

EFFECTIVENESS OF GROUP HEALTH EDUCATION ON PERCEIVED STRESS AMONG THE HIGH SCHOOL CHILDREN OF KOLAR: A CLUSTER RANDOMIZED CONTROLLED TRIAL

By

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Dissertation submitted to the
Sri Devaraj Urs Academy of Higher Education and Research,
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In partial fulfillment of the requirements for the degree of

DOCTOR OF MEDICINE
in
COMMUNITY MEDICINE

Under the guidance of

Dr. PRASANNA KAMATH B.T., M.D.



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SRI DEVARAJ URS MEDICAL COLLEGE, TAMAKA, KOLAR-

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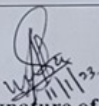


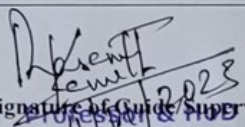
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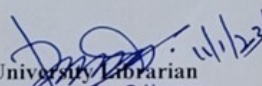
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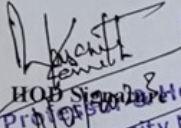
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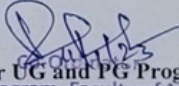
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ABSTRACT

Introduction:

Adolescents are exposed to various psycho-physiological stressors due to rapid changes in their body. Group Health Education sessions in schools could have a positive outcome among adolescents in not only the way they perceive stress but also tackle them efficiently.

Objective:

To assess the effectiveness of group health education intervention on 'perceived stress' among the High School children of Kolar

Methodology:

An open label cluster randomized controlled trial was conducted among high school students (8th, 9th and 10th standard) in Selected English Medium Schools of Kolar taluk. All students with any self-reported mental disorders were excluded. Cluster random sampling method was used to recruit the participant schools. The study was conducted in three phases spanning over 5 months of duration. In Phase I baseline data along with 'perceived stress' level was captured using Perceived Stress Scale-10 questionnaire. Phase II was interventional phase in form of group health education sessions. Phase III was end line assessment.

Results:

Before the intervention in the intervention group 6.2% of the students were having mild stress, 92.4% moderate stress and 1.5% of them having severe stress. After the intervention in the intervention group about 57.9% has mild stress, 42.1% moderate stress and none were having severe stress. The difference in difference analysis (DID) showed that the mean PSS scores in the intervention group changed by +8.84 while in the control group by -0.40.

Conclusion: Group health education delivered was effective in reducing the perceived stress levels among high school children and it is a feasible and acceptable intervention for stress in school-going adolescent children.

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LIST OF ABBREVIATIONS

APL/BPL-Above Poverty Line/Below Poverty Line

BDNF- Brain Derived Neurotrophic factor

BMS - Body–Mind–Spirit

CNS-Central Nervous System

CTRI-Clinical Trial Registry India

COVID 19- Corona Virus Disease 2019

DASS – Depression Anxiety Stress Scale

DDPI- Deputy Director of Public Instructions

DID-Difference in Difference

GHQ-General Health Questionnaire

GR-mRNA-Glucocorticoid Receptor messenger RNA

HAPA-Health Action Process Approach

HPA -Hypothalamo Pituitary Axis

IBM-International Business Machines

IEC- Institute Ethics Committee

MBCT-Mindfulness-Based Cognitive Therapy

MBP-Mindfulness-Based Program

MBSR-Mindfulness-Based Stress Reduction

MM-Model of Mindfulness

PSS 10-Perceived Stress Scale

PSA NCAM - Polysialylated Neuronal Cell Adhesion Molecule

SPSS-Statistical Package for the Social Sciences

S/R-Spirituality and Religiousness

SSS-Subjective Social Status

6SQuID-Six steps in the quality intervention development

tPA- tissue Plasminogen Activator

TPB-Theory of Planned Behavior

TSST-Trier Social Stress Test

UNICEF-United Nations Children's Fund

USA-United States of America

WHO -World Health Organization

ABSTRACT

Introduction:

The World Health Organization (WHO) has defined 10-19 years of life as adolescence. There is about 1.3 billion population around the whole world who belongs to the age group of 10-19 years. Out of the total 1.82 billion population, about 36% i.e., 627 million belongs to less than 18 years in the South Asian region. 21% of the total population in India belongs to the adolescent age group.

Stress can be defined as the nonspecific response to stimuli (external or internal) by individuals. External stimuli can be the peer group influence while internal can be the expectations of a facing situation. Stress is more so ever a part and parcel of life and it is inevitable. The stress can be a Eustress or Distress. For carrying out daily activities a positive form of stress is required, called eustress. The counter part of eustress, an unpleasant form of stress which can be considered as eustress which has crossed its normal limits can be called distress.

Adolescents are at risk of exposure to various psycho-physiological stressors as a result of sudden changes in their bodies. They are also exposed to increased academic pressure, peer pressure, and pressures from other sources of society. The way the adolescents tackle this stress would have an impact

on their overall development and thus in turn contributions to their society.

The school environment can be the perfect site for the various interventions which are aimed at reducing adolescent stress since they spend their substantial time i.e., about 6 hours per day in school. The school-based mental health programs enjoy the benefits of not being stigmatized along with a greater utilization rate even among ethnic minority adolescents. Group Health Education sessions in schools could have a positive outcome among adolescents in not only the way they perceive stress but also tackle them efficiently.

Mindfulness means “being aware of the present moment with an attitude of openness, curiosity, non-judgment, and acceptance.” A school-based non-randomized trial had shown that mindfulness-based intervention effectively reduces perceived stress levels along with improvement in subjective wellbeing and emotional regulation

“Health Action Process Approach (HAPA) and the Theory of Planned Behavior (TPB)” are two commonly used theories used to bring about behavioral change across varied populations. However, to date, researchers have not utilized the full potential of using theories to form interventions. Taking into consideration the success of school-based interventions in tackling stress this interventional study was done in High Schools of Kolar to know the effectiveness of group health educational intervention combining

TAPA, HAPA, and mindfulness in tackling perceived stress.

Objective:

To assess the effectiveness of group health education intervention on perceived stress among the high school children of Kolar taluk in terms of,

1. change in mean perceived stress scores pre- and post-intervention.
2. percentage change in children belonging to the severe (PSS score: 27-40) to moderate stress (PSS score: 14-26) group and moderate (PSS score: 14-26) to mild (PSS score: 0-13) stress group.

Materials and Methods:

An open-label cluster randomized controlled trial was conducted among high school students (8th, 9th, and 10th standard) in Selected English Medium Schools of Kolar taluk. All students with self-reported mental disorders were excluded. A systematic random sampling method was used to recruit the participant schools. The study was conducted in three phases spanning over 3 months of duration. Phase I included baseline data collection wherein socio-demographics along with the 'perceived stress' level was captured using Perceived Stress Scale-10(PSS-10) questionnaire. Phase II was the interventional phase for the intervention group wherein group health education sessions were conducted. Phase III was the end-line assessment

among both intervention and comparator schools to assess ‘perceived stress’ levels.

Results:

Before the intervention, in the intervention group, 6.2% of the students were having mild stress, 92.4% moderate stress, and 1.5% of them had severe stress. After the intervention in the intervention group, about 57.9% had mild stress, 42.1% had moderate stress and none were having severe stress. Thus, the percentage change in children in the mild stress category was + 51.7%, in the moderate stress category was -50.3% and in the severe category was - 1.5% and this change were statistically significant. The difference in difference analysis (DID) showed that the mean PSS scores in the intervention group changed by +8.84 while in the comparator group by -0.40.

Conclusion: The study shows that the group health education delivered was effective in reducing the perceived stress levels among high school children and it is a feasible and acceptable intervention for stress in school-going adolescent children.

Key words: Perceived stress, Mindfulness, Health education.

TABLE OF CONTENTS

SL.NO	CONTENTS	PAGE NO
1.	Introduction	1
2.	Objectives	7
3.	Review of literature	9
4.	Material and methods	27
5.	Results	45
6.	Discussion	73
7.	Summary and conclusion	82
8.	Limitations	85
9.	Recommendations	87
10.	References	90
11.	Annexure	107

LIST OF TABLES

TABLE NO.	TITLE OF THE TABLE	PAGE NO
1.	Modified B G Prasad socioeconomic status classification, 2021	34
2.	Six steps in quality intervention development (6SQuID)	38
3.	Class-wise distribution of participants	47
4.	Age-wise distribution of participants	49
5.	Religious distribution of the participants	50
6.	Participants distribution according to the number of siblings	51
7.	APL/BPL status of the participants	52
8.	Distribution of participants according to birth order	53
9.	Distribution of participants according to the number of members in the family	54
10.	Distribution of participants according to Socioeconomic status (According to Modified BG	55

	Prasad's Classification)	
11.	Distribution of students based on last year's grades obtained.	57
12.	Distribution based on the frequency of practicing meditation	59
13.	Distribution based on media application use	64
14.	Distribution based on the time spend daily on various media applications	66
15.	Satisfaction among the participants regarding their parents' educational background	67
16.	Satisfaction among the participants regarding their family environment.	68
17.	Overall baseline PSS scores among the participants	69
18.	Mean PSS scores before and after intervention	70
19.	Distribution of participants in the severe, moderate, and mild stress groups before and after the intervention	71
20.	The DID analysis of the PSS scores	72

LIST OF FIGURES

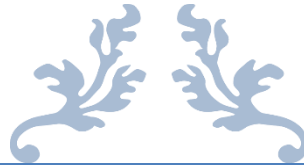
FIG NO.	DETAILS OF FIGURES	PAGE NO
1.	Map of Kolar district	28
2.	Flowchart depicting the selection of the schools	31
3.	Brief description of the intervention with the timeline.	38
4.	Behavior Change Wheel	39
5.	Flowchart depicting the participant's recruitment and study procedure	43
6.	Distribution of participants in the intervention and comparator group	46
7.	Gender-wise distribution of the participants	48
8.	Perception of the students about last year's scholastic performances.	56
9.	Distribution based on practice of meditation	58
10.	Distribution based on reporting of facing bullying from seniors	60

11.	Distribution based on the reporting of facing peer pressure	61
12a.	Distribution based on having mobile or laptops	62
12b.	Distribution based on feeling bad due to lack of their own mobile or laptops	63
13.	Distribution based on most used media application	65

LIST OF ANNEXURES

ANNEXURE NO.	TITLE	PAGE NO.
1	Proforma for data acquisition in English	106
2	Institutional Ethical Committee Certificate	111
3	Modified B G Prasad Classification	112
4	Proforma for data acquisition in Kannada	113
5	Information sheet - English	117
6	Information sheet - Kannada	118
7	Consent form (parent)- English	119
8	Consent form (parent)- Kannada	120
9	Consent form (Principal)- English	121
10	Consent form (Principal)- Kannada	122
11	Informed Assent(students)-English	123
12	Informed Assent(students)-Kannada	124
13	Pamphlets used	125
14	Materials used for providing Health	126

	Education	
15	Images of health education sessions	141
16	Gantt chart	143
17	Master Chart	144



INTRODUCTION



1.INTRODUCTION

There is about 1.3 billion population around the whole world in the 10-19 years age group.¹ The WHO has defined 10-19 years of life as adolescence. 627 million belong to less than 18 years in the South Asia region making approximately 36 percent of the total 1.82 billion living in the region.² 21% is the share of the adolescent age group to the total population in India .³

Among all the age groups adolescence is the most sensitive and vulnerable age group. The foundation for future life is laid in adolescence which underlines its importance. Various changes in physiological and analytical ability will start to occur in adolescence. These changes will provide them with confidence and the ability to maintain unique identities and opinions. They will become more or less independent just like the adults and their perception of life will also start to change. During this particular period, the peer group opinions will be having an easy influence on them.¹

Adolescents are more vulnerable to stress and health-related problems due to changes in social structure, lifestyle, education system, and various other factors.¹ Previous studies have established the relationship between stress and the chance of developing psychosomatic problems, sleep problems and depression.⁴ It is the coping ability that determines the adolescents' vulnerability to stress. To cope with the stress, they will adopt different harmful lifestyle practices like substance abuse, unprotected sex, binge eating, etc. ⁵ The prevalence studies carried out among Indian adolescents for stress

showed varied results i.e., with prevalence varying between 44% to 65%.^{6,7}

Stress is defined as the nonspecific response to a stimulus (external or internal) by the individual.⁸ External stimuli can be the peer group influence while internal can be the expectations of a facing situation. Stress is more so ever a part and parcel of life and is inevitable. The stress can be a Eustress or Distress. For performing our everyday activities, a positive form of stress is required, called “eustress”. The counter part of eustress, an unpleasant form of stress can be called “distress”. “Distress” can be understood as eustress which has crossed its normal limits. The prolonged existence of distress is a threat to body homeostasis.⁹ Perceived stress means “the uncomfortable emotional experience that gets developed due to an individual's perception of an internal (test anxiety) or external (death of a loved one) stressful event.”¹⁰

The increased stress level will activate the neural system but the effects are on a short-term basis while the activation of the neuro-endocrine system will have long-lasting effects. That is in case of prolonged stress levels the Hypothalamo-pituitary axis gets activated repeatedly leading to increased levels of stress hormones and inflammatory mediators.¹¹ Upon exposure to physical stressors like wounding or emotional stressors like perceived stress there will be a coordinated response from the immune, endocrine and nervous systems.¹² The lifetime risk of developing type 2 diabetes mellitus, hypertension, dyslipidemia, early coronary artery disease, and sleep disorders increases

with the increased circulation of the stress hormones.¹³

The major stressors for adolescents can be school, family, peer group, personal health, and appearance.^{14,15} Among all the five major stressors school environment and socio-economic status have been widely researched among the adolescent population.¹⁶⁻¹⁸

The school environment can be the perfect site for the various interventions which are aimed at reducing adolescent stress since they spend their substantial time ie, about 6 hours each day in school. This makes schools an important place for cognitive development along with the development of emotional control and social skills. They are unavoidable in dealing with adolescent stress.^{19,20} Conducting interventions that will enhance social and emotional functioning will improve scholastic performance and can lead to the school's success.²¹ The school-based mental health programs enjoy the benefits of not being stigmatized along with higher utilization rate even among the ethnic or religious minority adolescents.²² During the previous decade many intervention programs were conducted at schools targeting the adolescent stress either directly or indirectly. All these programs had different approaches and mechanisms for reducing stress levels comprising of cognitive and behavioral techniques like mindfulness, relaxation exercises, life skills training, etc.^{23,24,25} A systematic review and metanalysis conducted during 2020 showed school-based stress intervention programs to be rewarding and most of them had mindfulness component.²⁶

Mindfulness means “being aware of the present moment with an attitude of openness, curiosity, non-judgment, and acceptance.”²⁷ A school-based non-randomized trial had shown mindfulness-based intervention effectively reduces the perceived stress levels along with improvement in subjective wellbeing and emotional regulation.²⁸ Hence it is worthwhile to conduct interventions using mindfulness among the adolescent population which can reduce their stress levels and causes an improvement in the overall wellbeing.

The theories of the Health Action Process Approach (HAPA) and Theory of Planned Behavior (TPB) are used in promoting behavioral changes across different population groups especially in improving sleep hygiene. To date, the potential advantages of using theories to design interventions have not been given enough attention by researchers.²⁹ The theories can be used in selecting the intervention components, evaluating why the interventions work, and also in providing a framework so that these interventions are replicable in similar contexts.^{30,31}

As per TPB the most unique and proximal predictor for any behavioral change is the intention to change. The intention to change can be defined as the “self-instructions to perform a particular behavior or to obtain a certain outcome. “The intention to change further depends on the attitude, subjective norms, and perceived behavioral control.”^{29,32}

According to the theory of HAPA change in behavior involves two consecutive phases.

These are 1) a motivational phase and 2) a volition phase (a stage of planning and action). The previously explained TPB itself is enough to create motivational factors for a behavioral change. But the volition phase involving action coping and planning will determine whether the motivational factors are translated into actions. Many of the behavioral interventions lacked the volition phase and that may be the reason for their failures.^{29,33-36}

Considering the reaction to stress positively as the intended behavioral change among adolescents, an intervention was designed using the theories of TPB and HAPA and using mindfulness as the mechanism for change in stress. No other previous studies utilized HAPA, TPB, and mindfulness in designing a health education intervention to tackle the perceived stress among school children. Taking into consideration the success of school-based interventions in tackling stress this interventional study was carried out in High Schools of Kolar to assess the effectiveness of group health educational intervention on perceived stress.



OBJECTIVES OF STUDY



2. OBJECTIVES

To assess the effectiveness of group health education intervention on perceived stress among the high school children of Kolar taluk in terms of,

1. change in mean perceived stress scores pre- and post-intervention.
2. percentage change in children belonging to the severe (PSS score: 27-40) to moderate stress (PSS score: 14-26) group and moderate (PSS score: 14-26) to mild (PSS score: 0-13) stress group.



REVIEW OF LITERATURE



3. REVIEW OF LITERATURE

3.1 Adolescence: a critical period in the life course

WHO and UNICEF defined an adolescent “as a person between the age group of 10-19 years.” The 10-24 years age group is called youth. The terms adolescents and young adults are used to representing 10-24 years of age. The 10-24 years age group can be further classified into early adolescence (10-14 years), late adolescence (15-19 years), and young adulthood (20–24 years).³⁷

The emotional and cognitive capabilities for independence are usually acquired during the period of adolescence. It is the period during which one completes the education and gets into a job, have social engagements, and forms lifelong relationships. Those adolescents who had higher physical fitness levels, cognitive abilities, better education, social and financial supports, etc. are very much likely to maintain higher levels of well-being in adulthood. The reason is, the adolescent period lay down the foundation for adult health and well-being. Thus, interventions in tackling the infectious disease burden in childhood are very much essential. Also increasing burden of non-communicable diseases seen in adulthood has its root cause tracing back to adolescence.

38

Traditionally the adolescent period has been viewed as the period of transition that begins with the onset of puberty and ends with marriage and parenthood. This

conventional notion has been slowly changing around the world due to the social transition. The demographic transition happening in many countries due to the fall in fertility and mortality rates with an increased life expectancy, the world has been witnessing the survival of the largest ever population of adolescents and young adults.³⁸

The changing patterns of childhood infectious diseases and improved nutrition have led to a fall in the age of onset of puberty ie, now the period of adolescence is advanced in the life course. Contradicting the traditional notion of ringing down the curtain of adolescence with marriage and parenthood now the transition to adulthood is viewed with the adoption of wider adult roles and responsibilities. This includes employment, financial independence, and the formation of life partnerships.³⁸

The age at which adolescents reaches the milestones of becoming an adult also increased. This has stretched the period of adolescence further and the term 'adolescents and young adult' has gained importance. This expansion in the number of years for the adolescent age group in their life time further increased the significance of this age group and also the chances for disruption of a healthy developmental trajectory. If taken positively these expansion years will provide opportunities to intervene in an unhealthy development course.³⁸

Developments in neuroscience have shed some light on the developing adolescent brain and this new knowledge gained has hinted at the well-being of adolescents. The marked

difference in the decision-making of early and late adolescents has been substantiated by the changes observed in brain development during this period. So the research activities planned in the adolescent age group should take the differences between late and early adolescents into consideration.³⁹

Adolescents differ from adults in their reactions to emotionally charged situations (called hot emotions). Adolescents cannot override these situations like adults which makes them unguarded to various social and health problems. They will be easily influenced by their peer group and family and hence any interventions aimed at improving adolescents' wellbeing should consider these factors. Interventions done in this age group without considering the 'hot emotions' are less likely to be successful.³⁸

3.2 Prevalence of stress among the adolescents

A cross-sectional study by **Sibnath Deb et al** at the schools in Kolkata had shown that 63.5% of the students belonging to classes 11 and 12 were under stress due to academic pressure. The questionnaire used was a self-structured one. The pressure from parents to perform better in academics was reported by 66% of the students. Symptoms of psychiatric illness were found in 32.6% of students and 81.6% reported they were having exam-related anxiety.⁴⁰ A cross-sectional study in Chandigarh among 9-12th class students by **Kumar Sandal et al** using the Depression, Anxiety and stress (DAS) scale showed 65.53% having depression, 80.85% having anxiety, and 47.02% having

stress respectively. Class-wise stress levels were 76.3%,52.3%,40.8%, and 54.37% respectively in the 9th,10th,11th, and 12th classes.⁴¹Both the studies have shown a higher prevalence of stress among females than males.

An exploratory study done by **Vijay et al** at government schools in Bangalore among 15-19 years including 228 males (51.3%) and 217 females (48.7%) showed that 30.33% had low stress, 39.78% had moderate stress and 29.89% had severe stress. The measurement of the stress levels was using the PSS 10 questionnaire.⁴²

A study done in Hubli using two validated questionnaires for measuring stress-General Health Questionnaire 12 (GHQ 12) and PSS 10 among 9th and 10th classes also showed a higher prevalence of stress among adolescents. On PSS 10 scale 11.9%,63.7%, and 24.4% had low stress, moderate stress, and severe stress respectively. On the GHQ scale, 43.4% had evidence of distress was present in 43.4%, while psychological distress was found in 50.2% .⁴³

The student population all over the world was severely affected by the COVID-19 pandemic which caused a very long break from academics and forced them to stay at home. An online survey conducted by **Bijoy Chhetri et al** among the student population of India using PSS 10 showed that about 55% (N=450) of students showed moderate to severe stress levels.⁴⁴This showed the persistent level of stress among the student population especially the school children even during the lockdown period due to

COVID 19.

3.3 Health effects caused due to stress

A review by **Habib Yaribeygi et al**, on the influence of stress on body functions, had precisely summarized the ill effects due to stress. In the CNS stress can cause atrophy of the glucocorticoid receptors in the memory hippocampus area along with the decreasing dendritic branches and synaptic terminals in the hippocampal area leading to loss of spatial memory, and verbal memory and can affect cognition and learning. Stressful individuals also have impaired immune system functioning which makes them susceptible to more frequent illnesses. Stress may it be short-term or long-term will have a deleterious effect on the cardiovascular system functioning as well. On the Gastrointestinal system and nutrition, stress can cause alteration in the Appetite Modifying Ventral tegmental area in Amygdala which can either lead to anorexia induction or binge eating habits. Also increased stress levels will cause increased secretion of substance P in the alimentary tract which predisposes to irritable bowel syndrome and gastric ulcers. There is a mutual and broad relationship between the endocrine system and stress. Stress can either change or activate many endocrine processes related to the hypothalamus, pituitary and adrenal glands, the adrenergic system, gonads, the thyroid, and the pancreas. Stress is also beneficial as it helps in preserving the homeostasis of cells even though the ill effects of stress are getting much

attention. Only when severe and prolonged the above-mentioned ill effects can occur due to stress.⁴⁵

According to an article from **Bruce S. McEwen**, exposure to a shorter period of stress ensures better adaptability and persistence through responses of neural, cardiovascular, autonomic, immune, and metabolic systems. While exposure to stress for a longer period result in the dysregulation of these systems and create various pathophysiological events. When chronic stress is accompanied along with personal behavior changes like smoking, binge eating, alcoholism, and poor sleep (otherwise known as "lifestyle changes"), it is called “allostatic overload”. Both stresses for shorter and longer periods can alter the morphology and function in regions of the brain like the amygdala, hippocampus, and prefrontal cortex. The adaptiveness to stress is determined by numerous mediators such as “glucocorticoids, excitatory amino acids, endogenous factors such as Brain-Derived Neurotrophic factor (BDNF), Polysialylated Neuronal Cell Adhesion Molecule (PSA-NCAM), and tissue Plasminogen Activator (tPA), etc”. Hence stress response will be varying among different individuals based on their above-mentioned mediator levels.⁴⁶

The review article by **Sonia J. Lupien et al** proposed high basal levels and stress-induced changes of the Hypothalamo-pituitary axis (HPA) among adolescents can be caused due to variations in their sex hormone levels. It is established through various

studies that the Glucocorticoid Receptor messenger RNA (GR-mRNA) level is increased in the anterior part of the frontal lobe of the brain during the period of adolescence and late adulthood compared with infancy, young adulthood, and senescence. This gives the clue that emotional processes regulated by this brain area are sensitive to glucocorticoids and hence to stress. Many mental disorders like anxiety and depression have their beginning as periods of very high-stress levels which often precede the first episodes of these disorders. Adolescents hailing from poor socio-economic conditions or victims of mental or sexual abuse have increased levels of glucocorticoids. Children exposed to high-stress levels in their early life had reduced amygdala volume while in adolescents exposed to stress the prefrontal cortex area is affected. The prefrontal cortex plays an important role in cognitive control functions and hence stress can affect the attention span, impulse inhibition, prospective memory, and cognitive flexibility among adolescents.⁴⁷

An article by **Firdaus S. Dhabhar** on the aftermath of stress on immunity states that Short-term stress (i.e., lasting for minutes to hours) can cause immune activation and enhances innate/primary and adaptive/secondary immune responses. While long-term stress suppresses or dysregulates innate and adaptive immune responses. Chronic stress will alter the cytokine balance, induce low-grade chronic inflammation, and suppress the functioning of immune-protective cells. All these studies are directly or indirectly pointing the need to intervene for chronic stress, not an acute one.⁴⁸

3.4 Factors determining stress levels

A cross-sectional survey by **Pernille Bach Steen et al**, among 8181 Danish 9th-grade students explored the association of Subjective Social Status (SSS) with perceived stress. SSS means “a person's perception of social status”. The SSS in society and SSS in school were the independent variables and PSS scores were the outcome. The findings from the survey showed a linear association between SSS, in both society and school, and perceived stress. Also, higher the perceived stress levels, the lower the SSS. In the same study, girls reported a higher level of perceived stress than boys.⁴⁹

A narrative review on determinants of adolescent stress by **Kallol Roy et al**, including the twelve observational studies conducted between 2003 and 2013 reported that the socioeconomic status of parents, financial conditions, and academic life were the factors influencing adolescent stress. The majority of adolescent boys adopted distraction and relaxation as their coping strategies. While the girl's resort to avoidance coping and were more willing to seek support, resolve conflicts, and always openly expressed their emotions. The majority of girl participants reported they are having less freedom than boys which in turn can be the cause for their stress levels.⁵⁰

A cross-sectional analytical study by **Rama Pramanik et al**, among 102 students belonging to class IX and XI in West Bengal identified de-motivating comments, sibling patterns, and love affairs as the cause for perceived stress among late

adolescents. About 15.6% of the variations in PSS scores were explained by these factors. Individually they contributed 3.8%, 5.6%, and 6.2% of variations respectively.⁵¹

A cross-sectional study by **Srihari Ramamoorthy et al**, among school-going adolescents in Chennai belonging to 15-19 years showed that high-stress prevalence had a negative influence on their sleep hygiene. This also underlined the need for identification and early stress reduction interventions among school-going adolescents for improving their academic performance and well-being.⁵²

A study done by **Shruti Chandelkar et al** explored the association between “resilience, emotional stability, and stress” among the 10th standard students in Mumbai and showed a negative correlation between “resilience and emotional stability” with perceived stress. While “resilience and emotional stability” each other were positively correlated. No gender-wise disparities were reported in these three variables. The study summarized that resilient students are emotionally stable and dealt effectively with perceived stress.⁵³

A cross-sectional study by **Satya Raj et al**, among adolescent children in Tamil Nadu, ascertained the connection between physical activity and perceived stress levels. 42.5% of the participants were having low levels of physical activity while 22.5% were having high levels of physical activity. 39% of them were highly stressed and 36% were moderately stressed. 50% of those who were having low physical activity had high

perceived stress.⁵⁴

A paper by **Crystal Amiel M. Estrada et al** emphasized the significance of religion in promoting mental health. The paper states that providing religious education can improve the mental health of adolescents. Religious education can develop a better response toward stimuli through the internalization of religious morality and also can act as a coping mechanism for stress. It also promotes a sense of belonging which can improve self-esteem and well-being. But there can be negative effects also like discrimination and social isolation, especially among minorities. Thus, religious education has all the necessary prerequisites to supplement stress reduction interventions at schools.⁵⁵

The study by **Sreevani Renatala et al**, among adolescent girls in India, showed father's education, religion, number of siblings, the combination of subjects, type of personality, and Intelligence Quotient (IQ) were the factors influencing academic stress. The study also disclosed that the number of siblings and extrovert personalities negatively predicted stress and were protective factors. Introvert personality, Hindu religion, and illiterate father positively predicted stress among adolescent girls and were the risk factors.⁵⁶

A review of the scientific journals by **Giancarlo Lucchetti et al**, on the relationship between Spirituality and Religiousness(S/R) with mental health, concluded a

bidirectional relationship between the two. How S/R is used to cope with distress determines the mental health outcomes.⁵⁷ Hence S/R has a major role to play in mental health and wellbeing.

3.5 Approaches for measuring stress

An article by **Alexandra D Crosswell et al** described the best practices for stress measurement in health research. Even though there is enough evidence to point out that stress can lead to disease risk, often stress is not included in models of health. The reason may be due to the notion that stress is too broad and vague to accurately measure.

The term "stress" is a general term that represents the experiences when the demands of a situation outweigh the individual's perceived psychological and physiological ability to cope. One of the important aspects of measuring stress is correctly differentiating between exposures to stressful events and responses to that events.

Stressful events or "stressors" are "discrete events that have the potential to alter or disrupt typical psychological functioning." Self-report questionnaires such as a life events checklist, assessed by an interviewer, or objectively determined based on proximity to an event can be used to measure stressors. Stress responses can also be measured using self-report measures, behavioral coding, or physiological measurements.

One of the simplest ways to measure stress responses is through perceived stress measurements e.g., by using the PSS-10 scale. Trier Social Stress Test (TSST), is a standardized laboratory stress measurement method that measures the physiological changes to acute stress. Differentiating stress concerning some scales is also very important.

Chronic stressors are prolonged threatening or challenging circumstances that disrupt daily life and continue for an extended period (minimum of one month). People having chronic stress are predisposed to chronic illness, mortality, and accelerated biological aging.

Acute stress is a short-term event based on exposure to threatening or challenging stimuli that evoke a psychological and/or physiological stress response. The steps in choosing the appropriate measures for stress include determining the stress type to be measured, the time scale of stressor exposure, identifying the stressor responses, determining the life stage in which the stressor occurs, and using validated scales to capture these.⁵⁸

3.6 Perceived Stress Scale (PSS 10)

“Perceived Stress Scale (PSS)” is one of the most widely used questionnaires for measuring psychological stress and was made to measure "the degree to which individuals appraise situations in their lives as stressful”. All versions of the PSS(14-

item, 10-item, and 4-item) showed better internal reliability when modeled as two distinct factors: perceived coping and perceived distress (also termed perceived self-efficacy and perceived helplessness) relative to the more commonly used one-factor model, or mean score.¹⁰

The study done by **Afton Kechter et al** was done to test the factor structure and item-loadings of the 10-item Perceived Stress Scale (PSS) when administered to early adolescents. The findings were that the two-factor model of PSS, inclusive of perceived coping and perceived distress, fits the data better than a one-factor model. This study has indirectly validated the administration of PSS 10 among the early adolescent population also.⁵⁹

A systematic review by **Eun-Hyun Lee et al**, related to assessing the psychometric properties of the Perceived Stress Scale (PSS) showed that the 10-item PSS is superior to those of the 14-item PSS and 4-item PSS scales. Cronbach's alpha of the PSS-14 was $>.70$ in only 11 of the 12 studies while Cronbach's alpha of the PSS-10 was $>.70$ in all 12 studies in which it was used. Also, the test-retest reliability of the PSS-10 was assessed in four studies and met the criterion of $>.70$ in all cases.⁶⁰

3.7 Interventions for stress

A randomized controlled trial by **Rantala S et al** evaluated the effectiveness of a holistic group-based stress management program in reducing academic stress,

depression, and anxiety, and improving well-being among adolescent girls in Karnataka. The study showed that the experimental group participants had a statistically significant decrease in academic stress scores (from 53.63 to 21.64 at 6 months). The intervention comprised of body–mind–spirit (BMS) strategies focusing on techniques to handle stressful situations, accept responsibility for their well-being, and take charge of self-health. General stress scores decreased from 18.26 to 6.86 after 6 months of intervention. For measuring academic stress “educational stress scale” for adolescents was used. DASS 21 scale was used to assess the general stress levels.⁶¹

According to **Paula R. Jameson et al**, the hardiness educational intervention can have a statistically significant decrease in perceived stress. The study conducted as a pre-post trial among nursing students decreased the perceived stress scores by 2.80. Hardiness is a personality characteristic that enables persons under stress to feel committed versus alienated, to have a greater sense of control versus powerlessness, and to view change as a challenge versus a danger, to remain healthy.⁶²

Yet another intervention for stress among adolescents is assertiveness training. A Quasi-experimental study by **Ahmad Ali Eslami et al**, among high school children, showed that the mean anxiety in the interventional group was significantly lower than in the comparator group. DASS 21 scale was used to measure stress. The assertiveness training program is a structured intervention technique that is believed to improve

equality in human relations, enable individuals to act according to their interests, help them stand up to their desires without feeling anxious, allow them to express their sincere feelings, and encourage them to stand tall for what is needed for them without hampering the rights of others.⁶³

Through a cluster randomized controlled trial, **Katherine Dowling et al** evaluated how effective was a social-emotional learning program designed for older adolescents called the Mind Out program in addressing stress. The intervention was successful in improving mental health and well-being along with stress reduction. The program consisted of thirteen weekly sessions delivered by the teachers with core contents on “self-awareness, self-management, social awareness, relationship management, and responsible decision-making”.⁶⁴

3.8 Mindfulness-based interventions in adolescents

Through an editorial, **Tamsin Ford et al** have stated the feasibility of using mindfulness-based cognitive therapy utilizing skills in addressing stress and negative mood among adolescents with recurrent depression and anxiety. The core skills adolescents learned during Mindfulness-Based Cognitive Therapy (MBCT) were maintained and even showed an increase after the actual intervention. MBCT can be an ideal and sustainable choice for responders and relapse cases.⁶⁵

A pre-post follow-up trial by **Urvashi Anand et al** showed the benefits of the

Mindfulness-Based Stress Reduction (MBSR) program by significantly reducing physiological and emotional signs of stress. The study focused on academic stress and stress due to peer interactions among adolescents in school-based settings and proved that mindfulness-based interventions enhanced academic performance and well-being. The intervention comprised eight weekly sessions each of 40 minutes conducted during school hours.⁶⁶

In the study by **Cristiano Cresentini** among Italian school children, mindfulness meditation was effective in reducing attention problems and also in reducing the children's internalization problems. The intervention comprised three meditation exercises, which focused on three types of activities mindfulness of breathing, mindfulness of body parts, and mindfulness of thoughts.⁶⁷

According to a randomized controlled trial by **Carmen Díaz-González et al**, the mindfulness-based stress reduction (MBSR) program was effective in reducing symptoms related to depression, anxiety, paranoia, and perceived stress among adolescents in Spain. The study also suggested that mindfulness-based programs can be used as an adjuvant treatment for adolescents in mental health facilities.⁶⁸

Deborah L. Schussler et al through a pre-post trial investigated how the adolescents responded to the mindfulness-based program (MBP) and the results showed that High-risk adolescents received the most benefit from MBP participation, especially in the

case of stress levels. The intervention consisted of practicing mindful breathing exercises. Also, students who had practiced were more likely to experience change across stress outcomes.⁶⁹

3.9 School-based interventions in adolescents

According to a multilevel meta-analysis of the effectiveness of school-based intervention programs by **Amanda W. G. van Loon et al**, School-based intervention programs targeting adolescents can reduce psychological stress.²⁶In the randomized controlled trial by **Andrew J. Campbell et al** on the effectiveness of a schoolwide mindfulness program on adolescent well-being and stress showed participation in the program was followed by a considerable decline in perceived stress. In the intervention group, mean PSS scores dropped significantly, from 18.57 to 17.25, while those in the comparator group stayed relatively leveled, from 17.84 to 17.44.⁷⁰

Meta-analysis on the school-based interventions in promoting adolescent health by **Nichola Shackleton et al** screened 22 reviews and suggested that suggest that school-based interventions were effective for promoting sexual health and preventing bullying and smoking.⁷¹



MATERIALS AND METHODS



4. MATERIALS AND METHODS

4.1 Topography of Kolar district

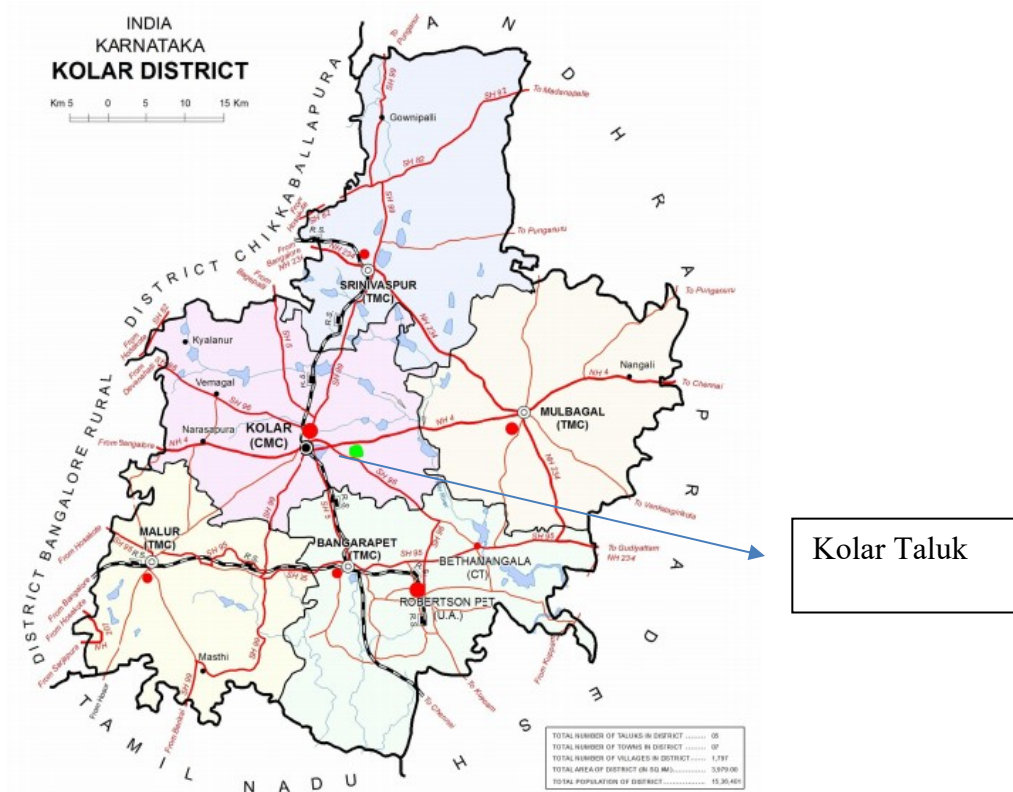


Figure 1. Map of Kolar district.

Kolar district is a district in the Karnataka state of India. The town of Kolar is the district headquarters. Kolar district is located in the southern region of the State and is the eastern-most district of the Karnataka State. The district is bounded by the Bangalore Rural district in the west Chikballapur district in the north, the Chittoor District of Andhra Pradesh in the east, and the south Krishnagiri and Vellore districts of Tamil Nadu. It consists of 6 taluks: Kolar, Mulbagal, Malur, Bangarpet, Srinivasapur and Kolar Gold Fields. According

to the 2011 census, the total population of Kolar is 15,36,401 with 7,76,396 males and 7,60,005 females.⁷²

4.2 Study design: Cluster randomized controlled trial

4.3 Study setting: High schools in Kolar taluk.

4.4 Study duration : 1st September 2021 to 31st January 2022.

4.5 Study population: All high school students (8th, 9th, and 10th standard) in Kolar taluk.

4.6 Sample size calculation:

Assuming the prevalence of stress among school children to be 50% with the expected improvement of intervention by a 15% decrease in the stress score than the comparator arm, with 5% alpha error, 20 % beta error, and design effect of 2, the minimum sample size is calculated to be 340 each in comparator and intervention group. (Total n = 680) [calculated by Open Epi version 3.01]

$$n = DE * (Z_{1-\alpha/2} + Z_{1-\beta})^2 * p_1(1-p_1) + p_2(1-p_2) / (p_1 - p_2)^2$$

where

p_1 = proportion of outcome from comparator group

p_2 = proportion of outcome from intervention group

$Z_{1-\alpha/2}$ = standard normal deviate for 2 tailed test based on alpha level

$Z_{1-\beta}$ = standard normal deviate for 1 tailed test based on beta level

DE = Design effect

4.7 Inclusion criteria:

1. All English medium high schools in Kolar taluk(coeducation) with >170 students in 8th,9th, and 10th classes altogether.
2. All English medium high schools in Kolar taluk(co-education) with at least 60 students each in 8th,9th, and 10th classes.

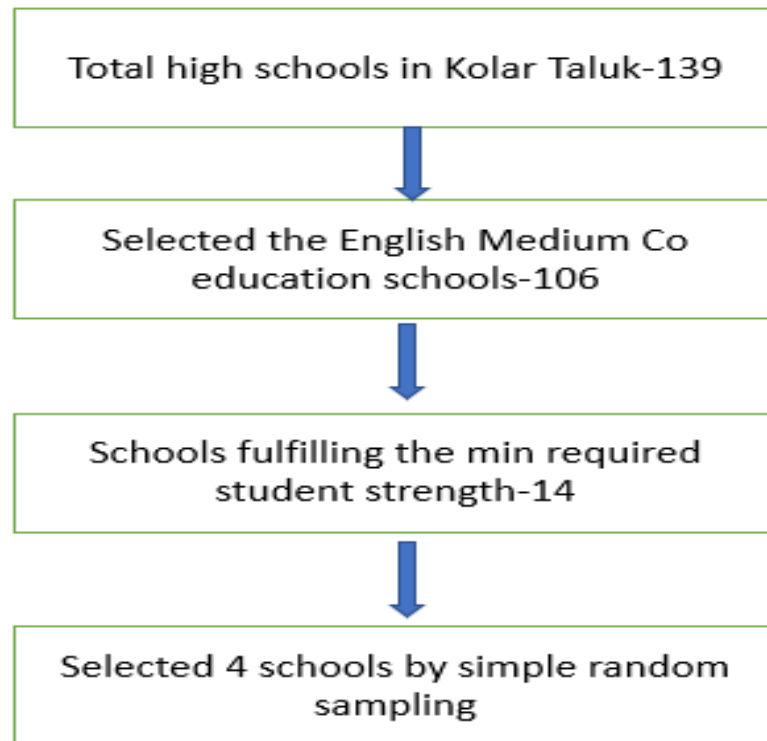
4.8 Exclusion criteria:

All students with any self-reported mental disorders

4.9 Sampling procedure

Cluster random sampling was used to recruit the participant schools. The list of coeducation English medium high schools in Kolar taluk (Clusters) was provided by the Deputy Director of Public Instructions (DDPI)office, Kolar. According to the inclusion criteria selection of 4 schools(clusters) was by simple random technique. After baseline data collection randomized the 4 schools(clusters) were into two groups of 2 schools(clusters) each as an intervention and comparator group. Baseline data collection and recruitment were done in September 2021.

Figure 2: Flowchart depicting the selection of Schools *



* Data from the statistics provided by Deputy Director of Public Instructions (DDPI), Kolar⁷³

4.10 Randomization details

Simple randomization was done by an expert from the Department of Community Medicine who did not participate in the study. The expert used randomization software to generate a random allocation sequence to allocate participant schools to either Group A (intervention) or Group B (comparator group). The allocation sequence was concealed using sequentially numbered sealed opaque envelopes. The envelopes were

given to the investigator who opened the respective envelopes after finishing the baseline data collection/recruitment for the day and allocated the respective schools into two groups.

4.11 Study tool

A semi-structured questionnaire was developed based on the objectives of the study. The questionnaire was translated into the local language Kannada and back-translated to English. It was validated by pre-testing among a subset of the sample population and modifications were done accordingly.

The study variables are sectioned into 4 domains: socio-demographic characteristics, factors affecting the perceived stress levels, self-reported mental illness, and PSS -10 scores

1. Socio-demographic characteristics: details on sex, age, number of family members, no of siblings, birth order, APL/BPL, and per capita income of the family.
2. Various factors affect the perceived stress levels; the practice of regular meditation exercises, social media use, previous scholastic performances, and the child's perception of the family environment and parents' education.

Perceived Stress Scale 10(PSS-10) was used to measure perceived stress. The PSS scale

measures the extent to which a person appraised his life situations as stressful. The contents in the scale are designed for capturing how respondents find their lives overburdened without any control or predictions for the same. The tool was validated previously to be used among the adolescent age groups in Indian settings. The questionnaire contains a total of ten questions with the responses in the form of a 5-point Likert scale. Most of the questions are general ones. Through the questionnaire, the respondents are asked about their feelings and thoughts during the last month. The total score ranges from 0 to 40. Higher scores indicate high perceived stress.¹⁰ Those who are having scores ranging from 0-13 are classified as the mild stress group, 14-26 as the moderate stress group, and 27-40 as the severe stress group⁵².

4.12 Pilot study

A pilot study was conducted among six students (three male and three female) of one school to test the structured questionnaire in March 2021. Modifications to the questionnaire were done wherever necessary based on their responses. These students were excluded from the study.

4.13 Approval for the study

The study was initiated after obtaining permission from the Institute Ethics Committee (IEC)[SDUMC/KLR/IEC/574/2020-21] and was prospectively registered in Clinical Trial Registry India (CTRI)" {CTRI/2021/02/031603 [Registered on: 26/02/2021]}.

4.14 Study variables

a. Independent variables:

1. Socio-demographic characteristics: sex, age, number of family members, no of siblings, birth order, APL/BPL, per capita income of the family, and Socioeconomic status (modified B.G Prasad scale (2021) were used to classify the socioeconomic status of study participants).
2. Various factors affect the perceived stress levels; the practice of regular meditation exercises, social media use, previous scholastic performances, and the child's perception of the family environment and parents' education.

Table1. Modified B G Prasad socioeconomic status classification, 2021.⁷⁴

Monthly per capita income in Rupees (May 2021)	Socio-economic class
Rs 7863and above	Upper class
Rs 3931-7862	Upper middle class
Rs 2359-3930	Middle class
Rs 1179-2358	Lower middle class
Below Rs 1179	Lower class

b. Outcome variables

1. Mean PSS score pre- and post-intervention.
2. percentage change in children belonging to the severe (PSS score: 27-40) to moderate stress (PSS score: 14-26) group and moderate (PSS score: 14-26) to mild (PSS score: 0-13) stress group.

4.15 Study procedure

4.15.1 Groups

1. Group A (Intervention group): received monthly health education (for 3 months) on stress and stress management techniques along with printed health education material (pamphlets) on stress at the beginning of the study.
2. Group B (Comparator group): received only printed health education material (pamphlets) on stress at the beginning of the study

4.15.2 Baseline assessment/recruitment

All the participants after obtaining informed written assent from students and consent from parents and principal were interviewed using the semi-structured questionnaire. Two students were excluded from the study as their parents did not had given their consent. After administering the questionnaire, education about stress was given by the investigator through pamphlets. The phone number of the investigator was given at the end and were informed that they will be receiving classes using various audio-visual

aids every month for the next 3 months at schools if they happen to be in the intervention group.

4.15.3 Intervention details

The intervention was designed following the 6 steps in the quality intervention development (6SQuID) [Table 2].⁷⁵ In selected schools as per criteria collected baseline data regarding socio-demographic details and also assessed the perceived stress through a pss10 questionnaire for those students whose parents had given consent. Through the parent's consent form certain details applicable to them were also collected (APL/BPL Status and family income). Every student was given pamphlets regarding stress and its causes. Baseline data was analyzed and intervention content for health education was modified accordingly. After dividing the schools into comparator and intervention groups, the health education was given based on two theories, the “Theory of Planned Behavior (TPB)” and the “Health Action Process Approach (HAPA)”. Group health education was selected as the mode of intervention based on the concepts in the behavior change wheel considering that the way each individual reacts to stressful situations can be accounted as one’s behavior. The behavior change wheel is a model that seeks to capture both the factors that affect behaviors and the different forms of interventions that can be used to change behaviors, proposed by **Michie et al.**⁷⁶ The intervention consisted of total 3 group face-to-face educational sessions and each lasted around 15 minutes. The interventions were delivered by the investigator with the

help of various audio-visual aids. The sessions were scheduled once monthly for 3 months. In the first session, adolescents received information about the definition of perceived stress, the need to overcome stress, the factors contributing, and how stress is affecting their health. In the second session, they were taught mindfulness-based breathing exercises for tackling stress. In the third session, adolescents were then asked to formulate strategies for various factors contributing to their stress and to overcome that factor. Although self-monitoring is absent in TPB or HAPA, self-monitoring was also included in the intervention as it forms a core part of the intervention for stress reduction. The students were trained to identify their stressors and to make them noted in the daily stress diary. They were also asked to make a note of how they managed those stressors. The diary from the students was collected after one month. Each student's compliance with the interventions was ensured through parents and teachers. Class leaders(students) from the respective classes were given the responsibility to make the students practice mindfulness exercises each day after the school prayer. The class teachers were also instructed to allow the students time to practice the exercise in the morning before the class begins. The parents were motivated to ensure that their children are practicing exercise in the evening hours before they begin their studies. Thus, daily two sessions of mindful breathing exercises were ensured each of 5 minutes in duration. The comparator group school children were later given health education sessions after the completion of the study.

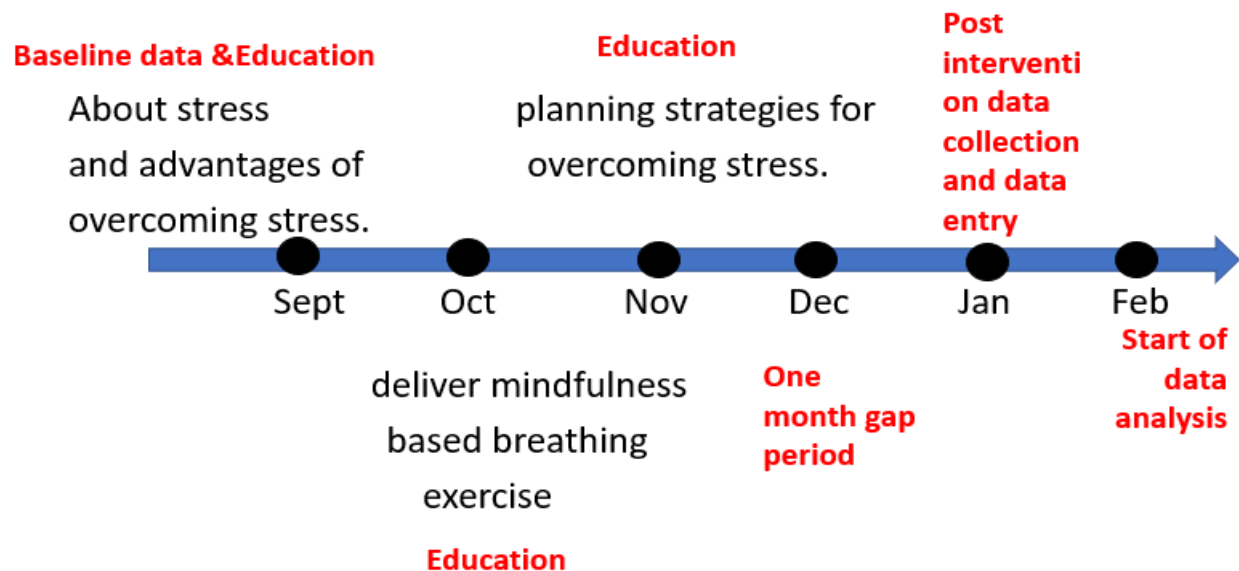


Fig 3: Brief description of the Intervention with the timeline.

Table2: Six steps in quality intervention development (6SQuID) ⁷⁵
1. Define and understand the problem and its causes.
2. Clarify which causal or contextual factors are malleable and have the greatest scope for change.
3. Identify how to bring about change: the change mechanism.
4. Identify how to deliver the change mechanism.
5. Test and refine on a small scale.
6. Collect sufficient evidence of effectiveness to justify rigorous evaluation/implementation.

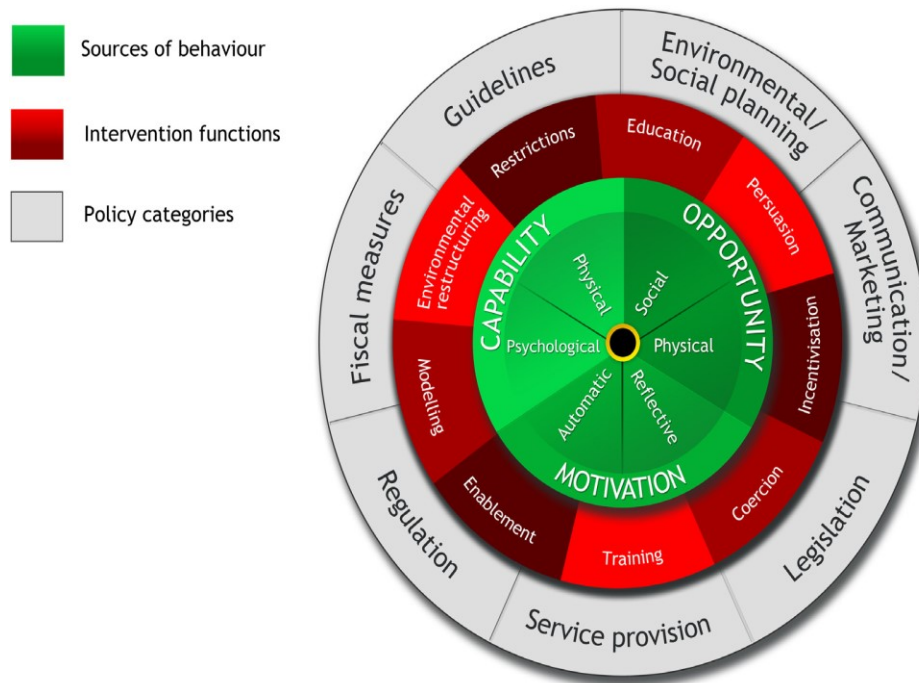


Fig 4: Behavior Change Wheel⁷⁶

4.15.4 End assessment

After giving health education for 3 months, again children were re-assessed after one month (5th month -Jan 2022) through the PSS 10 questionnaire to see the changes in perceived stress score. The students who were available during the baseline data collection and received at least 1 month of intervention are only included in the study results. Students who were not available during the post-intervention data collection would have been considered a loss to follow up but there is no “loss to follow up” in the study.

4.16 Operational definitions

Theory of Planned Behavior (TPB) -According to TPB, behavioral intention is the unique and proximal predictor for any behavior. Behavioral intention means “self-instructions to perform particular behaviors or to obtain certain outcomes.” TPB put forward that the three beliefs (attitude, subjective norms, and perceived behavioral control) will predict behavioral intention. The attitude of a person is the cognitive and affective evaluation of his behavior. Also, the subjective norms will determine how much a person agrees and comply with a particular action. Perceived behavioral control will define how much an individual can control the respective behaviors. Thus, TPB can be utilized to develop interventions for stress reduction. The limitation in TPB is due to not giving enough attention to the process(es) by which intentions should be translated into action. Due to this widely cited gap between intention and action, models like HAPA were proposed.”²⁹⁻³²

Health Action Process Approach (HAPA) – HAPA proposes “there are two consecutive phases: a motivational phase and a self-regulatory phase” in any behavioral change process. In the self-regulatory phase, action and coping planning take place. The lack of this phase explains why some behavioral change intentions are successful while others are not. Once an individual forms the intention to perform a health behavior developed through TBP (e.g.: reacting in a nonjudgmental way to the stress stimuli), action planning helps him or her to plan when, where, and how to perform such behaviors. Also coping planning helps him or her to design strategies (e.g.: Mindfulness

exercises) to overcome anticipated barriers to performing such behaviors.^{29,33-36}

The Model of Mindfulness (MM)-Mindfulness means “being aware of the present moment with an attitude of openness, curiosity, non-judgment, and acceptance.”²⁷

Mindfulness is based upon three principles, that will change how one reacts to a stimulus. The first principle creates an intention by bringing to mind what is hoped for and expected to be accomplished. The second principle ensures attention to the present moment by observation of arising stimuli, either internal or external. The third principle creates an attitude of openness, affection, and kindness to oneself and towards any stimuli that may be encountered, no matter how seemingly unpleasant.²⁷

The three principles together can re-perceive the individual that is can bring modification in their perspective, whereby individuals learn to move away from reacting to stimuli, positive and negative, internal and external if practiced regularly. A re-perceived individual who earlier viewed stimuli “subjectively” now can view them “objectively.” With this shift, stimuli will become less offensive and distressing.²⁷

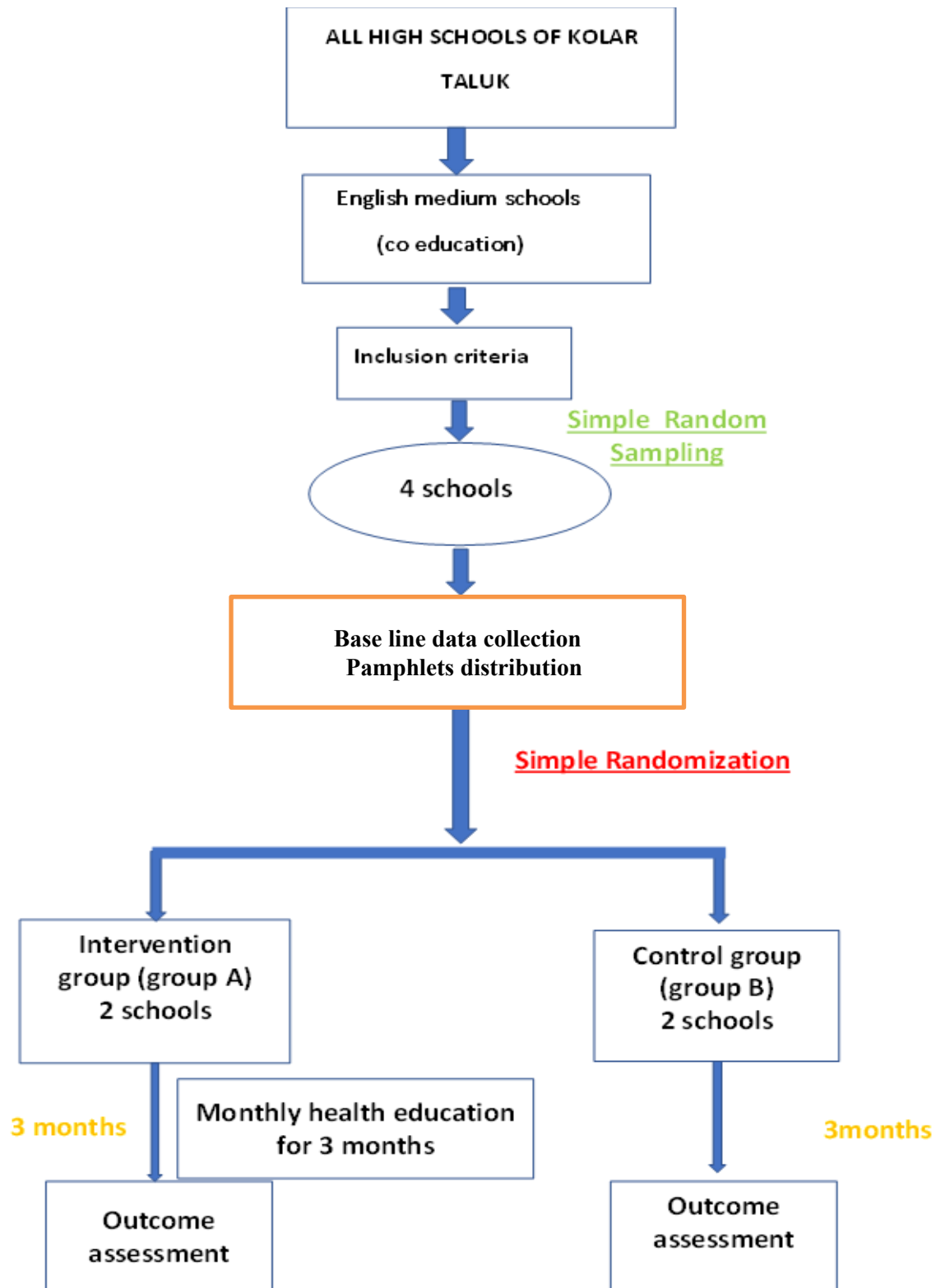
Perceived stress -According to Cohen Perceived stress is defined as “an uncomfortable emotional experience that occurs in response to an individual's perception of an internal stressful event, such as test anxiety, or external stressful event, such as the death of a loved one.”¹⁰

4.17 Measurement of outcome variable:

The PSS-10 scale is used to measure perceived stress.

1. The mean PSS scores pre- and post-intervention in both groups were measured
2. Students having PSS scores ranging from 0-13 are classified as the mild stress group. Scores ranging from 14-26 are classified as moderate stress group and scores ranging from 27-40 as severe stress group.
3. Percentage of children having mild, moderate, and severe stress was measured separately for both groups. Then percentage change in children belonging to the severe (PSS score: 27-40) to moderate stress (PSS score: 14-26) group and moderate (PSS score: 14-26) to mild (PSS score: 0-13) stress group after the intervention was measured for both the groups.

Figure 5. Flowchart depicting the participant's recruitment and study procedure



4.18 Statistical analysis:

Double data entry and validation did use Epi Data Entry Client v3.1 and analyzed using IBM SPSS Statistics 2.0. Continuous variables like PSS scores are summarized as Mean and Standard deviation (SD) since they are normally distributed. Categorical variables like gender and socioeconomic status are summarized as proportions. The Difference-In-Difference (DID) analysis was used to assess the effectiveness of the intervention. The difference in the mean over the pre-intervention period to the post-intervention period in the intervention group and comparator group was calculated. The test of significance of two means was used to test the statistical significance of DID. The 99% Confidence interval will be calculated for the mean change in the intervention group over the change in the comparator group. A $p < 0.001$ is accepted as statistically significant.



RESULTS



5. RESULTS

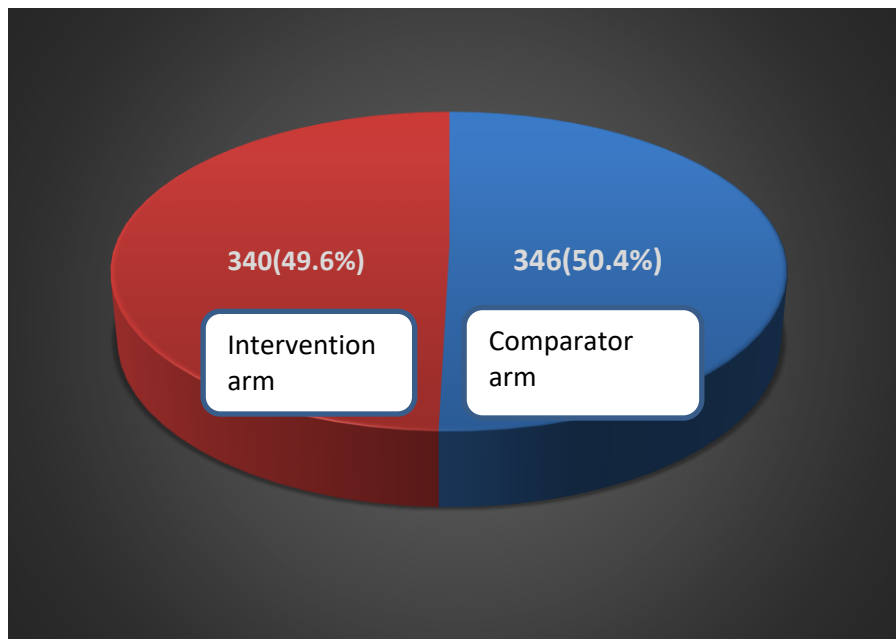


Figure 6: Distribution of participants in the intervention and comparator group

The comparator arm had 346 participants and the intervention arm had 340 participants. They constituted 50.4% and 49.6% of the total participants($n=686$).

(Figure 6)

Distribution of participants according to baseline characteristics in intervention and comparator group

Table 3: Class-wise distribution of participants

		Group	
		Intervention group	Comparator group
Student's class	Class X	122(35.9%)	120(35.7%)
	Class IX	110(32.4%)	107(30.9%)
	Class VIII	108(31.8%)	119(34.4%)
	Total	340(100%)	346(100.0%)

The participation of students from the 10th standard was 122(35.9%) and 120(35.7%) in the intervention arm and comparator arm respectively. In both arms, they are having highest participation. 9th standard students were 32.4% in the intervention group while in the comparator group they were 30.9%. 31.8% and 34.4% were the participation of 8th standard students in the intervention and comparator arms respectively. (Table3)

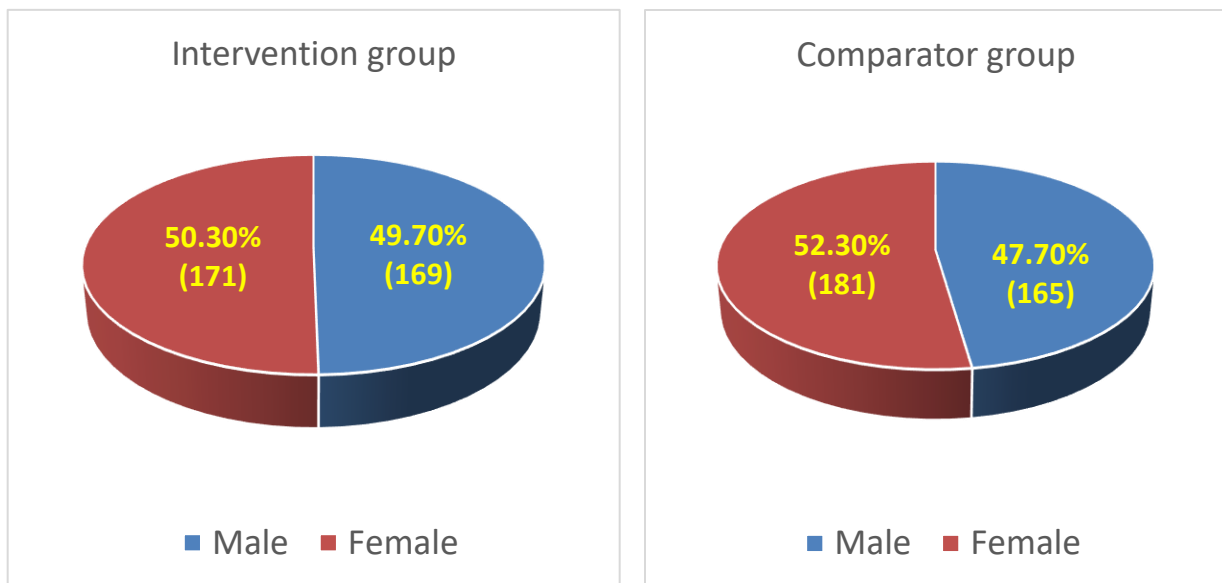


Figure 7: Gender-wise distribution of the participants

Considering the gender-wise distribution in both arms females are the majority constituting 50.3% (171) in the intervention arm and 52.3% (181) in the comparator arm. (Figure 7)

Table 4: Age-wise distribution of participants

		Group	
		Intervention group	Comparator group
Age (in years)	13	34(10.0%)	33(9.5%)
	14	187(55.0%)	191(55.2%)
	15	119(35.0%)	122(35.3%)
	Total	340(100.0%)	346(100.0%)

The students under the age of 14 years are the majority in both arms constituting 55% (187) and 55.2% (191) in the intervention arm and comparator arm respectively. The students belonging 15 years constitute 35% and 35.3% in the intervention and comparator arms respectively. 10% and 9.5% participation from students of 13 years in the intervention and the comparator arm. (Table 4)

Table 5: Religious distribution of the participants

		Group	
		Intervention group	Comparator group
Religion	Hindu	234(68.8%)	287(82.9%)
	Muslim	105(30.9%)	56(16.2%)
	Others	1(0.3%)	3(0.9%)
	Total	340(100.0%)	346(100.0%)

The students belonging to the Hindu religion are the majority in both arms constituting 68.8% (234) in the intervention arm and 82.9% (287) in the comparator arm. Muslim religion participants were 30.9% in the intervention arm and 16.2% in the comparator arm. (Table 5)

Table 6: Participant distribution according to the number of siblings

		Group	
		Intervention group	Comparator group
Number of siblings	0	26(7.6%)	20(5.8%)
	1	162(47.6%)	175(50.6%)
	2	89(26.2%)	75(21.7%)
	3	48(14.1%)	55(15.9%)
	>3	15(4.4%)	21(6.1%)
	Total	340(100.0%)	346(100.0%)

When asked about the number of siblings 47.6% in the intervention arm and 50.6% in the comparator arm reported having only one sibling. 4.4% and 6.1% in the intervention and comparator arm respectively reported having >3 siblings. (Table 6)

Table 7: APL/BPL status of the participants

		Group	
		Intervention group	Comparator group
APL / BPL status	APL	80(23.5%)	60(17.3%)
	BPL	260(76.5%)	286(82.7%)
	Total	340(100.0%)	346(100.0%)

The majority of the students in both the intervention (76.5%) and comparator (82.7%) group are hailing from below-poverty-line families. (Table 7)

Table 8: Distribution of participants according to birth order

		Group	
		Intervention group	Comparator group
Birth order	First born	157(46.2%)	184(53.2%)
	Second born	157(46.2%)	135(39.0%)
	Third born	26(7.6%)	24(6.9%)
	Fourth born	0(0.0%)	3(0.9%)
	Total	340(100.0%)	346(100.0%)

Regarding their birth order, the intervention arm has the majority of the students as first and second born (47% each) while in the comparator arm firstborns are the majority consisting of 53.2%. (Table 8)

Table 9: Distribution of participants according to the number of members in the family

		Group	
		Intervention group	Comparator group
Number of members in the family	1-4 members	80(23.5%)	50(14.5%)
	5-10 members	249(73.2%)	288(83.2%)
	>10 members	11(3.2%)	8(2.3%)
	Total	340(100.0%)	346(100.0%)

73.2% of students in the intervention arm and 83.2% of students in the comparator arm are living in families with 5-10 members. Only 3.2% in the intervention arm and 2.3% in the comparator arm belong to a family with >10 members. (Table 9)

**Table 10: Distribution of participants according to Socioeconomic status
(According to Modified BG Prasad's Classification,2021)**

		Group	
		Intervention group	Comparator group
Per capita income of the family (Modified BG Prasad's classification)	Lower(V)	9(2.6%)	4(1.2%)
	Lower Middle (IV)	60(17.6%)	62(17.9%)
	Middle (III)	53(15.6%)	90(26.0%)
	Upper Middle (II)	159(46.8%)	154(44.5%)
	Upper(I)	59(17.4%)	36(10.4%)
	Total	340(100.0%)	346(100.0%)

Per capita income of the family classified using Modified BG Prasad's classification shows the majority of the students both in the intervention arm (46.8%) and comparator (44.5%) are belonging to the upper-middle-class category. 17.4% of students in the intervention arm and 10.4% in the comparator arm belongs to upper class(I). 2.6% of students in the intervention arm and 1.2% in the comparator arm belongs to the lower class(V). (Table 10)

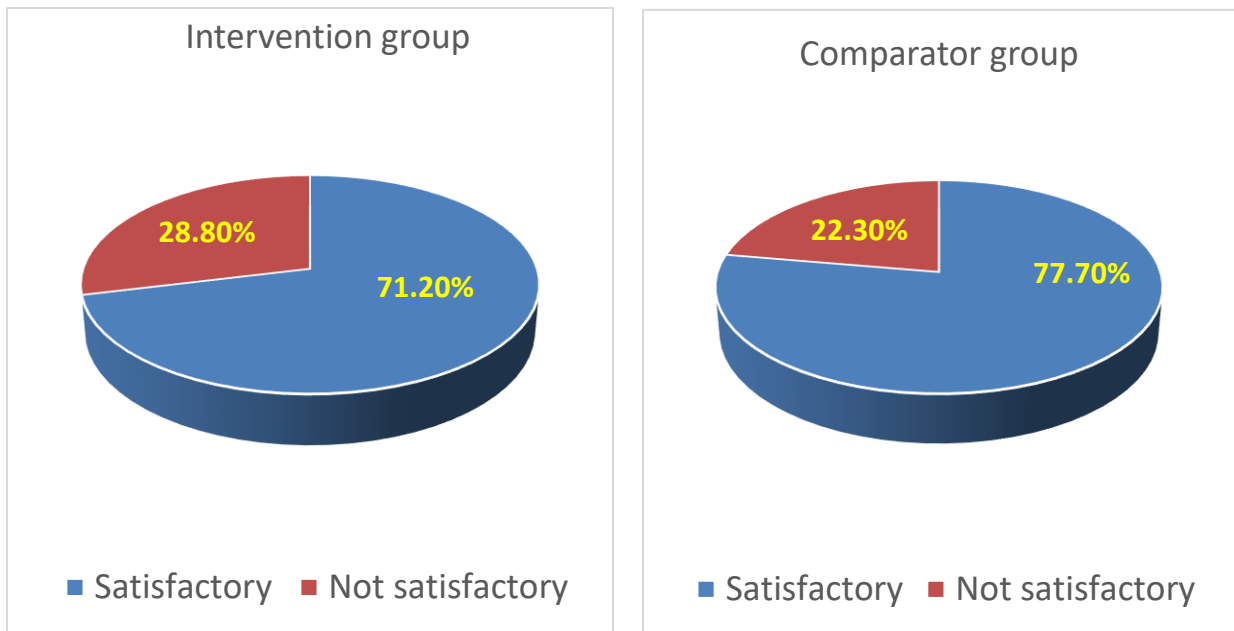


Figure 8: Perception of the students about last year's scholastic performances

When asked about the perception of the students regarding their last year's scholastic performance 28.8% (98) in the intervention arm and 22.3% (77) in the comparator arms reported their performances as unsatisfactory. (Figure 8)

Table 11: Distribution of students based on last year's grades obtained.

		Group	
		Intervention group	Comparator group
Last year's Grade obtained	A+	38(11.2%)	67(19.4%)
	A	202(59.4%)	196(56.6%)
	B+	58(17.1%)	74(21.4%)
	B	42(12.4%)	9(2.6%)
	Total	340(100.0%)	346(100.0%)

Regarding the last year's grade obtained, 59.4% and 56.6% of the students in the intervention and the comparator arm reported they had scored an “A” grade. The “B+” grade is scored by 17.1% and 21.4% in the intervention and the comparator arm. 12.4% and 2.6% scored grade “B” in the intervention and the comparator arm. (Table 11)

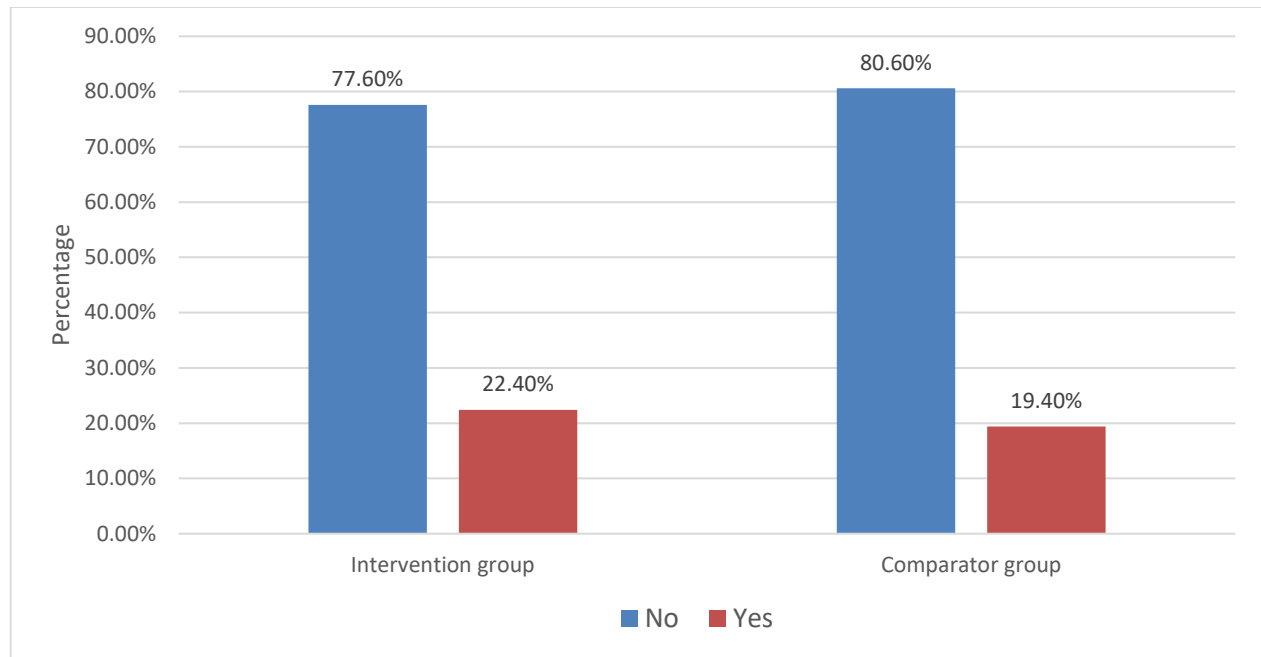


Figure 9: Distribution based on the prior practice of meditation

Regarding the prior practice of meditation, 22.4% (76) in the intervention arm and 19.4% (67) in the comparator arm were already practicing meditation. (Figure 9)

Table 12: Distribution based on the frequency of practicing meditation

		Group	
		Intervention group	Comparator group
Frequency of meditation/ yoga	Daily	33(43.42%)	17(25.37%)
	Weekly	36(47.36%)	34(50.74%)
	Monthly	7(9.22%)	16(23.89%)
	Total	76(100.0%)	67(100.0%)

Among those students who are practicing meditation 43.42% in the intervention arm and 25.37% in the comparator arm reported they were practicing meditation daily. 9.22% of students in the intervention arm and 23.89% in the comparator arm were practicing meditation once a month. (Table 12)

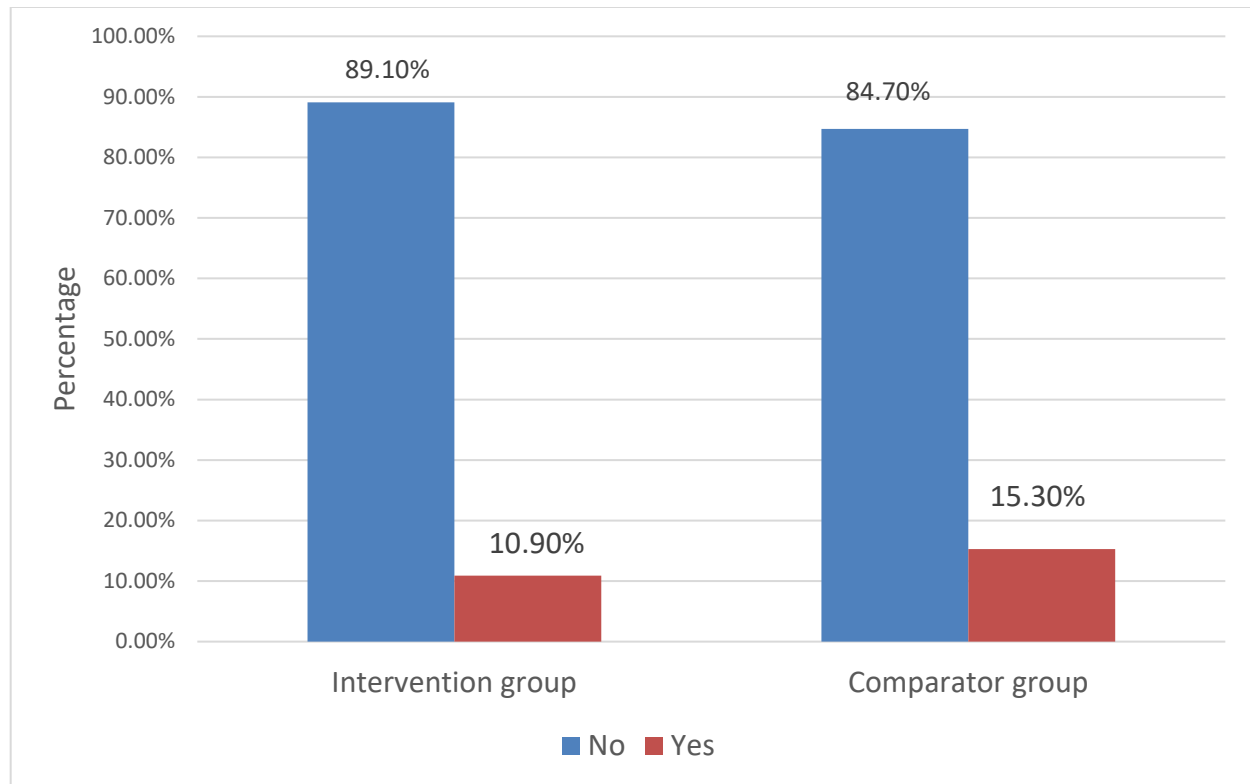


Figure 10: Distribution based on reporting of facing bullying from seniors

About 10.9% in the intervention arm and 15.3% in the comparator arm reported that they face bullying from their seniors or classmates. (Figure 10)

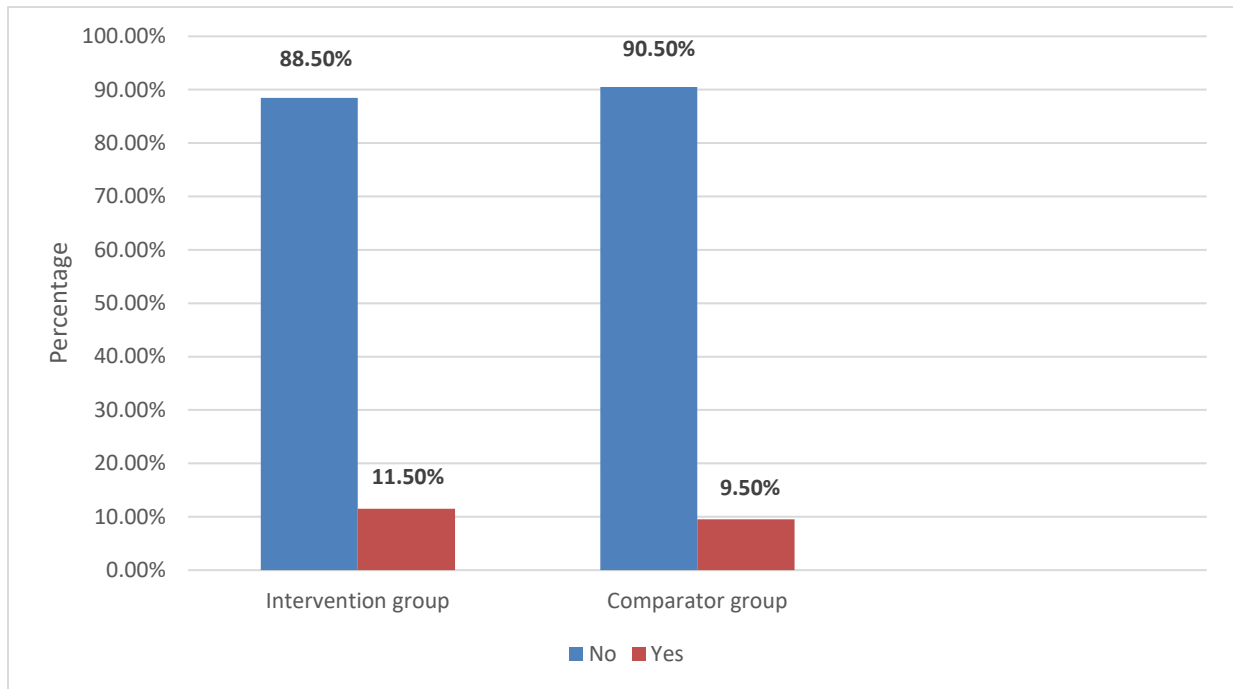


Figure 11: Distribution based on the reporting of facing peer pressure

When asked about whether they are facing peer pressure, 11.5% in the intervention arm and 9.5% in the comparator arm reported they are facing peer pressure. (Figure 11)

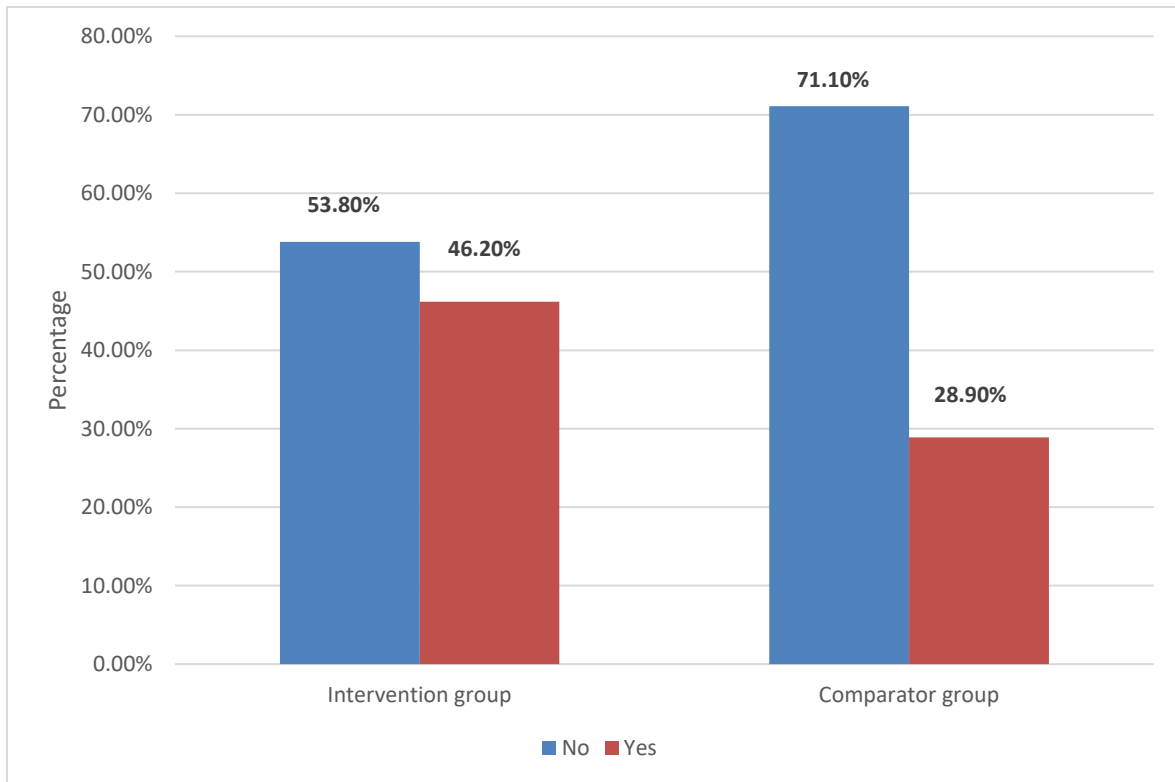


Figure 12a: Distribution based on having mobile or laptops

The majority 53.8%% in the intervention arm and 71.1% in the comparator arm do not have mobile phones or laptops with them. While 46.2%% and 28.9% in the intervention and comparator arms respectively have own mobile phones or laptops. (Figure 12a)

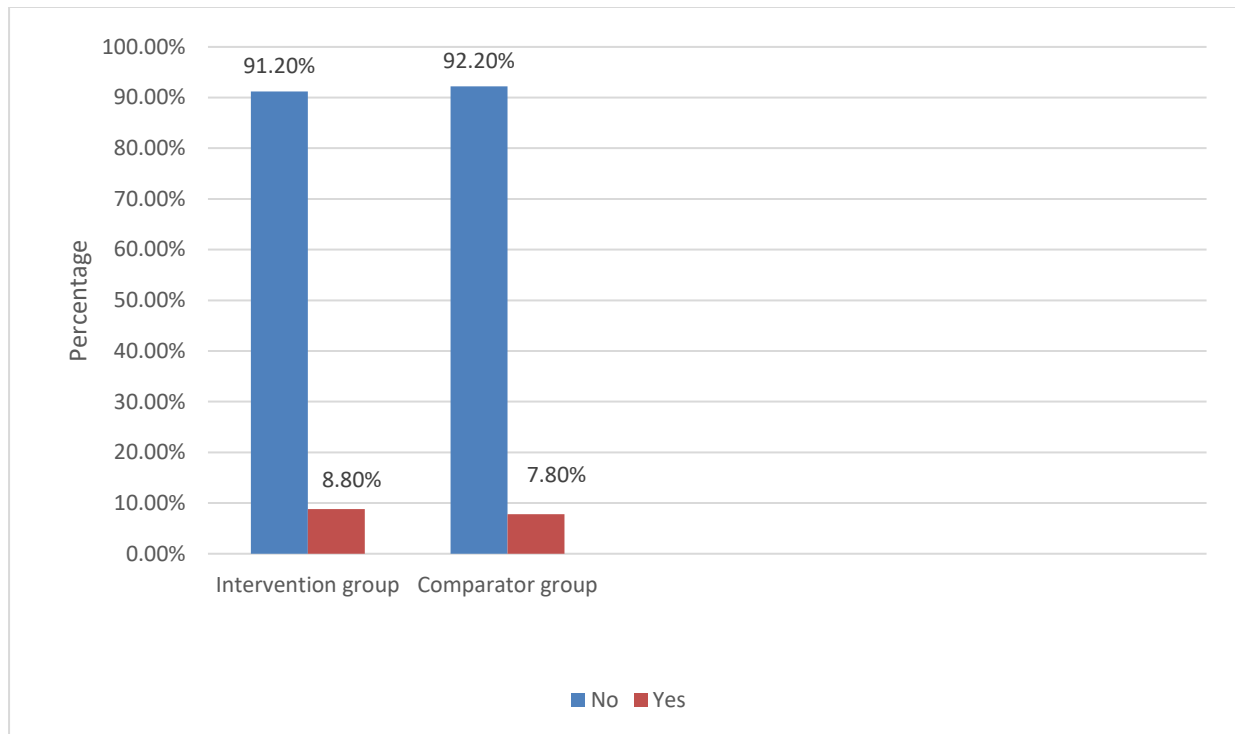


Figure 12b: Distribution based on feeling bad due to lack of mobile or laptops

8.8% and 7.8% respectively in the intervention and comparator arms reported they felt bad because their friends are having their mobile phones and laptops. (Figure 12b)

Table 13: Distribution based on media application use

		Group	
		Intervention group	Comparator group
Use media applications	No	0(0.0%)	0(0.0%)
	Yes	340(100.0%)	346(100.0%)
	Total	340(100.0%)	346(100.0%)

Almost all students in the intervention and comparator arms are using various media applications. (Table 13)

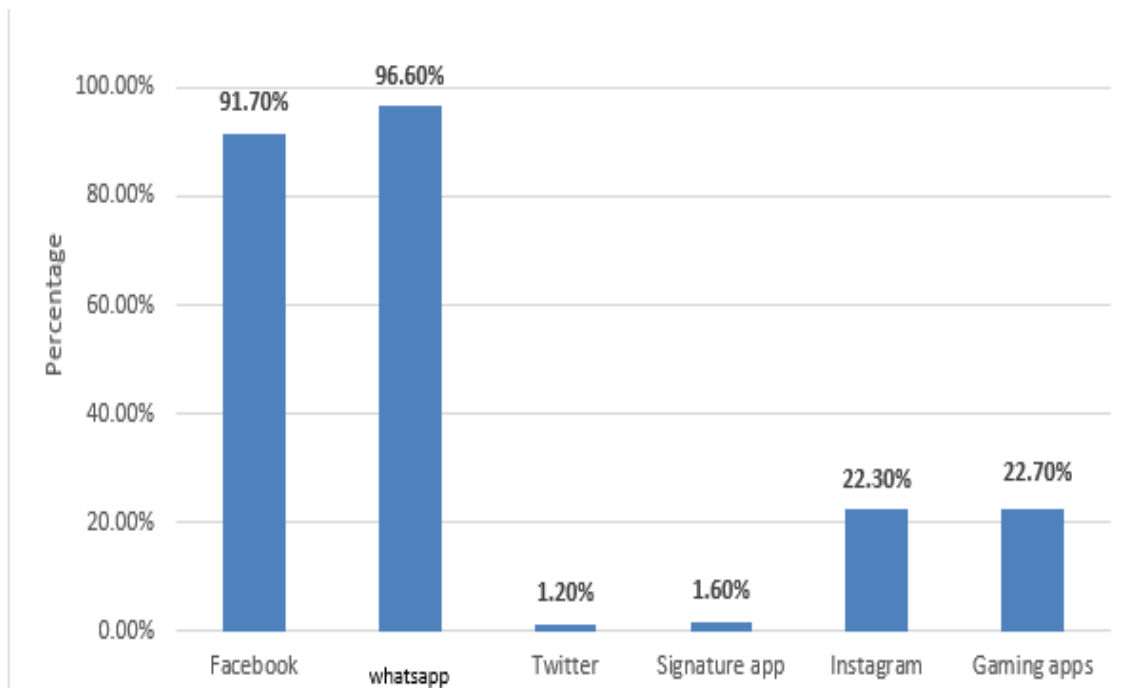


Figure 13: Distribution based on the most used media application

The media application most used by the students are WhatsApp and Facebook which are followed by gaming apps (like PUBG) and Instagram. 96.6% and 91.7% of the students respectively use WhatsApp and Facebook applications. (Figure 13)

Table 14: Distribution based on the time spent daily on various media applications.

		Group	
		Intervention group	Comparator group
Time spent on applications daily	0 - 15 minutes	89(26.2%)	47(13.6%)
	15 - 30 minutes	97(28.5%)	100(28.9%)
	30 min - 1 hour	90(26.5%)	138(39.9%)
	>1 hour	64(18.8%)	61(17.6%)
	Total	340(100.0%)	346(100.0%)

18.8% in the intervention arm and 17.6% in the comparator arm are spending more than one hour on various media applications. In the intervention arm, the majority (28.5%) spends 15-30 minutes using the various applications while in the comparator arm majority (39.9%) spends 30min-1hour. (Table 14)

Table 15: Satisfaction among the participants regarding their parents' educational background

		Group	
		Intervention group	Comparator group
Satisfied with Parents educational background	No	6.2%	4.0%
	Yes	93.8%	96.0%
	Total	100.0%	100.0%

When students were asked about their perception of their parent's educational background, 6.2% in the intervention arm and 4% in the comparator arm reported they were not satisfied. (Table 15)

Table 16: Satisfaction among the participants regarding their family environment.

		Group	
		Intervention group	Comparator group
Satisfied with family environment	No	24(7.1%)	9(2.6%)
	Yes	316(92.9%)	337(97.4%)
	Total	340(100.0%)	346(100.0%)

Regarding the family environment from which they were coming 7.1% in the intervention group and 2.6% in the comparator group said they were not satisfied. (Table 16)

Table 17: Overall baseline Perceived Stress Scale (PSS) scores among the participants

		Frequency	Percentage
PSS scores	Mild stress group	89	13%
	Moderate stress group	583	85%
	Severe stress group	14	2%
	Total	686	100%

Before the intervention 2% of the students were in the severe stress group, 85% were in the moderate stress group, and 13% were in the mild stress group. (Table 17)

Table 18: Mean PSS scores before and after intervention

		N	Mean	Std. Deviation	Std. Error Mean	t value	p value*
Intervention group	PSS before Intervention	340	18.34	3.561	.193	-26.479	<0.001
	PSS after Intervention	340	9.50	5.327	.289		
Comparator group	PSS before Intervention	346	17.53	4.732	.254	2.039	0.012
	PSS after Intervention	346	17.94	4.101	.220		

*Paired t-test with p-value <0.001 as significant.

Before the intervention, the mean PSS score in the intervention group was 18.34 and, in the comparator group, it was 17.53. After the intervention, the mean PSS score in the intervention group was 9.50 and, in the comparator group, it was 17.94. This difference in mean PSS scores in the intervention group was statistically significant. (Table 18)

Table 19: Distribution of participants in the severe, moderate, and mild stress groups before and after the intervention.

		Mild stress	Moderate stress	Severe stress	Total	p value*
Intervention group	Before intervention	21(6.2%)	314(92.4%)	5(1.5%)	340(100.0%)	<0.001
	After intervention	197(57.9%)	143(42.1%)	0(0.0%)	340(100.0%)	
Comparator group	Before intervention	68(19.7%)	269(77.7%)	9(2.6%)	346(100.0%)	0.042
	After intervention	51(14.7%)	287(82.9%)	8(2.3%)	346(100.0%)	

*chi-square test with p-value <0.001 as significant

Before the intervention, in the intervention group, 6.2% of the students were having mild stress, 92.4% had moderate stress, and 1.5% of them having severe stress. After the intervention in the intervention group, about 57.9% has mild stress, 42.1% had moderate stress and none were having severe stress. The percentage change in children in the mild stress category was + 51.7%, in the moderate stress category was -50.3% and in the severe category was -1.5%. After the intervention in the intervention group, none of the students had severe stress. (Table 19)

Table 20: The DID analysis of the PSS scores

The difference in mean PSS scores	Group	N	Mean	Std. Deviation	t value	99%CI		p value*
	Intervention	340	+8.84	6.157	23.902	Lower	Upper	<0.001
	Comparator	346	-0.40	3.691		8.247	10.245	

*Independent t-test with p-value <0.001 as significant

The mean difference of the PSS score in the intervention group before and after the intervention is +8.84 while in the comparator group it is -0.40. (Table 20)



DISCUSSION



6. DISCUSSION

The study shows that health education intervention based on mindfulness and the theories of HAPA and TPB is effective in reducing perceived stress among school children. The mean PSS scores in the intervention group improved from 18.34 to 9.50 after the intervention. While the mean PSS scores in the comparator group remained almost the same, nevertheless it had a slight increase.

In the intervention group, 6.2% of students were under severe stress before the intervention. Also, 92.4% were in moderate stress levels. After the health education sessions, no student in the intervention group has severe stress levels. The percentage of children having moderate stress levels also decreased to 42.1% in the intervention group after intervention. This decrease in percentages of children with severe and moderate stress had added up in the mild stress category with the percentage of children in the mild stress category increasing from just 6.2% before intervention to 57.9%. This shows the intervention was effective in decreasing the severe and moderate stress levels in students to mild stress levels.

The difference in difference analysis showed that the mean PSS scores in the intervention group changed by +8.84 while in the comparator group by -0.40. This shows the overall effect of the intervention in reducing stress levels.

1. perceived stress among the student population

In the current study at the baseline, 2% of the students had severe stress, 85% had moderate stress levels and 13% had mild stress levels.

A cross-sectional study in Chandigarh among 9-12th class students by **Kumar Sandal et al** using the DAS scale (Depression, Anxiety and stress scale) showed 47.02% of students having stress. The class-wise stress levels were 76.3%, 52.3%, 40.8%, and 54.37% respectively in the 9th, 10th, 11th and 12th classes.⁵ In our study the class-wise stress levels were 91.3%, 86.6%, and 82.8% respectively in 10th, 9th, and 8th classes.

An exploratory study done by **Vijay et al** at government schools in Bangalore using a PSS 10 questionnaire among 15-19 years including 228 males (51.3%) and 217 females (48.7%) showed that 30.33% had low stress, 39.78% had moderate stress and 29.89% had severe stress.⁴² While in our study 85% has moderate stress levels and 2% has severe stress levels.

A study done in Hubli using two validated questionnaires for measuring stress-GHQ 12 and PSS 10 among the 9th and 10th classes also showed very high-stress prevalence among adolescents. On PSS 10 scale 11.9% had low stress, 63.7% had moderate stress, and 24.4% were having severe stress.⁴³ This study showed results

almost similar to our study. The high prevalence of stress levels in the current study participants could be due to the study being conducted just after the reopening of the schools after the COVID-19 lockdown. COVID-19 lockdown might have contributed to the increased stress levels as the students were having online classes and were staying at home causing prolonged breaks from academic activities.

According to **Michelle Achterberg et al**, in a study conducted in Switzerland, children whose parents adopted negative coping strategies for stress like smoking and alcoholism had very high-stress levels. Parental over-reactivity also influenced the children's stress levels. Children belonging to families adopting negative coping strategies and having a history of parental over reactivity are more prone to the ill effects created due to COVID-19 lockdown.⁷⁷ Unfortunately, the current study did not explore the parental influence on children's stress levels. Nevertheless, it is the children's perception that determines their stress levels, not their parents as such.

An online survey conducted by **Bijoy Chhetri et al** among the student population of India using PSS 10 showed that about 55% out of the 450 students showed moderate to severe stress levels.⁴⁴ This showed the persistent level of stress among the student population especially the school children even during the lockdown period due to COVID 19.

2. Effectiveness of the school-based health education interventions

The current study being a school-based intervention study showed that it was effective in reducing the perceived stress levels among the students. Our study findings are similar to what has been seen in the case of school-based intervention studies conducted elsewhere. The feedback from the students, teachers, and parents was indeed promising. Since practicing in the group altogether self-motivation and peer group motivation were true might be the factors that might have led to the success of the current intervention.

A Multilevel Meta-Analysis regarding the effectiveness of School-Based Intervention Programs by **Amanda W. G. van Loon et al** (2020) also showed that the overall effect size of school-based intervention programs on psychological stress was moderate ($d = 0.543$, $p < 0.001$), indicating they effectively reduced psychological stress.²⁶

A systematic review of reviews by **Nichola Shackleton et al** screened 22 reviews and showed that multi-component school-based interventions including policy changes in schools and involvement of parents along with local communities were successful in promoting sexual health and in preventing smoking and bullying.⁷¹ Our intervention also incorporated the involvement of parents and school teachers in the monitoring of the practice of mindfulness breathing exercises. Multicomponent interventions reviewed comprising health education, environmental actions, and family/ community outreach were effective in reducing smoking, regardless of

whether intervention specifically targets smoking or broader risk behaviors.⁷¹In our study we targeted the perceived stress levels through health education about stress and used the mindfulness breathing exercise as the mechanism for reducing the perceived stress levels.

3. Impact of mindfulness in the intervention

In the current study, only the mindful breath counting exercise was used as the mechanism for change in the perceived stress levels. The exercise was easy to be taught and practiced by the students and hence it would have gotten better compliance. Regular mindfulness practices were done as 8-week courses having multiple sessions. But the present study had only one session in the second month of intervention. Our practices were only formal mindfulness practices. During the second session, the participants were educated about mindful eating and drinking as alternative ways of practicing mindfulness. Since we have difficulty ensuring compliance with the informal mindfulness practices, we included only the formal practices. The formal practices were supervised in the schools with the help of teachers and with the help of parents. Thus, the overall change in perceived stress levels can be due to formal mindfulness practices. The students practiced meditation just before their class begins in the morning and at home before they start their studies for 5 minutes under the supervision of parents and teachers. This practice of mindfulness has been encouraged to be practiced regularly for at least a minimum

of 30 days so that the practice can become part of their daily routines. Thus, we ensured the compliance of the students to the mindfulness practices and also its internalization.

In our study, the mean perceived stress in the intervention group falls from 18.34 to 9.5 while for the comparator arm it increased from 17.53 to 17.94. The results we got are much more promising than what was observed in the USA by **Campbell et al** (2019) where mean PSS scores dropped significantly, from 18.57 to 17.25 in the intervention arm, while those in the comparator group stayed relatively level, from 17.84 to 17.44. Both the studies used mindfulness-based stress reduction, but in our study, we ensured better compliance and internalization which might be the reason for the better results.⁷⁰

The reduction in the PSS scores can also be because meditation reduces elevated sympathetic activity and induces relaxation.⁷⁸ Accepting stressors instead of trying to avoid and escape from them reduces feelings of being under pressure. This also allows the person to re-perceive the situation and thus, brings about a cognitive change. Mindfulness also helps in considering thoughts as just thoughts and not "reality." This can reduce the tendency to judge and automatic reactions to thoughts, leading to better self-regulation. It also enables concentrating in the "here and now" rather than being in the 'past' or 'future' and thus reduces rumination and daydreaming.⁶⁶ The knowledge gained by the students about reacting to their

stressors in a non-judgmental attitude could have made them better equipped to tackle their perceived stress. The data from the daily stress diary also showed most of them were able to identify their stressors and react to them in a non-judgmental manner.

4. The impact of using TPB and HAPA

Both theories have been used to formulate many behavioral change interventions but for the first time, these theories were used to formulate a health education intervention for stress. Through the theory of planned behavior, the students were enlightened regarding stress and various ill effects. They were sensitized regarding the need to tackle the increased stress levels. This would have created an interest among the students and they would have been motivated to do something to overcome their increased stress levels. Through Health Action Process Approach they were taught to practice the mindful breathing exercise to tackle their perceived stress. Thus, their motivation to do something for their stress was effectively channeled into actions utilizing the mindful breathing exercises taught to them. A randomized controlled trial by **Lin CY et al**²⁹ had used these theories in designing an intervention for improving sleep hygiene among adolescents and the results were indeed rewarding. So, both theories can be considered in future studies to formulate various interventions in the adolescent age groups.

The strengths of the study are:

(1) the presence of a comparator group ensured the comparability

(2) the study participants were one-to-one matched for their baseline and end-line PSS scores with the help of unique coding.

(3) better compliance with the mindfulness exercise was ensured by involving the teachers and the parents.



SUMMARY & CONCLUSION



7. SUMMARY AND CONCLUSION

A school-based open-label cluster Randomized Controlled Trial was done to assess the effectiveness of once-monthly health education sessions on the perceived stress among high school children in Kolar Taluk from September 2021 to Jan 2022.

A total of 4 schools were recruited based on the inclusion criteria and randomized into intervention and comparator groups consisting of two schools each. A total of 686 students completed both baseline and end-line stress assessments. The intervention group received once monthly health education sessions for 3 months consecutively. In the comparator group, only the pamphlets containing information about stress were given. After 3 months of intervention in the intervention group, a gap of 1 month was given before their perceived stress levels were again assessed in both groups.

The mean PSS scores in the intervention group improved from 18.34 to 9.50 after the intervention {t value: -26.4, p-value:<0.001}. While the mean PSS scores in the comparator group remained almost the same, nevertheless it had a slight increase. 6.2% of the students in the intervention group had severe stress before the intervention. Also, 92.4% of them were having

moderate stress levels. After the intervention, none of the students in the intervention group had severe stress (p value<0.001). The percentage of children having moderate stress levels also decreased to 42.1% in the intervention group after intervention. The difference in difference analysis showed that the mean PSS scores in the intervention group changed by +8.84 while in the comparator group by -0.40. This shows the overall effect of the intervention in reducing stress levels.

The study shows that the group health education delivered was effective in reducing the perceived stress levels among high school children and it is a feasible and acceptable intervention for stress in school-going adolescent children.



LIMITATIONS



8. LIMITATIONS

In the study being carried out during the period of COVID-19, its effect on the student's mental health was not dealt with. The relatively high perceived stress scores at the baseline may be due to the after-effects of the pandemic and the school closure which the present study did not explore. Also evaluating the effectiveness of health education through blinding was not possible. The intervention given included only the mindful breathing exercise while the other aspects of mindfulness practices have not been included. The study made use of only formal mindfulness practices and not tried to include informal practices consideration since it was difficult to ensure compliance. The study only evaluated the effectiveness of the intervention on perceived stress among the English medium schools, while a comparison between the different school settings is needed. The English medium schools were only included for the better utilization of the PSS 10 questionnaire. Moreover, long-term follow-up was lacking in our study since students were not available due to their examinations and later change of schools for their higher studies.



RECOMMENDATIONS



9. RECOMMENDATIONS

Wellness means primarily being in good physical and mental health. Because mental health and physical health are so closely linked, problems in one area can impact the other. Likewise improving physical health can improve mental health and improve other life domains, and vice versa. As far as adolescents who pass through the most critical period in their life cycle, wellness benefits them a lot. The good physical and mental health of adolescents will determine their future life course as an adult. They may be having good physical health but their mental health may often be ignored.

Just like other interventions, this simple health education intervention proved to be very effective in tackling the students' stress and should be incorporated into teachers' training programs. It should be utilized by the government and the department of education in improving the mental health of school children and thereby their wellness.

The present study findings of moderate to severe stress in 87% participants at baseline are way higher than the previous study findings conducted in India. This shows the alarming situation of mental health conditions of the adolescents in the country which is to be dealt with seriousness. Further studies in different settings are needed to improve upon and design a better and more effective intervention that can be universally applied to every

school-going child. Future studies should include formal and informal mindfulness practices and should evaluate their effectiveness separately. Studies should be planned in Kannada medium schools also after the validation of the PSS 10 questionnaire and mindfulness practices should be tailored for delivery in Kannada and other languages too. The teachers can be better trained in providing the interventions so that they can have the potential to be a widely accepted and cost-effective method to tackle stress in schools. Long-term follows up studies should also be taken up to ensure that the benefits gained through these interventions are sustained.



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ANNEXURES



Annexure I

Proforma for data collection

Form No.:

Section A:

1. Class:		
2. Roll no:		
3. Socio-demographic details:		
Date of Birth:		
Gender:	Male ☐	Female ☐
Religion:	Hindu ☐ Muslim ☐ Christian ☐ Others:	
The number of siblings:	0	☐
	1	☐
	2	☐
	3	☐
	>3	☐
Total members in the family:		
Birth order:	Firstborn	☐
	Second born	☐
	Third born	☐
	Fourth born	☐
	Others:	
4. Your last year's scholastic performance according to you was	satisfactory	☐
	non-satisfactory	☐
5. What was your grade last year?		
6. Do you practice any meditation?	Yes ☐	No ☐
7. If yes how often?	Daily ☐ Weekly ☐ Monthly ☐	
8. Do you face any bullying from your batchmates or seniors?	Yes ☐	No ☐
9. Do your friends pressurize you to do things that you don't like?	Yes ☐	No ☐
10. a. Do you have your own mobile phones or laptops?	Yes ☐	No ☐
b. If no, do you feel bad when your friends are having one on their own?	Yes ☐	No ☐
11 a. Are you using any media applications?	Yes ☐	No ☐

b. Which media applications are you using more? (You may choose more than one option)	1. Facebook ☐ 2. whats app ☐ 3. Twitter ☐ 4. Signal app ☐ 5. Instagram ☐ 6. Gaming apps(Eg.PUBG) ☐
c. How much time do you spend daily using these platforms?	0-15 min ☐ 15-30 min ☐ 30min-1hour ☐ >1 hour ☐
12. Are you satisfied with your parent's educational background?	Yes ☐ No ☐
13. Are you satisfied with your family and household environment?	Yes ☐ No ☐
14. Have you ever been told by a doctor that you have the following? (You may choose more than one option)	1. Anxiety disorders ☐ 2. Depressive disorders ☐ 3. Schizophrenia ☐ 3. Bipolar disorder ☐ 4. Eating disorders ☐ 5. Autism spectrum disorders ☐ 6. ADHD ☐ 7. others ☐

Section B:

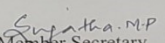
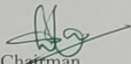
For each question tick any one of the choices as applicable.

Questions	0-NEVER	1-ALMOST NEVER	2-SOMETIMES	3-FAIRLY OFTEN	4-VERY OFTEN
1. In the last month, how often have you been upset because of something that happened unexpectedly?					
2. In the last month, how often have you felt that you were unable to control the important things in your life?					
3. In the last month, how often have you felt nervous and stressed?					
4. In the last month, how often have you felt confident about your ability to handle your personal problems?					
5. In the last month, how often have you felt that things were going your way?					

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

ANNEXURE II

Institutional Ethical Committee Certificate

 SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH SRI DEVARAJ URS MEDICAL COLLEGE Tamaka, Kolar INSTITUTIONAL ETHICS COMMITTEE 	
Members 1. Dr. D.E.Gangadhar Rao, (Chairman) Prof. & HOD of Zoology, Govt. Women's College, Kolar, 2. Dr. Sujatha.M.P., (Member Secretary), Assoc. Prof. of Anesthesia, SDUMC, 3. Mr. Gopinath Paper Reporter, Samyukth Karnataka 4. Mr. G. K. Varada Reddy Advocate, Kolar 5. Mr. Nagesh Sharma Priest, Sanskrit Scholar and School Teacher 6. Dr. Hariprasad, Assoc. Prof Department of Orthopedics, SDUMC 7. Dr. Mahendra.M., Asst. Prof. of Community Medicine, SDUMC 8. Dr. Harish Asst. Prof. of Pharmacology, SDUMC 9. Dr. Vinay Kulkarni Lecturer, Dept. of Anatomy, SDUMC 10. Dr. Ruth Sneha Chandrakumar Asst. Prof. of Psychiatry, SDUMC 11. Dr. Shiva Kumar C S Asst. Prof. Dept. of Clinical Nutrition and Diabetics, SDUMC 12. Dr. Munilakshmi U Asst. Prof. of Biochemistry, SDUMC	No. SDUMC/KLR/IEC/574/2020-21 Date: 24-12-2020 PRIOR PERMISSION TO START OF STUDY The Institutional Ethics Committee of Sri Devaraj Urs Medical College, Tamaka, Kolar has examined and unanimously approved the synopsis entitled “Effectiveness of group health education on perceived stress among high school children of kolar-A cluster randomized control trial” being investigated by DR. ANANDU S, Dr. Prasanna Kamath B T in the Department of Community Medicine at Sri Devaraj Urs Medical College, Tamaka, Kolar. Permission is granted by the Ethics Committee to start the study.  Member Secretary Institutional Ethics Committee Sri Devaraj Urs Medical College Tamaka, Kolar.  Chairman CHAIRMAN Institutional Ethics Committee Sri Devaraj Urs Medical College Tamaka, Kolar

ANNEXURE III

Modified B G Prasad Classification

Socio-Economic status: Modified B.G. Prasad classification was used for socio-economic status for rural and urban families according to per capita income 2021

Modified BG Prasad classification according to 2021. (74)

Socio-economic classification	Social class	Per capita monthly income		
		In 1961	2019	2021
Upper class	I	≥ 100	≥ 7008	Rs 7863 and above
Upper middle class	II	50-99	3504-7007	Rs 3931-7862
Middle class	III	30-49	2102-3503	Rs 2359-3930
Lower middle class	IV	15-29	1051-2101	Rs 1179-2358
Lower class	V	<15	1050 and below	Below Rs 1179

ANNEXURE IV

ಡೇಟಾ ಸಂಗ್ರಹಣೆಗಾಗಿ ಪ್ರೋಫಾರ್ಮಾ

ಫಾರ್ಮ್ ಸಂಖ್ಯೆ :

ವಿಭಾಗ:A

1. ವರ್ಗ:		
2. ರೋಲ್ ಸಂಖ್ಯೆ:		
3. ಸಾಮಾಜಿಕ-ವಿವರಗಳು:		
ಹುಟ್ಟಿದ ದಿನ:		
ಲಿಂಗ:	ಪುರುಷ ☐	ಹೆಣ್ಣು ☐
ಧರ್ಮ:	ಹಿಂದು ☐ ಮುಸ್ಲಿಂ ☐ ಕ್ರೈಶ್ಚಿಯನ್ ☐ ಇತರರು:	
ಒಡಹುಟ್ಟಿದವರ ಸಂಖ್ಯೆ:	೧	☐
	೨	☐
	೩	☐
	೪	☐
	>೪	☐
ಕುಟುಂಬದ ಒಟ್ಟು ಸದಸ್ಯರು:		
ಜನನ ಆದೇಶ:	ಮೊದಲು ಜನಿಸಿದ	☐
	ಎರಡನೇ ಜನನ	☐
	ಮೂರನೇ ಜನನ	☐
	ನಾಲ್ಕನೆಯ ಜನನ	☐
	ಇತರರು:	
4. ನಿಮ್ಮ ಪ್ರಕಾರ ನಿಮ್ಮ ಕಳೆದ ವರ್ಷದ ಪಾಂಡಿತ್ಯಪೂರ್ಣ ಪ್ರದರ್ಶನ	ತೃಪ್ತಿದಾಯಕ	☐
	ತೃಪ್ತಿಕರವಾಗಿಲ್ಲ	☐
5. ಕಳೆದ ವರ್ಷ ನಿಮ್ಮ ಗ್ರೇಡ್ ಯಾವುದು?		
6. ನೀವು ಯಾವುದೇ ಧ್ಯಾನವನ್ನು ಅಭ್ಯಾಸ ಮಾಡುತ್ತೀರಾ?	ಹೌದು ☐	ಅಲ್ಲ ☐
7. ನೀವು ಹೌದು ಎಂದು ಹೇಳಿದರೆ ಎಷ್ಟು ಬಾರಿ?	ದೈನಂದಿನ ☐ ಸಾಪ್ತಾಹಿಕ ☐ ಮಾಸಿಕ ☐	
8. ನಿಮ್ಮ ಸ್ನೇಹಿತರು ಅಥವಾ ಹಿರಿಯರಿಂದ ನೀವು ಯಾವುದೇ	ಹೌದು ☐	ಅಲ್ಲ ☐

ಬೆದರಿಸುವಿಕೆಯನ್ನು ಎದುರಿಸುತ್ತೀರಾ?	
9. ನೀವು ಇಷ್ಟಪಡದ ಕೆಲಸಗಳನ್ನು ಮಾಡಲು ನಿಮ್ಮ ಸ್ನೇಹಿತರು ನಿಮ್ಮ ಮೇಲೆ ಒತ್ತಡ ಹೇರುತ್ತಾರೆಯೇ?	ಹೌದು ☐ ಅಲ್ಲ ☐
10. a. ನಿಮ್ಮ ಸ್ವಂತ ಮೊಬೈಲ್ ಫೋನ್ ಅಥವಾ ಲ್ಯಾಪ್ಟಾಪ್ ಇದೆಯೇ?	ಹೌದು ☐ ಅಲ್ಲ ☐
b. ಇಲ್ಲದಿದ್ದರೆ, ನಿಮ್ಮ ಸ್ನೇಹಿತರು ತಮ್ಮದೇ ಆದದ್ದನ್ನು ಹೊಂದಿರುವಾಗ ನಿಮಗೆ ಕೆಟ್ಟ ಭಾವನೆ ಬರುತ್ತದೆಯೇ?	ಹೌದು ☐ ಅಲ್ಲ ☐
11 a. ನೀವು ಯಾವುದೇ ಮಾಧ್ಯಮ ಅಪ್ಲಿಕೇಶನ್‌ಗಳನ್ನು ಬಳಸುತ್ತಿರುವಿರಾ?	ಹೌದು ☐ ಅಲ್ಲ ☐
b. ನೀವು ಯಾವ ಮಾಧ್ಯಮ ಅಪ್ಲಿಕೇಶನ್‌ಗಳನ್ನು ಹೆಚ್ಚು ಬಳಸುತ್ತಿರುವಿರಿ?	1. ಫೇಸ್‌ಬುಕ್ ☐ 2. ವಾಟ್ಸ್ ಅಪ್ಲಿಕೇಶನ್ ☐ 3. ಟ್ವಿಟರ್ ☐ 4. ಸಿಗ್ನಲ್ ಅಪ್ಲಿಕೇಶನ್ ☐ 5. ಇನ್‌ಸ್ಟಾಗ್ರಾಮ್ ☐ 6. ಗೇಮಿಂಗ್ ಅಪ್ಲಿಕೇಶನ್‌ಗಳು (PUBG) ☐
c. ಈ ಪ್ಲಾಟ್‌ಫಾರ್ಮ್‌ಗಳನ್ನು ಬಳಸಲು ನೀವು ಪ್ರತಿದಿನ ಎಷ್ಟು ಸಮಯವನ್ನು ಕಳೆಯುತ್ತೀರಿ?	0-15 ನಿಮಿಷ ☐ 15-30 ನಿಮಿಷ ☐ 30 ನಿಮಿಷ -1 ಗಂಟೆ ☐ > 1 ಗಂಟೆ ☐
12. ನಿಮ್ಮ ಪೋಷಕರ ಶೈಕ್ಷಣಿಕ ಹಿನ್ನೆಲೆಯಲ್ಲಿ ನೀವು ತೃಪ್ತರಾಗಿದ್ದೀರಾ?	ಹೌದು ☐ ಅಲ್ಲ ☐
13. ನಿಮ್ಮ ಕುಟುಂಬ ಮತ್ತು ಮನೆಯ ವಾತಾವರಣದಿಂದ ನೀವು ತೃಪ್ತರಾಗಿದ್ದೀರಾ?	ಹೌದು ☐ ಅಲ್ಲ ☐
14. ನಿಮಗೆ ಈ ಕೆಳಗಿನ ಯಾವುದೇ ಸಮಸ್ಯೆಗಳಿವೆ ಎಂದು ವೈದ್ಯರು ಹೇಳಿದ್ದಾರೆಯೇ? (ನೀವು ಒಂದಕ್ಕಿಂತ ಹೆಚ್ಚು ಆಯ್ಕೆಗಳನ್ನು ಆಯ್ಕೆ ಮಾಡಬಹುದು)	1. ಆತಂಕದ ಕಾಯಿಲೆಗಳು ☐ 2. ಖಿನ್ನತೆಯ ಅಸ್ವಸ್ಥತೆಗಳು ☐ 3. ಸ್ವಿಜೋಫ್ರೇನಿಯಾ ☐ 3. ಬೈಪೋಲಾರ್ ಡಿಸಾರ್ಡರ್ ☐ 4. ತಿನ್ನವ ಅಸ್ವಸ್ಥತೆಗಳು ☐ 5. ಅಟಿಸಮ್ ಸ್ಟ್ರಕ್ಚರ್ ಅಸ್ವಸ್ಥತೆಗಳು ☐ 6. ಎಡಿಎಚ್ ☐ 7. ಇತರರು ☐

ವಿಭಾಗ ಬಿ: ಪ್ರಶ್ನಾವಳಿ

- ಪ್ರತಿ ಪ್ರಶ್ನೆಗೆ ಈ ಕೆಳಗಿನ ಪರ್ಯಾಯಗಳಿಂದ ಆರಿಸಿಕೊಳ್ಳಿ:

ಪ್ರಶ್ನೆಗಳು	0- ಎಂದಿಗೂ	1 - ಬಹುತೇಕ ಎಂದಿಗೂ	2 - ಕೆಲವೊಮ್ಮೆ	3 - ತಕ್ಕಮಟ್ಟಿಗೆ	4 - ಆಗಾಗ್ಗೆ
1. ಕಳೆದ ತಿಂಗಳಲ್ಲಿ, ನೀವು ಎಷ್ಟು ಬಾರಿ ಅನಿರೀಕ್ಷಿತವಾಗಿ ಸಂಭವಿಸಿದ ಘಟನೆಯ ಕಾರಣ ವಾಗಿ ಅಸಮಾಧಾನಗೊಂಡಿದ್ದೀರಿ?					
2. ಕಳೆದ ತಿಂಗಳಲ್ಲಿ, ನಿಮ್ಮ ಜೀವನದ ಪ್ರಮುಖ ವಿಷಯಗಳನ್ನು ನಿಯಂತ್ರಿಸಲು ಸಾಧ್ಯವಾಗುತ್ತಿಲ್ಲ ಎಂದು ಎಷ್ಟು ಬಾರಿ ಭಾವಿಸಿದ್ದೀರಿ?					
3. ಕಳೆದ ತಿಂಗಳಲ್ಲಿ, ನೀವು ಎಷ್ಟು ಬಾರಿ ಅಸ್ಥಿರತೆ ಮತ್ತು ಒತ್ತಡವನ್ನು ಅನುಭವಿಸಿದ್ದೀರಿ?					
4. ಕಳೆದ ತಿಂಗಳಲ್ಲಿ, ನಿಮ್ಮ ವೈಯಕ್ತಿಕ ಸಮಸ್ಯೆಗಳನ್ನು ನಿಭಾಯಿಸುವ ನಿಮ್ಮ ಸಾಮರ್ಥ್ಯದ ಬಗ್ಗೆ ಎಷ್ಟು ಬಾರಿ ವಿಶ್ವಾಸ ಹೊಂದಿದ್ದೀರಿ?					
5. ಕಳೆದ ತಿಂಗಳಲ್ಲಿ, ನೀವು ಬಯಸಿದಂತೆ ಜೀವನದಲ್ಲಿ ನಡೆಯುತ್ತಿವೆ ಎಂದು ಎಷ್ಟು ಬಾರಿ ಭಾವಿಸಿದ್ದೀರಿ?					
6. ಕಳೆದ ತಿಂಗಳಲ್ಲಿ, ನೀವು ಮಾಡಬೇಕಾಗಿರುವ ಎಲ್ಲ ಕೆಲಸಗಳನ್ನು ನಿಭಾಯಿಸಲು ಸಾಧ್ಯವಿಲ್ಲ ಎಂದು ನೀವು ಎಷ್ಟು ಬಾರಿ ಭಾವಿಸಿದ್ದೀರಿ?					
7. ಕಳೆದ ತಿಂಗಳಲ್ಲಿ, ನಿಮ್ಮ ಜೀವನದಲ್ಲಿ ಕಿರಿಕಿರಿಯನ್ನು ನಿಯಂತ್ರಿಸಲು ಎಷ್ಟು ಬಾರಿ ಸಾಧ್ಯವಾಯಿತು?					
8. ಕಳೆದ ತಿಂಗಳಲ್ಲಿ, ನೀವು ಎಷ್ಟು ಬಾರಿ ಉಲ್ಲಾಸಗೊಂಡಿದ್ದೀರಿ?					

9. ಕಳೆದ ತಿಂಗಳಲ್ಲಿ, ನಿಮ್ಮ ನಿಯಂತ್ರಣಕ್ಕೆ ಹೊರತಾದ ಸಂಗತಿಗಳಿಂದಾಗಿ ನೀವು ಎಷ್ಟು ಬಾರಿ ಕೋಪಗೊಂಡಿದ್ದೀರಿ?					
10. ಕಳೆದ ತಿಂಗಳಲ್ಲಿ, ನೀವು ಎಷ್ಟು ಬಾರಿ ಅತಿಯಾದ ತೊಂದರೆಗಳನ್ನು ಎದುರಿಸುತ್ತಿದ್ದೀರಿ ಎಂದು ಭಾವಿಸಿದ್ದೀರಿ?					

ANNEXURE V

Information sheet

Title: effectiveness of group health education intervention on perceived stress among the high school children of Kolar

My name is Dr. Anandu S, a Postgraduate in the department of Community Medicine, at Sri Devaraj URS Medical College, Kolar. I am carrying out a study on the effectiveness of group health education intervention on perceived stress among the high school children of Kolar. The study has been reviewed by the local ethical review board and has been started only after their formal approval.

In this regard, I will help your child/students to manage stress through different face-to-face group sessions. Your child/students will be provided a questionnaire to assess their stress. Your child/students need not have to answer any questions that you do not want to answer and you may end the participation of your child/student from the interview at any time you want to. However, your child's/student's honest answer to these questions will help us to understand the health status. We would greatly appreciate your permission in responding to the questionnaire. After the stress assessment, they will be provided classes on stress if they fall into the intervention group and will be taught some techniques to overcome stress through subsequent classes.

Participation in this study doesn't involve any cost for you and your child/student. This study is not only beneficial to your child/student but also for the whole student community at large. The results gathered from this study will be beneficial in estimating the effectiveness of counseling on behavioral change in managing stress.

All the information collected from your child/students will be strictly confidential and will not be disclosed to any outsider unless compelled by law. This information collected will be used only for research.

There is no compulsion to participate in this study. Your child/students will be in no way affected if you don't wish to participate in this study. You are required to sign only if you voluntarily agree to include your child in this study. Further, you are at liberty to withdraw your child from the study at any time, if you wish to do so. Be. It is up to you to decide whether your child should participate. This document will be stored in the safe locker in the department of Community Medicine in the college and a copy is given to you for information.

For any further clarification, you are free to contact the principal investigator,
Dr. Anandu S Mobile No: 8547199632

ANNEXURE VI

ಮಾಹಿತಿ ಪತ್ರ

ಶೀರ್ಷಿಕೆ: ಕೋಲಾರದ ಪ್ರೌಢಶಾಲೆ ಮಕ್ಕಳಲ್ಲಿ ಕಂಡುಬರುವ ಒತ್ತಡದ ಮೇಲೆ ಆರೋಗ್ಯ ಶಿಕ್ಷಣ ಹಸ್ತಕ್ಷೇಪದ ಪರಿಣಾಮ ನನ್ನ ಹೆಸರು ಡಾ. ಆನಂದ ಎಸ್, ಕೋಲಾರದ ಶ್ರೀ ದೇವರಾಜ್ ಉರ್ಸ್ ವೈದ್ಯಕೀಯ ಕಾಲೇಜಿನ ಸಮುದಾಯ ವೈದ್ಯಕೀಯ ವಿಭಾಗದಲ್ಲಿ ಸ್ನಾತಕೋತ್ತರ ವಿದ್ಯಾರ್ಥಿ. ಕೋಲಾರದ ಪ್ರೌಢಶಾಲೆ ಮಕ್ಕಳಲ್ಲಿ ಕಂಡುಬರುವ ಒತ್ತಡದ ಮೇಲೆ ಆರೋಗ್ಯ ಶಿಕ್ಷಣದ ಹಸ್ತಕ್ಷೇಪದ ಪರಿಣಾಮದ ಕುರಿತು ನಾನು ಅಧ್ಯಯನವನ್ನು ನಡೆಸುತ್ತಿದ್ದೇನೆ. ಅಧ್ಯಯನವನ್ನು ಸ್ಥಳೀಯ ನೈತಿಕ ವಿಮರ್ಶೆ ಮಂಡಳಿಯು ಪರಿಶೀಲಿಸಿದೆ ಮತ್ತು ಅವರ ಔಪಚಾರಿಕ ಅನುಮೋದನೆಯ ನಂತರವೇ ಪ್ರಾರಂಭಿಸಲಾಗಿದೆ.

ಈ ನಿಟ್ಟಿನಲ್ಲಿ ನಾನು ನಿಮ್ಮ ಮಗು / ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ವಿವಿಧ ತರಗತಿಗಳ ಮೂಲಕ ಒತ್ತಡವನ್ನು ನಿರ್ವಹಿಸಲು ಸಹಾಯ ಮಾಡುತ್ತೇನೆ. ನಿಮ್ಮ ಮಗು / ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ಅವರಿಗೆ ಇರುವ ಒತ್ತಡದ ಬಗ್ಗೆ ಕಂಡುಹಿಡಿಯಲು ಪ್ರಶ್ನಾವಳಿಯನ್ನು ನೀಡಲಾಗುವುದು. ನಿಮ್ಮ ಮಗು / ವಿದ್ಯಾರ್ಥಿಗಳು ನೀವು ಉತ್ತರಿಸಲು ಬಯಸದ ಯಾವುದೇ ಪ್ರಶ್ನೆಗಳಿಗೆ ಉತ್ತರಿಸಬೇಕಾಗಿಲ್ಲ ಮತ್ತು ನೀವು ಬಯಸಿದ ಯಾವುದೇ ಸಮಯದಲ್ಲಿ ಸಂದರ್ಶನದಿಂದ ನಿಮ್ಮ ಮಗು / ವಿದ್ಯಾರ್ಥಿಯು ಭಾಗವಹಿಸುವಿಕೆಯನ್ನು ನೀವು ಕೊನೆಗೊಳಿಸಬಹುದು. ಈ ಪ್ರಶ್ನೆಗಳಿಗೆ ನಿಮ್ಮ ಮಗುವಿನ / ವಿದ್ಯಾರ್ಥಿಯ ಪ್ರಾಮಾಣಿಕ ಉತ್ತರವು ಅವನ / ಅವಳ ಆರೋಗ್ಯ ಸ್ಥಿತಿಯನ್ನು ಅರ್ಥಮಾಡಿಕೊಳ್ಳಲು ನಮಗೆ ಸಹಾಯ ಮಾಡುತ್ತದೆ. ಪ್ರಶ್ನಾವಳಿಗೆ ಪ್ರತಿಕ್ರಿಯಿಸುವಾಗ ನಿಮ್ಮ ಅನುಮತಿಯನ್ನು ನಾವು ಬಹಳವಾಗಿ ಪ್ರಶಂಸಿಸುತ್ತೇವೆ. ಒತ್ತಡದ ಮೌಲ್ಯಮಾಪನದ ನಂತರ ಅವರು ಮಧ್ಯಸ್ಥಿಕೆ ಗುಂಪಿನಲ್ಲಿ ಬಿದ್ದರೆ ಒತ್ತಡ ನಿರ್ವಹಣೆ ಕುರಿತು ಶಿಕ್ಷಣವನ್ನು ನೀಡಲಾಗುವುದು ಮತ್ತು ನಂತರದ ತರಗತಿಗಳ ಮೂಲಕ ಒತ್ತಡವನ್ನು ಕಡಿಮೆ ಮಾಡಲು ಕೆಲವು ತಂತ್ರಗಳನ್ನು ಕಲಿಸಲಾಗುತ್ತದೆ.

ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸುವಿಕೆಯು ನಿಮಗೆ ಮತ್ತು ನಿಮ್ಮ ಮಗು / ವಿದ್ಯಾರ್ಥಿಗೆ ಯಾವುದೇ ವೆಚ್ಚವನ್ನು ಒಳಗೊಂಡಿರುವುದಿಲ್ಲ. ಈ ಅಧ್ಯಯನವು ನಿಮ್ಮ ಮಗುವಿಗೆ / ವಿದ್ಯಾರ್ಥಿಗೆ ಮಾತ್ರವಲ್ಲದೆ ಇಡೀ ವಿದ್ಯಾರ್ಥಿ ಸಮುದಾಯಕ್ಕೂ ಪ್ರಯೋಜನಕಾರಿಯಾಗಿದೆ. ಒತ್ತಡವನ್ನು ನಿರ್ವಹಿಸುವಲ್ಲಿನ ವರ್ತನೆಯ ಬದಲಾವಣೆಯ ಕುರಿತು ಸಮಾಲೋಚನೆಯ ಪರಿಣಾಮವನ್ನು ಅಂದಾಜು ಮಾಡಲು ಈ ಅಧ್ಯಯನದಿಂದ ಸಂಗ್ರಹಿಸಿದ ಫಲಿತಾಂಶಗಳು ಪ್ರಯೋಜನಕಾರಿಯಾಗುತ್ತವೆ.

ನಿಮ್ಮ ಮಗು / ವಿದ್ಯಾರ್ಥಿಗಳಿಂದ ಸಂಗ್ರಹಿಸಲಾದ ಎಲ್ಲಾ ಮಾಹಿತಿಯು ಗೌಪ್ಯವಾಗಿರುತ್ತದೆ ಮತ್ತು ಕಾನೂನಿನ ಮೂಲಕ ಒತ್ತಾಯಿಸದ ಹೊರತು ಯಾವುದೇ ಹೊರಗಿನವರಿಗೆ ಬಹಿರಂಗಪಡಿಸುವುದಿಲ್ಲ. ಸಂಗ್ರಹಿಸಿದ ಈ ಮಾಹಿತಿಯನ್ನು ಸಂಶೋಧನೆಗೆ ಮಾತ್ರ ಬಳಸಲಾಗುತ್ತದೆ.

ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ಯಾವುದೇ ಬಲವಂತವಿಲ್ಲ. ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ನೀವು ಬಯಸದಿದ್ದರೆ ನಿಮ್ಮ ಮಗು / ವಿದ್ಯಾರ್ಥಿಗಳು ಯಾವುದೇ ರೀತಿಯಲ್ಲಿ ಪರಿಣಾಮ ಬೀರುವುದಿಲ್ಲ. ನಿಮ್ಮ ಮಗುವನ್ನು ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಸೇರಿಸಲು ನೀವು ಸ್ವಯಂಪ್ರೇರಣೆಯಿಂದ ಒಪ್ಪಿಕೊಂಡರೆ ಮಾತ್ರ ನೀವು ಸಹಿ ಮಾಡಬೇಕಾಗುತ್ತದೆ. ಇದಲ್ಲದೆ, ನೀವು ಬಯಸಿದರೆ ನಿಮ್ಮ ಮಗುವನ್ನು ಯಾವುದೇ ಸಮಯದಲ್ಲಿ ಅಧ್ಯಯನದಿಂದ ಹಿಂತೆಗೆದುಕೊಳ್ಳುವ ಸ್ವಾತಂತ್ರ್ಯವಿದೆ. ನಿಮ್ಮ ಮಗು ಭಾಗವಹಿಸಬೇಕೆಂದು ನಿರ್ಧರಿಸುವ ಜವಾಬ್ದಾರಿ ನಿಮ್ಮದಾಗಿದೆ. ಈ ಡಾಕ್ಯುಮೆಂಟ್ ಅನ್ನು ಕಾಲೇಜಿನ ಸಮುದಾಯ ವೈದ್ಯಕೀಯ ವಿಭಾಗದ ಸುರಕ್ಷಿತ ಲಾಕರ್‌ನಲ್ಲಿ ಸಂಗ್ರಹಿಸಲಾಗುತ್ತದೆ ಮತ್ತು ಮಾಹಿತಿಗಾಗಿ ಪ್ರತಿಯನ್ನು ನಿಮಗೆ ನೀಡಲಾಗುತ್ತದೆ.

ಯಾವುದೇ ಹೆಚ್ಚಿನ ಸ್ಪಷ್ಟೀಕರಣಕ್ಕಾಗಿ ನೀವು ಪ್ರಧಾನ ತನಿಖಾಧಿಕಾರಿಯನ್ನು ಸಂಪರ್ಕಿಸಲು ಮುಕ್ತರಾಗಿದ್ದೀರಿ,

ಡಾ. ಆನಂದ ಎಸ್ ಮೊಬೈಲ್ ಸಂಖ್ಯೆ: 8547199632(೮೫೪೭೧೯೬೩೨)

ANNEXURE VII

INFORMED CONSENT(Parent)

Sl. no:

TITLE OF THE STUDY: Effectiveness of group health education intervention on
perceived stress among the high school children of Kolar

I, the undersigned, agree to participate with my son/daughter in this study and to undergo various health education sessions and disclosure of my child's personal information as outlined in this consent form.

I have been explained in my local language i.e., in _____, and understand the purpose of this study and the confidential nature of the information that will be collected and disclosed during the study. I have had the opportunity to ask questions regarding the various aspects of this study on my son/daughter and my questions have been answered to my full satisfaction. The information collected will be used only for research.

I understand that I remain free to withdraw my child from this study at any time. Participation in this study is at my sole discretion and does not involve any cost to me.

Name and signature of Principal Investigator: Dr. Anandu S

Contact No: 8547199632

Date:

Your monthly family income- Rs

You belong to- APL/BPL

ANNEXURE VIII

ಸಮ್ಮತಿ ಪತ್ರ (ಪೋಷಕರು)

ಅಧ್ಯಯನದ ಶೀರ್ಷಿಕೆ: ಕೋಲಾರದ ಪ್ರೌಢಶಾಲೆ ಮಕ್ಕಳಲ್ಲಿ ಒತ್ತಡದ ಮೇಲೆ ಆರೋಗ್ಯ ಶಿಕ್ಷಣದ ಹಸ್ತಕ್ಷೇಪದ ಪರಿಣಾಮ

ಈ ಕೆಳಗೆ ಸಹಿ ಮಾಡಿರುವ ನಾನು ನನ್ನ ಮಗ / ಮಗಳನ್ನು ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ಒಪ್ಪಿಗೆ ನೀಡಿದ್ದೇನೆ. ನನ್ನ ಮಗುವಿಗೆ ಮನೋವಿಶ್ಲೇಷಣೆ ನಡೆಸಲು ಮತ್ತು ವೈಯಕ್ತಿಕ ಮಾಹಿತಿಯನ್ನು ನೀಡಲು ನಾನು ಒಪ್ಪಿಗೆ ನೀಡುತ್ತೇನೆ.

ನನ್ನ ಸ್ಥಳೀಯ ಭಾಷೆಯಲ್ಲಿ, ಅಂದರೆ _____ ನಲ್ಲಿ ವಿವರಿಸಲಾಗಿದೆ ಮತ್ತು ಈ ಅಧ್ಯಯನದ ಉದ್ದೇಶ ಮತ್ತು ಅಧ್ಯಯನದ ಸಮಯದಲ್ಲಿ ಸಂಗ್ರಹಿಸುವ ಮಾಹಿತಿಯ ಗೌಪ್ಯ ಸ್ವರೂಪವನ್ನು ನನಗೆ ವಿವರಿಸಲಾಗಿದೆ. ಅಧ್ಯಯನದ ಎಲ್ಲಾ ಅಂಶಗಳ ಬಗ್ಗೆ ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳಲು ನನಗೆ ಅವಕಾಶ ಸಿಕ್ಕಿತು ಮತ್ತು ನನ್ನ ಪೂರ್ಣ ತೃಪ್ತಿಗೆ ನನ್ನ ಪ್ರಶ್ನೆಗಳಿಗೆ ಉತ್ತರಿಸಲಾಗಿದೆ. ಸಂಗ್ರಹಿಸಿದ ಮಾಹಿತಿಯನ್ನು ಸಂಶೋಧನೆಗೆ ಮಾತ್ರ ಬಳಸಲಾಗುತ್ತದೆ.

ಯಾವುದೇ ಸಮಯದಲ್ಲಿ ನನ್ನ ಮಗುವನ್ನು ಈ ಅಧ್ಯಯನದಿಂದ ಹಿಂತೆಗೆದುಕೊಳ್ಳಲು ನಾನು ಮುಕ್ತನಾಗಿರುತ್ತೇನೆ ಎಂದು ನಾನು ಅರ್ಥಮಾಡಿಕೊಂಡಿದ್ದೇನೆ. ಈ ಅಧ್ಯಯನದಲ್ಲಿ ನನ್ನ ಮಗುವಿನ ಭಾಗವಹಿಸುವಿಕೆಯು ನನ್ನ ಸ್ವಂತ ವಿವೇಚನೆಗೆ ಒಳಪಟ್ಟಿದೆ ಮತ್ತು ನನಗೆ ಯಾವುದೇ ವೆಚ್ಚವನ್ನು ಒಳಗೊಂಡಿರುವುದಿಲ್ಲ.

ಪೋಷಕರ ಹೆಸರು ಮತ್ತು ಸಹಿ / ಹೆಚ್ಚರಿಕೆ ಗುರುತು

ಸಾಕ್ಷಿಯ ಹೆಸರು ಮತ್ತು ಸಹಿ

1. ದಿನಾಂಕ:

2. ದಿನಾಂಕ:

ಸಂದರ್ಶಕರ ಹೆಸರು ಮತ್ತು ಸಹಿ:

ದಿನಾಂಕ:

ಪ್ರಧಾನ ತನಿಖಾಧಿಕಾರಿಗಳ ಹೆಸರು ಮತ್ತು ಸಹಿ: ಡಾ. ಆನಂದ ಎಸ್

ಸಂಪರ್ಕ ಸಂಖ್ಯೆ: 8547199632 (೮೫೪೭೧೯೯೬೩೨) ದಿನಾಂಕ

ನಿಮ್ಮ ಕುಟುಂಬದ ಮಾಸಿಕ ಆದಾಯ - ರೂ

ನೀವು APL/BPL ಗೆ ಸೇರಿದವರು

ANNEXURE IX

INFORMED CONSENT (Principal)

Sl. no:

TITLE OF THE STUDY: effectiveness of group health education intervention on
perceived stress among the high school children of Kolar

I, the undersigned, agree to participate my school in this study and to my students to undergo group health education sessions and disclosure of my students' personal information as outlined in this consent form.

I have been explained well and I understand the purpose of this study and the confidential nature of the information that will be collected and disclosed during the study. I have had the opportunity to ask my questions regarding the various aspects of this study on my students and my questions have been answered to my full satisfaction. The information collected will be used only for research.

I understand that I remain free to withdraw my students from this study at any time. Participation of my students in this study is under my sole discretion and does not involve any cost to the school.

Principal name and signature

ANNEXURE X

ಸಮ್ಮತಿ ಪತ್ರ (ಪ್ರಧಾನ ಅಧ್ಯಾಪಕರು)

ಅಧ್ಯಯನದ ಶೀರ್ಷಿಕೆ: ಕೋಲಾರದ ಪ್ರೌಢಶಾಲೆ ಮಕ್ಕಳಲ್ಲಿ ಒತ್ತಡದ ಮೇಲೆ ಆರೋಗ್ಯ ಶಿಕ್ಷಣದ ಹಸ್ತಕ್ಷೇಪದ ಪರಿಣಾಮ ಈ ಕೆಳಗೆ ಸಹಿ ಮಾಡಿರುವ ನಾನು ನನ್ನ ವಿದ್ಯಾರ್ಥಿಗಳನ್ನು ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ಒಪ್ಪಿಗೆ ನೀಡಿದ್ದೇನೆ. ನನ್ನ ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ಮನೋವಿಶ್ಲೇಷಣೆ ನಡೆಸಲು ಮತ್ತು ವೈಯಕ್ತಿಕ ಮಾಹಿತಿಯನ್ನು ನೀಡಲು ನಾನು ಒಪ್ಪಿಗೆ ನೀಡುತ್ತೇನೆ.

ನನ್ನ ಸ್ಥಳೀಯ ಭಾಷೆಯಲ್ಲಿ, ಅಂದರೆ _____ ನಲ್ಲಿ ವಿವರಿಸಲಾಗಿದೆ ಮತ್ತು ಈ ಅಧ್ಯಯನದ ಉದ್ದೇಶ ಮತ್ತು ಅಧ್ಯಯನದ ಸಮಯದಲ್ಲಿ ಸಂಗ್ರಹಿಸುವ ಮಾಹಿತಿಯ ಗೌಪ್ಯ ಸ್ವರೂಪವನ್ನು ನನಗೆ ವಿವರಿಸಲಾಗಿದೆ. ಅಧ್ಯಯನದ ಎಲ್ಲಾ ಅಂಶಗಳ ಬಗ್ಗೆ ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳಲು ನನಗೆ ಅವಕಾಶ ಸಿಕ್ಕಿತು ಮತ್ತು ನನ್ನ ಪೂರ್ಣ ತೃಪ್ತಿಗೆ ನನ್ನ ಪ್ರಶ್ನೆಗಳಿಗೆ ಉತ್ತರಿಸಲಾಗಿದೆ. ಸಂಗ್ರಹಿಸಿದ ಮಾಹಿತಿಯನ್ನು ಸಂಶೋಧನೆಗೆ ಮಾತ್ರ ಬಳಸಲಾಗುತ್ತದೆ.

ಯಾವುದೇ ಸಮಯದಲ್ಲಿ ನನ್ನ ವಿದ್ಯಾರ್ಥಿಗಳನ್ನು ಈ ಅಧ್ಯಯನದಿಂದ ಹಿಂತೆಗೆದುಕೊಳ್ಳಲು ನಾನು ಮುಕ್ತನಾಗಿರುತ್ತೇನೆ ಎಂದು ನಾನು ಅರ್ಥಮಾಡಿಕೊಂಡಿದ್ದೇನೆ. ಈ ಅಧ್ಯಯನದಲ್ಲಿ ನನ್ನ ವಿದ್ಯಾರ್ಥಿಗಳ ಭಾಗವಹಿಸುವಿಕೆಯು ನನ್ನ ಸ್ವಂತ ವಿವೇಚನೆಗೆ ಒಳಪಟ್ಟಿದೆ ಮತ್ತು ನನಗೆ ಯಾವುದೇ ವೆಚ್ಚವನ್ನು ಒಳಗೊಂಡಿರುವುದಿಲ್ಲ.

ಪ್ರಧಾನ ಅಧ್ಯಾಪಕರ ಹೆಸರು ಮತ್ತು ಸಹಿ

ಸಾಕ್ಷಿಯ ಹೆಸರು ಮತ್ತು ಸಹಿ

1. ದಿನಾಂಕ:

2. ದಿನಾಂಕ:

ಸಂದರ್ಶಕರ ಹೆಸರು ಮತ್ತು ಸಹಿ:

ದಿನಾಂಕ:

ಪ್ರಧಾನ ತನಿಖಾಧಿಕಾರಿಗಳ ಹೆಸರು ಮತ್ತು ಸಹಿ: ಡಾ. ಆನಂದ ಎಸ್

ಸಂಪರ್ಕ ಸಂಖ್ಯೆ: 8547199632 (೮೫೪೭೧೯೯೬೩೨)

ದಿನಾಂಕ:

ANNEXURE XI

INFORMED ASSENT (student)

Sl. no:

TITLE OF THE STUDY: effectiveness of group health education intervention on
perceived stress among the high school children of Kolar

I, the undersigned, agree to participate in this study and to undergo group health education sessions and disclosure of my personal information as outlined in this consent form.

I have been explained well and I understand the purpose of this study and the confidential nature of the information that will be collected and disclosed during the study. I have had the opportunity to ask questions regarding the various aspects of this study on me and my questions have been answered to my full satisfaction. The information collected will be used only for research.

I understand that I remain free to withdraw myself from this study at any time. My participation in this study is under my sole discretion and does not involve any cost to the school and my parents

student name and signature /thumb impression

Name and signature of Principal Investigator: Dr. Anandu S

Contact No: 8547199632

Date:

ANNEXURE XII

ಸಮ್ಮತಿ ಪತ್ರ (ವಿದ್ಯಾರ್ಥಿ)

ಅಧ್ಯಯನದ ಶೀರ್ಷಿಕೆ: ಕೋಲಾರದ ಪ್ರೌಢಶಾಲೆ ಮಕ್ಕಳಲ್ಲಿ ಒತ್ತಡದ ಮೇಲೆ ಆರೋಗ್ಯ ಶಿಕ್ಷಣದ ಹಸ್ತಕ್ಷೇಪದ ಪರಿಣಾಮ
ಈ ಕೆಳಗೆ ಸಹಿ ಮಾಡಿರುವ ನಾನು ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ಒಪ್ಪಿಗೆ ನೀಡಿದ್ದೇನೆ. ನನ್ನ ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ಮನೋವಿಶ್ಲೇಷಣೆ
ನಡೆಸಲು ಮತ್ತು ವೈಯಕ್ತಿಕ ಮಾಹಿತಿಯನ್ನು ನೀಡಲು ನಾನು ಒಪ್ಪಿಗೆ ನೀಡುತ್ತೇನೆ.

ನನ್ನ ಸ್ಥಳೀಯ ಭಾಷೆಯಲ್ಲಿ, ಅಂದರೆ _____ ನಲ್ಲಿ ವಿವರಿಸಲಾಗಿದೆ ಮತ್ತು ಈ ಅಧ್ಯಯನದ ಉದ್ದೇಶ ಮತ್ತು
ಅಧ್ಯಯನದ ಸಮಯದಲ್ಲಿ ಸಂಗ್ರಹಿಸುವ ಮಾಹಿತಿಯ ಗೌಪ್ಯ ಸ್ವರೂಪವನ್ನು ನನಗೆ ವಿವರಿಸಲಾಗಿದೆ. ಅಧ್ಯಯನದ ಎಲ್ಲಾ ಅಂಶಗಳ
ಬಗ್ಗೆ ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳಲು ನನಗೆ ಅವಕಾಶ ಸಿಕ್ಕಿತು ಮತ್ತು ನನ್ನ ಪೂರ್ಣ ತೃಪ್ತಿಗೆ ನನ್ನ ಪ್ರಶ್ನೆಗಳಿಗೆ ಉತ್ತರಿಸಲಾಗಿದೆ. ಸಂಗ್ರಹಿಸಿದ
ಮಾಹಿತಿಯನ್ನು ಸಂಶೋಧನೆಗೆ ಮಾತ್ರ ಬಳಸಲಾಗುತ್ತದೆ.

ಯಾವುದೇ ಸಮಯದಲ್ಲಿ ನಾನು ಈ ಅಧ್ಯಯನದಿಂದ ಹಿಂಜರಿಯಬಹುದು ಎಂದು ನಾನು ಅರ್ಥಮಾಡಿಕೊಂಡಿದ್ದೇನೆ. ಈ
ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸುವಿಕೆಯು ನನ್ನ ಸ್ವಂತ ವಿವೇಚನೆಗೆ ಒಳಪಟ್ಟಿದೆ ಮತ್ತು ನನಗೆ ಯಾವುದೇ ವೆಚ್ಚವನ್ನು
ಒಳಗೊಂಡಿರುವುದಿಲ್ಲ.

ಪ್ರಧಾನ ಅಧ್ಯಾಪಕರ ಹೆಸರು ಮತ್ತು ಸಹಿ

ಸಾಕ್ಷಿಯ ಹೆಸರು ಮತ್ತು ಸಹಿ

1. ದಿನಾಂಕ:

2. ದಿನಾಂಕ:

ಸಂದರ್ಶಕರ ಹೆಸರು ಮತ್ತು ಸಹಿ:

ದಿನಾಂಕ:

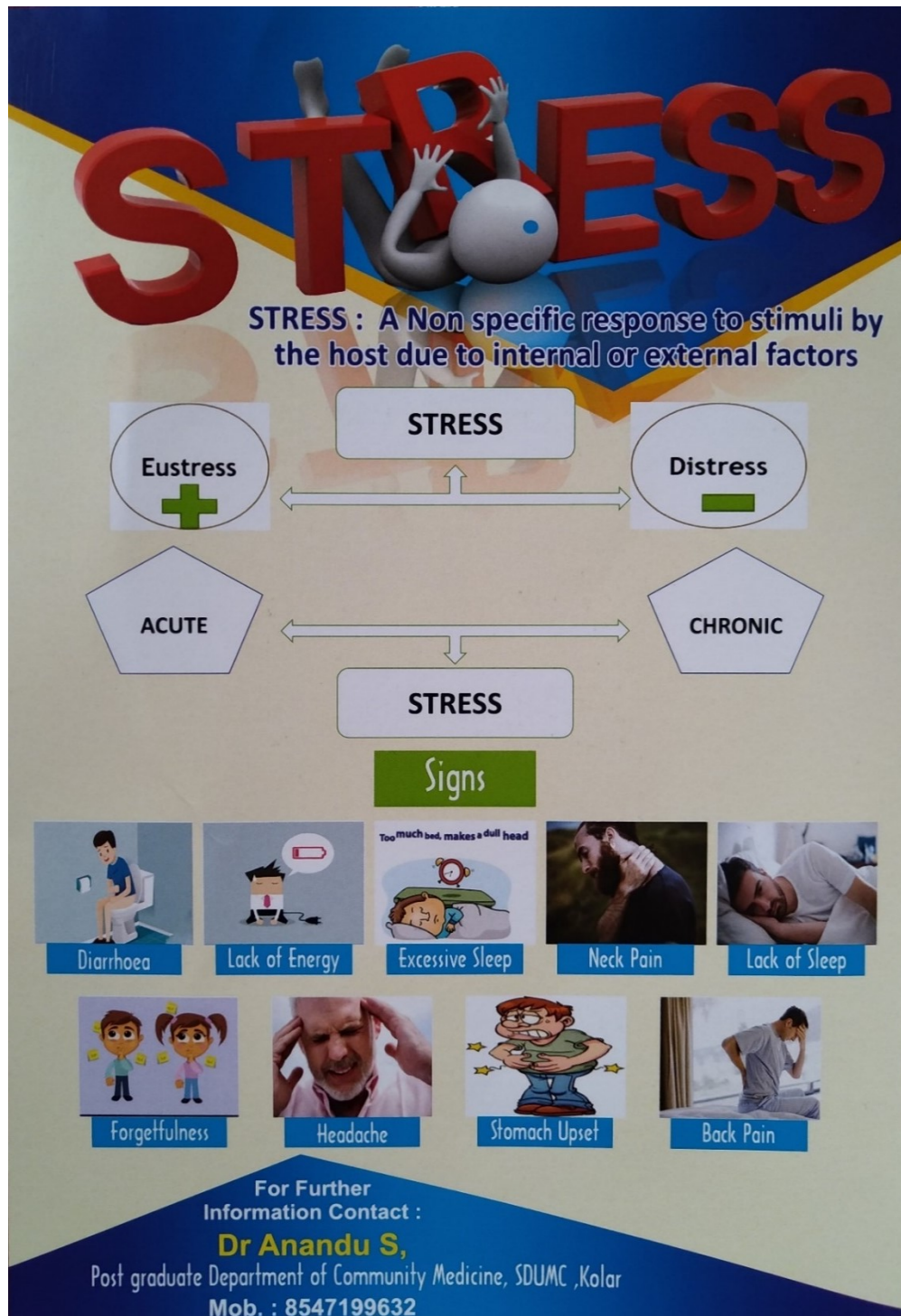
ಪ್ರಧಾನ ತನಿಖಾಧಿಕಾರಿಗಳ ಹೆಸರು ಮತ್ತು ಸಹಿ: ಡಾ. ಅನಂದ ಎಸ್

ಸಂಪರ್ಕ ಸಂಖ್ಯೆ: 8547199632 (೮೫೪೭೧೯೯೬೩೨)

ದಿನಾಂಕ:

ANNEXURE XIII

Pamphlets used in the study



ANNEXURE XIV

The material used for providing the health education

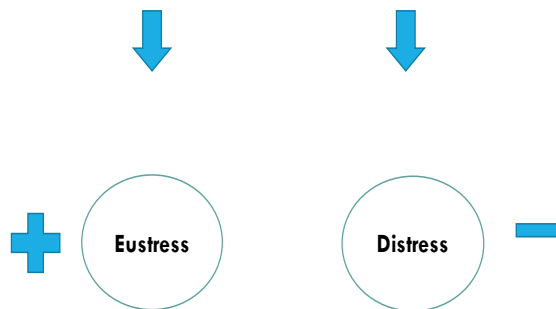
1st month



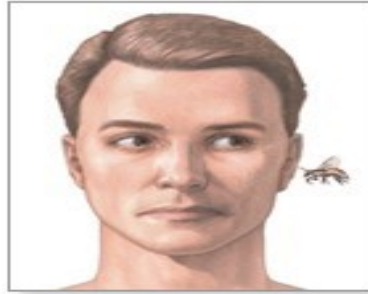
Dr. ANANDU S
SECOND YEAR POST GRADUATE
DEPARTMENT OF COMMUNITY MEDICINE
SDUMC, KOLAR

1

Non specific response to stimuli by the host due to
internal or external factors

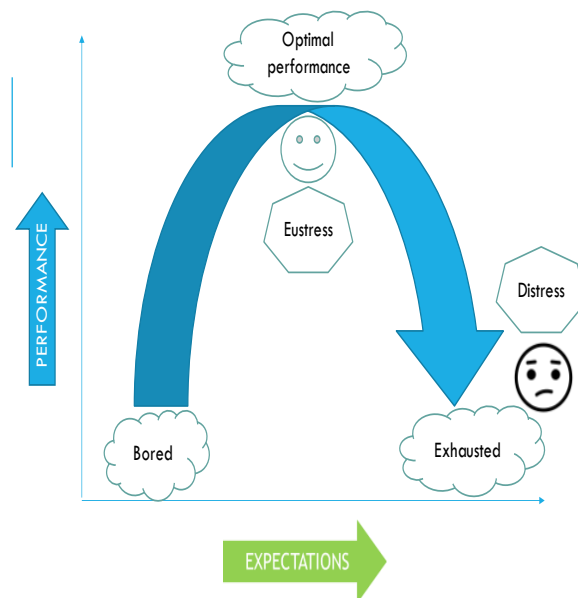


2

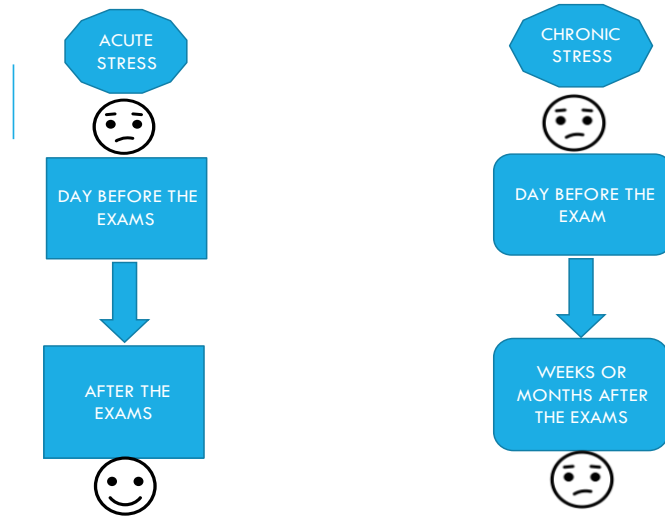


Stress is caused
by an existing
stress-causing
factor or
“stressor”

3



4



5



6

SIGNS



HEADACHE



FREQUENT
BODY ACHES
AND PAINS

7

SIGNS



Lack of
energy



Stiffness of
neck

8

SIGNS



tiredness



Trouble in
sleeping

9

SIGNS

Too much bed, makes a dull head



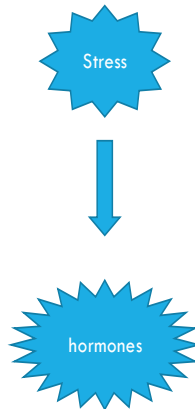
Too much
sleep



Stomach upset

10

Why to overcome stress?



https://www.ted.com/talks/sharon_horesh_bergquist_how_stress_affects_your_body?utm_campaign=tedsread&utm_medium=referral&utm_source=tedcomshare

11



- RISING BLOOD SUGAR LEVELS
- HIGHER BLOOD PRESSURE
- FASTER BREATHING
- INCREASED ATTENTION
- SLOWER DIGESTION AND KIDNEY FUNCTIONS

- HIGHER BLOOD VOLUME AND BLOOD PRESSURE
- HIGH BLOOD SUGAR LEVELS
- IMMUNOSUPPRESSION
- CARDIOVASCULAR DISEASES
- KIDNEY FAILURE
- OBESITY
- DEPRESSION

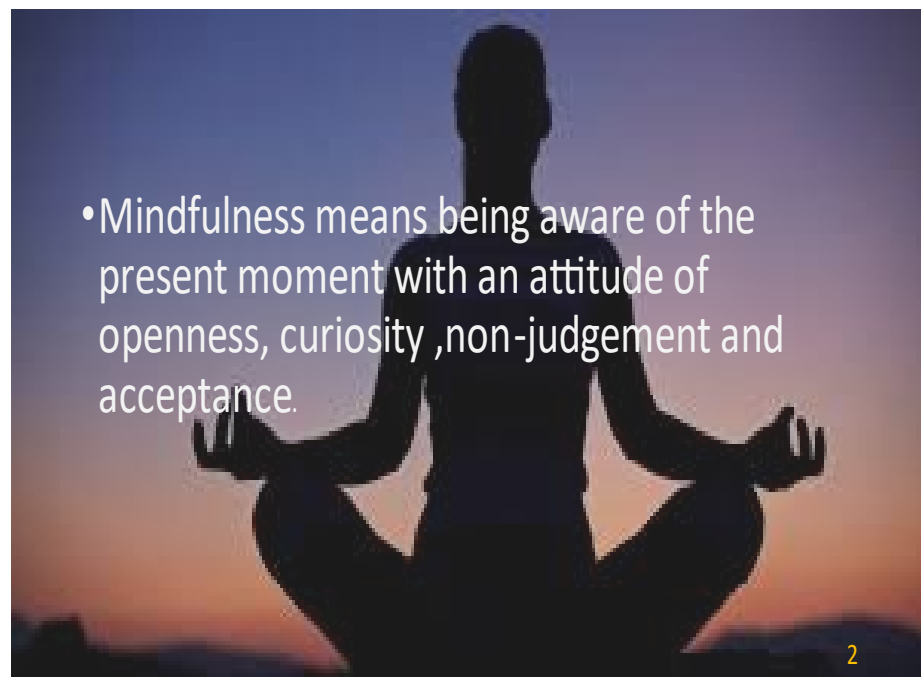
12

2nd month

MINDFULNESS



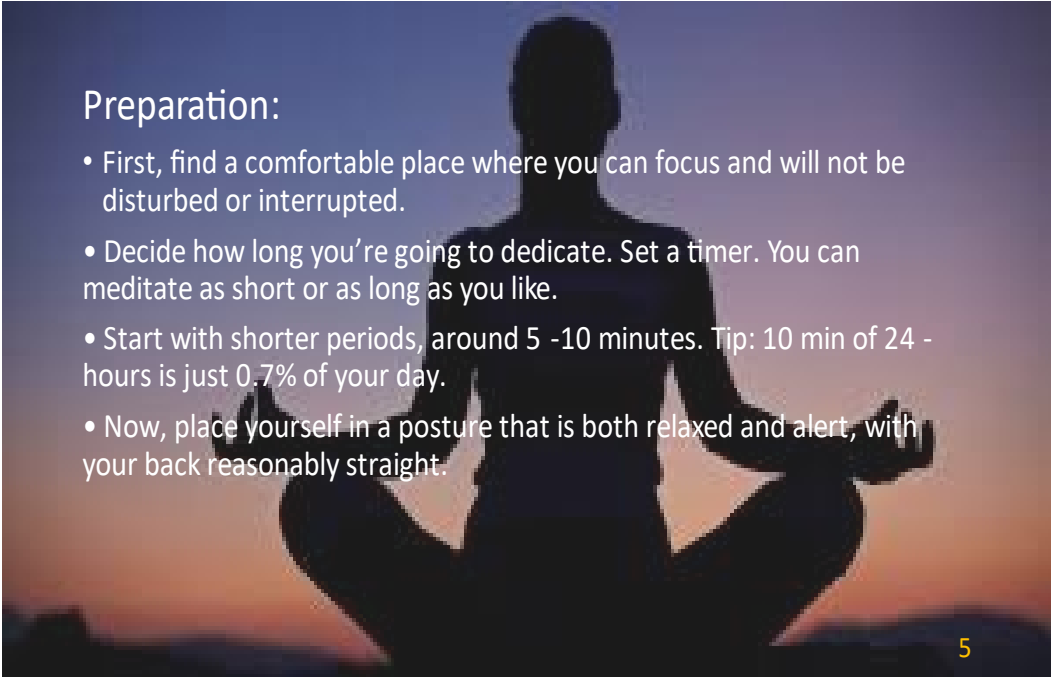
1



- Mindfulness means being aware of the present moment with an attitude of openness, curiosity, non-judgement and acceptance.

2





Preparation:

- First, find a comfortable place where you can focus and will not be disturbed or interrupted.
- Decide how long you're going to dedicate. Set a timer. You can meditate as short or as long as you like.
- Start with shorter periods, around 5 -10 minutes. Tip: 10 min of 24 - hours is just 0.7% of your day.
- Now, place yourself in a posture that is both relaxed and alert, with your back reasonably straight.

5



7 Mindfulness Steps:

- Step 1.
- Take a deep breath and relax, with your eyes closed. Be aware of sounds around you coming and going, and let them be whatever they are. Keep taking and releasing slow, deep breaths.

6

- Step 2.

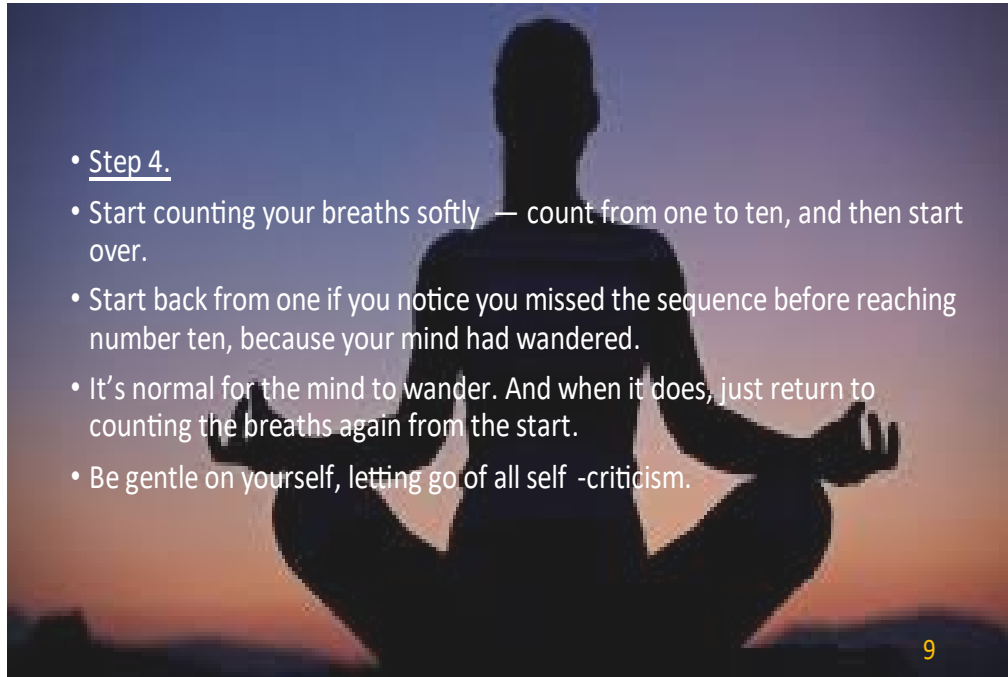
- Close your eyes and drop all your concerns now, like setting down a heavy bag. After the meditation, you can pick those up again — if you want to.
- Realize that you are allowing yourself this time to move away from worldly worries.

7

- Step 3.

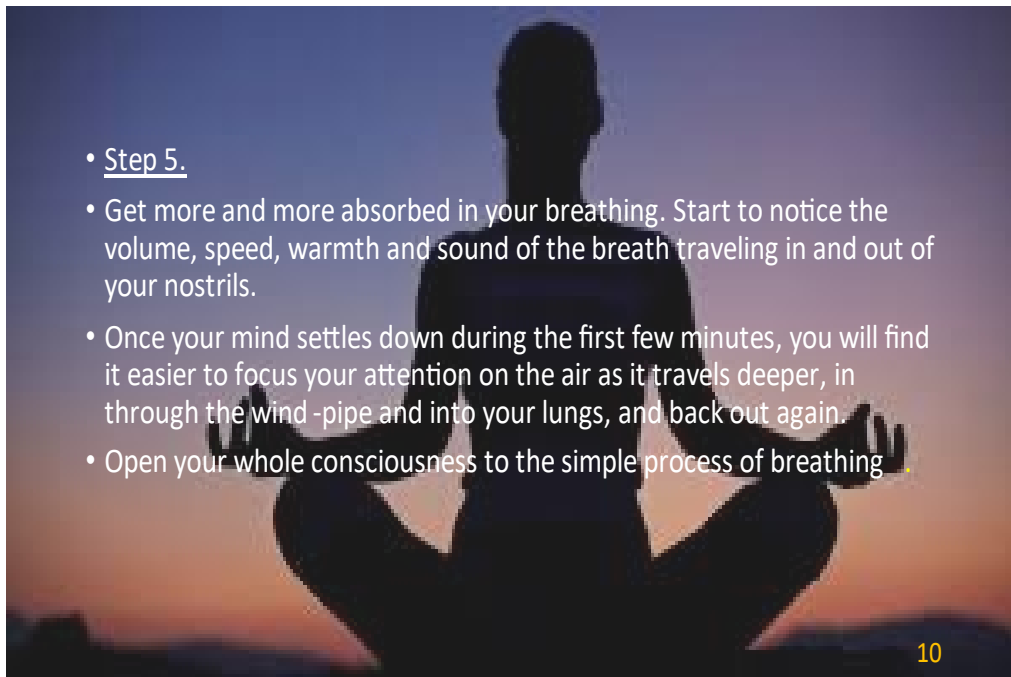
- Now focus on your breath. Bring your whole awareness to the sensation of your breathing.
- Sense the cool air coming in and the warm air going out. Feel the chest rising and falling, the belly expanding and contracting.
- Don't try to control your breath; let it be whatever it is, flowing in and out of its own.

8



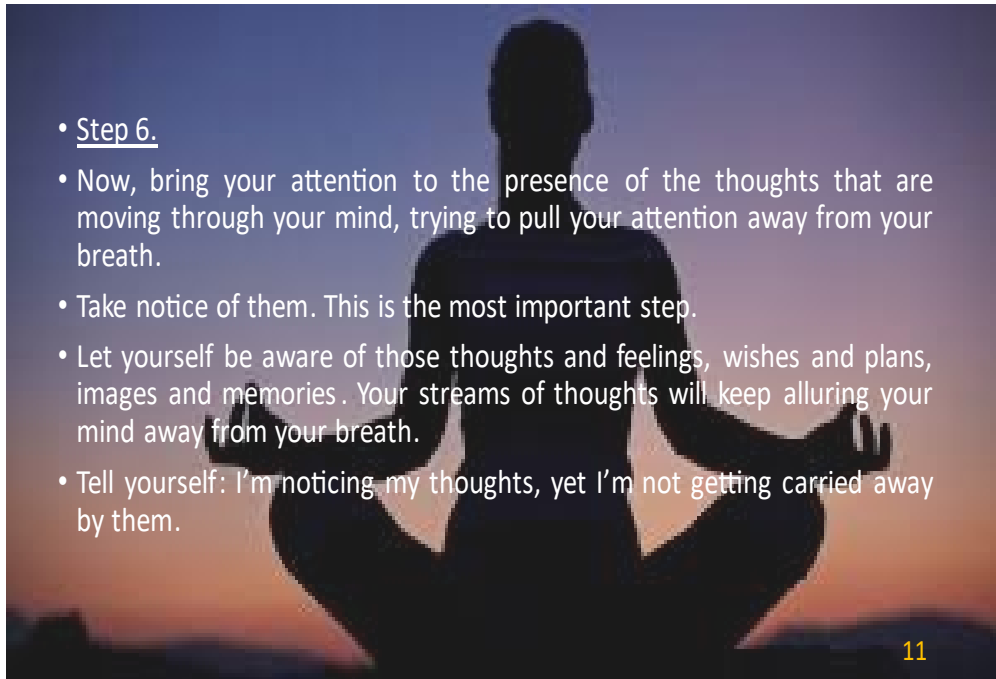
- Step 4.
- Start counting your breaths softly — count from one to ten, and then start over.
- Start back from one if you notice you missed the sequence before reaching number ten, because your mind had wandered.
- It's normal for the mind to wander. And when it does, just return to counting the breaths again from the start.
- Be gentle on yourself, letting go of all self -criticism.

9



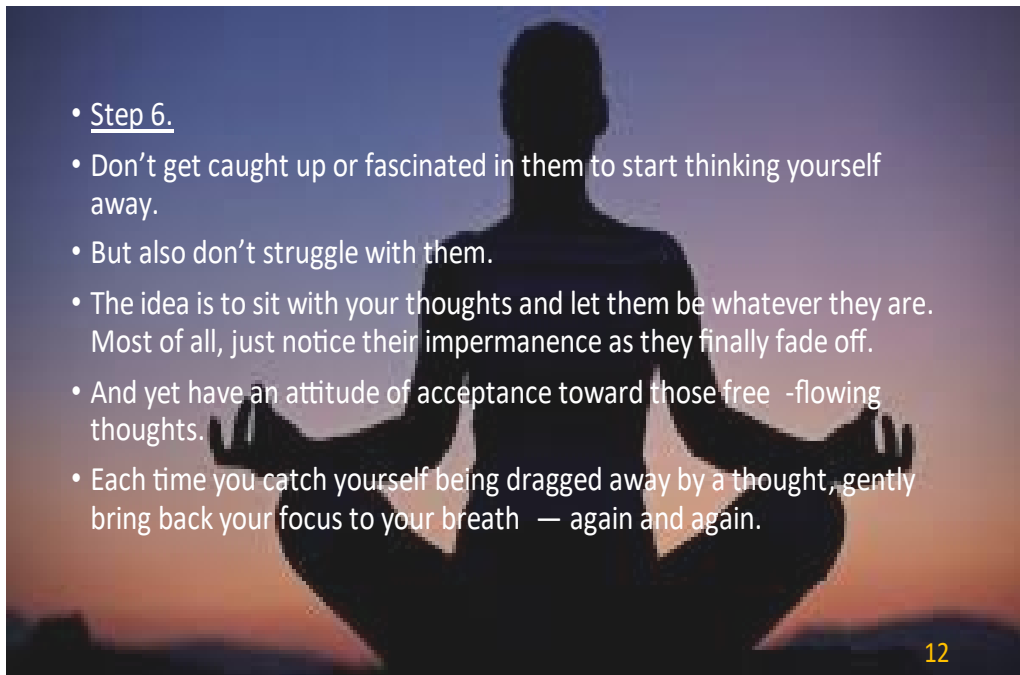
- Step 5.
- Get more and more absorbed in your breathing. Start to notice the volume, speed, warmth and sound of the breath traveling in and out of your nostrils.
- Once your mind settles down during the first few minutes, you will find it easier to focus your attention on the air as it travels deeper, in through the wind -pipe and into your lungs, and back out again.
- Open your whole consciousness to the simple process of breathing .

10



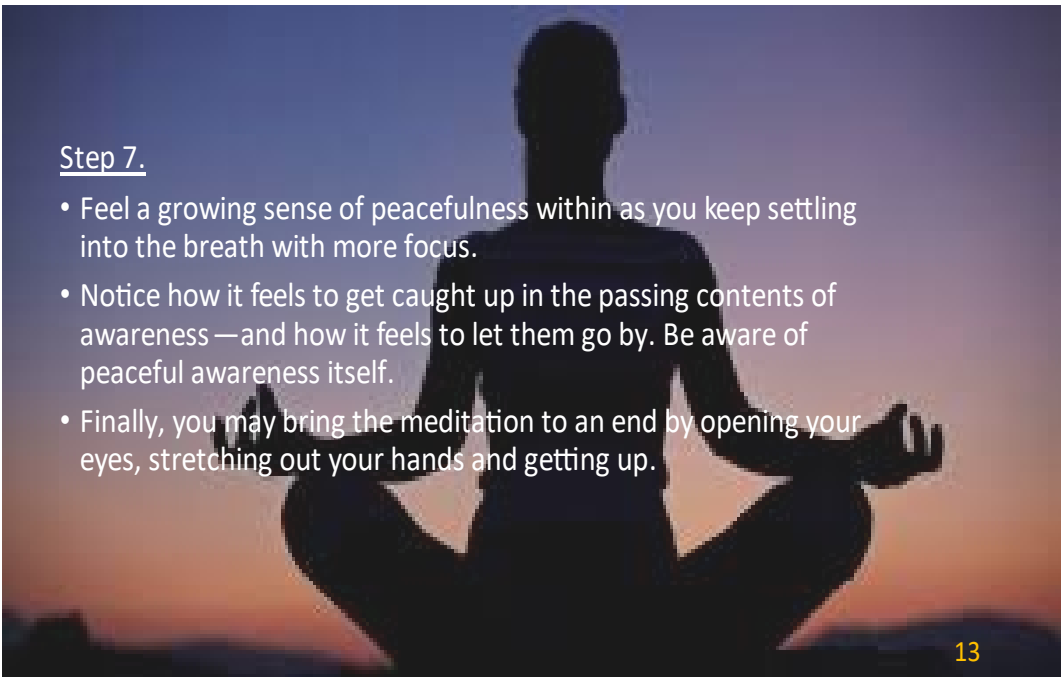
- Step 6.
- Now, bring your attention to the presence of the thoughts that are moving through your mind, trying to pull your attention away from your breath.
- Take notice of them. This is the most important step.
- Let yourself be aware of those thoughts and feelings, wishes and plans, images and memories. Your streams of thoughts will keep alluring your mind away from your breath.
- Tell yourself: I'm noticing my thoughts, yet I'm not getting carried away by them.

11



- Step 6.
- Don't get caught up or fascinated in them to start thinking yourself away.
- But also don't struggle with them.
- The idea is to sit with your thoughts and let them be whatever they are. Most of all, just notice their impermanence as they finally fade off.
- And yet have an attitude of acceptance toward those free-flowing thoughts.
- Each time you catch yourself being dragged away by a thought, gently bring back your focus to your breath — again and again.

12



Step 7.

- Feel a growing sense of peacefulness within as you keep settling into the breath with more focus.
- Notice how it feels to get caught up in the passing contents of awareness—and how it feels to let them go by. Be aware of peaceful awareness itself.
- Finally, you may bring the meditation to an end by opening your eyes, stretching out your hands and getting up.

13

Take a seat. Find a place to sit that feels calm and quiet to you.

Set a time limit. If you're just beginning, it can help to choose a short time, such as 5 or 10 minutes.

Notice your body. You can sit or kneel however is comfortable for you. Just make sure you are stable and in a position, you can stay in for a while.

Feel your breath. Follow the sensation of your breath as it goes out and as it goes in.

Notice when your mind has wandered. When you get around to noticing this—in a few seconds, a minute, five minutes—simply return your attention to the breath.

Be kind to your wandering mind. Don't judge yourself or obsess over the content of the thoughts you find yourself lost in. Just come back.



14



3rd month



FORMULATING STRATEGIES

Always remember!

- 2

- SELF MONITORING

3

ANNEXURE XV

Images of the health education sessions conducted





Investigator delivering the health education sessions at the school.

ANNEXURE XVI

GANTT CHART

S T E P	A C T I V I T Y	TIME PERIOD													
		2020			2021							2022			2023
		O C T	N O V	D e c	J a n	F e b t o M a r c h	A P R I T o A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R t o D E C	J A N
1	Topic search, selection & synopsis writing														
2	Synopsis submission														
3	Approval by IEC*														
4	Proforma Preparation and validation														
5	Pilot project														
6	Review of literature														
7	Data collection														
8	Data analysis														
9	Intervention														
10	Dissertation writing														
11	Submission of dissertation														

FNO	GRP	CLASS	DOR	REX	NEL	REB	PANNO	PANIN	AMPL	BO	BP	NRAD2	NEB	BUDF	NEPFL	PREBB	NOS	FEELS AD	NEB2A	FB	NAP	THWRY	SEON	ENBTA	GAHE	APPT1 NE	PEBU	PAREN V	DSAO	ANX	DEP	SPR	BPD	BAT	ASD	ADND	OTK	BQ1	BQ2	BQ3	BQ4	BQ5	BQ6	BQ7	BQ8	BQ9	BQ10	BQ11	BQ2	BQ3	BQ4	BQ5	BQ6	BQ7	BQ8	BQ9	BQ10	BQ11	BQ12	BQ13	BQ14	BQ15	BQ16	BQ17	BQ18	BQ19	BQ20	BQ21	BQ22	BQ23	BQ24	BQ25	BQ26	BQ27	BQ28	BQ29	BQ30	BQ31	BQ32	BQ33	BQ34	BQ35	BQ36	BQ37	BQ38	BQ39	BQ40	BQ41	BQ42	BQ43	BQ44	BQ45	BQ46	BQ47	BQ48	BQ49	BQ50	BQ51	BQ52	BQ53	BQ54	BQ55	BQ56	BQ57	BQ58	BQ59	BQ60	BQ61	BQ62	BQ63	BQ64	BQ65	BQ66	BQ67	BQ68	BQ69	BQ70	BQ71	BQ72	BQ73	BQ74	BQ75	BQ76	BQ77	BQ78	BQ79	BQ80	BQ81	BQ82	BQ83	BQ84	BQ85	BQ86	BQ87	BQ88	BQ89	BQ90	BQ91	BQ92	BQ93	BQ94	BQ95	BQ96	BQ97	BQ98	BQ99	BQ100	BQ101	BQ102	BQ103	BQ104	BQ105	BQ106	BQ107	BQ108	BQ109	BQ110	BQ111	BQ112	BQ113	BQ114	BQ115	BQ116	BQ117	BQ118	BQ119	BQ120	BQ121	BQ122	BQ123	BQ124	BQ125	BQ126	BQ127	BQ128	BQ129	BQ130	BQ131	BQ132	BQ133	BQ134	BQ135	BQ136	BQ137	BQ138	BQ139	BQ140	BQ141	BQ142	BQ143	BQ144	BQ145	BQ146	BQ147	BQ148	BQ149	BQ150	BQ151	BQ152	BQ153	BQ154	BQ155	BQ156	BQ157	BQ158	BQ159	BQ160	BQ161	BQ162	BQ163	BQ164	BQ165	BQ166	BQ167	BQ168	BQ169	BQ170	BQ171	BQ172	BQ173	BQ174	BQ175	BQ176	BQ177	BQ178	BQ179	BQ180	BQ181	BQ182	BQ183	BQ184	BQ185	BQ186	BQ187	BQ188	BQ189	BQ190	BQ191	BQ192	BQ193	BQ194	BQ195	BQ196	BQ197	BQ198	BQ199	BQ200	BQ201	BQ202	BQ203	BQ204	BQ205	BQ206	BQ207	BQ208	BQ209	BQ210	BQ211	BQ212	BQ213	BQ214	BQ215	BQ216	BQ217	BQ218	BQ219	BQ220	BQ221	BQ222	BQ223	BQ224	BQ225	BQ226	BQ227	BQ228	BQ229	BQ230	BQ231	BQ232	BQ233	BQ234	BQ235	BQ236	BQ237	BQ238	BQ239	BQ240	BQ241	BQ242	BQ243	BQ244	BQ245	BQ246	BQ247	BQ248	BQ249	BQ250	BQ251	BQ252	BQ253	BQ254	BQ255	BQ256	BQ257	BQ258	BQ259	BQ260	BQ261	BQ262	BQ263	BQ264	BQ265	BQ266	BQ267	BQ268	BQ269	BQ270	BQ271	BQ272	BQ273	BQ274	BQ275	BQ276	BQ277	BQ278	BQ279	BQ280	BQ281	BQ282	BQ283	BQ284	BQ285	BQ286	BQ287	BQ288	BQ289	BQ290	BQ291	BQ292	BQ293	BQ294	BQ295	BQ296	BQ297	BQ298	BQ299	BQ300	BQ301	BQ302	BQ303	BQ304	BQ305	BQ306	BQ307	BQ308	BQ309	BQ310	BQ311	BQ312	BQ313	BQ314	BQ315	BQ316	BQ317	BQ318	BQ319	BQ320	BQ321	BQ322	BQ323	BQ324	BQ325	BQ326	BQ327	BQ328	BQ329	BQ330	BQ331	BQ332	BQ333	BQ334	BQ335	BQ336	BQ337	BQ338	BQ339	BQ340	BQ341	BQ342	BQ343	BQ344	BQ345	BQ346	BQ347	BQ348	BQ349	BQ350	BQ351	BQ352	BQ353	BQ354	BQ355	BQ356	BQ357	BQ358	BQ359	BQ360	BQ361	BQ362	BQ363	BQ364	BQ365	BQ366	BQ367	BQ368	BQ369	BQ370	BQ371	BQ372	BQ373	BQ374	BQ375	BQ376	BQ377	BQ378	BQ379	BQ380	BQ381	BQ382	BQ383	BQ384	BQ385	BQ386	BQ387	BQ388	BQ389	BQ390	BQ391	BQ392	BQ393	BQ394	BQ395	BQ396	BQ397	BQ398	BQ399	BQ400	BQ401	BQ402	BQ403	BQ404	BQ405	BQ406	BQ407	BQ408	BQ409	BQ410	BQ411	BQ412	BQ413	BQ414	BQ415	BQ416	BQ417	BQ418	BQ419	BQ420	BQ421	BQ422	BQ423	BQ424	BQ425	BQ426	BQ427	BQ428	BQ429	BQ43
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[illegible]

PRO	GRP	CLASS	DOB	SEX	REL	SIB	FAMNO	FAMEN	APFL	BO	BP	ORADR	HED	HEDF	BULLY	PHERR	HOB	PHSL	AD	HEDZA	FB	MAP	THWRT	SEEN	EMTA	HARR	APPT	HE	PRDU	FAMEN	V	DEAB	ANK	DEP	SPR	BPD	EAT	ADD	ADDP	OTH	BQ1	BQ2	BQ3	BQ4	BQ5	BQ6	BQ7	BQ8	BQ9	BQ10	BQ11	BQ12	BQ13	BQ14	BQ15	BQ16	BQ17	BQ18	BQ19	BQ20	BQ21	BQ22	BQ23	BQ24	BQ25	BQ26	BQ27	BQ28	BQ29	BQ30	BQ31	BQ32	BQ33	BQ34	BQ35	BQ36	BQ37	BQ38	BQ39	BQ40	BQ41	BQ42	BQ43	BQ44	BQ45	BQ46	BQ47	BQ48	BQ49	BQ50	BQ51	BQ52	BQ53	BQ54	BQ55	BQ56	BQ57	BQ58	BQ59	BQ60	BQ61	BQ62	BQ63	BQ64	BQ65	BQ66	BQ67	BQ68	BQ69	BQ70	BQ71	BQ72	BQ73	BQ74	BQ75	BQ76	BQ77	BQ78	BQ79	BQ80	BQ81	BQ82	BQ83	BQ84	BQ85	BQ86	BQ87	BQ88	BQ89	BQ90	BQ91	BQ92	BQ93	BQ94	BQ95	BQ96	BQ97	BQ98	BQ99	BQ100	BQ101	BQ102	BQ103	BQ104	BQ105	BQ106	BQ107	BQ108	BQ109	BQ110	BQ111	BQ112	BQ113	BQ114	BQ115	BQ116	BQ117	BQ118	BQ119	BQ120	BQ121	BQ122	BQ123	BQ124	BQ125	BQ126	BQ127	BQ128	BQ129	BQ130	BQ131	BQ132	BQ133	BQ134	BQ135	BQ136	BQ137	BQ138	BQ139	BQ140	BQ141	BQ142	BQ143	BQ144	BQ145	BQ146	BQ147	BQ148	BQ149	BQ150	BQ151	BQ152	BQ153	BQ154	BQ155	BQ156	BQ157	BQ158	BQ159	BQ160	BQ161	BQ162	BQ163	BQ164	BQ165	BQ166	BQ167	BQ168	BQ169	BQ170	BQ171	BQ172	BQ173	BQ174	BQ175	BQ176	BQ177	BQ178	BQ179	BQ180	BQ181	BQ182	BQ183	BQ184	BQ185	BQ186	BQ187	BQ188	BQ189	BQ190	BQ191	BQ192	BQ193	BQ194	BQ195	BQ196	BQ197	BQ198	BQ199	BQ200	BQ201	BQ202	BQ203	BQ204	BQ205	BQ206	BQ207	BQ208	BQ209	BQ210	BQ211	BQ212	BQ213	BQ214	BQ215	BQ216	BQ217	BQ218	BQ219	BQ220	BQ221	BQ222	BQ223	BQ224	BQ225	BQ226	BQ227	BQ228	BQ229	BQ230	BQ231	BQ232	BQ233	BQ234	BQ235	BQ236	BQ237	BQ238	BQ239	BQ240	BQ241	BQ242	BQ243	BQ244	BQ245	BQ246	BQ247	BQ248	BQ249	BQ250	BQ251	BQ252	BQ253	BQ254	BQ255	BQ256	BQ257	BQ258	BQ259	BQ260	BQ261	BQ262	BQ263	BQ264	BQ265	BQ266	BQ267	BQ268	BQ269	BQ270	BQ271	BQ272	BQ273	BQ274	BQ275	BQ276	BQ277	BQ278	BQ279	BQ280	BQ281	BQ282	BQ283	BQ284	BQ285	BQ286	BQ287	BQ288	BQ289	BQ290	BQ291	BQ292	BQ293	BQ294	BQ295	BQ296	BQ297	BQ298	BQ299	BQ300	BQ301	BQ302	BQ303	BQ304	BQ305	BQ306	BQ307	BQ308	BQ309	BQ310	BQ311	BQ312	BQ313	BQ314	BQ315	BQ316	BQ317	BQ318	BQ319	BQ320	BQ321	BQ322	BQ323	BQ324	BQ325	BQ326	BQ327	BQ328	BQ329	BQ330	BQ331	BQ332	BQ333	BQ334	BQ335	BQ336	BQ337	BQ338	BQ339	BQ340	BQ341	BQ342	BQ343	BQ344	BQ345	BQ346	BQ347	BQ348	BQ349	BQ350	BQ351	BQ352	BQ353	BQ354	BQ355	BQ356	BQ357	BQ358	BQ359	BQ360	BQ361	BQ362	BQ363	BQ364	BQ365	BQ366	BQ367	BQ368	BQ369	BQ370	BQ371	BQ372	BQ373	BQ374	BQ375	BQ376	BQ377	BQ378	BQ379	BQ380	BQ381	BQ382	BQ383	BQ384	BQ385	BQ386	BQ387	BQ388	BQ389	BQ390	BQ391	BQ392	BQ393	BQ394	BQ395	BQ396	BQ397	BQ398	BQ399	BQ400	BQ401	BQ402	BQ403	BQ404	BQ405	BQ406	BQ407	BQ408	BQ409	BQ410	BQ411	BQ412	BQ413	BQ414	BQ415	BQ416	BQ417	BQ418	BQ419	BQ420	BQ421	BQ422	BQ423	BQ424	BQ425	BQ426	BQ427	BQ428	BQ429	BQ430	BQ431	BQ432	BQ433	BQ434	BQ435	BQ436	BQ437	BQ438	BQ439	BQ440	BQ441	BQ442	BQ443	BQ444	BQ445	BQ446	BQ447	BQ448	BQ449	BQ450	BQ451	BQ452	BQ453	BQ454	BQ455	BQ456	BQ457	BQ458	BQ459	BQ460	BQ461	BQ462	BQ463	BQ464	BQ465	BQ466	BQ467	BQ468	BQ469	BQ470	BQ471	BQ472	BQ473	BQ474	BQ475	BQ476	BQ477	BQ478	BQ479	BQ480	BQ481	BQ482	BQ483	BQ484	BQ485	BQ486	BQ487	BQ488	BQ489	BQ490	BQ491	BQ492	BQ493	BQ494	BQ495	BQ496	BQ497	BQ498	BQ499	BQ500	BQ501	BQ502	BQ503	BQ504	BQ505	BQ506	BQ507	BQ508	BQ509	BQ510	BQ511	BQ512	BQ513	BQ514	BQ515	BQ516	BQ517	BQ518	BQ519	BQ520	BQ521	BQ522	BQ523	BQ524	BQ525	BQ526	BQ527	BQ528	BQ529	BQ530	BQ531	BQ532	BQ533	BQ534	BQ535	BQ536	BQ537	BQ538	BQ539	BQ540	BQ541	BQ542	BQ543	BQ544	BQ545	BQ546	BQ547	BQ548	BQ549	BQ550	BQ551	BQ552	BQ553	BQ554	BQ555	BQ556	BQ557	BQ558	BQ559	BQ560	BQ561	BQ562	BQ563	BQ564	BQ565	BQ566	BQ567	BQ568	BQ569	BQ570	BQ571	BQ572	BQ573	BQ574	BQ575	BQ576	BQ577	BQ578	BQ579	BQ580	BQ581	BQ582	BQ583	BQ584	BQ585	BQ586	BQ587	BQ588	BQ589	BQ590	BQ591	BQ592	BQ593	BQ594	BQ595	BQ596	BQ597	BQ598	BQ599	BQ600	BQ601	BQ602	BQ603	BQ604	BQ605	BQ606	BQ607	BQ608	BQ609	BQ610	BQ611	BQ612	BQ613	BQ614	BQ615	BQ616	BQ617	BQ618	BQ619	BQ620	BQ621	BQ622	BQ623	BQ624	BQ625	BQ626	BQ627	BQ628	BQ629	BQ630	BQ631	BQ632	BQ633	BQ634	BQ635	BQ636	BQ637	BQ638	BQ639	BQ640	BQ641	BQ642	BQ643	BQ644	BQ645	BQ646	BQ647	BQ648	BQ649	BQ650	BQ651	BQ652	BQ653	BQ654	BQ655	BQ656	BQ657	BQ658	BQ659	BQ660	BQ661	BQ662	BQ663	BQ664	BQ665	BQ666	BQ667	BQ668	BQ669	BQ670	BQ671	BQ672	BQ673	BQ674	BQ675	BQ676	BQ677	BQ678	BQ679	BQ680	BQ681	BQ682	BQ683	BQ684	BQ685	BQ686	BQ687	BQ688	BQ689	BQ690	BQ691	BQ692	BQ693	BQ694	BQ695	BQ696	BQ697	BQ698	BQ699	BQ700	BQ701	BQ702	BQ703	BQ704	BQ705	BQ706	BQ707	BQ708	BQ709	BQ710	BQ711	BQ712	BQ713	BQ714	BQ715	BQ716	BQ717	BQ718	BQ719	BQ720	BQ721	BQ722	BQ723	BQ724	BQ725	BQ726	BQ727	BQ728	BQ729	BQ730	BQ731	BQ732	BQ733	BQ734	BQ735	BQ736	BQ737	BQ738	BQ739	BQ740	BQ741	BQ742	BQ743	BQ744	BQ745	BQ746	BQ747	BQ748	BQ749	BQ750	BQ751	BQ752	BQ753	BQ754	BQ755	BQ756	BQ757	BQ758	BQ759	BQ760	BQ761	BQ762	BQ763	BQ764	BQ765	BQ766	BQ767	BQ768	BQ769	BQ770	BQ771	BQ772	BQ773	BQ774	BQ775	BQ776	BQ777	BQ778	BQ779	BQ780	BQ781	BQ782	BQ783	BQ784	BQ785	BQ786	BQ787	BQ788	BQ789	BQ790	BQ791	BQ792	BQ793	BQ794	BQ795	BQ796	BQ797	BQ798	BQ799	BQ800	BQ801	BQ802	BQ803	BQ804	BQ805	BQ806	BQ807	BQ808	BQ809	BQ810	BQ811	BQ812	BQ813	BQ814	BQ815	BQ816	BQ817	BQ818	BQ819	BQ820	BQ821	BQ822	BQ823	BQ824	BQ825	BQ826	BQ827	BQ828	BQ829	BQ830	BQ831	BQ832	BQ833	BQ834	BQ835	BQ836	BQ837	BQ838	BQ839	BQ840	BQ841	BQ842	BQ843	BQ844	BQ845	BQ846	BQ847	BQ848	BQ849	BQ850	BQ851	BQ852	BQ853	BQ854	BQ855	BQ856	BQ857	BQ858	BQ859	BQ860	BQ861	BQ862	BQ863	BQ864	BQ865	BQ866	BQ867	BQ868	BQ869	BQ870	BQ871	BQ872	BQ873	BQ874	BQ875	BQ876	BQ877	BQ878	BQ879	BQ880	BQ881	BQ882	BQ883	BQ884	BQ885	BQ886	BQ887	BQ888	BQ889	BQ890	BQ891	BQ892	BQ893	BQ894	BQ895	BQ896	BQ897	BQ898	BQ899	BQ900	BQ901	BQ902	BQ903	BQ904	BQ905	BQ906	BQ907	BQ908	BQ909	BQ910	BQ911	BQ912	BQ913	BQ914	BQ915	BQ916	BQ917	BQ918	BQ919	BQ920	BQ921	BQ922	BQ923	BQ924	BQ925	BQ926	BQ927	BQ928	BQ929	BQ930	BQ931	BQ932	BQ933	BQ934	BQ935	BQ936	BQ937	BQ938	BQ939	BQ940	BQ941	BQ942	BQ943	BQ944	BQ945	BQ946	BQ947	BQ948	BQ949	BQ950	BQ951	BQ952	BQ953	BQ954	BQ955	BQ956	BQ957	BQ958	BQ959	BQ960	BQ961	BQ962	BQ963	BQ964	BQ965	BQ966	BQ967	BQ968	BQ969	BQ970	BQ971	BQ972	BQ973	BQ974	BQ975	BQ976	BQ977	BQ978	BQ979	BQ980	BQ981	BQ982	BQ983	BQ984	BQ985	BQ986	BQ987	BQ988	BQ989	BQ990	BQ991	BQ992	BQ993	BQ994	BQ995	BQ996	BQ997	BQ998	BQ999	BQ1000	BQ1001	BQ1002	BQ1003	BQ1004	BQ1005	BQ1006	BQ1007	BQ1008	BQ1009	BQ1010	BQ1011	BQ1012	BQ1013	BQ1014	BQ1015	BQ1016	BQ1017	BQ1018	BQ1019	BQ1020	BQ1021	BQ1022	BQ1023	BQ1024	BQ1025	BQ1026	BQ1027	BQ1028	BQ1029	BQ1030	BQ1031	BQ1032	BQ1033	BQ1034	BQ1035	BQ1036	BQ1037	BQ1038	BQ1039	BQ1040	BQ1041	BQ1042	BQ1043	BQ1044	BQ1045	BQ1046	BQ1047	BQ1048	BQ1049	BQ1050	BQ1051	BQ1052	BQ1053	BQ1054	BQ1055	BQ1056	BQ1057	BQ1058	BQ1059	BQ1060	BQ1061	BQ1062	BQ1063	BQ1064	BQ1065	BQ1066	BQ1067	BQ1068	BQ1069	BQ1070	BQ1071	BQ1072	BQ1073	BQ1074	BQ1075	BQ1076	BQ1077	BQ1078	BQ1079	BQ1080	BQ1081	BQ1082	BQ1083	BQ1084	BQ1085	BQ1086	BQ1087	BQ1088	BQ1089	BQ1090	BQ1091	BQ1092	BQ1093	BQ1094	BQ1095	BQ1096	BQ1097	BQ1098	BQ1099	BQ1100	BQ1101	BQ1102	BQ1103	BQ1104	BQ1105	BQ1106	BQ1107	BQ1108	BQ1109	BQ1110	BQ1111	BQ1112	BQ1113	BQ1114	BQ1115	BQ1116	BQ1117	BQ1118	BQ1119	BQ1120	BQ1121	BQ1122	BQ1123	BQ1124	BQ1125	BQ1126	BQ1127	BQ1128	BQ1129	BQ1130	BQ1131	BQ1132	BQ1133	BQ1134	BQ1135	BQ1136	BQ1137	BQ1138	BQ1139	BQ1140	BQ1141	BQ1142	BQ1143	BQ1144	BQ1145	BQ1146	BQ1147	BQ1148	BQ1149	BQ1150	BQ1151	BQ1152	BQ1153	BQ1154	BQ1155	BQ1156	BQ1157	BQ1158	BQ1159	BQ1160	BQ1161	BQ1162	BQ1163	BQ1164	BQ1165	BQ1166	BQ1167	BQ1168	BQ1169	BQ1170	BQ1171	BQ1172	BQ1173	BQ1174	BQ1175	BQ1176	BQ1177	BQ1178	BQ1179	BQ1180	BQ1181	BQ1182	BQ1183	BQ1184	BQ1185	BQ1186	BQ1187	BQ1188	BQ1189	BQ1190	BQ1191	BQ1192	BQ1193	BQ1194	BQ1195	BQ1196	BQ1197	BQ1198	BQ1199	BQ1200	BQ1201	BQ1202	BQ1203	BQ1204	BQ1205	BQ1206	BQ1207	BQ1208	BQ1209	BQ1210	BQ1211	BQ1212	BQ1213	BQ1214	BQ1215	BQ1216	BQ1217	BQ1218	BQ1219	BQ1220	BQ1221	BQ1222	BQ1223	BQ1224	BQ1225	BQ1226	BQ1227	BQ1228	BQ1229	BQ1230	BQ1231	BQ1232	BQ1233	BQ1234	BQ1235	BQ1236	BQ1237	BQ1238	BQ1239	BQ1240	BQ1241	BQ1242	BQ1243	BQ1244	BQ1245	BQ1246	BQ1247	BQ1248	BQ1249	BQ1250	BQ1251	BQ1252	BQ1253	BQ1254	BQ1255	BQ1256	BQ1257	BQ1258	BQ1259	BQ1260	BQ1261	BQ1262	BQ1263	BQ1264	BQ1265	BQ1266	BQ1267	BQ1268	BQ1269	BQ1270	BQ1271	BQ1272	BQ1273	BQ1274	BQ1275	BQ1276	BQ1277	BQ1278	BQ1279	BQ1280	BQ1281	BQ1282	BQ1283	BQ1284	BQ1285	BQ1286	BQ1287	BQ1288	BQ1289	BQ1290	BQ1291	BQ1292	BQ1293	BQ1294	BQ1295	BQ1296	BQ1297	BQ1298	BQ1299	BQ1300	BQ1301	BQ1302	BQ1303	BQ1304	BQ1305	BQ1306	BQ1307	BQ1308	BQ1309	BQ1310	BQ1311	BQ1312	BQ1313	BQ1314	BQ1315	BQ1316	BQ1317	BQ1318	BQ1319	BQ1320</
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FPO	GRP	CLARK	DOD	SEX	REL	RIB	PANRO	PANIN	APPL	BO	SP	GRADE	RED	MOD	BULLY	PHYS	HOS	PUBLS AD	MEDIA	PS	MAP	TWENT	RENT	IBNRT	GARE	APPLY NG	PSDU	PANIN V	DIAO	ANX	DEP	SPR	BAT	ADD	ADND	OTN	RQ1	RQ2	RQ3	RQ4	RQ5	RQ6	RQ7	RQ8	RQ9	RQ10	RQ11	RQ12	RQ13	RQ14	RQ15	RQ16	RQ17	RQ18	RQ19	RQ20	RQ21	RQ22	RQ23	RQ24	RQ25	RQ26	RQ27	RQ28	RQ29	RQ30	RQ31	RQ32	RQ33	RQ34	RQ35	RQ36	RQ37	RQ38	RQ39	RQ40	RQ41	RQ42	RQ43	RQ44	RQ45	RQ46	RQ47	RQ48	RQ49	RQ50	RQ51	RQ52	RQ53	RQ54	RQ55	RQ56	RQ57	RQ58	RQ59	RQ60	RQ61	RQ62	RQ63	RQ64	RQ65	RQ66	RQ67	RQ68	RQ69	RQ70	RQ71	RQ72	RQ73	RQ74	RQ75	RQ76	RQ77	RQ78	RQ79	RQ80	RQ81	RQ82	RQ83	RQ84	RQ85	RQ86	RQ87	RQ88	RQ89	RQ90	RQ91	RQ92	RQ93	RQ94	RQ95	RQ96	RQ97	RQ98	RQ99	RQ100	RQ101	RQ102	RQ103	RQ104	RQ105	RQ106	RQ107	RQ108	RQ109	RQ110	RQ111	RQ112	RQ113	RQ114	RQ115	RQ116	RQ117	RQ118	RQ119	RQ120	RQ121	RQ122	RQ123	RQ124	RQ125	RQ126	RQ127	RQ128	RQ129	RQ130	RQ131	RQ132	RQ133	RQ134	RQ135	RQ136	RQ137	RQ138	RQ139	RQ140	RQ141	RQ142	RQ143	RQ144	RQ145	RQ146	RQ147	RQ148	RQ149	RQ150	RQ151	RQ152	RQ153	RQ154	RQ155	RQ156	RQ157	RQ158	RQ159	RQ160	RQ161	RQ162	RQ163	RQ164	RQ165	RQ166	RQ167	RQ168	RQ169	RQ170	RQ171	RQ172	RQ173	RQ174	RQ175	RQ176	RQ177	RQ178	RQ179	RQ180	RQ181	RQ182	RQ183	RQ184	RQ185	RQ186	RQ187	RQ188	RQ189	RQ190	RQ191	RQ192	RQ193	RQ194	RQ195	RQ196	RQ197	RQ198	RQ199	RQ200	RQ201	RQ202	RQ203	RQ204	RQ205	RQ206	RQ207	RQ208	RQ209	RQ210	RQ211	RQ212	RQ213	RQ214	RQ215	RQ216	RQ217	RQ218	RQ219	RQ220	RQ221	RQ222	RQ223	RQ224	RQ225	RQ226	RQ227	RQ228	RQ229	RQ230	RQ231	RQ232	RQ233	RQ234	RQ235	RQ236	RQ237	RQ238	RQ239	RQ240	RQ241	RQ242	RQ243	RQ244	RQ245	RQ246	RQ247	RQ248	RQ249	RQ250	RQ251	RQ252	RQ253	RQ254	RQ255	RQ256	RQ257	RQ258	RQ259	RQ260	RQ261	RQ262	RQ263	RQ264	RQ265	RQ266	RQ267	RQ268	RQ269	RQ270	RQ271	RQ272	RQ273	RQ274	RQ275	RQ276	RQ277	RQ278	RQ279	RQ280	RQ281	RQ282	RQ283	RQ284	RQ285	RQ286	RQ287	RQ288	RQ289	RQ290	RQ291	RQ292	RQ293	RQ294	RQ295	RQ296	RQ297	RQ298	RQ299	RQ300	RQ301	RQ302	RQ303	RQ304	RQ305	RQ306	RQ307	RQ308	RQ309	RQ310	RQ311	RQ312	RQ313	RQ314	RQ315	RQ316	RQ317	RQ318	RQ319	RQ320	RQ321	RQ322	RQ323	RQ324	RQ325	RQ326	RQ327	RQ328	RQ329	RQ330	RQ331	RQ332	RQ333	RQ334	RQ335	RQ336	RQ337	RQ338	RQ339	RQ340	RQ341	RQ342	RQ343	RQ344	RQ345	RQ346	RQ347	RQ348	RQ349	RQ350	RQ351	RQ352	RQ353	RQ354	RQ355	RQ356	RQ357	RQ358	RQ359	RQ360	RQ361	RQ362	RQ363	RQ364	RQ365	RQ366	RQ367	RQ368	RQ369	RQ370	RQ371	RQ372	RQ373	RQ374	RQ375	RQ376	RQ377	RQ378	RQ379	RQ380	RQ381	RQ382	RQ383	RQ384	RQ385	RQ386	RQ387	RQ388	RQ389	RQ390	RQ391	RQ392	RQ393	RQ394	RQ395	RQ396	RQ397	RQ398	RQ399	RQ400	RQ401	RQ402	RQ403	RQ404	RQ405	RQ406	RQ407	RQ408	RQ409	RQ410	RQ411	RQ412	RQ413	RQ414	RQ415	RQ416	RQ417	RQ418	RQ419	RQ420	RQ421	RQ422	RQ423	RQ424	RQ425	RQ426	RQ427	RQ428	RQ429	RQ430	RQ431	RQ432	RQ433	RQ434	RQ435	RQ436	RQ437	RQ438	RQ439	RQ4
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PRO	GRP	CLASS	DOB	SEX	REL	SIB	FAMNO	FAMEN	APPL	BO	OP	ORADR	HEP	MEFP	BULLY	PHERR	MOB	PHSLB AD	HEDEX	FB	MAP	THWRT	SEEN	EMRTA	NAME	APPLYT ME	PHDV	FAMEN V	DEAB	ANK	DEP	SFR	BPD	EAT	ADD	ADDP	OTH	BQ1	BQ2	BQ3	BQ4	BQ5	BQ6	BQ7	BQ8	BQ9	BQ10	BQ11	BQ12	BQ13	BQ14	BQ15	BQ16	BQ17	BQ18	BQ19	BQ20	BQ21	BQ22	BQ23	BQ24	BQ25	BQ26	BQ27	BQ28	BQ29	BQ30	BQ31	BQ32	BQ33	BQ34	BQ35	BQ36	BQ37	BQ38	BQ39	BQ40	BQ41	BQ42	BQ43	BQ44	BQ45	BQ46	BQ47	BQ48	BQ49	BQ50	BQ51	BQ52	BQ53	BQ54	BQ55	BQ56	BQ57	BQ58	BQ59	BQ60	BQ61	BQ62	BQ63	BQ64	BQ65	BQ66	BQ67	BQ68	BQ69	BQ70	BQ71	BQ72	BQ73	BQ74	BQ75	BQ76	BQ77	BQ78	BQ79	BQ80	BQ81	BQ82	BQ83	BQ84	BQ85	BQ86	BQ87	BQ88	BQ89	BQ90	BQ91	BQ92	BQ93	BQ94	BQ95	BQ96	BQ97	BQ98	BQ99	BQ100	BQ101	BQ102	BQ103	BQ104	BQ105	BQ106	BQ107	BQ108	BQ109	BQ110	BQ111	BQ112	BQ113	BQ114	BQ115	BQ116	BQ117	BQ118	BQ119	BQ120	BQ121	BQ122	BQ123	BQ124	BQ125	BQ126	BQ127	BQ128	BQ129	BQ130	BQ131	BQ132	BQ133	BQ134	BQ135	BQ136	BQ137	BQ138	BQ139	BQ140	BQ141	BQ142	BQ143	BQ144	BQ145	BQ146	BQ147	BQ148	BQ149	BQ150	BQ151	BQ152	BQ153	BQ154	BQ155	BQ156	BQ157	BQ158	BQ159	BQ160	BQ161	BQ162	BQ163	BQ164	BQ165	BQ166	BQ167	BQ168	BQ169	BQ170	BQ171	BQ172	BQ173	BQ174	BQ175	BQ176	BQ177	BQ178	BQ179	BQ180	BQ181	BQ182	BQ183	BQ184	BQ185	BQ186	BQ187	BQ188	BQ189	BQ190	BQ191	BQ192	BQ193	BQ194	BQ195	BQ196	BQ197	BQ198	BQ199	BQ200	BQ201	BQ202	BQ203	BQ204	BQ205	BQ206	BQ207	BQ208	BQ209	BQ210	BQ211	BQ212	BQ213	BQ214	BQ215	BQ216	BQ217	BQ218	BQ219	BQ220	BQ221	BQ222	BQ223	BQ224	BQ225	BQ226	BQ227	BQ228	BQ229	BQ230	BQ231	BQ232	BQ233	BQ234	BQ235	BQ236	BQ237	BQ238	BQ239	BQ240	BQ241	BQ242	BQ243	BQ244	BQ245	BQ246	BQ247	BQ248	BQ249	BQ250	BQ251	BQ252	BQ253	BQ254	BQ255	BQ256	BQ257	BQ258	BQ259	BQ260	BQ261	BQ262	BQ263	BQ264	BQ265	BQ266	BQ267	BQ268	BQ269	BQ270	BQ271	BQ272	BQ273	BQ274	BQ275	BQ276	BQ277	BQ278	BQ279	BQ280	BQ281	BQ282	BQ283	BQ284	BQ285	BQ286	BQ287	BQ288	BQ289	BQ290	BQ291	BQ292	BQ293	BQ294	BQ295	BQ296	BQ297	BQ298	BQ299	BQ300	BQ301	BQ302	BQ303	BQ304	BQ305	BQ306	BQ307	BQ308	BQ309	BQ310	BQ311	BQ312	BQ313	BQ314	BQ315	BQ316	BQ317	BQ318	BQ319	BQ320	BQ321	BQ322	BQ323	BQ324	BQ325	BQ326	BQ327	BQ328	BQ329	BQ330	BQ331	BQ332	BQ333	BQ334	BQ335	BQ336	BQ337	BQ338	BQ339	BQ340	BQ341	BQ342	BQ343	BQ344	BQ345	BQ346	BQ347	BQ348	BQ349	BQ350	BQ351	BQ352	BQ353	BQ354	BQ355	BQ356	BQ357	BQ358	BQ359	BQ360	BQ361	BQ362	BQ363	BQ364	BQ365	BQ366	BQ367	BQ368	BQ369	BQ370	BQ371	BQ372	BQ373	BQ374	BQ375	BQ376	BQ377	BQ378	BQ379	BQ380	BQ381	BQ382	BQ383	BQ384	BQ385	BQ386	BQ387	BQ388	BQ389	BQ390	BQ391	BQ392	BQ393	BQ394	BQ395	BQ396	BQ397	BQ398	BQ399	BQ400	BQ401	BQ402	BQ403	BQ404	BQ405	BQ406	BQ407	BQ408	BQ409	BQ410	BQ411	BQ412	BQ413	BQ414	BQ415	BQ416	BQ417	BQ418	BQ419	BQ420	BQ421	BQ422	BQ423	BQ424	BQ425	BQ426	BQ427	BQ428	BQ429	BQ430	BQ431	BQ432	BQ433	BQ434	BQ435	BQ436	BQ437	BQ438	BQ439	BQ440	BQ441	BQ442	BQ443	BQ444	BQ445	BQ446	BQ447	BQ448	BQ449	BQ450	BQ451	BQ452	BQ453	BQ454	BQ455	BQ456	BQ457	BQ458	BQ459	BQ460	BQ461	BQ462	BQ463	BQ464	BQ465	BQ466	BQ467	BQ468	BQ469	BQ470	BQ471	BQ472	BQ473	BQ474	BQ475	BQ476	BQ477	BQ478	BQ479	BQ480	BQ481	BQ482	BQ483	BQ484	BQ485	BQ486	BQ487	BQ488	BQ489	BQ490	BQ491	BQ492	BQ493	BQ494	BQ495	BQ496	BQ497	BQ498	BQ499	BQ500	BQ501	BQ502	BQ503	BQ504	BQ505	BQ506	BQ507	BQ508	BQ509	BQ510	BQ511	BQ512	BQ513	BQ514	BQ515	BQ516	BQ517	BQ518	BQ519	BQ520	BQ521	BQ522	BQ523	BQ524	BQ525	BQ526	BQ527	BQ528	BQ529	BQ530	BQ531	BQ532	BQ533	BQ534	BQ535	BQ536	BQ537	BQ538	BQ539	BQ540	BQ541	BQ542	BQ543	BQ544	BQ545	BQ546	BQ547	BQ548	BQ549	BQ550	BQ551	BQ552	BQ553	BQ554	BQ555	BQ556	BQ557	BQ558	BQ559	BQ560	BQ561	BQ562	BQ563	BQ564	BQ565	BQ566	BQ567	BQ568	BQ569	BQ570	BQ571	BQ572	BQ573	BQ574	BQ575	BQ576	BQ577	BQ578	BQ579	BQ580	BQ581	BQ582	BQ583	BQ584	BQ585	BQ586	BQ587	BQ588	BQ589	BQ590	BQ591	BQ592	BQ593	BQ594	BQ595	BQ596	BQ597	BQ598	BQ599	BQ600	BQ601	BQ602	BQ603	BQ604	BQ605	BQ606	BQ607	BQ608	BQ609	BQ610	BQ611	BQ612	BQ613	BQ614	BQ615	BQ616	BQ617	BQ618	BQ619	BQ620	BQ621	BQ622	BQ623	BQ624	BQ625	BQ626	BQ627	BQ628	BQ629	BQ630	BQ631	BQ632	BQ633	BQ634	BQ635	BQ636	BQ637	BQ638	BQ639	BQ640	BQ641	BQ642	BQ643	BQ644	BQ645	BQ646	BQ647	BQ648	BQ649	BQ650	BQ651	BQ652	BQ653	BQ654	BQ655	BQ656	BQ657	BQ658	BQ659	BQ660	BQ661	BQ662	BQ663	BQ664	BQ665	BQ666	BQ667	BQ668	BQ669	BQ670	BQ671	BQ672	BQ673	BQ674	BQ675	BQ676	BQ677	BQ678	BQ679	BQ680	BQ681	BQ682	BQ683	BQ684	BQ685	BQ686	BQ687	BQ688	BQ689	BQ690	BQ691	BQ692	BQ693	BQ694	BQ695	BQ696	BQ697	BQ698	BQ699	BQ700	BQ701	BQ702	BQ703	BQ704	BQ705	BQ706	BQ707	BQ708	BQ709	BQ710	BQ711	BQ712	BQ713	BQ714	BQ715	BQ716	BQ717	BQ718	BQ719	BQ720	BQ721	BQ722	BQ723	BQ724	BQ725	BQ726	BQ727	BQ728	BQ729	BQ730	BQ731	BQ732	BQ733	BQ734	BQ735	BQ736	BQ737	BQ738	BQ739	BQ740	BQ741	BQ742	BQ743	BQ744	BQ745	BQ746	BQ747	BQ748	BQ749	BQ750	BQ751	BQ752	BQ753	BQ754	BQ755	BQ756	BQ757	BQ758	BQ759	BQ760	BQ761	BQ762	BQ763	BQ764	BQ765	BQ766	BQ767	BQ768	BQ769	BQ770	BQ771	BQ772	BQ773	BQ774	BQ775	BQ776	BQ777	BQ778	BQ779	BQ780	BQ781	BQ782	BQ783	BQ784	BQ785	BQ786	BQ787	BQ788	BQ789	BQ790	BQ791	BQ792	BQ793	BQ794	BQ795	BQ796	BQ797	BQ798	BQ799	BQ800	BQ801	BQ802	BQ803	BQ804	BQ805	BQ806	BQ807	BQ808	BQ809	BQ810	BQ811	BQ812	BQ813	BQ814	BQ815	BQ816	BQ817	BQ818	BQ819	BQ820	BQ821	BQ822	BQ823	BQ824	BQ825	BQ826	BQ827	BQ828	BQ829	BQ830	BQ831	BQ832	BQ833	BQ834	BQ835	BQ836	BQ837	BQ838	BQ839	BQ840	BQ841	BQ842	BQ843	BQ844	BQ845	BQ846	BQ847	BQ848	BQ849	BQ850	BQ851	BQ852	BQ853	BQ854	BQ855	BQ856	BQ857	BQ858	BQ859	BQ860	BQ861	BQ862	BQ863	BQ864	BQ865	BQ866	BQ867	BQ868	BQ869	BQ870	BQ871	BQ872	BQ873	BQ874	BQ875	BQ876	BQ877	BQ878	BQ879	BQ880	BQ881	BQ882	BQ883	BQ884	BQ885	BQ886	BQ887	BQ888	BQ889	BQ890	BQ891	BQ892	BQ893	BQ894	BQ895	BQ896	BQ897	BQ898	BQ899	BQ900	BQ901	BQ902	BQ903	BQ904	BQ905	BQ906	BQ907	BQ908	BQ909	BQ910	BQ911	BQ912	BQ913	BQ914	BQ915	BQ916	BQ917	BQ918	BQ919	BQ920	BQ921	BQ922	BQ923	BQ924	BQ925	BQ926	BQ927	BQ928	BQ929	BQ930	BQ931	BQ932	BQ933	BQ934	BQ935	BQ936	BQ937	BQ938	BQ939	BQ940	BQ941	BQ942	BQ943	BQ944	BQ945	BQ946	BQ947	BQ948	BQ949	BQ950	BQ951	BQ952	BQ953	BQ954	BQ955	BQ956	BQ957	BQ958	BQ959	BQ960	BQ961	BQ962	BQ963	BQ964	BQ965	BQ966	BQ967	BQ968	BQ969	BQ970	BQ971	BQ972	BQ973	BQ974	BQ975	BQ976	BQ977	BQ978	BQ979	BQ980	BQ981	BQ982	BQ983	BQ984	BQ985	BQ986	BQ987	BQ988	BQ989	BQ990	BQ991	BQ992	BQ993	BQ994	BQ995	BQ996	BQ997	BQ998	BQ999	BQ1000	BQ1001	BQ1002	BQ1003	BQ1004	BQ1005	BQ1006	BQ1007	BQ1008	BQ1009	BQ1010	BQ1011	BQ1012	BQ1013	BQ1014	BQ1015	BQ1016	BQ1017	BQ1018	BQ1019	BQ1020	BQ1021	BQ1022	BQ1023	BQ1024	BQ1025	BQ1026	BQ1027	BQ1028	BQ1029	BQ1030	BQ1031	BQ1032	BQ1033	BQ1034	BQ1035	BQ1036	BQ1037	BQ1038	BQ1039	BQ1040	BQ1041	BQ1042	BQ1043	BQ1044	BQ1045	BQ1046	BQ1047	BQ1048	BQ1049	BQ1050	BQ1051	BQ1052	BQ1053	BQ1054	BQ1055	BQ1056	BQ1057	BQ1058	BQ1059	BQ1060	BQ1061	BQ1062	BQ1063	BQ1064	BQ1065	BQ1066	BQ1067	BQ1068	BQ1069	BQ1070	BQ1071	BQ1072	BQ1073	BQ1074	BQ1075	BQ1076	BQ1077	BQ1078	BQ1079	BQ1080	BQ1081	BQ1082	BQ1083	BQ1084	BQ1085	BQ1086	BQ1087	BQ1088	BQ1089	BQ1090	BQ1091	BQ1092	BQ1093	BQ1094	BQ1095	BQ1096	BQ1097	BQ1098	BQ1099	BQ1100	BQ1101	BQ1102	BQ1103	BQ1104	BQ1105	BQ1106	BQ1107	BQ1108	BQ1109	BQ1110	BQ1111	BQ1112	BQ1113	BQ1114	BQ1115	BQ1116	BQ1117	BQ1118	BQ1119	BQ1120	BQ1121	BQ1122	BQ1123	BQ1124	BQ1125	BQ1126	BQ1127	BQ1128	BQ1129	BQ1130	BQ1131	BQ1132	BQ1133	BQ1134	BQ1135	BQ1136	BQ1137	BQ1138	BQ1139	BQ1140	BQ1141	BQ1142	BQ1143	BQ1144	BQ1145	BQ1146	BQ1147	BQ1148	BQ1149	BQ1150	BQ1151	BQ1152	BQ1153	BQ1154	BQ1155	BQ1156	BQ1157	BQ1158	BQ1159	BQ1160	BQ1161	BQ1162	BQ1163	BQ1164	BQ1165	BQ1166	BQ1167	BQ1168	BQ1169	BQ1170	BQ1171	BQ1172	BQ1173	BQ1174	BQ1175	BQ1176	BQ1177	BQ1178	BQ1179	BQ1180	BQ1181	BQ1182	BQ1183	BQ1184	BQ1185	BQ1186	BQ1187	BQ1188	BQ1189	BQ1190	BQ1191	BQ1192	BQ1193	BQ1194	BQ1195	BQ1196	BQ1197	BQ1198	BQ1199	BQ1200	BQ1201	BQ1202	BQ1203	BQ1204	BQ1205	BQ1206	BQ1207	BQ1208	BQ1209	BQ1210	BQ1211	BQ1212	BQ1213	BQ1214	BQ1215	BQ1216	BQ1217	BQ1218	BQ1219	BQ1220	BQ1221	BQ1222	BQ1223	BQ1224	BQ1225	BQ1226	BQ1227	BQ1228	BQ1229	BQ1230	BQ1231	BQ1232	BQ1233	BQ1234	BQ1235	BQ1236	BQ1237	BQ1238	BQ1239	BQ1240	BQ1241	BQ1242	BQ1243	BQ1244	BQ1245	BQ1246	BQ1247	BQ1248	BQ1249	BQ1250	BQ1251	BQ1252	BQ1253	BQ1254	BQ1255	BQ1256	BQ1257	BQ1258	BQ1259	BQ1260	BQ1261	BQ1262	BQ1263	BQ1264	BQ1265	BQ1266	BQ1267	BQ1268	BQ1269	BQ1270	BQ1271	BQ1272	BQ1273	BQ1274	BQ1275	BQ1276	BQ1277	BQ1278	BQ1279	BQ1280	BQ1281	BQ1282	BQ1283	BQ1284	BQ1285	BQ1286	BQ1287	BQ1288	BQ1289	BQ1290	BQ1291	BQ1292	BQ1293	BQ1294	BQ1295	BQ1296	BQ1297	BQ1298	BQ1299	BQ1300	BQ1301	BQ1302	BQ1303	BQ1304	BQ1305	BQ1306	BQ1307	BQ1308	BQ1309	BQ1310	BQ1311	BQ1312	BQ1313	BQ1314	BQ1315	BQ1316	BQ1317	BQ1318	BQ1319	BQ1320	BQ1321</
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[illegible]

PNO	GRP	CARS	DOS	BEX	NEL	SIN	PANRO	FAMIN	AMPL	BO	BP	NRAGE	KED	BUOLY	PREBS	HDS	PERLS AD	MEDIA	FB	MAP	TWERY	SION	ZINTA	GAME	APPTS RE	PSDU	PAREN V	DISAO	ANK	DEP	BPR	RAT	EAT	AEO	AORD	OTH	BQ1	BQ2	BQ3	BQ4	BQ5	BQ6	BQ7	BQ8	BQ9	BQ10	BQ11	BQ12	BQ13	BQ14	BQ15	BQ16	BQ17	BQ18	BQ19	BQ20	BQ21	BQ22	BQ23	BQ24	BQ25	BQ26	BQ27	BQ28	BQ29	BQ30	BQ31	BQ32	BQ33	BQ34	BQ35	BQ36	BQ37	BQ38	BQ39	BQ40	BQ41	BQ42	BQ43	BQ44	BQ45	BQ46	BQ47	BQ48	BQ49	BQ50	BQ51	BQ52	BQ53	BQ54	BQ55	BQ56	BQ57	BQ58	BQ59	BQ60	BQ61	BQ62	BQ63	BQ64	BQ65	BQ66	BQ67	BQ68	BQ69	BQ70	BQ71	BQ72	BQ73	BQ74	BQ75	BQ76	BQ77	BQ78	BQ79	BQ80	BQ81	BQ82	BQ83	BQ84	BQ85	BQ86	BQ87	BQ88	BQ89	BQ90	BQ91	BQ92	BQ93	BQ94	BQ95	BQ96	BQ97	BQ98	BQ99	BQ100	BQ101	BQ102	BQ103	BQ104	BQ105	BQ106	BQ107	BQ108	BQ109	BQ110	BQ111	BQ112	BQ113	BQ114	BQ115	BQ116	BQ117	BQ118	BQ119	BQ120	BQ121	BQ122	BQ123	BQ124	BQ125	BQ126	BQ127	BQ128	BQ129	BQ130	BQ131	BQ132	BQ133	BQ134	BQ135	BQ136	BQ137	BQ138	BQ139	BQ140	BQ141	BQ142	BQ143	BQ144	BQ145	BQ146	BQ147	BQ148	BQ149	BQ150	BQ151	BQ152	BQ153	BQ154	BQ155	BQ156	BQ157	BQ158	BQ159	BQ160	BQ161	BQ162	BQ163	BQ164	BQ165	BQ166	BQ167	BQ168	BQ169	BQ170	BQ171	BQ172	BQ173	BQ174	BQ175	BQ176	BQ177	BQ178	BQ179	BQ180	BQ181	BQ182	BQ183	BQ184	BQ185	BQ186	BQ187	BQ188	BQ189	BQ190	BQ191	BQ192	BQ193	BQ194	BQ195	BQ196	BQ197	BQ198	BQ199	BQ200	BQ201	BQ202	BQ203	BQ204	BQ205	BQ206	BQ207	BQ208	BQ209	BQ210	BQ211	BQ212	BQ213	BQ214	BQ215	BQ216	BQ217	BQ218	BQ219	BQ220	BQ221	BQ222	BQ223	BQ224	BQ225	BQ226	BQ227	BQ228	BQ229	BQ230	BQ231	BQ232	BQ233	BQ234	BQ235	BQ236	BQ237	BQ238	BQ239	BQ240	BQ241	BQ242	BQ243	BQ244	BQ245	BQ246	BQ247	BQ248	BQ249	BQ250	BQ251	BQ252	BQ253	BQ254	BQ255	BQ256	BQ257	BQ258	BQ259	BQ260	BQ261	BQ262	BQ263	BQ264	BQ265	BQ266	BQ267	BQ268	BQ269	BQ270	BQ271	BQ272	BQ273	BQ274	BQ275	BQ276	BQ277	BQ278	BQ279	BQ280	BQ281	BQ282	BQ283	BQ284	BQ285	BQ286	BQ287	BQ288	BQ289	BQ290	BQ291	BQ292	BQ293	BQ294	BQ295	BQ296	BQ297	BQ298	BQ299	BQ300	BQ301	BQ302	BQ303	BQ304	BQ305	BQ306	BQ307	BQ308	BQ309	BQ310	BQ311	BQ312	BQ313	BQ314	BQ315	BQ316	BQ317	BQ318	BQ319	BQ320	BQ321	BQ322	BQ323	BQ324	BQ325	BQ326	BQ327	BQ328	BQ329	BQ330	BQ331	BQ332	BQ333	BQ334	BQ335	BQ336	BQ337	BQ338	BQ339	BQ340	BQ341	BQ342	BQ343	BQ344	BQ345	BQ346	BQ347	BQ348	BQ349	BQ350	BQ351	BQ352	BQ353	BQ354	BQ355	BQ356	BQ357	BQ358	BQ359	BQ360	BQ361	BQ362	BQ363	BQ364	BQ365	BQ366	BQ367	BQ368	BQ369	BQ370	BQ371	BQ372	BQ373	BQ374	BQ375	BQ376	BQ377	BQ378	BQ379	BQ380	BQ381	BQ382	BQ383	BQ384	BQ385	BQ386	BQ387	BQ388	BQ389	BQ390	BQ391	BQ392	BQ393	BQ394	BQ395	BQ396	BQ397	BQ398	BQ399	BQ400	BQ401	BQ402	BQ403	BQ404	BQ405	BQ406	BQ407	BQ408	BQ409	BQ410	BQ411	BQ412	BQ413	BQ414	BQ415	BQ416	BQ417	BQ418	BQ419	BQ420	BQ421	BQ422	BQ423	BQ424	BQ425	BQ426	BQ427	BQ428	BQ429	BQ430	BQ431	BQ432	BQ433	BQ434	BQ435	BQ436	BQ437	BQ438	BQ439	BQ440	BQ441	BQ442	BQ443	BQ444	BQ445	BQ446	BQ447	BQ448	BQ449	BQ450	BQ451	BQ452	BQ453	BQ454	BQ455	BQ456	BQ457	BQ458	BQ459	BQ460	BQ461	BQ462	BQ463	BQ464	BQ465	BQ466	BQ467	BQ468	BQ469	BQ470	BQ471	BQ472	BQ473	BQ474	BQ475	BQ476	BQ477	BQ478	BQ479	BQ480	BQ481	BQ482	BQ483	BQ484	BQ485	BQ486	BQ487	BQ488	BQ489	BQ490	BQ491	BQ492	BQ493	BQ494	BQ495	BQ496	BQ497	BQ498	BQ499	BQ500	BQ501	BQ502	BQ503	BQ504	BQ505	BQ506	BQ507	BQ508	BQ509	BQ510	BQ511	BQ512	BQ513	BQ514	BQ515	BQ516	BQ517	BQ518	BQ519	BQ520	BQ521	BQ522	BQ523	BQ524	BQ525	BQ526	BQ527	BQ528	BQ529	BQ530	BQ531	BQ532	BQ533	BQ534	BQ535	BQ536	BQ537	BQ538	BQ539	BQ540	BQ541	BQ542	BQ543	BQ544	BQ545	BQ546	BQ547	BQ548	BQ549	BQ550	BQ551	BQ552	BQ553	BQ554	BQ555	BQ556	BQ557	BQ558	BQ559	BQ560	BQ561	BQ562	BQ563	BQ564	BQ565	BQ566	BQ567	BQ568	BQ569	BQ570	BQ571	BQ572	BQ573	BQ574	BQ575	BQ576	BQ577	BQ578	BQ579	BQ580	BQ581	BQ582	BQ583	BQ584	BQ585	BQ586	BQ587	BQ588	BQ589	BQ590	BQ591	BQ592	BQ593	BQ594	BQ595	BQ596	BQ597	BQ598	BQ599	BQ600	BQ601	BQ602	BQ603	BQ604	BQ605	BQ606	BQ607	BQ608	BQ609	BQ610	BQ611	BQ612	BQ613	BQ614	BQ615	BQ616	BQ617	BQ618	BQ619	BQ620	BQ621	BQ622	BQ623	BQ624	BQ625	BQ626	BQ627	BQ628	BQ629	BQ630	BQ631	BQ632	BQ633	BQ634	BQ635	BQ636	BQ637	BQ638	BQ639	BQ640	BQ641	BQ642	BQ643	BQ644	BQ645	BQ646	BQ647	BQ648	BQ649	BQ650	BQ651	BQ652	BQ653	BQ654	BQ655	BQ656	BQ657	BQ658	BQ659	BQ660	BQ661	BQ662	BQ663	BQ664	BQ665	BQ666	BQ667	BQ668	BQ669	BQ670	BQ671	BQ672	BQ673	BQ674	BQ675	BQ676	BQ677	BQ678	BQ679	BQ680	BQ681	BQ682	BQ683	BQ684	BQ685	BQ686	BQ687	BQ688	BQ689	BQ690	BQ691	BQ692	BQ693	BQ694	BQ695	BQ696	BQ697	BQ698	BQ699	BQ700	BQ701	BQ702	BQ703	BQ704	BQ705	BQ706	BQ707	BQ708	BQ709	BQ710	BQ711	BQ712	BQ713	BQ714	BQ715	BQ716	BQ717	BQ718	BQ719	BQ720	BQ721	BQ722	BQ723	BQ724	BQ725	BQ726	BQ727	BQ728	BQ729	BQ730	BQ731	BQ732	BQ733	BQ734	BQ735	BQ736	BQ737	BQ738	BQ739	BQ740	BQ741	BQ742	BQ743	BQ744	BQ745	BQ746	BQ747	BQ748	BQ749	BQ750	BQ751	BQ752	BQ753	BQ754	BQ755	BQ756	BQ757	BQ758	BQ759	BQ760	BQ761	BQ762	BQ763	BQ764	BQ765	BQ766	BQ767	BQ768	BQ769	BQ770	BQ771	BQ772	BQ773	BQ774	BQ775	BQ776	BQ777	BQ778	BQ779	BQ780	BQ781	BQ782	BQ783	BQ784	BQ785	BQ786	BQ787	BQ788	BQ789	BQ790	BQ791	BQ792	BQ793	BQ794	BQ795	BQ796	BQ797	BQ798	BQ799	BQ800	BQ801	BQ802	BQ803	BQ804	BQ805	BQ806	BQ807	BQ808	BQ809	BQ810	BQ811	BQ812	BQ813	BQ814	BQ815	BQ816	BQ817	BQ818	BQ819	BQ820	BQ821	BQ822	BQ823	BQ824	BQ825	BQ826	BQ827	BQ828	BQ829	BQ830	BQ831	BQ832	BQ833	BQ834	BQ835	BQ836	BQ837	BQ838	BQ839	BQ840	BQ841	BQ842	BQ843	BQ844	BQ845	BQ846	BQ847	BQ848	BQ849	BQ850	BQ851	BQ852	BQ853	BQ854	BQ855	BQ856	BQ857	BQ858	BQ859	BQ860	BQ861	BQ862	BQ863	BQ864	BQ865	BQ866	BQ867	BQ868	BQ869	BQ870	BQ871	BQ872	BQ873	BQ874	BQ875	BQ876	BQ877	BQ878	BQ879	BQ880	BQ881	BQ882	BQ883	BQ884	BQ885	BQ886	BQ887	BQ888	BQ889	BQ890	BQ891	BQ892	BQ893	BQ894	BQ895	BQ896	BQ897	BQ898	BQ899	BQ900	BQ901	BQ902	BQ903	BQ904	BQ905	BQ906	BQ907	BQ908	BQ909	BQ910	BQ911	BQ912	BQ913	BQ914	BQ915	BQ916	BQ917	BQ918	BQ919	BQ920	BQ921	BQ922	BQ923	BQ924	BQ925	BQ926	BQ927	BQ928	BQ929	BQ930	BQ931	BQ932	BQ933	BQ934	BQ935	BQ936	BQ937	BQ938	BQ939	BQ940	BQ941	BQ942	BQ943	BQ944	BQ945	BQ946	BQ947	BQ948	BQ949	BQ950	BQ951	BQ952	BQ953	BQ954	BQ955	BQ956	BQ957	BQ958	BQ959	BQ960	BQ961	BQ962	BQ963	BQ964	BQ965	BQ966	BQ967	BQ968	BQ969	BQ970	BQ971	BQ972	BQ973	BQ974	BQ975	BQ976	BQ977	BQ978	BQ979	BQ980	BQ981	BQ982	BQ983	BQ984	BQ985	BQ986	BQ987	BQ988	BQ989	BQ990	BQ991	BQ992	BQ993	BQ994	BQ995	BQ996	BQ997	BQ998	BQ999	BQ1000
506	1	3	*****	2	1	1	4	25000	2	2	2	2	0	8	1	1	1	0	1	1	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		

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882	1	5	*****	2	1	3	8	25000	2	1	2	2	0	8	0	0	1	0	1	1	1	0	0	0	0	3	1	1	0	8	0	8	0	8	0	8	0	8	0	2	3	1	1	2	3	2	1	2	3	2	0	0	4	4	1	4	3	1	1	3	2	2	3	0	0	0	1	24	6	3	14	18	2	2	1																																																																						
883	1	5	*****	1	1	1	7	10000	2	1	2	2	0	8	0	0	1	0	1	1	1	0	0	0	0	3	1	1	0	8	0	8	0	8	0	8	0	8	0	2	3	2	3	2	3	2	3	2	3	2	0	0	4	4	0	4	3	1	1	1	2	2	1	0	0	0	1	21	5	4	15	16	2	2	1																																																																						
884	1	5	*****	1	1	2	8	59000	1	2	1	1	0	8	0	0	1	0	1	1	1	0	0	0	0	3	1	1	0	8	0	8	0	8	0	8	0	8	0	2	3	1	2	4	4	1	3	1	2	0	0	4	4	0	4	3	0	0	2	0	0	3	0	0	8	1	19	3	2	15	16	2	2	1																																																																							
885	1	5	3/8/2006	1	1	2	9	34000	2	2	2	2	1	1	0	0	0	8	1	1	1	0	0	0	0	3	1	1	0	8	0	8	0	8	0	8	0	8	0	2	3	1	2	1	3	1	2	1	3	2	0	0	4	4	1	4	3	0	0	2	3	3	2	0	0	8	1	23	4	3	14	19	2	2	1																																																																						
886	1	5	*****	1	1	2	8	44000	2	2	2	2	0	8	0	0	0	0	0	1	1	1	0	0	0	3	1	1	0	8	0	8	0	8	0	8	0	8	0	2	3	2	3	2	3	2	1	2	1	2	1	4	4	0	4	3	0	0	1	2	2	1	0	0	0	1	19	5	2	15	14	2	2	1																																																																							
887	1	5	*****	1	1	2	7	23000	2	2	1	1	0	8	0	0	1	0	1	1	1	0	0	1	0	2	1	1	0	8	0	8	0	8	0	8	0	8	0	2	3	1	2	1	3	2	3	1	4	2	0	1	4	4	1	4	3	0	0	2	3	2	1	0	0	0	1	22	5	3	14	17	2	2	1																																																																						