ളത്
- ☐ അൽപം ഗൗരവമുള്ളത്
- ☐ ഗൗരവമില്ലാത്തത്

3.10 നിങ്ങൾക്ക് അത് തൃപ്തികരമായി കൈകാര്യം ചെയ്യാൻ സാധിച്ചോ?

1. ഉണ്ട് ☐
2. ഇല്ല ☐

3.11 ജോലി സാഹചര്യങ്ങൾ

നിങ്ങളുടെ സ്കൂളിൽ ലഭ്യമായ താഴെ പറയുന്ന സൗകര്യങ്ങളിൽ നിങ്ങൾ എത്രത്തോളം സംതൃപ്തനാണ്?

(നിങ്ങളുടെ അഭിപ്രായം മികച്ച രീതിയിൽ പ്രതിഫലിപ്പിക്കുന്ന ബോക്സ് ടിക്ക് ചെയ്യുക)

സൗകര്യങ്ങളും ഉപകരണങ്ങളും	തൃപ്തികരമല്ല	അൽപം തൃപ്തികരമാണ്	വളരെ തൃപ്തികരം
ലൈറ്റുകൾ, ഫാനുകൾ, പവർ ബാക്കപ്പ് (യുപിഎസ്), തുടങ്ങിയവ			
ആവശ്യത്തിനുള്ള പഠനോപകരണങ്ങൾ (ബോർഡ്, പ്രൊജക്ടറുകൾ, ലാബ് ഉപകരണങ്ങൾ മുതലായവ)			
കുടിവെള്ളം			
ശൗചാലയ സൗകര്യം			
ലൈബ്രറിയുടെ പ്രവർത്തനം			
കമ്പ്യൂട്ടർ ലാബും ഇന്റർനെറ്റ് സൗകര്യങ്ങളും			
വിനോദ പ്രവർത്തനങ്ങൾക്കുള്ള സൗകര്യങ്ങൾ (യോഗ അല്ലെങ്കിൽ ധ്യാന മുറികൾ, പൂന്തോട്ടങ്ങൾ അല്ലെങ്കിൽ തുറസ്സായ ഇടങ്ങൾ, മുതലായവ)			
സ്കൂളിൽ എത്താനുള്ള ഗതാഗത സൗകര്യം (സ്കൂൾ ബസ്)			
കാന്റീനീന്റെ പ്രവർത്തനം			

നിങ്ങളുടെ സ്കൂളിൽ അക്കാദമിക്, പാഠ്യേതര ആവശ്യങ്ങൾ കൈകാര്യം ചെയ്യാൻ മതിയായ സ്റ്റാഫ് ഉണ്ടോ?

1. ഉണ്ട് ☐

2. ഇല്ല ☐

ജോലിയുടെ തുടർച്ച ഉറപ്പാക്കാൻ നിങ്ങളുടെ സ്കൂളിലെ അവധി ഒഴിവുകൾ ഉടൻ നികത്തിയിട്ടുണ്ടോ?

1. ഉണ്ട് ☐

2. ഇല്ല ☐

വിഭാഗം 4. ശീലങ്ങളും ഹോബികളും

4.1 നിങ്ങൾ നിലവിൽ സിഗരറ്റ്, ബീഡി തുടങ്ങിയ ഏതെങ്കിലും പുകയില ഉൽപ്പന്നങ്ങൾ ഉപയോഗിക്കുന്നുണ്ടോ?

3. ഉണ്ട് ☐

4. ഇല്ല ☐

4.2 നിങ്ങൾ മുമ്പ് എപ്പോഴെങ്കിലും പുകയില ഉൽപ്പന്നങ്ങൾ ഉപയോഗിച്ചിട്ടുണ്ടോ?

1. ഉണ്ട് ☐

2. ഇല്ല ☐

4.3 നിങ്ങൾ നിലവിൽ മറ്റ് തരത്തിൽ പെട്ട പുകയില ഉൽപ്പന്നങ്ങൾ, (ഉദാ: പുകയിലക്കുട്ടിയുള്ള മുറുക്ക്, പുകയില ഉൽപ്പന്നങ്ങൾ ചവയ്ക്കുക , തുടങ്ങിയവ) ഉപയോഗിക്കുന്നുണ്ടോ?

1. ഉണ്ട് ☐

2. ഇല്ല ☐

4.4 നിങ്ങൾ എപ്പോഴെങ്കിലും ബിയർ, വൈൻ അല്ലെങ്കിൽ സ്പിരിറ്റ് പോലുള്ള ഏതെങ്കിലും മദ്യം കഴിച്ചിട്ടുണ്ടോ?

1. ഉണ്ട് ☐

2. ഇല്ല ☐

4.5 താഴെ കൊടുത്തിരിക്കുന്ന ശാരീരിക പ്രവർത്തനങ്ങളിൽ നിങ്ങൾ എത്ര തവണ ഏർപ്പെടുന്നു? (ഏറ്റവും അനുയോജ്യമായ കോളം ടിക്ക് ചെയ്യുക)

	പതിവായി	ഇടയ്ക്കിടെ (ആഴ്ചയിൽ ഒരിക്കൽ, അവധി ദിവസങ്ങളിൽ)	ഒരിക്കലുമില്ല
ഔട്ട്ഡോർ ഗെയിമുകൾ			
ഇൻഡോർ ഗെയിമുകൾ			
ജോഗിംഗ് / നടത്തം			
സൈക്ലിംഗ്			
നീന്തൽ			
യോഗ			
മറ്റേതെങ്കിലും ഉണ്ടെങ്കിൽ വ്യക്തമാക്കുക			
1.			
2.			

വിഭാഗം 5. പൊതുവായ ആരോഗ്യം

5.1	ഇവിടെ നൽകിയിട്ടുള്ള ഏതെങ്കിലും രോഗാവസ്ഥ നിങ്ങൾക്ക് എപ്പോഴെങ്കിലും കണ്ടെത്തിയിട്ടുണ്ടോ?	☐ പ്രമേഹം ☐ ഹൈപ്പർടെൻഷൻ ☐ ആസ്ത്മ ☐ തൈറോയ്ഡ് പ്രശ്നങ്ങൾ ☐ വെരികോസ് വെയിൻ ☐ ഹൃദ്രോഗം ☐ മറ്റുള്ളവ (വ്യക്തമാക്കുക)_____
5.2	മുൻപേ നൽകിയ ഏതെങ്കിലും രോഗാവസ്ഥകൾക്ക് നിങ്ങൾ പതിവായി മരുന്ന് കഴിക്കുന്നുണ്ടോ?	1. ഉണ്ട് ☐ 2. ഇല്ല ☐

5.3	ലിസ്റ്റുചെയ്ത ഏതെങ്കിലും അസുഖങ്ങൾ നിങ്ങൾ പതിവായി അനുഭവിക്കാറുണ്ടോ?	☐ മൈഗ്രേയ്ൻ ☐ നടുവേദന ☐ കഴുത്ത് വേദന ☐ ദഹന ബന്ധമായ പ്രശനങ്ങൾ
5.4	ഒരു സാധാരണ ദിവസത്തിൽ, രാത്രിയിൽ നിങ്ങൾ എത്ര മണിക്കൂർ ഉറങ്ങും?	
5.5	നിങ്ങൾക്ക് മതിയായ ഉറക്കം ലഭിക്കുന്നുണ്ടോ?	1. ഉണ്ട് ☐ 2. ഇല്ല ☐
5.6	നിങ്ങളുടെ ആരോഗ്യനിലയെ നിങ്ങൾ എങ്ങനെ വിലയിരുത്തുന്നു	☐ വളരെ നല്ലത് ☐ നല്ലത് ☐ ശരാശരി ☐ മോശം ☐ വളരെ മോശം
5.7	കഴിഞ്ഞ വർഷം നിങ്ങൾ അസുഖ-അവധി എടുത്തിട്ടുണ്ടോ? (ഗർഭകാലമവധിയോ/ പ്രസവാവധിയോ ഒഴികെ)	1. ഉണ്ട് ☐ 2. ഇല്ല ☐
5.8	ഉണ്ടെങ്കിൽ എത്ര ദിവസം അവധി എടുത്തു?	
5.9	താങ്കൾ അവധിയെടുത്തതിനുള്ള കാരണം വ്യക്തമാക്കാമോ?	

മാനസികാരോഗ്യത്തിന്റെ വിലയിരുത്തൽ

വിഭാഗം 6. ബേൺഔട്ട് (ഓൾഡൻബർഗ് ബേൺഔട്ട് ഇൻവെന്ററി)

നിർദ്ദേശങ്ങൾ

താങ്കൾ യോജിക്കുന്നതോ വിരോധിക്കുന്നതോ ആയ പ്രസ്താവനകളുടെ ഒരു പരമ്പര ചുവടെ നൽകിയിരിക്കുന്നു. സ്കെയിൽ ഉപയോഗിച്ച് ഓരോ പ്രസ്താവനയുമായി പൊരുത്തപ്പെടുന്ന നമ്പർ തിരഞ്ഞെടുത്ത് (✓) താങ്കളുടെ യോജിപ്പിന്റെ അളവ് സൂചിപ്പിക്കുക.

ചോദ്യ നം.	ഓൾഡൻബർഗ് ബേൺഔട്ട് ഇൻവെന്ററി	ശക്തമായി യോജിക്കുന്നു	യോജിക്കുന്നു	വിയോജിക്കുന്നു	ശക്തമായി വിയോജിക്കുന്നു
6.1	എന്റെ ജോലിയിൽ എല്ലായ്പ്പോഴും ഞാൻ പുതിയതും താൽപ്പര്യമുണർത്തുന്നതുമായ തലങ്ങൾ കണ്ടെത്താറുണ്ട്.	1	2	3	4
6.2	ജോലിക്കു എത്തുന്നതിന് മുൻപേ തന്നെ എനിക്ക് ക്ഷീണം അനുഭവപ്പെടുന്ന ദിവസങ്ങൾ ഉണ്ടാകാറുണ്ട്.	1	2	3	4
6.3	എന്റെ ജോലിയെക്കുറിച്ച് ഞാൻ മോശമായി സംസാരിക്കുന്ന സാഹചര്യങ്ങൾ ഈയിടെയായി കൂടുതലായി ഉണ്ടാകാറുണ്ട് .	1	2	3	4
6.4	ജോലിസമയം കഴിഞ്ഞ് ഒന്നു ശാന്തമാകുന്നതിന് നേരത്തെ ഉണ്ടായിരുന്നതിനേക്കാൾ കൂടുതൽ സമയം എനിക്കിപ്പോൾ ആവശ്യമായി വരുന്നുണ്ട്.	1	2	3	4
6.5	എന്റെ ജോലിസമ്പന്ധമായ സമ്മർദ്ദങ്ങളെ എനിക്ക് നന്നായി താങ്ങാൻ പറ്റുന്നുണ്ട്.	1	2	3	4
6.6	ഈയിടെയായി, ജോലിസമയത്ത് ജോലിയെപ്പറ്റി ഏറെ ചിന്തിക്കാതെ യാന്ത്രികമായി ഞാൻ ജോലിചെയ്യുന്ന പ്രവണതയുണ്ട്.	1	2	3	4
6.7	എന്റെ ജോലിയെ ഞാൻ പ്രോത്സാഹനാജനകമായ ഒരു വെല്ലുവിളി ആയിട്ടാണ് കാണുന്നത്.	1	2	3	4
6.8	എന്റെ ജോലികൾക്കിടയിൽ എനിക്ക് പലപ്പോഴും വൈകാരികമായ തളർച്ച അനുഭവപ്പെടാറുണ്ട്.	1	2	3	4
6.9	കാലക്രമേണ, ഇത്തരത്തിലുള്ള ജോലിയിൽ നിന്നും ഒരാൾ അകന്നുപോകാനുള്ള സാധ്യത കൂടുതലാണ്.	1	2	3	4

6.10	ജോലിയിൽക്കുശേഷം എന്റെ ഒഴിവുസമയപ്രവർത്തനങ്ങൾ ചെയ്യാൻ എനിക്ക് വേണ്ടുവോളം ഊർജ്ജം ഉണ്ടാകാറുണ്ട്.	1	2	3	4
6.11	ചിലസമയങ്ങളിൽ, എന്റെ ജോലികൾ എന്നെ അസ്വസ്ഥനാക്കാറുണ്ട് .	1	2	3	4
6.12	ജോലിക്കുശേഷം പലപ്പോഴും എനിക്ക് ക്ഷീണവും മടുപ്പും തോന്നാറുണ്ട്.	1	2	3	4
6.13	ഞാൻ ചെയ്യുന്നതായി എനിക്ക് സങ്കൽപ്പിക്കാൻ പറ്റുന്ന ഒരേയൊരു ജോലി ഇതുമാത്രമാണ്.	1	2	3	4
6.14	സാധാരണയായി എന്റെ ജോലിഭാരം എനിക്ക് നന്നായി കൈകാര്യം ചെയ്യാൻ കഴിയും	1	2	3	4
6.15	ഞാൻ എന്റെ ജോലിയിൽ വളരെയധികം വ്യാപൃതനാണെന്ന് എനിക്ക് തോന്നുന്നു.	1	2	3	4
6.16	ജോലി ചെയ്യുന്ന സമയത്ത് സാധാരണയായി എനിക്ക് ഊർജ്ജസ്വലത അനുഭവപ്പെടാറുണ്ട്.	1	2	3	4

വിഭാഗം 7. സമ്മർദ്ദം, ഉത്കണ്ഠ, വിഷാദം

മൂന്ന് ഉപവിഭാഗങ്ങളായി തിരിച്ചിരിക്കുന്ന അവസാന ഭാഗമാണിത്. ഓരോ ഭാഗവും സമ്മർദ്ദം, ഉത്കണ്ഠ, വിഷാദം എന്നിങ്ങനെ വ്യത്യസ്തമായ മാനസികാരോഗ്യ പ്രശ്നങ്ങളിൽ ശ്രദ്ധ കേന്ദ്രീകരിക്കുന്നു. ഇവ മൂന്നും ബേൺഔട്ടുമായി അടുത്ത ബന്ധമുള്ളവയാണ്, വിട്ടുമാറാത്ത സമ്മർദ്ദം അടിഞ്ഞുകൂടുമ്പോൾ, ഇത് ബേൺഔട്ടിന്റെ സാധ്യത വർദ്ധിപ്പിക്കുന്നു, ഇത് ഉത്കണ്ഠയും വിഷാദവും വർദ്ധിപ്പിക്കുന്നു, അവകാരണം അധ്യാപകരുടെ ക്ഷേമവും പ്രൊഫഷണൽ പ്രകടനവും കൂടുതൽ വഷളാക്കുന്ന ഒരു സാഹചര്യം സൃഷ്ടിക്കുന്നു.

7 എ. സ്ക്രൈസ്: മനസികസങ്കർഷം അളക്കാനുള്ള ചോദ്യാവലി (PSS- 10)

നിർദ്ദേശങ്ങൾ

1. കഴിഞ്ഞ ഒരുമാസത്തിനുള്ളിൽ നിങ്ങളുടെ മനസിലുണ്ടായ ചിന്തകളെയും സങ്കർഷങ്ങളെയും കുറിച്ചുള്ള 10 ചോദ്യങ്ങളാണിത്.
2. എല്ലാ ചോദ്യങ്ങൾക്കും ഏറ്റവും യോജിച്ച ഉത്തരത്തിനുനേരെ "✓" എന്ന് രേഖപ്പെടുത്തുക

ചോ. നം.		ഒരിക്കലുമില്ല	അപൂർവമായി	ചിലപ്പോഴൊക്കെ	സാധാരണയായി	വളരെ സാധാരണയായി
എ.1	അപ്രതീക്ഷിതമായ സംഭവിച്ച കാര്യങ്ങളെക്കുറിച്ചാർത്ത് എപ്പോഴെല്ലാം നിങ്ങൾ വിഷമിച്ചിട്ടുണ്ട് ?	0	1	2	3	4
എ.2	ജീവിതത്തിൽ പ്രധാനപ്പെട്ട കാര്യങ്ങൾ നിയന്ത്രിക്കാൻ കഴിയുന്നില്ല എന്ന് എപ്പോഴെങ്കിലും നിങ്ങൾക്ക് തോന്നിയിട്ടുണ്ടോ ?	0	1	2	3	4
എ.3	എപ്പോഴെങ്കിലും മാനസികസംഘർഷവും പിരിമുറുക്കവും അനുഭവപ്പെട്ടിട്ടുണ്ടോ ?	0	1	2	3	4
എ.4	വ്യക്തിപരമായ പ്രശ്നങ്ങളെ ആത്മവിശ്വാസത്തോടെ നേരിടാൻ കഴിയുമെന്ന് എപ്പോഴെല്ലാം നിങ്ങൾക്ക് തോന്നിയിട്ടുണ്ട് ?	0	1	2	3	4
എ.5	കാര്യങ്ങൾ എല്ലാം നിങ്ങളുടെ വഴിക്ക് നടക്കുന്നു എന്ന് എപ്പോഴെല്ലാം നിങ്ങൾക്ക് തോന്നിയിട്ടുണ്ട് ?	0	1	2	3	4
എ.6	കടമകൾ നിർവഹിക്കാനുള്ള സമ്മർദ്ദം അതിജീവിക്കാൻ കഴിയില്ലെന്ന് എപ്പോഴെങ്കിലും നിങ്ങൾക്ക് തോന്നിയിട്ടുണ്ടോ ?	0	1	2	3	4
എ.7	കാര്യങ്ങളെക്കുറിച്ച് വ്യക്തമായ ധാരണ / അറിവ് നിങ്ങൾക്കുണ്ടെന്ന് എപ്പോഴെല്ലാം തോന്നിയിട്ടുണ്ട് ?	0	1	2	3	4

എ.8	പ്രകോപനങ്ങളേ നിയന്ത്രിക്കാൻ കഴിയാറുണ്ടോ ?	0	1	2	3	4
എ.9	കാര്യങ്ങൾ കൈവിട്ടുപോകുമ്പോൾ കോപിതനാകാറുണ്ടോ ?	0	1	2	3	4
എ.10	പ്രയാസങ്ങൾ കുന്നുകൂടുന്നു, അവയെ മറികടക്കാൻ സാധിക്കില്ല എന്ന് എപ്പോഴെങ്കിലും നിങ്ങൾക്ക് തോന്നിയിട്ടുണ്ടോ ?	0	1	2	3	4

7 ബി. വിഷാദവും ഉത്കണ്ഠയും - പേഷ്യന്റ് ഹെൽത്ത് കൊസ്റ്റ്യനെയർ (PHQ-4)

കഴിഞ്ഞ 2 ആഴ്ചയിൽ താഴെ കൊടുത്തിരിക്കുന്ന ഏതെങ്കിലും പ്രശ്നങ്ങൾ താങ്കളെ എത്രത്തോളം തുടർച്ചയായി ബുദ്ധിമുട്ടിച്ചു? (നിങ്ങളുടെ ഉത്തരം സൂചിപ്പിക്കുന്നതിനായി അടയാളം "✓" ഉപയോഗിക്കുക)		ഒട്ടുമില്ല	നിരവധി ദിവസങ്ങളിൽ	പകുതിയിൽ കൂടുതൽ ദിവസങ്ങളിൽ	മിക്കവാറും എല്ലാ ദിവസവും
ബി.1	മനോബലം ഇല്ലാതിരിക്കുക, ഉത്കണ്ഠയോ കടുത്ത പിരിമുറുക്കമോ തോന്നുക	0	1	2	3
ബി.2	വിഷമിക്കുന്നത് നിർത്താനോ നിയന്ത്രിക്കാനോ കഴിയാതിരിക്കുക	0	1	2	3
ബി.3	കാര്യങ്ങൾ ചെയ്യാൻ താൽപര്യക്കുറവ് അല്ലെങ്കിൽ സന്തോഷക്കുറവ്	0	1	2	3

ബി.4	മനസ്സിടീഞ്ഞതു പോലെയും , വിഷാദവും നിരാശയും തോന്നുന്നു	0	1	2	3
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7 സി.

ചോ . നം.	ചോദ്യങ്ങൾ	ഓപ്ഷനുകൾ(ദയവായി മികച്ച ചോയ്സ് ടിക്ക് (✓)ചെയ്യുക
സി.1	ജോലിസമയത്ത് നിങ്ങൾക്ക് സമ്മർദ്ദം അനുഭവപ്പെടുന്നുണ്ടോ?	1. ഉണ്ട് ☐ 2. ഇല്ല ☐
സി.2	സമ്മർദ്ദം കുറയ്ക്കുന്നതിനോ അത് നിയന്ത്രിക്കുന്നതിനോ നിങ്ങൾ ഈ പറയുന്ന ഏതെങ്കിലും തന്ത്രങ്ങൾ ഉപയോഗിക്കുന്നുണ്ടോ? (ബാധകമെങ്കിൽ ഒന്നിലധികം ഓപ്ഷനുകൾ തിരഞ്ഞെടുക്കുക)	☐ ധ്യാനം ☐ ശ്വാസന വ്യായാമങ്ങൾ ☐ നടത്തം ☐ സംഗീതം കേൾക്കുന്നു ☐ ഭക്ഷണം കഴിക്കുന്നു ☐ മറ്റുള്ളവ വ്യക്തമാക്കുക _____
സി.3	0 മുതൽ 5 വരെയുള്ള സ്കെയിലിൽ, നിങ്ങളുടെ തൊഴിൽ-ജീവിത സന്തുലിതാവസ്ഥയിൽ നിങ്ങൾ എത്രത്തോളം സംതുപ്തരാണ്?	☐ വളരെ അസംതുപ്തി ☐ അസംതുപ്തി ☐ നിഷ്പക്ഷം ☐ സംതുപ്തി ☐ വളരെ സംതുപ്തി
സി.4	നിങ്ങൾക്ക് എന്തെങ്കിലും മാനസികാരോഗ്യ കൗൺസിലിംഗ് ലഭിച്ചിട്ടുണ്ടോ?	1. ഉണ്ട്, സ്കൂളിൽ നിന്ന് ☐ 2. ഉണ്ട്, പുറത്തുനിന്ന് ☐ 3. ഇതുവരെ ഇല്ല ☐

നിങ്ങളുടെ വിലപ്പെട്ട സമയത്തിന് നന്ദി.

ANNEXURE 11: Independent Predictors of Burnout: Results from Linear Regression Analysis

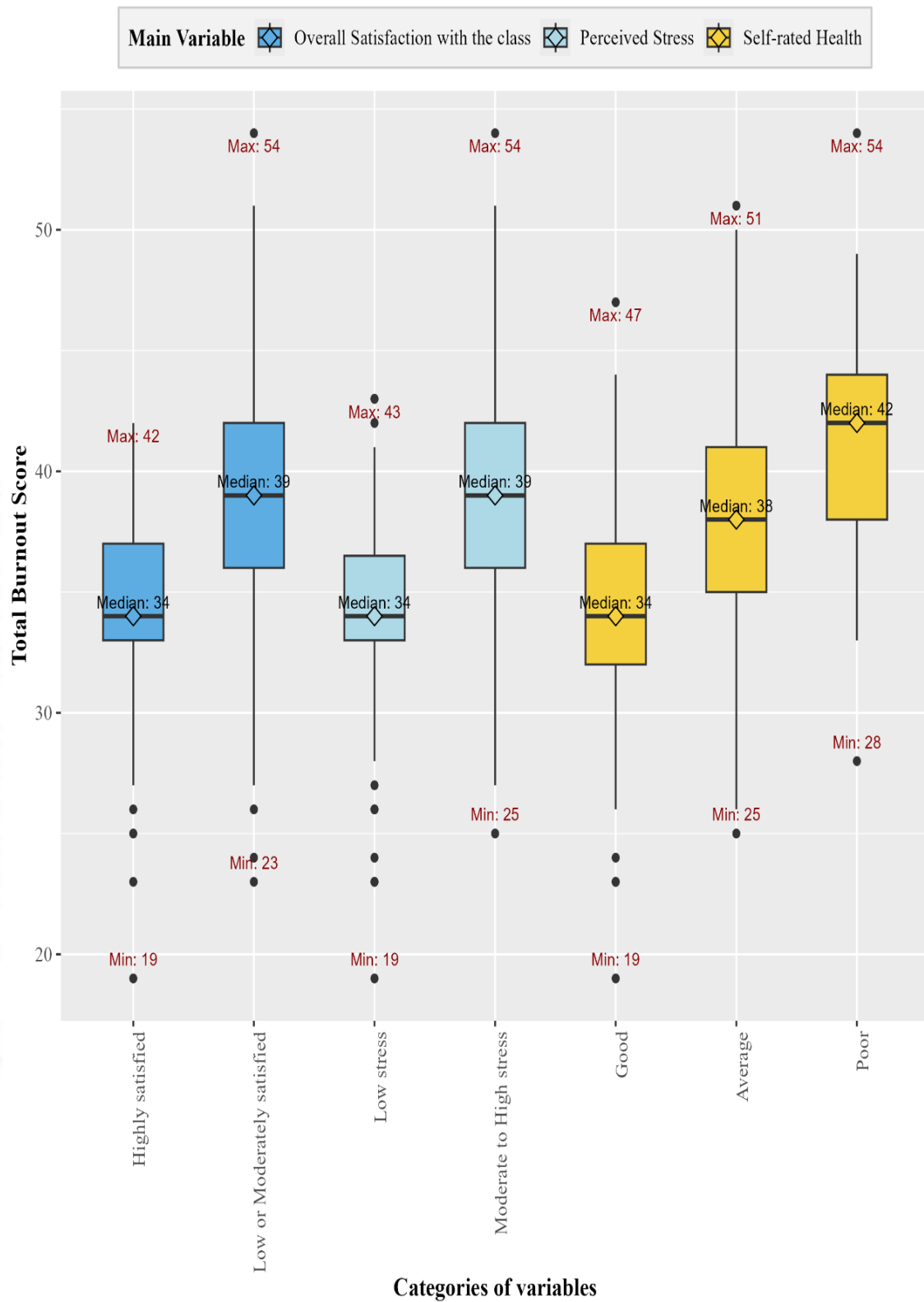
Comparison of Mean Burnout Scores Across Key Predictors Using t-test and ANOVA

Variable	Mean(SD)	Range	P value (Test of difference)
Total Burnout score	Mean(SD) = 37.37(5.15) Median(Q2) = 37, Q1 = 34, Q3 = 41 P10 = 31 ; P20 = 34 ; P30 = 35 ; P40 = 36 ; P50 = 37 ; P60 = 39 ; P70 = 40 ; P80 = 42 ; P90 = 43.4 Range = 19 to 54		
Overall satisfaction of the teacher with the class			
Low or Moderate satisfaction	38.5(4.8)	23 - 54	<0.001 (t-test)
High satisfaction	34.1(4.5)	19 - 42	
Self-rated health			
Good	34.24(5.2)	19 - 47	<0.001 (ANOVA)
Average	38.2(4.4)	25 - 51	
Poor	41.24(5.7)	28 - 54	
Status of stress			
low	34.2(4.5)	19 - 43	<0.001 (t-test)
Moderate to high	39.1(4.7)	25 - 54	

T-tests and ANOVA confirmed that the direction and significance of associations seen in logistic regression (using the 33rd percentile cutoff) were consistent, with higher average burnout score among those with lower satisfaction, poorer health, and higher stress ($p < 0.001$). These differences are further illustrated in the box plots presented below.

Distribution of Burnout Scores Across Key Predictors (Box Plot)

Distribution of Burnout Scores Across Overall satisfaction
with class, perceived stress, and Self-rated health



Results of simple linear regression analysis

Variable	Intercept (a)	Coefficient (b)	95% CI for coefficient (b)	P-value (b)	R ²
Overall satisfaction of the teacher with the class (1)					
Low or Moderate satisfaction	34.08	4.47	3.12-5.82	<0.001	0.144
High satisfaction		Reference			
Self-rated health (2)					
Good	34.24	Reference			0.151
Average		3.914	2.55-5.28	<0.001	
Poor		6.996	4.65-9.35	<0.001	
Status of stress (3)					
low	34.182	Reference			0.203
Moderate to high		4.872	3.68-6.07	<0.001	

1-Model 1(Y- Total burnout score, X – Overall satisfaction with class), 2-Model 2(Y- Total burnout score, X - Self-rated health), 3-Model 3(Y- Total burnout score, X – Status of stress)

For Binary variables, the Reference is coded as '0' and the other category as '1'

Burnout score = 34.08 + 4.47 (satisfaction with class) is the simple linear equation for model one. The average burnout score for those who are highly satisfied with class is 34.08. If there is a change in the satisfaction with the class from high to low or moderate, then the burnout score increases by 4.47 units, which is statistically significant. 14.4 per cent of the variation in burnout is explained by overall satisfaction with the class ($R^2 = 0.144$).

Burnout score = 34.24 + 3.914(Average health status) + 6.996(Poor health status) is the simple linear equation for model two. Compared to Good health status (reference), there is a 3.914 and 6.996 unit increase in burnout score for average health status and poor health status, which is statistically significant. So, the average burnout score for health status average is 38.154, and for poor health status, it is 41.236, respectively. 15.1 per cent of the variation in burnout is explained by self-rated health status ($R^2 = 0.151$).

Burnout score = 34.182 + 4.87 (status of stress) is the simple linear equation for model three. The average burnout score for those who have low stress levels is 34.182, There is a 4.87 unit increase in the burnout score when there is a change of stress from low to moderate

or high, which is statistically significant. 20.3 per cent of the variation in burnout is explained by stress ($R^2 = 0.203$)

Results of multiple linear regression analysis

Predictors	Coefficient*	95% CI for the coefficient	P-value
Intercept(a)	30.735	29.40-32.07	<0.001
Overall satisfaction with the class (Low or moderate)	3.247	2.01-4.49	<0.001
Self-rated health (Average)	2.349	1.09-3.61	<0.001
Self-rated health (Poor)	5.262	3.15-7.38	<0.001
Status stress(Moderate to High)	3.419	2.25-4.59	<0.001

Y- Total burnout score, X- Overall satisfaction with class, Self-rated health, status of stress

The reference is the same as shown in Table 3.33. For Binary variables, the Reference is coded as '0' and the other category as '1'

*Coefficient adjusted for other variables in the model. Refer to Table 3.33 for unadjusted coefficients.

Model summary: $R^2 = 0.349$, Adjusted $R^2 = 0.339$, $F(4,247) = 33.135$, P-value is <0.001.

Burnout Total Score = 30.735 + 3.247(Satisfaction with Class) + 2.349(Average health status) + 5.262(Poor health status) + 3.419(Status of Stress) is the equation for the multiple linear regression model. When adjusting for multiple predictors, Overall satisfaction with class, Self-rated health, and status of stress remained statistically significant. Poor health status has a higher impact on burnout scores, followed by the status of stress. The model explained 33.9 per cent of the variation in burnout (Adjusted $R^2 = 0.339$), indicating that these factors play an important role in predicting burnout (see Table 3.30).

ANNEXURE 12: Know the Signs of Burnout - Seek Help Early

DANGER SIGNS OF BURNOUT	
Physical Signs • Chronic fatigue, exhaustion • Frequent headaches or muscle pain • Insomnia or disturbed sleep • Frequent illness (weakened immunity)	Emotional Signs • Feeling detached or emotionally drained • Increased irritability or frustration • Loss of motivation and sense of accomplishment • Persistent sadness or anxiety
Behavioural Signs • Withdrawal from colleagues and students • Procrastination and reduced productivity • Increased dependence on caffeine, alcohol, or smoking • Skips work or is frequently absent	Cognitive Signs • Difficulty concentrating and making decisions • Forgetfulness or mental fog • Negative or cynical attitude toward work
 If you experience these symptoms, seek support  <i>Your mental health matters.</i>  DISHA 1056 – 24/7 Mental Health Helpline (Govt. of Kerala)  Tele-MANAS 14416 – National Mental Health Helpline	

ANNEXURE 13: Permission obtained to Translate & Validate OLBI from the Author

Return address: IE&IS 3 ATL, NL-PO Box 513, 5600 MB Eindhoven

Dr. RITWIK
Sree Chitra Tirunal Institute of Medical Sciences and
Technology
Trivandrum



Date
August 27, 2024

Our reference
ED/NvdK

Industrial Engineering and
Innovation Sciences
Human Performance Management

T +31 (0)40 247 4607 / 2493
e.demerouti@tue.nl

www.tue.nl

Subject: Permission to use and translate (OLBI)

Dear Dr. Ritwik,

Further to my email dated 12 August 2024, I am sending you this formal letter to state the following:

1. You have permission to use Oldenburg Burnout Inventory (OLBI) at no cost by respecting the terms on how the data should be analyzed and how to acknowledge the scale appropriately. The OLBI is free of charge for academic purposes. An attachment (with the OLBI in several languages, including English) was emailed to you.
If you decide to apply it eventually, please let us know whether the instrument has the same structure in your sample as in the German and Dutch ones.
For information regarding the validity of the instrument, see this publication:
https://www.isonderhouden.nl/doc/pdf/arnoldbakker/articles/articles_arnold_bakker_219.pdf.
For information regarding the cutoff scores of the OLBI, see this publication:
<https://www.tandfonline.com/doi/full/10.1080/00140139.2018.1464667>.
2. You have my written approval to translate the OLBI scale into the language you specified (Malayalam) and validate the scale provided that you cite the original scale per the instructions for its use and citation and make clear that you are responsible for the translation.

Yours sincerely,

A handwritten signature in blue ink, appearing to be 'E. Demerouti', written in a cursive style.

Prof. dr. Evangelia Demerouti
Chief Diversity Officer TU/e

**ANNEXURE 14: Permission obtained from the Director of General Education,
Kerala**

DGE/22057/2024-M4

I/1030943/2024

ഭരണഭാഷ - മാതൃഭാഷ



നം:എം-4/22057/2024/ഡി.ജി.ഇ

പൊതുവിദ്യാഭ്യാസ ഡയറക്ടറുടെ കാര്യാലയം
തിരുവനന്തപുരം, തീയതി : 07-12-2024
ഇ-മെയിൽ : supdtm.dge@kerala.gov.in

പ്രേഷകൻ

പൊതുവിദ്യാഭ്യാസ ഡയറക്ടർ,
തിരുവനന്തപുരം

സ്വീകർത്താവ്

1. ഡോ.ബിജു സോമൻ
പ്രൊഫസർ & ഹെഡ്
അച്ചുത മേനോൻ സെന്റർ ഫോർ ഹെൽത്ത് ആന്റ് സയൻസ്
തിരുവനന്തപുരം
2. വിദ്യാഭ്യാസ ഉപഡയറക്ടർ
കോട്ടയം

സർ,

വിഷയം :- പൊതുവിദ്യാഭ്യാസം- കോട്ടയം ജില്ലയിലെ സെക്കന്ററി സ്കൂൾ അധ്യാപകർക്കിടയിൽ
പഠനം നടത്തുന്നതിനുള്ള അനുമതി നൽകുന്നത് സംബന്ധിച്ച്

സൂചന :- 21.10.2024 ലെ AMCHSS/MPH-2023/External Letter/50/2024 നമ്പർ കത്ത്.

സൂചനയിലേക്ക് ശ്രദ്ധ ക്ഷണിക്കുന്നു. മേൽ സൂചന പ്രകാരം തിരുവനന്തപുരം അച്ചുത മേനോൻ സെന്റർ ഫോർ ഹെൽത്ത് സയൻസ് സ്റ്റഡീസിലെ മാസ്റ്റർ ഓഫ് പബ്ലിക് ഹെൽത്ത് വിദ്യാർത്ഥിയായ ഡോ. റിതീകിന് കോട്ടയം ജില്ലയിലെ സെക്കന്ററി സ്കൂൾ അധ്യാപകർക്കിടയിലെ stress, burnout എന്നിവയെപ്പറ്റി പഠിക്കുന്നതിനായി അധ്യാപകരെ അഭിമുഖം നടത്തുന്നതിനുള്ള അനുമതി ആവശ്യപ്പെട്ടിരുന്നു. ആയതിനായി സ്കൂൾ അധ്യയന ദിനങ്ങൾക്ക് തടസ്സമില്ലാത്ത രീതിയിൽ പ്രധാനാധ്യാപകരുടെ അനുമതിയോടെ പഠനം നടത്തുന്നതിനുള്ള അനുമതി നൽകുന്നതായി അറിയിക്കുന്നു.

Signed by വിശ്വസ്മതയോടെ,
Santhosh C A
Date: 07-12-2024 15:54:10
പൊതുവിദ്യാഭ്യാസ ഡയറക്ടർക്കു വേണ്ടി

പകർപ്പ്:

1. കോട്ടയം ജില്ലയിലെ എല്ലാ പ്രധാനാധ്യാപകർക്കും.(വിദ്യാഭ്യാസ ഉപ- ഡയറക്ടർ
മുഖേന)

ANNEXURE 15: IEC approval



श्री चित्रा तिरुनाल आयुर्विज्ञान और प्रौद्योगिकी संस्थान, त्रिवेन्द्रम
तिरुवनन्तपुरम - ६९५०११, केरल, इंडिया
SREE CHITRA TIRUNAL INSTITUTE FOR MEDICAL SCIENCES AND TECHNOLOGY, TRIVANDRUM
Thiruvananthapuram - 695 011, Kerala, India
(An Institute of National Importance under Govt. of India)

Grams : Chitramet, Phone : +91-471-2443152, Fax : +91-471-2550728 / 2446433, E-mail : sct@sctimst.ac.in, Website : www.sctimst.ac.in

Institutional Ethics Committee

CDSO Registration No: ECR/189/Inst/KL/2013/RR-24
DHR Registration No: EC/NEW/INST/2022/2775

SCT/IEC/2344/DECEMBER/2024

15.01.2025

Dr. Ritwik
MPH Student, AMCHSS
SCTIMST, Thiruvananthapuram

Dear Dr. Ritwik,

The Institutional Ethics Committee held on 30th December, 2024, reviewed and discussed your application to conduct the study titled "PREVALENCE OF BURNOUT AND THE FACTORS ASSOCIATED WITH IT AMONG SECONDARY SCHOOL TEACHERS IN KOTTAYAM DISTRICT, KERALA" (IEC /2344) .

Principal Investigator	Dr. Ritwik, MPH Student, AMCHSS, SCTIMST
Co-Principal Investigator(s)	Dr. Jissa VT, Scientist D, AMCHSS, SCTIMST
Duration of the study	6 months

The following members of the Ethics Committee were present at the meeting held on 30th December, 2024

SL. No.	Member Name	Highest Degree	Gender	Scientific /Non Scientific	Affiliation with Institution(s)
1.	Dr. Manoj Murhekar	MD (Preventive & Social Medicine)	Male	Social Scientist	No
2.	Dr. Annapurna.Y	MD	Female	Basic Medical Scientist	No
3.	Adv. Priya Kaimal	LLM, MBL	Female	Legal Expert	No
4.	Dr. Indu PV	MBBS, DPM, MPhil, PhD	Female	Clinician	No
5.	Dr. Rejnish Kumar	MBBS, MD, DNB	Male	Clinician	No
6.	Smt. Rekha Radhakrishnan	M.A (Eng.); B.Ed	Female	Lay person	No
7.	Dr. Biju Soman	MBBS, MD, DPH, MSc, DLSHTM	Male	Basic Medical Scientist	Yes
8.	Dr. Syam K	MBBS, MD, DM	Male	Clinician	Yes
9.	Dr. Srinivas G	PhD	Male	Basic Medical Scientist (Member Secretary)	Yes

The following documents were reviewed:

Original submission

1. IEC Application Form
2. Permission letter
3. Funding details and Budget
4. Covering letter addressed to the Chairperson, IEC, SCTIMST dated 09.12.2024 forwarded by HOD
5. Questionnaire in English and Tamil
6. Informed Consent Forms in English and Tamil
7. Participant Information Sheets in English and Tamil
8. Permission to use and translate (OLBI)
9. Checklist Form
10. Proposal
11. Declaration Form
12. CV of PI and Co-PI

Revised submission

1. Covering letter addressed to the Member Secretary, IEC, SCTIMST dated 12.01.2025
2. IEC Recommendation letter dated 09.01.2024
3. Proposal
4. Participant Information Sheets in English and Malayalam
5. Informed Consent Forms in English and Malayalam
6. Interview schedule in English and Malayalam
7. Questionnaire in English and Malayalam
8. CV of PI and Co-PI
9. Permission to use and translate (OLBI)
10. Permission letter

IEC Decision

The IEC approved the conduct of the study in the present form.

Remarks:

The Institutional Ethics Committee expects to be informed about the progress of the study, any SAE occurring in the course of the study, any changes in the protocol and patient information/informed consent and asks to be provided a copy of the final report.

There was no member of the study team / Guide who participated in voting / decision making process. The ethics committee is organized and operated according to the requirements of Good Clinical Practice and the requirements of the Indian Council of Medical Research (ICMR).

Sincerely,


Dr. G. Srinivas
Member Secretary, IEC

MEMBER SECRETARY
INSTITUTIONAL ETHICS COMMITTEE (IEC)
SCTIMST, THIRUVANANTHAPURAM



ANNEXURE 16: Plagiarism report

4/29/25, 8:36 AM

Similarity Report

Dissertation Full -Final draft

By: Ritwik 50341

As of: Apr 28, 2025 11:07:04 AM

25,392 words - 173 matches - 51 sources

Similarity Index

8%

Mode: Similarity Report

paper text:

ABSTRACT Background: Teachers face high-stress levels due to the demanding nature of their work, placing them at increased risk of burnout, adversely impacting their productivity and well-being. This study

aimed to estimate the prevalence and associated factors of burnout among secondary school teachers in

17

the Kottayam district, Kerala, using a cross-sectional survey. Methods:The Oldenburg Burnout Inventory (OLBI), a widely used tool for measuring burnout, was translated and validated in Malayalam after obtaining permission from the original author. The process followed standard guidelines, including translation, back- translation, content validation, and reliability testing. A multistage cluster sampling strategy was used to select participants from government, aided and unaided

schools in the district. Data were collected using a structured, self-administered questionnaire

35

that captured sociodemographic, occupational, health, and psychosocial-related variables. Data analysis was done using SPSS version 27, where

descriptive statistics were used to summarise the data and logistic regression to identify factors associated with burnout and its dimensions. Results: The Malayalam version of the OLBI

1

demonstrated good content validity

and reliability with a Cronbach's alpha value of 0

4

.821. Among 255 participants, 66 per cent(95% CI: 60-71%)reported moderate to high burnout(score > 35). Key predictors of burnout were a low level of satisfaction with the class's performance (AOR 3.83, 95% CI: 1.92-7.66) and having moderate to

https://app.iThenticate.com/en_us/report/115400019/similarity

1/64