SCERT, KERALA & FAROOK TRAINING COLLEGE, KOZHIKODE

Young Scholars' Enrichment Programme

Mental Health, Entrance Exam Stress and Perseverance of Higher Secondary Science Students in Malappuram District

Praseetha R. P.

Study Report submitted Under the Young Scholars Enrichment Programme Jointly conducted by SCERT, Kerala & Farook Training College, Kozhikode

FAROOK TRAINING COLLEGE, KOZHIKODE

2022-2024

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I, **Dr. Jayaprakash K**, do hereby certify that this study report entitled **MENTAL HEALTH, ENTRANCE EXAM STRESS AND PERSEVERANCE OF HIGHER SECONDARY SCIENCE STUDENTS IN MALAPPURAM DISTRICT** is a record of bonafide study and research carried out by **Praseetha R.P.,** of M.Ed. Programme (2022 – 2024) under the supervision and guidance of **Dr.Anees Mohammed.C,** Assistant Professor, Farook Training College, Kozhikode, as the part of ***Young Scholars' Enrichment Programme*** jointly conducted by ***SCERT, Kerala & Farook Training College, Kozhikode.***

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CHAPTER I

INTRODUCTION

- Introduction of the study
- Need and significance of the study
- Statement of the problem
- Definition of key terms
- Variables of the study
- Definition of key terms
- Objectives of the study
- Hypotheses of the study
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INTRODUCTION

Education is an essential tool that everyone needs in order to thrive and achieve success in life. Education helps a lot in reducing life's challenges and the knowledge acquired during the journey of education period instills confidence in every individual regarding their life. Education fosters a sense of equality among individuals in the society and contributes to the growth and development of the country. Education serves as an indispensable tool for securing a promising future and also plays a pivotal role in the progress of a nation. Education is a necessity for both men and women alike, as their collective participation forms the foundation of a well informed and enlightened society. The highly educated individuals form the keystone of a developed nation. So, proper education paves the way for a promising future, benefitting both the individual and the nation as a whole.

Education holds significance for individuals of all backgrounds, particularly students at the higher secondary level, as it empowers them to lead successful lives. It serves as a fundamental stage for college education and continuous learning, laying the groundwork for a prosperous career. It is crucial that every student is guided towards discovering their passion for education and pursuing their interests in the field. Mostly, higher secondary school students are adolescents. Adolescent stage is the stage which is the critical period in student's life.

According to the words of Vivekananda, the aim of education is to manifest in our lives the perfection that is already in man. This perfection is the realization of the infinite power that is in everything and everywhere. Vivekananda's educational

ideal formed a part of his larger social agenda or the spiritual regeneration of the Indian society. His concept is; Reality is one-wise men call it by different names. His religious ideal in education is to elevate one from the narrow confines of the logical beliefs. The aim of the education must be to make our students rational, scientific, and unorthodox in their approach to life.

Education aims to equip children with the ability to become responsible, productive, and valuable contributors to society. Through various learning experiences and opportunities provided in school, students develop knowledge, skills, and attitudes. The classroom serves as a space where learners can reflect on and assess their experiences, cultivate critical thinking skills, and learn to question, explore, and think independently.

In the present era of highly competitive world, students encounter a range of challenges including exam-related stress, lack of engagement in classes and difficulties in comprehending academic subjects. Also, students face stress related to competitive exams or entrance exams to join to the course of their interest. Exam stress refers to the emotional strain and apprehension individuals experience regarding their performance in examinations.

The pressure of entrance exams can weigh heavily on students, often leading to significant stress and anxiety. Entrance exam stress is one of the most and common stress find out in the higher secondary students. Entrance exam is a test or exam that higher secondary students take when they want to get into their desired course or college. It is like a hurdle they must pass to gain the admission. These exams typically assess a student's knowledge, skills, and abilities related to the

subjects or topics relevant to the institution or program they are applying to. The competitive nature of entrance exams gets associated with the stress, as students perceive themselves in constant comparison to their classmates or peers.

The effects of entrance exam stress on students can be extreme and broad. Different researches suggest that high levels of stress during the exam period can have significant negative impacts on students' mental and physical well-being, as well as their academic performance. Physical symptoms such as headaches, nausea, and fatigue are often seen in students which shows that how much pressure entrance exams can put on students' minds.

Mental health is one of the most important factors during the adolescent years. Mental health refers to a person’s emotional, psychological, and social well-being. It is that how individual think, feel and behave, as well as their ability to cope with stress, interact with others and make choices that promote overall well-being. The stress and anxiety related with academic exams and competitive exams have a significant role on the mental health of students. Exam stress among higher secondary students can lead to various mental health challenges including increased anxiety, depression, sleep disturbances, difficulty in concentrating, decreased motivation, etc. it is very important to support the mental health of students during the critical period of their education.

The concept of mental health is as old as human beings. Our ancient scriptures are full of references to mental disorders and their treatment. The Atharva Veda, the Charaka Samhita, the Sushrut Samhita, and the Ashtanga Sangrah have

described several diseases of the mind with the specific methods of treatment. They also given the concept of mental health and how to maintain and promote it.

According to World Health Organization (WHO), "Mental health is a state of mental well-being that enables people to cope with the stresses of life, realize their abilities, learn well, and work well, and contribute to their community. It is an integral component of health and well-being that underpins our individual and collective abilities to make decisions, build relationships and shape the world we live in. Mental health is a basic human right. And it is crucial to personal, community and socio-economic development."

Higher secondary school students also should have perseverance in their life. According to Collins dictionary, "Perseverance is the quality of continuing with something even though it is difficult." This allows the students to overcome difficulties, maintain their rights, and actively shape their own destiny. Not all students may have the same kind of perseverance and its intensity. But it is important to have a perseverance mind in every student. By implanting the importance of perseverance, students can develop the needed skills and mindset to take control of their future and achieve success. Some factors like educational environment, personal experiences, societal influences, etc can influence the student's perseverance.

According to APA dictionary of psychology, perseverance is defined as the quality or state of maintaining a course of action or keeping at a task and finishing it despite the obstacles (such as opposition or discouragement) or the effort involved. Perseverance means staying focused on the desired outcome and refusing to give up,

no matter how difficult the journey becomes. It involves resilience, determination, and the ability to learn from failures and setbacks.

Need and Significance of the Study

In the present world, life has become more increasingly impersonal, mechanical, and fast paced, resulting in a significant number of individuals experiencing feelings of depression and anxiety. The complex nature of today's world highlights concerning patterns in the mental well-being of our young population. Also stress and anxiety due to different exams are very much affecting the students.

Today's higher secondary science students face a lot of pressure and stress on competitive entrance exams which lead to an unhealthy lifestyle, sleep disturbances, lack of concentration, lack of engagement in other co-curricular activities, etc. Students are facing so much exams and this lead to many mental health issues also. So, studying about the entrance exam stress have so much relevance in today's context. So, from the study we can understand the impact of entrance exams and they have a significant role in determining student's educational and career opportunities. Also, it sheds light on the specific challenges students face during the exam period and the consequences for their mental health and overall well-being.

This also helps in the identification of factors that contribute to higher stress levels among students. We can also develop effective coping strategies that students can utilize to manage stress and perform appropriately. Findings from studies on

entrance exam stress can inform to educational policy makers about the negative consequences of a high-stakes examination system. By directing exam stress effectively, we can promote the academic success and well-being of students.

Researchers observed that students who reported higher levels of entrance exam stress did worse on the exam than students who reported lower levels of stress, according to a study published in the journal "Psychological Science". Additionally, the researchers discovered that stress might cause cognitive issues like poor memory and concentration. Stress related to entrance exams can be brought on by a few things, including pressure to perform well, failure-related anxiety, and future uncertainty. A bad diet, little exercise, and sleep deprivation can all make it worse.

The intense strain of preparing for entrance exams has resulted in a concerning trend of student suicides in Kota, which is regarded as the coaching centre of India. The city saw 20 instances of student suicide in 2023, or an average of three per month. Numerous occurrences have already been documented, and this trend is expected to continue into 2024 (Hindustan Times). One important component in these tragedies is the extreme pressures of academics. Every year, some 150,000 students come to Kota's coaching facilities; many of them have high aspirations for themselves and their families to get into elite colleges like AIIMS and IITs. Families have a significant financial strain as well, paying about Rs 2 lakh a year for living expenses and coaching fees (India Today).

The coaching institutes in Kota have harsh, demanding schedules that leave little time for pleasure, and students there are subject to intense familial and societal pressure to perform well. Suicide results from this tension and anxiety as well as the

guilt and shame of not being able to achieve their family's dreams. The ongoing suicides in Kota serve as a stark reminder of the shortcomings of India's higher education system, as students are seen as commercial props by powerful parties. Strict guidelines were released by the Union Ministry of Education to control the operations of private coaching centres. These included prohibiting the enrolment of pupils younger than 16 and prohibiting the publication of deceptive advertising by the centres that claimed to guarantee high grades and ranks.

The government of Rajasthan has acknowledged the seriousness of the problem. To address the problem, Chief Minister Ashok Gehlot called a meeting with officials and interested parties in August 2023. Installing spring-loaded ceiling fans in dorm rooms was one contentious strategy suggested to stop hanging suicides. But according to India Today, this strategy has come under fire for failing to address the underlying reasons of student stress and mental health problems. Experts and policymakers have emphasized the need for a more all-encompassing strategy that includes greater mental health assistance, less emphasis on passing difficult exams, and coaching sector regulation. Additionally, it is suggested that children begin preparing for competitive tests later in life rather than in their early teens, which might result in excessive stress.

Mental health and stress are inter-related. Mental health is very important to maintain the overall well-being of individual. Entrance exam stress may affect the mental health of the student. So, by studying about exam stress, we can also understand the mental well-being of student. Study on mental health of higher secondary students help in understanding the frequency and patterns of mental

health issues among this specific age group. We can explore the relationship between mental health and academic outcomes. This understanding can help the implementation of strategies to support student's mental well-being, leading to improved academic performance.

Mental health is as important as physical health to children's quality of life and directly impacts their learning. It is important to recognize that the mental health is not simply the absence of mental illness, it also means having the skills necessary to cope with life challenges. Improving people's and communities capacities and empowering them to fulfil their own objectives are central to mental health. Not just individuals who have mental disorders, but all of us should be concerned about mental health.

A person with good perseverance can have a good mental health. All these three variables are inter-related. This provides valuable insights into how students perceive and value the concept of taking control of their lives. From this study, we can promote the personal growth of students and enhance the career readiness. It can help the students perceive their own abilities, set goals, and make decisions related to their future careers. So, by promoting perseverance, we can help students realize their full potential and become active participants in their communities and work towards creating a more equitable society.

The relationship between perseverance, entrance exam stress, and mental health is still being studied, but a deeper comprehension of this intricate problem is required. The relationship between perseverance, entrance exam stress, and mental health has not received much research. A large portion of the literature currently

available on student mental health tends to concentrate on general well-being, sadness, and anxiety rather than going in-depth with the stressors associated with entry tests. Comprehensive research examining the long-term effects on mental health of the particular stresses associated with entrance exams in competitive areas such as Kota is lacking. It is particularly uncommon to find thorough longitudinal studies that follow these effects from the earliest phases of preparation to the outcomes of exams.

Research on how perseverance and resilience can mitigate the negative effects of entrance exam stress is not widely available. There is a need for studies that develop and validate measurement tools for these traits within this specific context. Despite its crucial importance, this topic has not been thoroughly investigated, leading to a lack of studies and data that are available to fully comprehend the influence of these elements on pupils.

For students, entrance exams can be a major cause of stress and anxiety, which can have detrimental effects on their mental health. Although there has been some research on the subject, more thorough investigations are still required to help students' mental health during exam times with efficient interventions and culturally aware methods. We can foster a more encouraging atmosphere where students feel encouraged to persevere through the difficulties of entry tests by filling in these research gaps and raising awareness of mental health issues.

Statement of the Problem

In recent years, the mental health and well-being of students have become increasingly important concerns within the education system. The transition from higher secondary education to higher studies, particularly in the context of competitive entrance exams has brought to the issue of stress and its potential impact on student's mental health. As students prepare for competitive entrance exams that play an important role in shaping their academic future, the stress associated with these exams has become a prevalent concern. Also, the transition from adolescent to adulthood is noted by a growing need for autonomy and decision-making, making this study more relevant. At this age period, perseverance in their life is need to be there. Hence, the proposed study is entitled as **"MENTAL HEALTH, ENTRANCE EXAM STRESS AND PERSEVERANCE OF HIGHER SECONDARY SCIENCE STUDENTS IN MALAPPURAM DISTRICT."**

Variables of the Study

The study involves two types of variables, Independent Variable and Dependent Variable. The Independent Variables in the study are Entrance Exam Stress and Mental Health and Dependent Variable is the perseverance. The sub groups are gender, locality, type of institution, parental qualification, and parental employment.

Definition of Key Terms

The key terms in the statement of the problem are explained below to get operational definition.

Mental health

Mental health is the state of psychological and emotional well-being that helps the students to cope with different stresses of their life. It encompasses various aspects of a student's mental and emotional state, including their thought, feelings, behaviours, and overall quality of their life.

Entrance exam stress

Entrance exam stress refers to a state of tension and anxiety caused by taking competitive exams. It is the stress which students experience extreme stress, anxiety, and discomfort during and or before taking a competitive test which may be in the form of a headache, forgetfulness, tiredness, etc.

Perseverance

Perseverance refers to the quality of continuing with something even though it is difficult. It is the ability to keep doing something despite any obstacles. The student's ability to achieve their aims and goal by breaking their all stress and anxiety.

Higher secondary students

Students of class XI and XII are taken as higher secondary students. The age group of adolescents falls within the range of 16 to 18 years old.

Objectives of the Study

The following are the objectives of the study:

1. To assess the mental health status of higher secondary school science students in Malappuram district.
2. To examine the levels of entrance exam stress experienced by higher secondary school science students in Malappuram district.
3. To assess the perseverance of higher secondary school science students in Malappuram district.
4. To explore the relationship between mental health, entrance exam stress and perseverance of higher secondary school science students of Malappuram district.
5. To identify any significant differences in mental health, entrance exam stress and perseverance of higher secondary school science students of Malappuram district based on a) gender b) locality c) type of institution d) parental qualification e) parental employment.

Hypotheses of the Study

1. There is no significant relationship between mental health, entrance exam stress and perseverance of higher secondary school science students of Malappuram district.
2. There is no significant difference between mental health, entrance exam stress and perseverance of higher secondary school science students of Malappuram district based on a) gender b) locality c) type of institution d) parental qualification e) parental employment.

Methodology

Method

The study is quantitative research where the descriptive research design is used. The quantitative research was conducted through cross-sectional survey method.

Sample

The study is conducted on a sample of 510 higher secondary school science students from different higher secondary schools located at Malappuram district of Kerala using stratified random sampling technique by giving due representation to gender, locality, type of institution, parental qualification, and parental employment.

Tools used

Tools use for this study was Scale on Mental Health (constructed by Praseetha & Anees, 2023) scale on Entrance Exam Stress (constructed by Praseetha & Anees, 2023), and scale on Perseverance (constructed by Praseetha & Anees, 2023).

Statistical Techniques

In order to analyse the objectives of this study, descriptive analysis, percentile scores, percentage analysis, Pearson's product moment correlation, t-test and one way ANOVA are used.

Scope and Limitations of the Study

According to Best and Kahn (2012), "Limitations are those conditions beyond the control of the researcher that may place restriction on the conclusion of the study and their applications to other situations". The researcher has made every

attempt to make the study a perfection. But the constraints of time and resources reduced the size of the sample for the study.

The study has been intended for studying 'Mental health, entrance exam stress and perseverance of higher secondary science students in Malappuram district.' The study was conducted on a stratified random sample of 510 higher secondary science students from Malappuram district. Due representation was given to factors like gender, locality, type of institution, parental education, and parental employment.

The study tries to find out whether there exists considerable difference in mental health, entrance exam stress and perseverance by male and female students, rural and urban locality of school, type of institution, parental education, and parental employment.

The study was based on student's mental health, anxiety, physical environment, organization and management, desired goals, assessment by teachers, and capability of students. Even though precautions were undertaken to make the study as accurate as possible, certain limitations have crept to the study. The following are some limitations which the investigator could not consider due to limitation of time, geographical reasons, and other practical reasons.

1. The sample study was limited to 510 students only.
2. The study was conducted in a limited number of higher secondary schools only.
3. A lot of mental health components are there, but only important 6 components were considered.

4. The investigator developed only one scale for each variable for data collection. So, the scope of cross checking for validity was limited.

Despite the above-mentioned facts, all possible attempts have been made to make the study as reliable and valid as possible. It is hoped that the results of the present study would be helpful in finding new frontiers in the field of education.

Scheme of Chapterization

The researcher has made the following Chapterization design for her research study:

Chapter Ⅰ: Presents brief introduction of the study, statement of the problem, definition of key terms, variables of the study, objectives of the study, hypotheses, methodology, scope and limitations of the study and organization of the report.

Chapter Ⅱ: Presents the review of related literature which includes theoretical overview and review of related studies.

Chapter Ⅲ: Presents the methodology of the study, details of variable, tools used, selection of sample procedure for data collection, scoring techniques used for analysis and statistical techniques used.

Chapter Ⅳ: Brings out the details of statistical analysis of the data and discussion of the result.

Chapter Ⅴ: Deals with summary of the study, major findings, educational implications of the study and suggestions for further research in this area.

CHAPTER II

REVIEW OF RELATED LITERATURE

- *Conceptual & Theoretical framework*
- *Review of related studies*
- *Conclusion*

REVIEW OF RELATED LITERATURE

The review of related literature is a process of reviewing work of others within your field and using that as a basis for data collection. It is important for obtaining an overview of the current knowledge on the topic. The term "review" means revision or "refer back on". It implies locating, studying, and evaluating the reports of relevant researches study, study of published articles, research abstracts as well as reports of casual observation and opinion that related to the individuals planned research project (Agarwal, 1998). A literature review is an essential part of any type of research that aims to review the critical point of current knowledge including substantive findings as well as a theoretical and methodological contribution to a particular topic. Literature review is a search and evaluation of the available literature in our chosen topic area. Since effective research must be based on past knowledge, this step helps to eliminate the duplication of what has been done already and provides useful hypotheses and suggestions for significant investigation. The review of related literature paves a clear way for the investigator to form proper objective and hypothesis for the study. It avoids unnecessary duplicity of work.

Best and Kahn (2010) pointed out that review of related literature is a summary of previous research and writing of recognized experts provide the researchers familiar with what is already known and with what is still unknown and untested. The review of related literature paves a clear way for the investigator to

present in a proper way to solve the prominent problem. It helps the investigator to form proper objective and hypothesis for the study.

The review is presented here under the following headings.

- Conceptual framework & Theoretical framework
- Review of related studies

Conceptual Framework & Theoretical Framework

The conceptual overview introduces and describes the concept that explains why the researcher problem under the study exists. The background literature related to the relevant concepts in this research study is included. Conceptual overview serves the purpose of stating as clearly and as concisely as possible the state of knowledge in the area in which the research proposed to work. Once this has been done it is to see what must be done to find the major gaps in the present knowledge.

The theoretical framework is the structure that can hold or support a theory of a research study. A theoretical framework in research can be defined as a set of concepts, theories, ideas, and assumptions that help you understand a specific phenomenon or problem. It can be considered a blueprint that is borrowed by researchers to develop their own research inquiry. The theoretical framework encompasses not just the theory, but the narrative explanation about how the researcher engages in using the theory and its underlying assumptions to investigate the research problem. A theoretical framework in research is an important part of a manuscript and should be presented in the first section. It shows an understanding of the theories and concepts relevant to the research and helps limit the scope of the

research. It is the structure of your paper that summarizes concepts, ideas, and theories derived from prior research studies and which was synthesized to form a conceptual basis for your analysis and interpretation of meaning found within your research.

Mental Health

Health is multidimensional one. The WHO definition of health implies the notion of perfect functioning of the body. It conceptualizes health, biologically as a state in which every cell and every organ is functioning at maximum capacity and in perfect harmony with the rest of the body.

Mental health has been defined as a state of balance between the individual and surrounding world, a state of harmony between oneself and other people and that of the environment. According to the World Health Organization (WHO), "Mental health is a state of mental well-being that enables people to cope with the stresses of life, realize their abilities, learn well and work well, and contribute to their community." The WHO states that mental health is "more than the absence of mental disorders." Peak mental health is about managing active conditions and maintaining wellness and happiness. The organization also emphasizes that preserving and restoring mental health is important at individual, community, and societal levels.

The first author (MT) has proposed a utilitarian concept of mental health (Thirunavurakasu, 2011). Central to this concept is the conceptualization of the biological entity whose health is called 'mental health.' That entity has been called

manas, in order to wilfully avoid the historic and archaic misconceptions attached to the word ‘mind,’ which are surprisingly imbibed in the contemporary teaching and practice of psychiatry and its allied sciences. The current conceptualization of the mind and mental health are plagued by the current Cartesian system of medicine, which considers ‘mind’ as an entity that interacts with the ‘body.’

According to APA Dictionary of Psychology, mental health can be defined as a state of mind characterized by emotional well-being, good behavioral adjustment, relative freedom from anxiety and disabling symptoms, and a capacity to establish constructive relationships and cope with the ordinary demands and stresses of life.

Mental health refers to the ability of a person to think and act in a way that supports their capability to attain well-being and manage suffering while also honouring societal and personal boundaries. The notions of mental health and hygiene have gained global recognition since the United Nations was established. "Health is a state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity," according to the World Health Organization's (WHO) 1946 constitution. Achieving a state of well-being in which a person performs at a level commensurate with their mental potential, preventing mental disorders, relieving tension in a stressful environment, and recovering from mental illness are all represented by the term "mental health."

Mental health does not exist on its own. It is an integral and essential part of overall health, which can be defined in at least three ways – as the absence of disease, as a state of the organism that allows the full performance of all its

functions or as a state of balance within oneself and between oneself and one's physical and social environment (Bhugra, 2002).

The Mental Health Foundation (MHF, 2016) notes that mental health is defined by how individuals think and feel about themselves and their life, and that it affects how an individual copes and manages in times of adversity. Mental health is seen as affecting one's abilities to function and make the most of the opportunities that are available, and to participate fully with family, workplace, community, and peers. There is a close link between physical and mental health, as they affect each other directly and indirectly.

Positive mental health can be defined in terms of the fully aspects of the individual, that is attitude towards self-growth, development and self-actualization, integration autonomy, preparation of reality and environmental mastery. One's attitude towards self contains self-acceptance, self-confidence, self-reliance, initiative, and quick decision making. Mental health is consequence of the kind of bridge a person between rational thinking and non rational thinking and its acceptability to traffic between emotional and rational modes of response and behaviour within the individual. There are different factors, important in contributing to good mental health.

1. The individual's self-image or his attitude towards himself.

2. The degree to which the individual realizes his innate potentials and acquires skills through action and not through fantasy alone.

3. The degree to which the individual has resolved his dependencies and can function independently of social influences.

4. The degree to which the individual's various functions and roles in life are integrated according to a self-consistent pattern which is harmonious.

5. The degree of stress and tolerance he or she has.

6. How well balanced and matured are his capacities for loving and being loved.

World Health Organization define mental health as 'a state of well-being in which every individual realizes his or her own potential, can cope with the normal stress of life, can work productively and fruitfully, and is able to make a contribution to her or his community". The definition emphasize that mental health is more than the absence of mental illness. Knowledge about the prevalence and determinants of mental health is important for informing promotion and intervention programs.

Factors affecting mental health of adolescents

Good Mental Health is just more than the absence of mental illness. It can be seen as a state of Mental Health that allows one to flourish and fully enjoy life. Some of factors that affect Mental Health of youth are as follows.

Hereditary factors

An individual's temperament, general emotional pattern, emotional regulation skills, stress tolerance, and other traits are mostly determined by the anatomical and physiological features of their brain, which are inherited.

Physical health

Poor mental health, as well as mental illness on occasion, are frequently caused by diseases, injuries, and other physical issues. Low mental health can have an impact on one's sense of self-worth and capacity to achieve objectives, which can result in discontent or depressive symptoms. Poor mental health is more common in people with weak bodies than in those with robust and healthy bodies, including those with physical disabilities, chronic illnesses, birth deformities, malnourishment, etc.

Socio cultural environment

The socio-cultural environment in which the learners are brought up has got tremendous influence on one's social conformity, attitude towards self and attitude towards others. All these factors influence his personal and social adjustability and ultimately affect his mental health.

Intelligence

An essential component of social adjustment and success in social settings is the learner's general mental capacity. Higher reasoning ability children are able to comprehend contradictory situations more rationally and successfully manage them by exercising control over them.

Disorganized family environment

The environment of the family and the attitude of the parents Children's social adaptability and mental health are influenced by a variety of factors, including

the warmth of the family relationships, parental disputes, sibling rivalry, family size, and family type. Children's mental health is badly impacted by families that are divided, do not provide intellectual stimulation or supervision, and use severe discipline.

Habit training in school

Children who learn good habits, conventions, etiquettes, manners, and etiquette from their families or schools will have fewer interpersonal disputes and friction, which will promote mental health. Engaging a youngster in recreational activities, hobbies, social events, sports, athletics, etc. will enable him or her to meaningfully lose himself and preserve emotional stability.

Ethical and moral upbringing

Moral behaviour of the parents, ethical standard of the neighbourhood, moral experiences received from school, community etc. will shape the social and moral outlook of children. This will affect the wholesome personal and social adjustability of the individual and influence his mental health.

School related factors

Frequent change in school, rejection from peers, bullying often leads to emotional, behavioural, and academic problems and subsequent deterioration of mental health.

Characteristics of Mental Health

Mental Health refers not only to emotional well-being but also to how people think and behave. There are several different factors that have been found to influence mental health.

Life satisfaction

A person's ability to enjoy life is frequently used as an indicator of mental health and wellness. It is often defined as the degree to which a person enjoys the most important aspects of their life. Some factors that have been found to play an important role in life satisfaction includes the absence of feeling ill, good relationships, a sense of belonging. Being active in work and leisure, a sense of achievement and pride, positive self-perceptions, a sense of autonomy, and feelings of hope.

Resilience

The ability to bounce back from adversity has been referred to as resilience. People who are resilient also tend to have a positive view of their ability to cope with stress but to thrive even in the face of it.

Support

Social support is important to mental health. Loneliness has been shown to have several negative health effects. It has been linked to problems with both physical and mental including depression, heart disease, memory problem, drug misuse, alcoholism, and altered brain function.

Flexibility

Having rigid expectations can sometimes create added stress. Emotional flexibility may be just as important as cognitive flexibility. Mentally healthy people

experience a range of emotions and allow themselves to express these feelings, finding them to be unacceptable.

According to WHO, Good mental health is defined as the state of well-

1. Realize their own potential.
2. Work productively.
3. Cope with normal stress of life.
4. Make a positive contribution to the society.

Mental and psychological well-being encompasses the way you feel about yourselves, but also the way you deal with external situations and the quality of your relationship. Good mental health is not simply the absence of diagnosable mental health problems, although good mental health is likely to help protect against development of many such problems (World Health Foundation,2016).

Good mental health is characterized by a person's ability to fulfil a number of key functions and activities including,

1. Ability to learn.

2. The ability to feel, express and manage a range of positive and negative emotions.

3. The ability to form and maintain good relationship with others.

4. The ability to cope with and manage change and uncertainty.

WHO says Adolescence is a crucial period for developing and maintaining social and emotional habits important for mental well-being. These include adopting healthy sleep patterns, taking regular exercise, developing coping, problem solving and inter personal skills etc. WHO stressed that, multiple factors determine mental health outcomes. Media influence and gender norms can exacerbate the disparity between an adolescent's lived reality and their perceptions or aspirations for the future. Adolescents with mental health conditions are in turn particularly vulnerable to social exclusion, discrimination, educational difficulties, risk taking behaviours, physical ill-health, and human rights violations.

Positive mental health

Positive mental health is not simply the absence of mental health issues, such as depression or anxiety. Being mentally positive is predominantly about the presence of positive characteristics such as feeling of purpose, contentment, maintaining fulfilling relationship and participating in the life to the fullest. Positive mental health allows to enjoy all the activities want to participate in. It does not mean you will be never sad or go through emotionally-challenging times. However, those with positive mental health will be able to bounce back more easily from these experiences called mental resilience.

The positive dimension of mental health is stressed in WHO's definition of health as contained in its situation: "Health is as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." Concept of mental health include subject well-being, perceived self-efficiency, autonomy, competence, inter-generational dependence, and recognition of the ability to realize

one's intellectual and emotional potential. Mental health is about enhancing competencies of individuals and communities and enabling them to achieve their self-determined goals. Mental health should be a concern for all of us, rather than only for those who suffer from a mental disorder.

Mental health problem affect society, and not just a small isolated segment. They are therefore a major challenge to global development. No group is immune to mental disorders, but the risk is higher among the poor, homeless, the unemployed, persons with low education, victims of violence, migrants and refugees, indigenous populations, children, and adolescents, abused women and the neglected elderly.

The promotion of mental health consists of any action taken to create living conditions and environments that support mental wellness and allow individuals, families, groups, or communities to adopt and maintain healthy lifestyles fostering optimal emotional functioning and social inclusion (O'Reilly et al., 2018).

Mental health and wellbeing experts draw from other areas to inform their perspective. They also review a person's mental health within context. An act could be psychopathological in one cultural context but not in another. Some of the perspectives from which counsellors, psychologists, and psychiatrists gain understanding about mental health are (Miller, 2024):

Spiritual

This approach explains who we are in the world and how we are to act. It also tells us what we can expect after death based on our actions. The spiritual perspective discusses good and evil as they relate to suffering.

Moral character

This perspective posits that there are certain virtues a person needs to learn. Doing so allows the individual to live a better life free from mental illness.

Statistical

Based on mathematics, this perspective seeks to define what is "normal" or "average" for populations. Anyone falling outside of the norm is abnormal.

Disease/medical/biological

This approach explains mental health as it relates to changes in the brain. The well-known case of Phineas Gage is an example. A rod went through his left frontal lobe. This affected his personality and behaviour. Before the accident, people enjoyed his company and thought he was reliable. Afterward, they described him as ill tempered, foul, and unreliable.

Psychological

Mental health develops along an expected path. People try to adjust to their environment to survive within it. Problems arise when a person learns maladaptive strategies as a response to new situations.

Social

Biology, psychology, and society all affect a person's mental health. The influence of societal norms is important to the adaptive or maladaptive behaviour of the individual.

Psychosocial (Social learning model)

Researchers in this area study the relationship between a person's thoughts (psychological) and their social behaviour. This includes the meaning a person gives to their psychological processes. According to Bandura, people learn through observation and modelling of other people's behaviour.

Biopsychosocial

The interplay of biological, psychological, and social factors explains mental illness. This depends on the person and their environment.

Mental health is fundamental to our collective and individual ability as humans to think, emote, interact with each other, earn a living, and enjoy life. On this basis, the promotion, protection, and restoration of mental health can be regarded as a vital concern of individuals, communities, and societies throughout the world. Mental health is critically important for everyone, everywhere, and goes beyond the mere absence of a mental health condition. It is integral to well-being, enabling people to realize their full potential, show resilience amidst adversity, be productive across the various settings of daily life, form meaningful relationships and contribute to their communities. Physical, psychological, social, cultural, spiritual, and other interrelated factors contribute to mental health, and there are inseparable links between mental and physical health. Promoting and protecting mental health is also critical to a well-functioning society. It fosters social capital and solidarity, which are essential during times of crisis.

In the theory of mental health propounded by Man (1969), mental health is a state that enables an individual's physical, intellectual, and emotional growth to be at its best. The fundamental principles that imply the elements of mental harmony are: self-assurance, consistency in routines, self-affirmation, emotional development, reality perception, freedom from negativity, freedom from worth-drawing tendencies, and freedom from limited symptoms. According to him, every mentally healthy individual possesses each of these attributes in equal measure.

According to Stewart (2021), mental health results from meeting all psychobiological demands. A mentally healthy individual is driven to pursue self-actualization and has a positive self-concept. He is integrated, meaning that his psychic forces are in equilibrium. There is an unwavering trust in caring for oneself, duties, and romantic relationships, along with a lack of mistrust and contempt for any internal defences. He views life in a cohesive manner and can handle stress to a respectable extent.

Entrance Exam Stress

The term 'stress" was first coined by Selye in the 1930s who focused on stress as an effect or response of the body to demands made upon it. Stress was seen as a state of stimulation causing changes with the body which interrupt normal physiologic mechanisms. These physical reactions were thought to be important in allowing humans to adapt and survive in difficult situations, however, even early theories recognized that a high level of stress can lead to a number of negative effects on the body over time (Hamey, 2005).

The etymological meaning of the word 'stress' has been originated from the Latin word 'stringere' which means 'to draw light'. The term was used to refer to hardship, strain, adversity, or affliction. Various terms have been synonymously used with stress, viz., anxiety, frustration, conflict, pressure, strain etc. Physical science uses the term stress, strain, pressure, elasticity to describe an effect on material. The credit for adoption of the term 'stress' as a psychological concept is attributed to Selye (1978). He defined stress as "non-specific responses of the body to any demand made upon it."

Stress can be defined as any type of change that causes physical, emotional, or psychological strain. Stress is your body's response to anything that requires attention or action. Everyone experiences stress to some degree. The way you respond to stress, however, makes a big difference to your overall well-being.

Stress is the body's reaction to a change that requires a physical, mental, or emotional adjustment or response. Stress refers to a "particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources" (Lazarus & Folkman, 1984). Individuals have stress in different situations, including academics, career, and social relationships. Although many researchers (Ainslie, Shafer, & Reynolds, 1996) have examined students' general stress, which refers to psychological stress based on specific surroundings.

Stress is viewed as a negative emotional, cognitive, behavioural, and physiological process that occurs as a person tries to adjust to or deal with stressors

(Bernstein et al., 2008). It has been argued that an individual can have possibly anxious thoughts, difficulty to concentrate or remember because of being stressed.

Stress can lead also to change in people's behaviours, such as nail biting, heavy breathing, teeth clenching and hand wringing. When people are stressed, they may feel cold hands and feet, butterflies in stomach, and which all are regarded as common physiological effects of stress. They can be connected to emotion of anxiety (Auerbach & Gramling, 1998). Physical and psychological responses to stress generally occur together, especially when stress becomes more intense.

However, one category of stress responses can influence other responses. For instance, mild chest pain may lead to the psychological stress response of worrying about getting a heart attack. Physical responses can be produced when a person escapes from a terrible accident or some other frightening events, he or she will experience rapid breathing, sweating, and even shaking little later. These reactions are part of a general pattern known as the fight-or-flight syndrome. The psychological responses to stress can appears changes in emotions, thoughts (cognition), and behaviours (Bernstein et al., 2008).

Stress has been seen tightening its grip on the students, as they must compete every step of their academic career in this fast-moving world. This shadow of academic stress darkens the students of high and intermediate schools as they must enter the world of competition for choosing their respective careers. Stress is marked by overly high-performance standards, with high levels of worry, self-criticism of attention while preparing for or taking exams (Pai et al., 2018). Too much stress can interfere with how a student prepares, concentrates, and performs.

Stress is something that causes strong feeling of worry or anxiety. It is a normal part of life and it is not necessarily harmful until and unless, it takes over the person to feel overwhelmed and even isolated. In fact, getting stressed a bit about examination means that students really care about the result they will get. It pushes them to work hard to get a good score. But when anxiety caused by examination stress reached clinical or sub-clinical levels, it interfered with the ability of the students to perform at their potential. The inability to perform in turn led to a greater sense of distress. Stress and anxiety experienced during the examinations is often attributed to the fear of failure and can have lasting negative impacts on the self-esteem of the student. Examination anxiety has been reported to produce debilitating cognitive effect including difficulties with memory and recalling information. There is a significant positive relation found between achievement motivation and academic achievement and a negative relationship between anxiety and academic achievement (Alam, 2018).

According to Concordia University, “Exam stress is the feeling of tension and worry that comes from test-taking situations. It is normal to feel some stress about upcoming tests, exams, papers, or presentations. Indeed, a small amount of stress can challenge you and stimulate you to work harder. Exam stress becomes problematic when it interferes with your ability to perform and achieve your academic and learning goals.”

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attention or action. Everyone experiences stress to some degree. The way you respond to stress, however, makes a big difference to your overall well-being.

Stress has been seen tightening its grip on the students, as they must compete every step of their academic career in this fast-moving world. This shadow of academic stress darkens the students of high and intermediate schools as they must enter into the world of competition for choosing their respective careers.

"Stress" is a word, which is used widely in everyday life and it is defined as the insight of impropriety between factors or stressors and ability of human body to cope these strains or it is defined as the undesirable response of the human body against burden or any type of strains placed on them.

Stress is developed in the human body as it faces or deals with an environment or situations, like physical or psychological challenges. These are recognized as an inevitable or irresistible and that cannot be coped up or cannot be managed easily. So, our body's response (physiological, biological, or psychological) to the changing surroundings or environmental stimulus or stressors, which are in any form affecting the human body. The response of Human body occurs physically, mentally, and with emotional capabilities. Stress is worthy regard to consider as dangerous to human health as it affects the normal daily activities or functioning or performance. There are two types of stress, first is the negative form or distress and second form is positive form or eustress. Both experts' different effects on the human body. The distress form or negative form, in which most people are associated with stressed out condition, which exerts effects or develop sign and symptoms like insomnia or lack of sleep, tension, irritability or anger and headache.

The peoples respond destructively with collapse of the body or develops suicidal ideation or suicidal attempts or exerts negative effects on human body. The positive form or eustress, will boost or energize and motivate, which results in achievements of goals or destinations or high dignity and exerts positive effects on human body.

Adolescence is a transition period from childhood to adulthood during which emotional, social, and cognitive development occurs. They are the more than 1.5 billion and considered as one fifth of the total population in the world. In Adolescence, transition occurs in education level from higher secondary schools or degree colleges to professional universities (Medical / Engineering), so crises increase in the human body and this issue can be assessed by psychologically parameters, like Academic stress, Entrance exam stress. This type of stress is considered as pervasive problem, which is prevalent in our society, as well as in each ethnic group in our country.

According to Marriam Webster Dictionary, “entrance exam can be defined as a test to see if someone should be admitted to a school.” Collins English Dictionary defines that the entrance exam “an examination success in which qualifies a person to join a school, university, organization, etc.” R.K Singh defined that "Entrance exams are standardized assessments designed to evaluate the eligibility and suitability of candidates for admission into various educational institutions. These exams test the knowledge, skills, and aptitude required for specific academic programs."

"Entrance exam stress refers to the psychological strain and anxiety experienced by students as a result of preparing for and taking high-stakes exams

that determine their academic and professional futures. This stress is often a response to the perceived imbalance between the demands of the exam and the individual's ability to meet those demands" (Lazarus, R. S., & Folkman, S. 1984). "Entrance exam stress encompasses the cognitive, emotional, and physiological responses elicited by the anticipation and experience of taking entrance exams. This form of stress is particularly intense due to the high stakes involved, including future educational and career opportunities" (Spielberger, C. D., & Vagg, P. R., 1995).

Students preparing for competitive exams, such the National Eligibility cum Entrance Test (NEET) for medical education in India or the Joint Entrance Examination (JEE) for engineering, frequently experience entrance exam stress. Students are under a lot of pressure from society, their families, and themselves, which is the root of this stress. Entrance exam stress is the word used to describe the tension, anxiety, and psychological strain that students go through when they are getting ready for important exams that will determine whether they get into elite universities. Numerous elements, such as peer pressure, familial expectations, and academic expectations, have an impact on this stress.

Students who take entrance exams may experience severe anxiety and depression. These mental health problems are partly caused by having high expectations and being afraid of failing. Stress can impair cognitive functions such as memory, attention, and problem-solving abilities, which are crucial for performing well in exams. Social factors such as parental pressure and peer competition also contribute the exam stress to the students.

According to psychologists Richard Lazarus and Susan Folkman's 1984 book "Stress, Appraisal and Coping," stress is the body's internal response to any perceived damaging external input. This could be anything from a small annoyance like spilling your coffee to a major life disaster like losing your job.

They found that an individual's degree of stress is strongly correlated with how comfortable they feel handling a threat. For instance, someone may consider spilled coffee to be a small annoyance and choose to simply clean it up and move on. Another could become enraged and allow it to spoil her entire day.

According to Lazarus and Folkman, our stress levels are frequently more influenced by how we perceive or respond to events than by the events themselves. Using coping mechanisms and objective assessment, they created a framework to assist people in managing stressful situations. This model of stress and coping was called the Transactional Model.

According to Yerkes-Dodson Law, there is an ideal arousal level for performance, and both high and low stress levels impair one's ability to function. While extreme stress decreases cognitive function, moderate stress increases motivation and focus, which improves performance.

According to Bandura, a key factor in how students handle stress is their sense of self-efficacy, or their confidence in their capacity to succeed. While students with low self-efficacy may feel more anxious and stressed out, individuals with strong self-efficacy are more likely to approach entrance tests with confidence and less worry.

Entrance exams can be especially difficult because they are frequently crucial in establishing a student's future academic and professional path. The elevated stress levels linked to these exams are caused by a number of factors:

High stakes

Entrance exams often determine admission to prestigious institutions or programs, making the stakes extremely high. The fear of not securing a spot can create immense pressure on students.

Intense competition

Stress is increased by the competitive nature of entrance exams, where a large number of applicants compete for a small number of seats. The pressure to achieve better than their peers is something that many students experience.

Parental and societal expectations

Parents and society often have high expectations regarding academic success. This external pressure can contribute significantly to the stress experienced by students.

Fear of failure

One of the main causes of stress can be the dread of falling short of others' or one's own expectations. Students could be concerned about how failing will affect their future and self-worth.

Time constraints

It can be difficult to manage entrance exam preparation in addition to normal schooling and other obligations. When students find it difficult to properly manage their schedules, time constraints might make them feel more stressed.

Peer pressure

Peer interactions that result in a competitive atmosphere and stress can arise from studying for the same tests. Anxiety might be increased even more by comparing one's performance and preparedness to that of peers.

Lack of proper guidance

Inadequate guidance and support from teachers, mentors, or coaching institutes can leave students feeling unprepared and anxious about their exam readiness.

Previous academic performance

Students who have struggled academically in the past may experience increased stress, fearing that their past performance will negatively impact their entrance exam results.

Students' mental health and academic performance are greatly impacted by entrance exam stress, which is a complex problem. Stress levels are raised by the vast material, fierce rivalry, societal and family expectations, high stakes attached to these tests, and dread of failing. Anxiety, a lack of focus, and poor academic performance might result from this stress. It is critical to address these problems by

providing supportive workplaces, efficient time management, and access to mental health resources. A study by Deb et al. (2015) emphasizes the significance of comprehending students' academic-related stress and the requirement for interventions that offer both practical help and emotional support to lessen exam stress.

Perseverance

According to Marriam Webster Dictionary, perseverance is the continued effort to do or achieve something despite difficulties, failure, or opposition: the action or condition or an instance of persevering: steadfastness. According to APA Dictionary of Psychology, perseverance can be defined as the phenomenon in which people's beliefs about themselves and others persist despite a lack of supporting evidence or even a contradiction of supporting evidence.

The word Perseverance is derived from Latin words, per means through and Severus means severe - that is through the severe and difficult. Perseverance is the ability to keep doing something in spite of obstacles. It is the quality of continuing to try to accomplish a particular aim though you encounter hindrances. It is showing steadfastness in doing something despite how tough or how long it is to reach the goal. Each one of us face defeats or setbacks at one or other stage, in our life. Some of these might be big ones, which are noticeable. But many of them are smaller, which can take a toll on us. These challenges can leave us scrambling to keep up the spirit or might lead us to reconsider our paths and goals. We require the ability to withstand or resist these hiccups, which may include criticism, discouragement, physical barriers etc., and require optimism to fight against all the odds in the battle

of life. "Perseverance" is a word that generally, though not always in a clinical sense, describes repeated or incessant behaviour.

Perseverance refers to our ability to pursue a goal or passion over time, and stick with it if we encounter obstacles or setbacks. It is closely related to a range of other concepts including resilience, motivation, drive, determination, grit, passion, and conscientiousness. Various studies have shown that perseverance is an essential quality for success in life (Duckworth, 2014). It often tops aptitude and raw talent and is a more accurate predictor of achievement. Our ability to stick with our tasks, goals, and passions is vital. Persevering entails effort and practice. It also involves our ability to learn from failure and try again when thrown off our horses until we get thrown off no more (Jankay, 2020). Perseverance as a continuous drive to reach our goals and improve our skills and performance through persistent effort. It is a form of purposefulness and goal-orientation, which requires long-term commitment and discipline.

Baruch-Feldman (2017) defines perseverance as “the ability to stick with something, to continue working hard even after experiencing difficulty or failure.” Perseverance means everything to one’s success. If one is always giving up when things get clumsy or when one faces impossibilities, it will be very difficult for him to achieve success. Without perseverance, one will never be successful. That is why perseverance is must for anyone who wants to succeed in life. The more one learns to persevere when growing and developing physically and mentally, the success one will easily reap.

Perseverance is the ability to keep doing something in spite of obstacles. It is the quality of continuing to try to accomplish a particular aim though you encounter hindrances. It is showing steadfastness in doing something despite how tough or how long it is to reach the goal. Each one of us face defeats or setbacks at one or other stage, in our life. We require the ability to withstand or resist these hiccups and require optimism to fight against all the odds throughout the battle of life. People with Perseverance are reliable and trustworthy and Perseverance boosts your morale and increases your self-esteem. Perseverance includes Resilience, which can be defined as the ability to recover quickly from difficulties, toughness or the capacity to bounce back into shape The paper also dwells on certain techniques or approaches like setting goals, willingness to risk, not to be afraid of failure, be positive, build a network of support, maintain fitness and update your skills, knowledge and abilities ,that can be used to handle obstacles as to persevere through these obstacles and rise above is the key to progress in life.

Perseverance, known as provision and continuation of effort, is a decisive factor in the accomplishment of all goals. The importance of Perseverance is recognized by Intellectuals, Sports men, Film stars, Business men and Leaders alike. Perseverance includes Resilience, which can be defined as the ability to recover quickly from difficulties, toughness, or the capacity to bounce back into shape. It is a quality which all of us have but when and how we use it matters." Of all the virtues we learn, no trait is more useful, more essential for survival and more likely to improve the quality of life than the ability to transform adversity into an enjoyable challenge.”

Perseverance is defined within the field of positive psychology as the voluntary continuation of a goal-directed action in spite of obstacles, difficulties, discouragement, boredom, tedium, or frustration. Perseverance is a character strength associated with psychological health. Its connection with well- being is explained as follows, “When sustained activity results from an internal strength, as opposed to threats or deadlines, it is highly engaging. When the activity is complete, it produces satisfaction.”

Perseverance, often recognized as the secret to success, is the unrelenting dedication to accomplishing one's objectives in the face of obstacles and disappointments. It is the capacity to persevere in the face of difficulty, keeping one's resolve and focus. A quality that has been praised historically for its ability to spur ambition, foster personal development, and clear the way for success.

The quality that makes the difference between people who fail and those who succeed in their aspirations is perseverance. Difficulty is conquered by people when they have a determined will to keep going forward in the face of challenges, setbacks, and failures. It encourages one to stick to their long-term goals instead of giving in to transient joys or failures. Perseverance plays such a significant role in our individual lives, naturally its domain also extends to making a positive impact on the world.

Angela Duckworth defines grit as “perseverance and passion for long-term goals. Grit entails working strenuously toward challenges, maintaining effort and interest over years despite failure, adversity, and plateaus in progress” (Duckworth, Peterson, Matthews, & Kelly, 2007). According to Duckworth, grit is a critical

predictor of success, often more so than talent or intelligence. Grit is the ability to persevere through years of hardship, setbacks, and stagnation in one's career.

According to Self-Determination Theory (SDT), perseverance is fuelled by internal motivation as well as the satisfaction of fundamental psychological needs such as competence, autonomy, and relatedness. People are more likely to demonstrate perseverance in pursuing their goals when they are intrinsically driven when their surroundings meet their psychological demands.

"Self-determination theory (SDT) is a macro-theory of human motivation, personality development, and well-being. The theory focuses especially on volitional or self-determined behaviour and the social and cultural conditions that promote it. SDT also postulates a set of basic and universal psychological needs, namely those for autonomy, competence and relatedness, the fulfilment of which is considered necessary and essential to vital, healthy human functioning regardless of culture or stage of development."

Locke and Latham's goal-setting theory postulates that specific and challenging goals, coupled with appropriate feedback, enhance motivation and performance. Perseverance is influenced by the clarity of goals and the belief in their attainability. Setting achievable yet challenging goals encourages sustained effort and persistence. The domain of goal setting theory lies within the domain of purposefully directed action. The theory focuses on the question of why some people perform better on work tasks than others. If they are equal in ability and knowledge, then the cause must be motivational. Goal setting theory approaches the issue of motivation from a first-level perspective; its emphasis is on an immediate level of

explanation of individual differences in task performance (Ryan, 1970). The theory states that the simplest and most direct motivational explanation of why some people perform better than others is because they have different performance goals.

The study of attribution theory looks at how people understand and account for their accomplishments and shortcomings. Perseverance is higher in those who ascribe their failures to controllable elements, such as work and strategy. On the other hand, blaming uncontrolled elements like bad luck for failure might destroy persistence. As part of Bernard Weiner's contribution to attribution theory, he explored the concept of internal attribution, which refers to the belief that an individual's behaviour is driven by personal characteristics, such as ability, effort, or personality traits. This perspective highlights the role of social perception in shaping attributions, as individuals often rely on their observations and evaluations of others to make judgments about the causes of behaviour.

Markman, et al. (2005) conclude that perseverance is an individual tendency to persist and in the face of adversity. There are two types of perseverance: 1. Perceived control over adversity. Perceived control over adversity influences one’s course of action, effort, length of perseverance and resilience specifically in contexts of obstacles, hardship, or failures.; 2. Perceived responsibility of or accountability for the outcome of adversity It means that how the person perceived his responsible to face of adversity. It also captures the extent to which individuals hold themselves accountable for improving their situation. Taking responsibility is important because when performance is deemed inferior due to lack of effort (rather than ability), a

causal antecedent is set in motion whereby deploying additional effort enhances future performance.

Peterson and Seligman (2004), also argued that perseverance is related to ability, people with high ability should be more willing than other people to persist on faced on tasks. Motivational differences among the individual also high relevant to perseverance, people with high motivational orientations toward control are likely to be more persistent, especially in the face of failure than others.

Perseverance is a key aspect in achieving long-term success and is fuelled by intrinsic motivation, self-efficacy, a growth mindset, effective goal planning, social support, and emotional regulation. These characteristics work together to help people persevere and overcome problems, promoting resilience and long-term commitment. As Duckworth et al. (2007) point out, grit, which includes both tenacity and passion, is a better predictor of success than talent or intelligence alone. Individuals that cultivate these characteristics can improve their perseverance, resulting in greater accomplishments and personal progress.

Review of Related Studies

The phrase ‘review of literature’ consists of two words: Review and Literature. The term review means to organise the knowledge of the specific sound of research to evolve an edifice of knowledge to show that the proposed study would be an addition to this field in research methodology the term literature affairs to the knowledge of a particular area of Investigation of any discipline which includes theoretical practical and its research studies.

The task of review of literature is highly creative and tedious because the researcher has to synthesise the available knowledge of the field in a unique way to provide the rationale for his study. The study of the related literature held the researcher in Problem study, promotion of hypothesis, research methods, Research Design, selection of the tools and its uses.

Review of related studies is about reviewing or studying existing work carried out in this project or research field. Related studies can be taken from journals, magazines, website link governmental reports and other sources. In that, related studies first need to be included to justify your novelty of the research work.

Review of Related Studies on Mental Health

Velagapaly & Bolla (2023) studied an exploratory study on student mental health and well-being at Higher Education Institute in Telangana District, India. This study aimed to investigate the relationship between mental health, academic performance, and self-social mental health recovery in college students. A cross-sectional survey was used to collect the data. The data was analysed using descriptive statistics, correlation analysis, multiple regression analysis, and ANOVA. Results indicated that college students generally reported above-average levels of mental health and academic performance. The prevalence and severity of mental health issues, along with factors contributing to poor mental health, were rated high. A significant positive relationship between factors contributing to poor mental health and self-social mental health recovery, as well as between mental health, academic performance, and self-social mental health recovery had found through study. No

significant relationship was found between the prevalence and severity of mental health issues and self-social mental health recovery.

La Salle & Rocha-Neves (2021) conducted a multinational study exploring adolescent perception of school climate and mental health. In this study, it is investigated the established measurement invariance of an eight-factor school climate scale using a multinational sample of secondary students and compared school climate factor means across 14 international groups and investigated the association between school climate factors and mental health. From the findings, it highlights similarities across nations in how secondary students perceive school climate and how it affects their mental health.

Shanmugam (2020) has conducted study on the mental health of higher secondary students in relation to their value conflict, social maturity, and achievement in English. The target population consists of twelfth-grade students studying in higher secondary schools. A sample of 600 students from 20 different schools in the Namakkal district of Tamil Nadu, India was selected using simple random sampling. The normative survey method was used in this study. The research adopted and standardized several tools including an achievement test in English, Mental health scale, Value conflict scale and social maturity scale. The results indicate that students generally exhibit better mental health, lower value conflict, higher social maturity, and lower achievement in English.

Patel (2019) has conducted a study on the problem of mental stress among higher secondary science stream students, recognizing its impact on their educational achievement and overall personality development. To gather data, the

researcher administered a standardized mental stress scale developed by Dr. Himanshu. P. Sawant, to a sample of 556 science stream students selected through random sampling. Upon analysing data, it was observed that the entire sample group experienced a moderate level of mental stress.

Murugan (2017) conducted a study on mental health and adjustment of higher secondary school students. To collect the data from the samples, Mental Health Scale developed by Sakthimani (2010) and the Adjustment Inventory developed by A.K.P. Sinha and R.P. Singh (2007) were used. The sample consisted of 103 higher secondary school students, including 53 males and 50 females. From the results, it found that there is a significant relationship between the mental health and adjustment of higher secondary school students.

Subramani & Kadhiravan (2017) conducted a study on academic stress and mental health among high school students. This study aimed to investigate the association between academic stress and mental health among high school students. The researchers selected 200 students from both government and private schools in and around Salem city, Tamil Nadu, using stratified random sampling. Data was collected using the Educational Stress Scale for Adolescents and the Positive Mental Health Scale. Results indicated that students from private schools experienced higher levels of academic stress compared to those from government schools, while private school students exhibited higher levels of mental health. And the study found a significant relationship between academic stress and the mental health of high school students.

Sankar & Wani (2017) studied the mental health among adolescents. In the study, a sample of 40 subjects were divided into two group: boys and girls, with each group contains 20 subjects. The assessment of mental health was conducted using the Mental Health Scale developed and standardized by Dr. Jagadish. The results indicated that boys had a higher level of mental health than girls, with a significant difference observed between the mental health scores of boys and girls.

Kharod & Kumar (2015) carried out a study on mental health status of school going adolescents in rural area of Gujarat. A cross-sectional study was conducted among adolescent students aged 10-19 years in rural schools in Anand district, Gujarat. In this study, a pre-tested and validated 'Strengths & Difficulties' Questionnaire (SDQ) in Gujarati language was used. A total of 605 boys and 361 girls participated in the study. Only around 37% of students reported normal SDQ scores, while 30% had borderline and 33% had abnormal scores. The highest level of abnormal scores was observed in peer problem scores and the lowest was in pro-social behaviour scores. Abnormal SDQ scores were significantly more prevalent among girls, Muslim students, students in primary school, those from problematic families, and those attending morning schools.

Sreenivasan & Kumar (2014) carried out a study on comparison of mental health of urban Indian adolescents among working and non-working mothers. This study was conducted at two schools within the Chennai Corporation. The mental health status of the students was evaluated using the self-report version of the Strengths and Difficulties Questionnaire (SDQ). The highest reported issues were conduct problems, followed by peer problems, pro-social behaviour, and emotional

problems. Some of the students felt that these problems affected their homelife, friendships, classroom life, and leisure activities, and that these difficulties upset or disturbed them. Mental health problems were significantly more prevalent among children whose both parents were employed, across all categories.

Talawar, Das (2014) conducted a study of relationship between academic achievement and mental health of secondary school tribal students of Assam. A sample of 200 secondary school tribal students was used and giving representation to gender and locality. To assess mental health, the researchers used the scale developed by Mercy Abraham and K.C. Baby Prasanna, while academic achievement scores were obtained from the schools. Pearson's product moment correlation was used to determine the relationship between the variables, and 't' tests were conducted to assess the significance of differences. The findings indicate a positive correlation between academic achievement and mental health among the secondary school tribal students in Assam. The study reveals significant differences in mental health between boys and girls, as well as between urban and rural secondary school tribal students in Assam.

Lester & Waters (2013) studied a relationship between school connectedness and mental health during the transition to secondary school. Data were collected from 3,459 students in a longitudinal study on adolescents' knowledge, attitudes and experiences of bullying victimisation and perpetration during the transition from primary to secondary school. Path analysis was used to analyse the relationships between school connectedness, depression, and anxiety. The results show that there were reciprocal relationships between connectedness and mental health: increased

connectedness to school is linked to decreased depression and anxiety, while increased depression and anxiety are associated with decreased connectedness to school.

Dogra & Omigbodun (2012) conducted a study to establish the views and knowledge about mental health and illness in pupils at four secondary schools in rural and urban Southwest Nigeria. A cross-sectional survey was conducted using a questionnaire that was previously utilized in the UK and adapted for use in Nigeria. Data from 145 Nigerian school children showed the limited knowledge, negative attitudes, and a desire for social distance from individuals with mental health issues. Urban students and boys showed less knowledge compared to rural children and girls.

Faghirpour & Amoopour (2011) conducted a study to find out the relationship between emotional intelligence and mental health of students. A sample of 503 high school students were selected using cluster sampling method for the study. Emotional intelligence questionnaire Sybrya Shrink and Goldberg and Hillier mental health questionnaire were used as tools. And from the results, it said that there is a significant relationship between the components of emotional intelligence of students with the mental health.

Li & Chan (2010) conducted an exploratory study to assess the relationships among mental health, self-esteem, and physical health in Chinese adolescents. In this study, Chinese students aged 12 to 19 from four secondary schools in different regions were selected as samples. From the results, it found that a considerable number of adolescents in Hong Kong are experiencing symptoms of depression.

From the overall findings it found that the self-esteem of adolescents is related to and predicts their physical and mental health.

Dhuria & Sharma (2009) carried out a study on assessment of mental health status of senior secondary school children in Delhi. This study aimed to evaluate the mental health status of senior secondary students. A cross-sectional study was conducted on a sample of 458 children selected through 2-stage sampling. Goldberg's General Health Questionnaire with 60 items (GHQ-60) was used to assess mental health. The GHQ was administered to 239 boys and 219 girls aged 15 to 20 years. From the results it showed that the morbidity was notably higher among children from nuclear families and those who had either failed or achieved the highest scores in their class.

Review of Related Studies on Entrance Exam Stress

Motallebi & Pour (2023) conducted a study investigating the relationship between stress and oral health-related behaviours changes in final year of high school students prior to university entrance exam. A descriptive-analytical study was done and assessed the stress levels and variables associated with oral health in 180 final-year high school students in Tehran. Findings of the study indicate that, as the entrance exam date approached, there was a significant decrease in the score for cognitive error and higher level of test anxiety as the entrance exam got closer.

Rabby & Islam (2023) conducted a cross-sectional study to assess the prevalence and associated factors of depression symptoms, anxiety, and stress among undergraduate entrance admission-seeking students in Bangladesh. A cross-

sectional study design was employed, utilizing an online tool that included socio-demographic questions and the 21-item Bangla Depression, Anxiety, and Stress Scale (BDASS-21). The survey was completed by 452 Bangladeshi students who had successfully completed the Higher Secondary Certificate (HSC) examination in 2020 and were preparing to enroll in undergraduate programs during the data collection period. Findings of the study was that the females were more likely to have depression, anxiety, and stress symptoms than males. And the students from science backgrounds were at higher risk of developing depression and stress symptoms when compared with students from business studies backgrounds.

Saleem & Khan (2023) conducted a study on association of perceived stress with gender and BMI in students appearing in university entrance examination. A cross-section study was done in a sample of 498 pre-medical and pre-engineering students. The purposive sampling technique was used to collect the student's data by applying Sheldon Cohen's Perceived Stress Scale (PSS-10). From the findings, it was found out that there was a moderate stress level of perceived stress in students. Also, the perceived stress was significantly associated with gender, while no significant association between stress and BMI.

Mann & Tiwari (2021) carried out the study of stress and coping strategies in competitive entrance exams aspirants attending medical and engineering coaching institutes in Delhi. A cross-sectional survey was used and the sample of the study was 400 students, 200 each from medical and engineering sectors. A self -designed questionnaire was used to collect data. The study findings indicated that majority of the students reported academic and parental stressors as sources of stress and

personal and environmental stressors also contributed as the sources of stress to the medical and engineering competitive entrance exams aspirants.

Chung (2020) conducted a study to investigate the effects of entrance exam stress on oral health behaviours and subjective oral health status in female high school students. A sample of 216 female high school students from Gwangju area were selected and a self-reported questionnaire was used as tool. From the results, it was found that there was a significant positive correlation between the subjective oral health status and the subarea of entrance exam stress, except for future uncertainty stress.

Saharia & Goswami (2020) conducted a study on examination stress of higher secondary students in relation to their gender, locality, and stream of study. Stratified random sampling technique was used for data collection. Results of the study showed that there exists a significant difference between the examination stress of male and female students and between rural and urban students. And there was no significant difference was found in the examination stress level of the students of Science and Commerce stream.

Sasikumar & Bapitha (2019) conducted a study on examination stress and academic achievement in English of ninth standard students in Pudukottai educational district. A total of 300 high school students randomly selected for the study. Results showed that high school students experience high stress due to various reasons such as lack of preparation, nature of their study and lack of needed information.

Xiang & Tan (2019) carried out a study on longitudinal effects of examination stress on psychological well-being and a possible mediating role of self-esteem in Chinese high school students. This study was conducted among 248 Chinese high school students who were followed over the course of one semester. Three tools used in this study are the shortened version of the academic stress scale, the Rosenberg self-esteem scale, and the Chinese version of the psychological well-being scale. Results showed that the initial examination stress level negatively predicted the students' initial level of psychological well-being. Also, changes in examination stress over time negatively predicted changes in psychological well-being.

Limura (2016) carried out a study on students' stress-related growth through high school entrance examinations: Role of personality traits and perceived support. This study investigated the impact of personality traits and perceived support on stress-related growth in students during their high school entrance examination experience. 96 boys and 87 girls in the ninth grade were participated in the study. From the study, it found that the stress-related growth differed, depending on gender and the interaction of personality and perceived support.

Thomas (2016) conducted a study on stress in adolescents attempting entrance exams to professional courses in relation to regularity of routine, study habits and parental expectations. A survey method was used. 203 students were administered questionnaires to assess their stress levels and perception of parental expectations. Results of the study showed that adolescents preparing for entrance exams experienced significantly higher levels of stress compared to those not

preparing for exams. And higher stress in adolescents had significant relationship with higher parental expectations and poorer regularity of routine.

Kumari & Jain (2014) conducted a study on examination stress and anxiety of college students under science, arts, and commerce stream of education. A sample of 90 students were selected using the random stratified sampling method and a questionnaire was designed by the researcher to assess examination stress and anxiety among college students. The results indicated a correlation between examination stress and anxiety among college students.

Shahmohammadi (2011) conducted a study on students coping with stress at high school level particularly at eleventh and twelfth grade. A sample of 100 students from 11th and 12th grades attending government secondary schools in Tehran was chosen. The stress and coping strategy questionnaire were used to gather the data. The study's results showed that 11th and 12th grade students generally handled challenging situations maturely, but tended to withdraw from life's problems.

Lee & Park (2007) conducted a study on the influence of high school students entrance exam stress on their mental health and also investigated if the entrance exam stress and mental health were related to gender, grade, character type, parenting style and economic status. A sample of 600 students from general high schools were selected through questionnaire. From the results, it showed that the students who were more introverted have higher levels of entrance exam stress and their parents adopted an authoritative parenting style. Students with low economic status exhibited higher levels of mental health issues. And also, male students

experienced higher level of entrance exam stress than girl students due to parental pressure.

Wang & Yeh (2005) conducted a study on stress, coping, and psychological health of vocational high school nursing students associated with a competitive entrance exam. Using descriptive cross-sectional design, the study was examined on nursing students in vocational high schools. Three tools such as stress perceived scale, coping behaviour inventory, and a Chinese health questionnaire were used. Results showed that the five main stressors of entrance exam stress were taking tests, the student's own aspirations, learning tasks, teacher's aspirations, and parent's aspirations.

Choi & Kim (2001) studied the relationship between stress responses and self-esteem on senior high school students preparing for college entrance examination. 261 senior high school students from three high schools situated in different areas of Seoul, South Korea were selected for this study. Stress responses were measured by SOS (symptoms of stress) inventory and self- esteem was measured by Rosenberg's self-esteem scale. From the findings found that there was significant negative correlation between the mean SOS score and the mean self-esteem score. The participants exhibited significantly high physiological and psychological stress responses, with females showing particularly higher stress responses compared to males.

Review of Related Studies on Perseverance

Maziriri (2024) conducted a study on the topic from perceived parental entrepreneurial passion to technopreneurship intention: The moderating role of perseverance and perceived parental entrepreneurial rewards. This study aimed to examine how perceived parents' entrepreneurial passion, perceived desirability, and perceived feasibility stimulated attitude towards a career in technopreneurship and technopreneurship intention among Generation Z students in Zimbabwe. It was based on a nomothetic quantitative methodology, where a survey was applied to collect responses from Generation Z university students in the Harare Metropolitan Province of Zimbabwe. The results indicated that the moderation role of perseverance and perceived parental entrepreneurial rewards on the nexus between attitude towards a career in technopreneurship and technopreneurship intention. Based on the results, the study concluded that perceived parents' entrepreneurial passion, perceived desirability, and perceived feasibility stimulated attitude towards a career in technopreneurship and technopreneurship intention among Generation Z students.

Sever & Jana (2023) conducted a study on Academic Self-Efficacy, Perseverance, and Growth Mindset: Impact on First-Generation Student Success. The goal of this sequential mixed-methods study was to determine whether academic self-efficacy, tenacity, and a growth mindset can predict first-generation student performance. A group of first-generation students was drawn from a multi-campus community college system in Texas. Ninety-three students filled out three questionnaires: the College Academic Self-Efficacy Scale (CASES), the Short Grit

Scale (Grit-S), and the Implicit Theories of Intelligence Questionnaire (self-theory). To capture the voices of first-generation students, eight people volunteered to participate in semi-structured interviews. Theories of Intelligence Questionnaire (Self-Theory) could predict student success, the results from the qualitative portion of the study suggested the participants felt that academic self-efficacy, perseverance, and growth mindset contributed to student success.

Al-Shamri & others (2021) conducted a study on the effect of the P5BL Model on the development of scientific thinking skills and academic perseverance in Physics among First grade secondary school students. The study utilized an experimental approach with a quasi-experimental design for two groups: experimental and control. The research sample comprised (45) secondary school students in Hail, Kingdom of Saudi Arabia, with (23) students in the experimental group and (22) students in the control group. Scientific Thinking Skills Test and Academic Perseverance scale were used as tools for the study. From the results, it was found that a statistically significant effect of the P5BL model on the development of scientific thinking skills in physics and academic perseverance among first-grade secondary school students. It concluded that the P5BL model played an important role in enhancing students' scientific thinking and academic perseverance.

Thorsen & Yang Hansen (2021) conducted a study on the mechanisms of interest and perseverance in predicting achievement among academically resilient and non-resilient students. The study sample included a subset of 1665 compulsory school students from the 1992 birth cohort in the Evaluation Through Follow-up

(ETF) database. Multigroup structural equation modelling (SEM) with latent variable interaction was used. From the findings, it found that the resilient students depend significantly on both their perseverance in effort and their interest in school subjects to achieve academic success. And for the non-resilient group, the level of perseverance was influenced by their level of interest, and neither their early nor later interest in grades was associated with their academic achievement.

Carbonneau & others (2020) conducted a study on the influence of perceptually rich manipulatives and collaboration on mathematic problem-solving and perseverance. In this study, the researcher conducted a two-part study to examine how the use of different manipulatives, levels of instructional guidance, and collaboration among college-aged students influenced their mathematics performance and perseverance. The results indicated that the collaboration of participants had a positive effect on students' perseverance during problem-solving as students who collaborated with perceptually rich manipulatives persevered as much as those who collaborated with bland manipulatives as well as those who worked individually with bland manipulatives.

Fabelico & Afalla (2020) carried out the study perseverance and passion in the teaching profession: teachers' grit, self-efficacy, burnout, and performance. This research was conducted to examine the interrelationships between and between variables such as teacher characteristics, motivation, self-efficacy, burnout, and performance to create a model that explains teacher success. This research employed several instruments, including the Short Grit Scale, Norwegian Teacher Self Efficacy Scale, Maslach Burnout Inventory for Teachers, and NBC 461 QCE, to collect data.

The participants were faculty members from a state university in the Cagayan Valley Region of the Philippines. The findings of this study revealed that teachers generally exhibited high levels of self-efficacy, moderate levels of burnout, and achieved satisfactory teaching outcomes.

Kamboj & Garg (2020) conducted a study on psychological wellbeing of Indian teachers and the role of emotional intelligence and perseverance. This study aimed to highlight the relevance of the direct and indirect impact of various psychological variables on the performance of the school teachers. A sample of 200 school teachers from sub-urban cities of Haryana (India) participated in the study. The results deduced a significant positive correlation among the key study variables.

Liw (2020) conducted a study on Roles of Perseverance and Meaning-Focused Coping in the Relationship Between Acculturative Stress and Subjective Well-Being for East Asian International Students. Using Tweed and Conway's (2006) framework, the study investigated how culturally relevant coping strategies, such as perseverance and meaning-focused coping, along with acculturative stress, impact the well-being of 200 East Asian international students. The findings showed that acculturative stress strongly predicted various aspects of well-being, including life satisfaction, positive affect, negative affect, and peace of mind. Perseverance emerged as a predictor of overall well-being, except for negative affect, while meaning-focused coping was associated with higher life satisfaction and positive affect. Further analysis revealed that perseverance partially mediated the relationship between acculturative stress and positive affect, as well as peace of mind.

Santos *et, al.* (2020) carried out a study on Passion and perseverance as two new dimensions of an Individual Entrepreneurial Orientation scale. The aim of this study was to validate a scale for quantitative research focusing on two newly identified dimensions of individual entrepreneurial orientation (IEO): passion and perseverance. The proposed measurement tool underwent development, validation, and testing using data from 249 agri-food firms established within the past five years in a specific region of Portugal. Through confirmatory factor analysis, the final analysis of the IEO dimensions and associated items resulted in a refined, reliable multidimensional model. The latter consisted of the three fundamental dimensions of IEO—risk-taking, innovativeness, and proactivity, along with the supplementary dimensions of passion and perseverance. The results indicated that these personal traits have implications for entrepreneurs, as all five dimensions impact firm management through entrepreneurial orientation.

Blades (2018) conducted a study on Perseverance in science education: A longitudinal study on the academic journeys of eight female students. This longitudinal study tracked the development of eight female students from secondary school through the completion of their first degree, and in some instances, the beginning of their careers. The research aimed to uncover the factors that contribute to these students' persistence in science education. Questionnaires and interviews were used as tools for the data collection. The results indicated that the perseverance in science education for these eight students has been the result of strength of character and individual choices.

Ganesan & Annadurai (2018) conducted a study on perseverance behaviour among B Ed students in Theni district. A random sample of 400 students were selected and general information sheet structured by the Investigator and Perseverance Inventory was used as the tools. Results showed that the perseverance behaviour among B Ed students was above the average level and female students have more perseverance behaviour than male students.

McCutcheon (2014) carried out a study on perseverance and persistence in achieving educational goals. This study aimed to identify the differences between students who persist in pursuing their educational goals and those who are unable to persist among a specific population of adult learners. A sample of 134 students were used in this study and the Grit Scale-S was used to assess the level of persistence among adults who have returned to complete their high school diplomas at an adult charter high school. From the results it said that there was not a significant difference on scores on the Grit-S between those students who completed the school term and those who did not.

Conclusion

The review of related literature gives the researcher a better knowledge and understanding about the research methodology. Review of the related literature helps the researcher to know about the tools and instruments which became useful and promising in the previous studies. The advantage of review of related literature is to provide insight into the statistical methods through which the results are to be established. In this chapter, the researcher has undergone through different researches, its subject matter which were related to the study. With the help of

reference books, abstracts, dissertations, the international sources of educational publications, yearbooks and survey reports, the researcher has studied the previous researches and enhanced the necessary knowledge to proceed further in the study. The success of any work depends on its fundamental planning. In the next chapter the researcher will explain the complete methods of research used in this study.

CHAPTER III

METHODOLOGY

- *Variables of the study*
- *Objectives of the study*
- *Hypotheses of the study*
- *Research methods*
- *Sample selected for the study*
- *Tools used for data collection*
- *Data collection procedure*
- *Scoring and consolidation of data*
- *Statistical techniques used*

METHODOLOGY

As studied in the second chapter, the review of literature helps a researcher to choose a broad field of education within which the researcher conducts the study. Through the survey and review of literature studies, the researcher gets thorough understanding of the problems which have remained unsolved or need a fresh interpretation and understanding about the gaps which exist in knowledge in the field selected by the researcher. After selecting the broad zone or field, the next step is to identify a specific research study for investigation.

The present study is entitled as the “Mental health, Entrance exam stress and Perseverance of higher secondary science students in Malappuram district.”

It is essential to use appropriate methods to find out the correct solutions of the problem. Various types of methods are employed for the educational research. Research is a purposeful, precise, and systematic search for new knowledge, skills, attitude, and values for the reinterpretation of existing knowledge, skills, attitude, and values.

Research methodology involves the systematic procedures by which the researcher starts from the initial identification of the problem to its final conclusions. The role of the methodology is to carry on the research work in a scientific and valid manner. The methodology chapter gives an overall idea about the research preparation, implementation, and finalization. The study will assure the quality if it follows each aspect of scientific methods and the result will be useful for the future.

The methodology adopted for the present study is described under the following major headings:

- Variables of the study
- Objectives of the study
- Hypotheses of the study
- Research methods
- Sample selected for the study
- Tools used for data collection
- Data collection procedure
- Scoring and consolidation of data
- Statistical techniques used

Variables of the study

The present study involves variables that are mental health, entrance exam stress and perseverance. The Independent Variables in the study are Entrance Exam Stress and Mental Health and Dependent Variable is the perseverance. The sub groups are gender, locality, type of institution, parental qualification, and parental employment.

Objectives of the study

The following are the objectives of the study:

1. To assess the mental health status of higher secondary school science students in Malappuram district.

2. To examine the levels of entrance exam stress experienced by science higher secondary school students in Malappuram district.
3. To assess the perseverance of higher secondary school science students in Malappuram district.
4. To explore the relationship between mental health, entrance exam stress and perseverance of higher secondary science students of Malappuram district.
5. To identify any significant differences in mental health, entrance exam stress and perseverance of science students of Malappuram district based on a) gender b) locality c) type of institution d) parental qualification e) parental employment.

Hypotheses of the study

1. There is no significant relationship between mental health, entrance exam stress and perseverance of higher secondary science students of Malappuram district.
2. There is no significant difference between mental health, entrance exam stress and perseverance of science students of Malappuram district based on a) gender b) locality c) type of institution d) parental qualification e) parental employment.

Research Methods

The purpose of the present study was to find out the relationship difference of mental health, entrance exam stress and perseverance of higher secondary science students in Malappuram district. The quantitative research method was used in this study.

In the present study researcher has used mental health scale, entrance exam stress scale, and perseverance scale as survey testing tool. The research tool used for the present research is a self-made tool and the whole procedure for construction and

standardization of tool is followed by the researcher with the help of the supervising teacher, which is explained later in this chapter.

Sample selected for the study

The importance of sampling is that you can determine the adequate respondents from the total number of the target population. Effective sampling, therefore, gives a room to the generalisation of the findings to the targeted population making the research very practical and economical to conduct yielding more comprehensive information.

A sample is a small portion of the population that is selected for observation and analysis; one can make certain inferences about the characteristics of the population from which it was drawn (Best &Kahn, 2012).

The present study followed the descriptive research design for quantitative research to find out the mental health, entrance exam stress, and perseverance of higher secondary science students in Malappuram district concerning their gender, locality, type of institution, parental education, and parental employment.

The population of the present study is composed of higher secondary science students in Malappuram district. The sample of the study constituted 510 students studying in higher secondary schools of Malappuram district. Stratified random sampling procedure was used to select the sample for the study.

Types of Higher Secondary Schools

There are mainly three types of higher secondary schools in Kerala such as Government, Aided and Unaided. These three types of higher secondary schools are popular in Kerala and are considered for my study.

Table 1

List of Higher Secondary Schools

Sl. No	Name of the school	Type of institution	Sample size
1.	GHSS, Kunnakkavu	Government	52
2.	PMSAMAHSS, Chemmankadavu	Aided	45
3.	PHSS, Perinthalmanna	Private	33
4.	GHSS, Edappal	Government	55
5.	MES HSS, Ponnani	Aided	46
6.	Markaz HSS, Athavanad	Private	36
7.	GHSS, Othukkungal	Government	45
8.	SNMHSS, Parappanangadi	Aided	40
9.	Oriental School, Tirurangadi	Private	35
10.	GMVHSS, Nilambur	Government	48
11.	MES HSS, Mampad	Aided	40
12.	Little Flower EHSS, Nilambur	Private	35
			Total = 510

Tools used for Data Collection

After a research design has been selected and it is decided who will be included in the study, the next step is to identify or develop suitable tools for collection of the desired information. Tools are nothing but the instruments that help the researcher to gather data.

During research process any instrument used to collect data consistent with the objectives of the study is known as tool.

The tools can be standardized tests which are readily available. If the standardized tests are not available then such tests are to be created, which should be reliable and appropriate for the respective research study.

In the present study to know the Mental Health, Entrance Exam Stress and Perseverance of higher secondary science school students of Malappuram district, researcher with the help of supervising teacher prepared a five-point scale for each variable of the study. Complete process of construction and standardization of Scale is presented in detail below.

In short, for the purpose of collecting data, the investigator used the following instruments for the study;

- Scale on Mental Health (Praseetha & Anees, 2023)
- Scale on Entrance Exam Stress (Praseetha & Anees, 2023)
- Scale on Perseverance (Praseetha & Anees, 2023)

Description of the Tools

The detailed description of the tools is given below.

Scale on Mental Health

Scale on Mental Health was used to measure the Mental Health of Higher secondary school science students in Malappuram district. Scale on Mental Health, constructed and standardized by the investigator with the help of the supervising teacher, was used to measure the Mental Health of Higher secondary science students.

Planning of the Scale

The first step in the construction and standardization of the Scale was planning of the Scale. It was decided to develop a Likert type scale with five responses viz; Always, Often, Sometimes, Rarely and Never.

After selecting the topic, the investigator reviewed relevant literature that cited numerous scales that were already being used for assessing mental health of higher secondary science students. The investigator carried out an extensive search of the literature on the development of mental health scale and testing.

The scale was prepared based on the different components mentioned in the Mental Health and Well-being of School Students, A Survey report, 2022 (NCERT). The Mental Health and Well-being of School Students—A Survey was undertaken to explore the perception of students with regard to their mental health. After thorough investigation and scrutiny, the investigator selected six components. The components selected for assessing the mental health of higher secondary students are:

Quality components

1. Adaptability
2. Satisfaction
3. Confidence
4. Trustworthiness
5. Peer pressure
6. Emotional understanding

1. Adaptability

Adaptability is the ability to adapt to changes in life, relationships or environment is an important life skill which determines how quickly an individual is able to respond to changes. Adaptability is also an important factor in students' academic and personal development, including their motivation, engagement, achievement, and socio-emotional well-being. It is identified as an important personal resource that can help students in their online learning, including periods of remote instruction.

Eg: when I need support, I am willing to seek help from others.

2. Satisfaction

Satisfaction is a person's feelings of pleasure or disappointment resulting from comparing a product's perceived performance (or outcome) in relation to his or her expectations. the role of expectations in shaping satisfaction. If a product performs better than expected, it leads to satisfaction.

Eg: when I spend time with people I like, I feel happy.

3. Confidence

Confidence is a belief in oneself, the conviction that one has the ability to meet life's challenges and to succeed and the willingness to act accordingly. An individual's confidence is impacted by how they perceive themselves. A lower level of confidence often leads to difficulty in expressing one's thoughts to others.

Eg: I believe I have the abilities to achieve my goals.

4. Trustworthiness

Trustworthiness is the quality of a person or institution that inspires confidence in their reliability, truthfulness, and ability to act in the best interests of others. Perceiving oneself as trusted by others increases an individual's self-esteem and has a positive impact on their social relationships.

Eg: I can build and maintain trustworthy relationship with my friends.

5. Peer pressure

Peer pressure is a feeling that one must do the same things as other people of one's age and social group in order to be liked or respected by them. The influence yielded by people over other members within the same social group emerges as an important motivating factor behind the actions and behaviour of an individual. It also impacts mental health.

Eg: my friends encourage me to participate in social activities like NCC, NSS, etc.

6. Emotional understanding

Emotional understanding is an individual's ability to identify emotions. It helps in interacting appropriately as one is able to understand how the other person is feeling.

Eg: I try to recognize and learn from my mistakes, and correct them.

Preparation of the Scale

Based upon the above-mentioned components the investigator developed Scale on Mental Health for higher secondary science students. The draft Scale on Mental Health includes 25 items. Out of 25 items, 21 items were positive and 4 items were negative statements. The subject had to respond to each of the items by choosing any of the alternatives always, often, sometimes, rarely, and never. Each of the items of the scale has five possible responses which are scored as 1, 2, 3, 4, and 5 respectively for positive statements and for negative statements the scoring was done in the reverse order.

The components wise distribution of items in the Scale on Mental Health is shown in Table 2.

Table 2

Components wise distribution of items in the Scale on Mental Health

Sl No:	Components	Item numbers in the scale	Total number of items
1.	Adaptability	1,2,3,4,5	5
2.	Satisfaction	6,7,8,9,10	5
3.	Confidence	11,12	2
4.	Trustworthiness	13,14,15	3
5.	Peer pressure	16,17,18,19,20	5
6.	Emotional understanding	21,22,23,24,25	5

Try out

The draft scale with 25 items, were tried out on a sample of 250 higher secondary science students by the investigator. Due representation was given to the sub groups of the population based on gender, locality of institution, type of institution, parental education and parental employment while selecting the sample for the try out. Before administering the test, necessary instructions were given to the students regarding the method of marking the responses. In addition to that, the purpose of scale was made clear to the students. With the help of the scoring key, all response sheets were scored and subjected to item analysis. 250 response sheets which are completely filled by the respondents were selected for the item analysis.

Item Analysis

Item analysis is a statistical technique which is used for selecting and rejecting the items of the scale. For determining the highest 27 percent and lowest 27 percent of the sample, 250 response sheets obtained after the administration of

the scale were scored and the total score of each sheet was noticed. The scored response sheets were arranged in ascending order based on total score. The highest 27 percent and lowest 27 percent with respect to the total score were separated.

As the total number is 250, its 27 percent is 67 and hence top most 67 scripts and lower most 67 scripts were selected as upper group and lower group respectively. The average scores obtained for each item by the upper group as well as the lower group was calculated separately. The significance of difference between the two mean scores were calculated by using the formula

$$\text{t value} = \frac{X_1 - X_2}{\sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}}$$

Where,

x_1 = The mean of the upper group for the item

x_2 = The mean of the lower group for the item

σ_1^2 = The SD of the upper group

σ_2^2 = The SD of the higher group

N_1 = Sample size of the higher group

N_2 = Sample size of the lower group

Items with t-value greater than 1.96 having significance as per Likert scale were selected for the final scale. The result of item analysis of the Scale on Mental Scale is provided in Table 3.

Table 3

Details of Item Analysis of Scale on Mental Health

Item No:	t-value	Remarks
1.	6.785	Accepted
2.	4.443	Accepted
3.	4.005	Accepted
4.	7.893	Accepted
5.	-2.1700	Accepted
6.	5.018	Accepted
7.	6.427	Accepted
8.	7.506	Accepted
9.	7.898	Accepted
10.	5.299	Accepted
11.	7.863	Accepted
12.	6.921	Accepted
13.	6.499	Accepted
14.	6.431	Accepted
15.	7.441	Accepted
16.	11.692	Accepted
17.	8.895	Accepted
18.	2.009	Accepted
19.	11.379	Accepted
20.	9.465	Accepted
21.	8.686	Accepted
22.	7.562	Accepted
23.	7.443	Accepted
24.	7.028	Accepted
25.	2.849	Accepted

After the item analysis, with the t-value greater than 1.96 having significance as per Likert scale was selected for the final scale. The Final Scale on Mental Health consists of 25 items, in which 21 items are positive and 4 items are negative.

A copy of the final version of the tool, Scale on Mental Health (English and Malayalam versions) are given as Appendices.

Reliability

Reliability refers to how dependably or consistently a test measures a characteristic. If a person takes the test again, will he/she get a similar test score, of much different score. A test that yields similar scores for a person who repeats the test is said to measure a characteristic reliably.

$$\text{Cronbach's Alpha} = 2[1- (\sigma\ 2\ \text{odd} + \sigma\ 2\ \text{even})/ \sigma\ 2\ \text{total}]$$

Cronbach's Alpha ranges from 0 to 1, with higher values indicating greater internal consistency (and ultimately reliability). Common guidelines for evaluating Cronbach's Alpha are:

- 0.0 to 0.5 = Unacceptable
- 0.5 to 0.6 = Poor
- 0.6 to 0.7 = Questionable
- 0.7 to 0.8 = Acceptable
- 0.8 to 0.9 = Good
- .90 to .99 = Excellent/Strong

The investigator used Cronbach's Alpha to determine internal consistency of items. The value of Cronbach's Alpha is 0.858, hence the tool is correlated well and scale is acceptable.

Validity

An index of validity shows the degree to which a test measures what it intends to measure when compared with accepted criterion. “Validity is that quality of a data gathering instrument or procedure that enables it to measure what is supposed to measure” (Best & Khan, 2012).

Face validity

When a scale 'appears to measure' what the scale intends to measure, it is said to possess face validity. Thus, face validity refers not to what the scale measure, but what the scale 'appears to measure', i.e. whether it seems to be relevant to its various objectives. Scale content should not appear to be irrelevant, inappropriate, silly, or childish. Present scale is prepared to find the mental health of higher secondary science students in Malappuram district. Language of scale and construction of items are checked by experts to make it accurate, therefore this scale shows face validity.

Content validity

Content validity considers whether or not the items on a given scale accurately reflect the theoretical domain of the teaching learning process of students to measure. Item need to effectively act as a representative sample of all possible question that could have been derived from the construct. In present study content validity was established for the tools. Tools had been sent to the experts related to the respective fields. Content of subject was checked by subject experts and items

suggested by them were selected and the necessary modifications are made accordingly to ensure content validity.

Scale on Entrance Exam Stress

Scale on Entrance Exam Stress was used to measure the Entrance Exam Stress of Higher secondary school science students in Malappuram district. Scale on Entrance Exam Stress, constructed and standardized by the investigator with the help of the supervising teacher, was used to measure the Entrance Exam Stress of Higher secondary science students.

Planning of the Scale

The first step in the construction and standardization of the Scale was planning of the Scale. It was decided to develop a Likert type scale with five responses viz; Always, Often, Sometimes, Rarely and Never.

After selecting the topic, the investigator reviewed relevant literature that cited numerous scales that were already being used for assessing exam stress of higher secondary science students. The investigator carried out an extensive search of the literature on the development of entrance exam stress scale and testing.

The scale was prepared based on the quality components mentioned in an article from MIER Journal of Educational Studies Trends and Practices (Saharia & Goswami, 2020). The components for assessing the entrance exam stress of higher secondary students are:

Quality components

1. Anxiety response
2. Cognitive and behavioural response
3. Perceived social expectation and social comparison

1. Anxiety response

Anxiety is an emotion characterized by feelings of tension, worried thoughts, and physical changes like increased blood pressure. People with anxiety disorders usually have recurring intrusive thoughts or concerns. Anxiety response is a temperamental disposition characterized by an increased sensitivity to unfamiliar situations and perceived threats.

Eg: When I think about the entrance exam, I have doubts about myself and my abilities.

2. Cognitive and behavioural response

Cognitive responses refer to the processes of encoding, organizing, and retrieving information that influence behaviour. These include thoughts, beliefs, and attitudes that affect how one interprets and responds to social situations.

Behavioral responses are actions or reactions to external stimuli, often influenced by reinforcement and punishment. In the context of depression, increasing engagement in positively reinforcing activities can reduce depressive symptoms.

Eg: After starting to prepare for the entrance exam, I am experiencing sleeplessness.

3. Perceived social expectation and social comparison

Perceived social expectations are the individual's internalized understanding of societal norms and roles, which guide their behaviour and interactions within a cultural context. These expectations are learned through socialization and communication within a community.

Social comparison is the process through which individuals evaluate their own opinions and abilities by comparing themselves to others. This comparison helps individuals understand their own standing and make decisions about their behaviour and beliefs.

Eg: I feel there is a competition among friends related to entrance exam.

Preparation of the Scale

Based upon the above-mentioned components the investigator developed Scale on Entrance Exam Stress for higher secondary science students. The draft Scale on Entrance Exam Stress includes 33 items. Out of 33 items, 29 items were positive and 4 items were negative statements. The subject had to respond to each of the items by choosing any of the alternatives always, often, sometimes, rarely, and never. Each of the items of the scale has five possible responses which are scored as 1, 2, 3, 4, and 5 respectively for positive statements and for negative statements the scoring was done in the reverse order.

The components wise distribution of items in the Scale on Entrance Exam Stress is shown in Table 4.

Table 4

Components wise distribution of items in the Scale on Entrance Exam Stress

Sl No:	Components	Item numbers in the scale	Total number of items
1.	Anxiety response	1,2,3,4,5,6,7,8,9,10,11	11
2.	Cognitive and behavioural response	12,13,14,15,16,17,18,19,20,21,22	11
3.	Perceived social expectation and social comparison	23,24,25,26,27,28,29,30,31,32,33	11

Try out

The draft scale with 33 items, were tried out on a sample of 250 higher secondary science students by the investigator. Due representation was given to the sub groups of the population based on gender, locality of institution, type of institution, parental education and parental employment while selecting the sample for the try out. Before administering the test, necessary instructions were given to the students regarding the method of marking the responses. In addition to that, the purpose of scale was made clear to the students. With the help of the scoring key, all response sheets were scored and subjected to item analysis. 250 response sheets which are filled by the respondents were selected for the item analysis.

Item Analysis

Item analysis is a statistical technique which is used for selecting and rejecting the items of the scale. For determining the highest 27 percent and lowest 27 percent of the sample, 250 response sheets obtained after the administration of the scale were scored and the total score of each sheet was noticed. The scored response sheets were arranged in ascending order based on total score. The highest 27 percent and lowest 27 percent with respect to the total score were separated.

As the total number is 250, its 27 percent is 67 and hence top most 67 scripts and lower most 67 scripts were selected as upper group and lower group respectively. The average scores obtained for each item by the upper group as well as the lower group was calculated separately. The significance of difference between the two mean scores were calculated by using the formula

$$\text{t value} = \frac{X_1 - X_2}{\sqrt{\frac{\sigma_1{}^2}{N_1} + \frac{\sigma_2{}^2}{N_2}}}$$

Where,

x_1 = The mean of the upper group for the item

x_2 = The mean of the lower group for the item

$\sigma_1{}^2$ = The SD of the upper group

$\sigma_2{}^2$ = The SD of the higher group

N_1 = Sample size of the higher group

N_2 = Sample size of the lower group

Items with t-value greater than 1.96 having significance as per Likert scale were selected for the final scale. The result of item analysis of the Scale on Entrance Exam Stress is provided in Table 5.

Table 5

Details of Item Analysis of Scale on Entrance Exam Stress

Item No:	t-value	Remarks
1.	7.637	Accepted
2.	7.897	Accepted
3.	11.002	Accepted
4.	13.357	Accepted
5.	14.308	Accepted
6.	12.918	Accepted
7.	10.626	Accepted
8.	8.890	Accepted
9.	16.673	Accepted
10.	12.696	Accepted
11.	9.799	Accepted
12.	14.928	Accepted
13.	14.344	Accepted
14.	10.785	Accepted
15.	9.541	Accepted
16.	10.083	Accepted
17.	6.587	Accepted
18.	-2.3902	Accepted
19.	5.394	Accepted
20.	4.188	Accepted
21.	6.784	Accepted
22.	5.991	Accepted
23.	6.314	Accepted
24.	11.181	Accepted
25.	7.744	Accepted
26.	8.808	Accepted
27.	10.370	Accepted
28.	10.028	Accepted
29.	2.344	Accepted
30.	7.637	Accepted
31.	2.4086	Accepted
32.	3.482	Accepted
33.	5.124	Accepted

After the item analysis, with the t-value greater than 1.96 having significance as per Likert scale was selected for the final scale. The Final Scale on Entrance Exam Stress consists of 33 items, in which 29 items are positive and 4 items are negative.

A copy of the final version of the tool, Scale on Entrance Exam Stress (English and Malayalam versions) are given as Appendices.

Reliability

Reliability refers to how dependably or consistently a test measures a characteristic. If a person takes the test again, will he/she get a similar test score, of much different score. A test that yields similar scores for a person who repeats the test is said to measure a characteristic reliably.

$$\text{Cronbach's Alpha} = 2[1- (\sigma\ 2\ \text{odd} + \sigma\ 2\ \text{even})/ \sigma\ 2\ \text{total}]$$

Cronbach's Alpha ranges from 0 to 1, with higher values indicating greater internal consistency (and ultimately reliability). Common guidelines for evaluating Cronbach's Alpha are:

- 0.0 to 0.5 = Unacceptable
- 0.5 to 0.6 = Poor
- 0.6 to 0.7 = Questionable
- 0.7 to 0.8 = Acceptable
- 0.8 to 0.9 = Good
- .90 to .99 = Excellent/Strong

The investigator used Cronbach's Alpha to determine internal consistency of items. The value of Cronbach's Alpha is 0.868, hence the tool is correlated well and scale is acceptable.

Validity

An index of validity shows the degree to which a test measures what it intends to measure when compared with accepted criterion. "Validity is that quality of a data gathering instrument or procedure that enables it to measure what is supposed to measure" (Best & Khan, 2012).

Face validity

When a scale 'appears to measure' what the scale intends to measure, it is said to possess face validity. Thus, face validity refers not to what the scale measure, but what the scale 'appears to measure', i.e. whether it seems to be relevant to its various objectives. Scale content should not appear to be irrelevant, inappropriate, silly, or childish. Present scale is prepared to find the entrance exam stress of higher secondary science students in Malappuram district. Language of scale and construction of items are checked by experts to make it accurate, therefore this scale shows face validity.

Content validity

Content validity considers whether or not the items on a given scale accurately reflect the theoretical domain of the teaching learning process of students to measure. Item need to effectively act as a representative sample of all possible question that could have been derived from the construct. In present study content

validity was established for the tools. Tools had been sent to the experts related to the respective fields. Content of subject was checked by subject experts and items suggested by them were selected and the necessary modifications are made accordingly to ensure content validity.

Scale on Perseverance

Scale on Perseverance was used to measure the Perseverance of Higher secondary school science students in Malappuram district. Scale on Perseverance, constructed and standardized by the investigator with the help of the supervising teacher, was used to measure the Perseverance of Higher secondary science students.

Planning of the Scale

The first step in the construction and standardization of the Scale was planning of the Scale. It was decided to develop a Likert type scale with five responses viz; Always, Often, Sometimes, Rarely and Never.

After selecting the topic, the investigator reviewed relevant literature that cited numerous scales that were already being used for assessing perseverance of higher secondary science students. The investigator carried out an extensive search of the literature on the development of perseverance scale and testing.

The scale was prepared based on different reviewed literature and identified 10 components. The components for assessing the perseverance of higher secondary students are:

Quality components

1. Resilience
2. Determination
3. Grit
4. Optimism
5. Self-discipline
6. Goal-setting
7. Focus
8. Learning from failure
9. Patience
10. Time management

1. Resilience

Resilience is the process and outcome of successfully adapting to difficult or challenging life experiences, especially through mental, emotional, and behavioral flexibility and adjustment to external and internal demands. A number of factors contribute to how well people adapt to adversities, including the ways in which individuals view and engage with the world, the availability and quality of social resources, and specific coping strategies.

Eg: I am able to set goals for myself and work hard to achieve them.

2. Determination

Determination can be understood as the consistent application of behaviour in pursuit of a specific goal, reinforced by the positive outcomes or rewards

associated with achieving that goal. It is the repeated engagement in behaviours despite challenges, driven by anticipated rewards.

Eg: when I am working on a group project, I schedule regular meetings with my teammates to stay on track and avoid wasting time.

3. Grit

Grit refers to a student's ability to persevere through academic challenges and maintain a consistent effort toward educational goals. It encompasses qualities like resilience, commitment, and sustained effort in the face of setbacks.

Eg: I am interested in learning new things.

4. Optimism

Optimism is expecting good things to occur in your life. Such positive expectations are associated with higher levels of subjective well-being, better physical health, and a higher quality and quantity of social relationships.

Eg: I believe that my hard work will improve my academic performance and lead to many opportunities in the future.

5. Self-discipline

Self-discipline is the ability to push yourself forward, stay motivated, and act, regardless of how you are feeling, physically or emotionally. You are showing it when you intentionally choose to pursue something better for yourself, and you do it in spite of factors such as distractions, hard work, or unfavourable odds.

Eg: When I am discouraged or under pressure, I find it difficult to control my emotions.

6. Goal-setting

Goal setting is the process of specifying desired outcomes toward which individuals, teams, or organizations will strive and is intended to increase organizational efficiency and effectiveness.

Eg: I can find joy in small achievements, and it also helps me to look forward to bigger goals.

7. Focus

Focus is the ability to direct attention where it is needed, to sustain it over time, and to manage distractions.

Eg: I take breaks to refresh my mind and regain focus during my studies.

8. Learning from failure

Learning from failure describes processes and behaviours through which individuals, groups and organizations gain accurate and useful insights from failures and modify future behaviours, processes, or systems accordingly.

Eg: I choose effective learning methods to reduce mistakes in my studies.

9. Patience

Patience is defined as the capacity to tolerate hardships, obstacles, or delays without losing composure or getting agitated. It is the ability to wait patiently or overcome obstacles while being composed and persistent.

Eg: I understand that studying and achieving goals require time and effort.

10. Time management

Time management is the process of organising, planning, and controlling time to get more and better work done in less time. It is defined as behaviours that aim at achieving an effective use of time while performing certain goal-directed activities.

Eg: I am able to complete my homework and assignments on time.

Preparation of the Scale

Based upon the above-mentioned components the investigator developed Scale on Perseverance for higher secondary science students. The draft Scale on Perseverance includes 33 items. Out of 33 items, 29 items were positive and 4 items were negative statements. The subject had to respond to each of the items by choosing any of the alternatives always, often, sometimes, rarely, and never. Each of the items of the scale has five possible responses which are scored as 1, 2, 3, 4, and 5 respectively for positive statements and for negative statements the scoring was done in the reverse order.

The components wise distribution of items in the Scale on Perseverance is shown in Table 6.

Table 6

Components wise distribution of items in the Scale on Perseverance

Sl No:	Components	Item numbers in the scale	Total number of items
1.	Resilience	1,2,3	3
2.	Determination	4,5	2
3.	Grit	6,7,8,9	4
4.	Optimism	10,11,12	3
5.	Self-discipline	13,14,15	3
6.	Goal-setting	16,17	2
7.	Focus	18,19,20,21	4
8.	Learning from failure	22,23,24,25	4
9.	Patience	26,27,28	3
10.	Time management	29,30,31,32,33	5

Try out

The draft scale with 33 items, were tried out on a sample of 250 higher secondary science students by the investigator. Due representation was given to the sub groups of the population based on gender, locality of institution, type of institution, parental education and parental employment while selecting the sample for the try out. Before administering the test, necessary instructions were given to the students regarding the method of marking the responses. In addition to that, the purpose of scale was made clear to the students. With the help of the scoring key, all response sheets were scored and subjected to item analysis. 250 response sheets which are filled by the respondents were selected for the item analysis.

Item Analysis

Item analysis is a statistical technique which is used for selecting and rejecting the items of the scale. For determining the highest 27 percent and lowest 27 percent of the sample, 250 response sheets obtained after the administration of the scale were scored and the total score of each sheet was noticed. The scored response sheets were arranged in ascending order based on total score. The highest 27 percent and lowest 27 percent with respect to the total score were separated.

As the total number is 250, its 27 percent is 67 and hence top most 67 scripts and lower most 67 scripts were selected as upper group and lower group respectively. The average scores obtained for each item by the upper group as well as the lower group was calculated separately. The significance of difference between the two mean scores were calculated by using the formula

$$\text{t value} = \frac{X_1 - X_2}{\sqrt{\frac{\sigma_1{}^2}{N_1} + \frac{\sigma_2{}^2}{N_2}}}$$

Where,

x_1 = The mean of the upper group for the item

x_2 = The mean of the lower group for the item

$\sigma_1{}^2$ = The SD of the upper group

$\sigma_2{}^2$ = The SD of the higher group

N_1 = Sample size of the higher group

N_2 = Sample size of the lower group

Items with t-value greater than 1.96 having significance as per Likert scale were selected for the final scale. The result of item analysis of the Scale on Perseverance is provided in Table 7.

Table 7

Details of Item Analysis of Scale on Perseverance

Item No:	t-value	Remarks	Item No:	t-value	Remarks
1.	10.365	Accepted	18.	13.186	Accepted
2.	10.114	Accepted	19.	9.769	Accepted
3.	11.005	Accepted	20.	5.708	Accepted
4.	10.135	Accepted	21.	7.664	Accepted
5.	9.116	Accepted	22.	10.505	Accepted
6.	8.693	Accepted	23.	11.059	Accepted
7.	10.549	Accepted	24.	9.726	Accepted
8.	6.086	Accepted	25.	6.566	Accepted
9.	8.733	Accepted	26.	8.096	Accepted
10.	3.040	Accepted	27.	8.604	Accepted
11.	7.778	Accepted	28.	9.273	Accepted
12.	9.843	Accepted	29.	9.841	Accepted
13.	6.523	Accepted	30.	9.072	Accepted
14.	12.612	Accepted	31.	12.958	Accepted
15.	9.587	Accepted	32.	11.404	Accepted
16.	10.293	Accepted	33.	8.080	Accepted
17.	11.461	Accepted			

After the item analysis, with the t-value greater than 1.96 having significance as per Likert scale was selected for the final scale. The Final Scale on Perseverance consists of 33 items, in which 29 items are positive and 4 items are negative.

A copy of the final version of the tool, Scale on Perseverance (English and Malayalam versions) are given as Appendices.

Reliability

Reliability refers to how dependably or consistently a test measures a characteristic. If a person takes the test again, will he/she get a similar test score, of much different score. A test that yields similar scores for a person who repeats the test is said to measure a characteristic reliably.

$$\text{Cronbach's Alpha} = 2[1- (\sigma\ 2\ \text{odd} + \sigma\ 2\ \text{even})/\ \sigma\ 2\ \text{total}]$$

Cronbach's Alpha ranges from 0 to 1, with higher values indicating greater internal consistency (and ultimately reliability). Common guidelines for evaluating Cronbach's Alpha are:

- 0.0 to 0.5 = Unacceptable
- 0.5 to 0.6 = Poor
- 0.6 to 0.7 = Questionable
- 0.7 to 0.8 = Acceptable
- 0.8 to 0.9 = Good
- .90 to .99 = Excellent/Strong

The investigator used Cronbach's Alpha to determine internal consistency of items. The value of Cronbach's Alpha is 0.897, hence the tool is correlated well and scale is acceptable.

Validity

An index of validity shows the degree to which a test measures what it intends to measure when compared with accepted criterion. "Validity is that quality

of a data gathering instrument or procedure that enables it to measure what is supposed to measure" (Best & Khan, 2012).

Face validity

When a scale 'appears to measure' what the scale intends to measure, it is said to possess face validity. Thus, face validity refers not to what the scale measure, but what the scale 'appears to measure', i.e. whether it seems to be relevant to its various objectives. Scale content should not appear to be irrelevant, inappropriate, silly, or childish. Present scale is prepared to find the perseverance of higher secondary science students in Malappuram district. Language of scale and construction of items are checked by experts to make it accurate, therefore this scale shows face validity.

Content validity

Content validity considers whether or not the items on a given scale accurately reflect the theoretical domain of the teaching learning process of students to measure. Item need to effectively act as a representative sample of all possible question that could have been derived from the construct. In present study content validity was established for the tools. Tools had been sent to the experts related to the respective fields. Content of subject was checked by subject experts and items suggested by them were selected and the necessary modifications are made accordingly to ensure content validity.

Data Collection Procedure

After construction and standardization of the scale on Mental Health, Entrance Exam Stress and Perseverance, data collection was done. For that, investigator selected science students from different government, aided and private higher secondary schools in Malappuram district of Kerala. After securing permission from the principal of the selected higher secondary schools, investigator approached concerned teachers in charge of divisions. The investigator explained the relevance of this research to them.

Investigator administered the scale on Mental Health, Entrance Exam Stress and Perseverance. Proper instructions were given on how to mark their responses for the statements in the scale and confidentiality of the responses was ensured.

Scoring and Interpretation of Data

The scale is a five-point Likert type scale with responses Always, Often, Sometimes, Rarely and Never respectively. The respondent marks their responses to each item in appropriate columns. A score of 5 was given to Always for positively worded items and scores of 4,3,2,1 was given for the responses Often, Sometimes, Rarely and Never respectively. The reverse scoring procedure was adopted for the negative items i.e., a score of 1, 2, 3, 4, 5 are assigned for responses Always, Often, Sometimes, Rarely and Never. The total score obtained for each sample is calculated to identify the score of mental health, entrance exam stress and perseverance of higher secondary science students.

Analysis

For finding the level of mental health status, entrance exam stress and perseverance of higher secondary school science students in Malappuram district, preliminary analysis and percentile scores are used. To find out whether there exists any significant difference in variables, mental health, entrance exam stress and perseverance t-test, Pearson's product moment correlation and One-way ANOVA are used.

Statistical Techniques Used

The statistical techniques used for the analysis of data are explained below.

- Descriptive statistics (mean, median, mode, standard deviation, skewness, kurtosis)
- Inferential statistics

1. Percentile scores
2. Percentage analysis
3. Pearson's Product Moment coefficient of correlation
4. Test of significance of difference between means (t-test)
5. Analysis of variance (One-way ANOVA)

Descriptive Statistics

Descriptive statistics was used to describe about the nature of the distribution of scores of mental health, entrance exam stress and perseverance of higher secondary science students. Descriptive statistics are broken down into measures of central tendency and measures of variability. Measures of central tendency include

the mean, median, and mode, while measures of variability include standard deviation, skewness, and kurtosis.

Mean

The mean is the best measure of describing the central tendency of the score of a distribution. The mean of a distribution is commonly understood as the arithmetic average (Best & Kahn, 1995). The mean is probably the most useful of all statistical measures, as it is the base from which many other important measures are computed.

$$\bar{x} = A + \frac{\in fd_H}{N} \times c$$

Median

The median is a point (not necessarily a score) in an array, above and below which one half of the score fall. It is a measure of position rather than of magnitude and is frequently found by inspection rather than by calculation (Best & Kahn, 1998).

The median is calculated using the formula.

$$\text{Median} = L + \left[\frac{\frac{N}{2} - M}{F}\right]$$

Mode

The mode is defined as the most frequently occurring score in a distribution. Mode is the score that occurs most frequently in a distribution. It is located by inspection rather than by computation (Gupta, 2003). In grouped data distributions,

mode is assumed to be the mid score of the interval in which the greatest frequency occurs.

Standard Deviation

Standard deviation is the most important and stable measure of variability. The standard deviation, the square foot of the variance, is most frequently used as a measure of spread or dispersion of scores in a distribution (Gupta, 2003). The standard deviation measures the absolute dispersion or variability. The greater the standard deviation, the greater will be the magnitude of the deviations of the values from their mean.

$$\text{Standard deviation} = c\sqrt{\frac{\in fd^2}{N} - (\frac{\in fd}{N})^2}$$

Skewness

Skewness is the important characteristics for defining precise pattern of a distribution. It helps the investigator to describe about the direction of the variation or the departure from symmetry (Gupta, 2003). In short, skewness is the measure of the asymmetry of the probability distribution of a real valued Random Variable about its mean.

$$: SK = \frac{(3mean - median)}{SD}$$

Kurtosis

The term Kurtosis refers to the degree flatness of peakedness of a frequency distribution as a compared with the normal distribution (Gupta 2003). In other

words, Kurtosis describes the extent to which the distribution is more peaked or flat topped than the normal curve.

$$Ku = \frac{P_{75} - P_{25}}{2(P_{90} - P_{10})}$$

Where,

P_{75} = 75th percentile

P_{25} = 25th percentile

P_{90} = 90th percentile

P_{10} = 10th percentile

Percentile Scores

Percentiles are points of a given distribution below which given percentage of case lies. To find out norms for the total, percentiles are used. The formula to find out the percentile is,

$$P_i = L + \frac{h}{f}\left[\frac{i}{100} \times N - C\right]$$

Where,

L = Lower limit of class contain P_i

f = Frequency of the class containing P_i

h = Magnitude of the class containing P_i

C = Cumulative frequency of the class preceding the class containing P_i

N = Total number of the sample

Pearson's product moment co-efficient of correlation

The most often used and most precise co-efficient of correlation is the Pearson's Product Moment Co-efficient of correlation of correlation. Which is a measure of the strength of a linear association between two variables and is denoted by (r).

The formula used to find our product moment coefficient of correlation is,

$$r = \frac{N\Sigma xy - \Sigma x \Sigma Y}{\sqrt{[N\Sigma x^2 - (\Sigma X)^2 (N\Sigma y^2 - (\Sigma Y)^2)]}}$$

Where,

∑x = Sum of x scores

∑y = Sum of the y scores

∑x2=Sum of the squares of x scores

∑y2= Sum of the squares of y scores

∑xy= Sum of the product of paired x and y scores

N= Number of scores

The value of 'r' obtained in the class is described in the term of

- Size of 'r'
- Statistical significance of the coefficient
- Direction of 'r'

Interpretation of Computed Correlation Coefficient

The computed correlation coefficient between two variables is then interpreted to find whether there exists any correlation between the two variables and if any such relation exists, how far the relation is significant. The interpretation of correlation coefficient is presented in Table 8:

Table 8

Interpretation of correlation coefficient

Range of Computed correlation.	Interpretation
0	Zero relation, absolutely no relationship
0.0 to±0.2	Slight; almost negligible relationship
±0.21 to ± 0.4	No correlation; definite, but small relationship
±0.41 to ±0.6	Moderate relation; substantial but small relationship
±0.61 to ±0.8	High correlation; marked relationship
±0.81 to ±0.99	Very high correlation
±1	Perfect correlation; almost identical or opposite relationship

Test of Significance of Mean Difference

The Test of significance of mean difference is called t-test. This statistical test is used to compare the mean between two groups. It is used in hypothesis testing to check whether a process influences the population.

The formula of t-test for large independent sample is:

$$t = \frac{\overline{X}_1 - \overline{X}_2}{\sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}}$$

Where,

$\overline{X}_1$ = Mean of the Group I

$\overline{X}_2$ = Mean of the Group II

σ_1 = Standard Deviation of Group I

σ_2 = Standard Deviation of Group II

N_1= Sample size of Group I

N_2= Sample size of Group II

One-way ANOVA

The analysis of variance is an effective way to determine whether the means of more than two samples are different to attribute to sampling error (Best & khan, 2010). It helps us to know whether any of the differences between the means of the given samples are significant.

Conclusion

In this chapter research method, population, sample of the study, research tools, sampling method and the collection of data is described. This chapter gives the basic framework on which the research was carried out by the researcher. It also dealt with the construction of tool, reliability, validity, scoring, interpretation of data

and statistical techniques used. The process of analysis of data will conclude with the help of various techniques. The researcher will transform the calculated values of the collected data into tabulation and subsequently produce the findings which will be interpreted in accordance with justification of the framed hypotheses. Analysis of collected data and its interpretation were done in detail in the next chapter.

CHAPTER IV

ANALYSIS AND INTERPRETATION OF DATA

- *Preliminary analysis*
- *Major statistical analysis*
- *Conclusion*

ANALYSIS AND INTERPRETATION OF DATA

The proper arrangement and presentation of information collected during any type of research or study is essential because misleading conclusions may be drawn and the whole purpose of doing research may get violated. Analysis and interpretation of information is the heart of research. Research tool and statistical methods helps to classify whole data into summarized forms. According to Sukhia and Malhotra (1965), "Analysis of data means studying the tabulated material in order to determine inherent facts of meanings."

The present study was intended to assess the mental health, perseverance, and level of entrance exam stress of higher secondary science students in Malappuram district. It also aimed to find out significant difference for the subgroups based on gender, locality, type of institution, parental education, and parental employment.

Analysis and interpretation chapter deals with the statistical analysis of the data collected and its interpretation. The analysis of data has been done to throw light on the major objectives formulated as follows.

Data Analysis

Data analysis is a process of applying statistical practices to organize, represent, describe, evaluate, and interpret data. It is a process used to inspect,

transform and remodel data with a view to reach to a certain conclusion for a given situation.

Data analysis is typically of two kinds: qualitative or quantitative. The type of data dictates the method of analysis. In qualitative research, any non-numerical data like text or individual words are analysed. Quantitative analysis, on the other hand, focuses on measurement of the data and can use statistics to help reveal results and conclusions. The results are numerical. In some cases, both forms of analysis are used hand in hand. For example, quantitative analysis can help prove qualitative conclusions.

Analysis of the data means studying and organising data to discover the inherent facts It requires alertness, flexibility, and open mind on the part of the investigator. Interpretation of data is done by taking the objective of the research and keeping in mind the hypotheses.

Interpretation of data

Data interpretation is not a routine and mechanical process but it emphasis the meaningful, logical, and critical examination of the fact obtained after analysis. Through it, researcher can link up search for broader meaning of research findings. Interpretation is the process of determining what the findings means and making sense of the evidences gathered.

Quantitative data interpretation is the process of analysis results from surveys, where information is often compiled into data tables and represented through graphs. In qualitative data interpretation, non- numerical data like or

individual views are analysed based on the response given by subjects. Researcher has accomplished the task of interpretation only after considering all relevant factors affecting the problem to avoid false generalization. Researcher has used figures and graphs to show results of data analysis, along with the tables with raw numbers.

The present study is investigated to find out the mental health, entrance exam stress and perseverance of higher secondary school science students. On the basis of the results of the statistical processing, the investigator tested the hypotheses formulated.

Objectives of the study

The following are the objectives of the study:

1. To assess the mental health status of higher secondary school science students in Malappuram district.
2. To examine the levels of entrance exam stress experienced by higher secondary school science students in Malappuram district.
3. To assess the perseverance of higher secondary school science students in Malappuram district.
4. To explore the relationship between mental health, entrance exam stress and perseverance of higher secondary school science students of Malappuram district.
5. To identify any significant differences in mental health, entrance exam stress and perseverance of higher secondary school science students of

Malappuram district based on a) gender b) locality c) type of institution d) parental qualification e) parental employment.

Hypotheses of the study

1. There is no significant relationship between mental health, entrance exam stress and perseverance of higher secondary school science students of Malappuram district.

2. There is no significant difference between mental health, entrance exam stress and perseverance of higher secondary school science students of Malappuram district based on a) gender b) locality c) type of institution d) parental qualification e) parental employment.

Statistical Analysis of the Data

Preliminary Analysis

A preliminary analysis of the Variable of the present study was done to know the basic properties of the variables for the total sample and subsamples based on Gender, Locality, Type of Institution, Parental Qualification and Parental Employment. This analysis was taken up with a view that the findings will help to make more valid interpretation of statistical indices of the study.

Important statistical constants like mean, median, mode, standard deviation, skewness, and kurtosis were calculated for the entire sample as the initial stage in the analytic process. This will assist in gaining a broad understand of the score distribution.

The results of descriptive statistics for the distribution of scores for Mental Health, Entrance Exam Stress and Perseverance for total sample are calculated and presented in table 9.

Table 9

Descriptive statistics for the distribution of scores for Mental Health, Entrance Exam Stress and Perseverance for total sample.

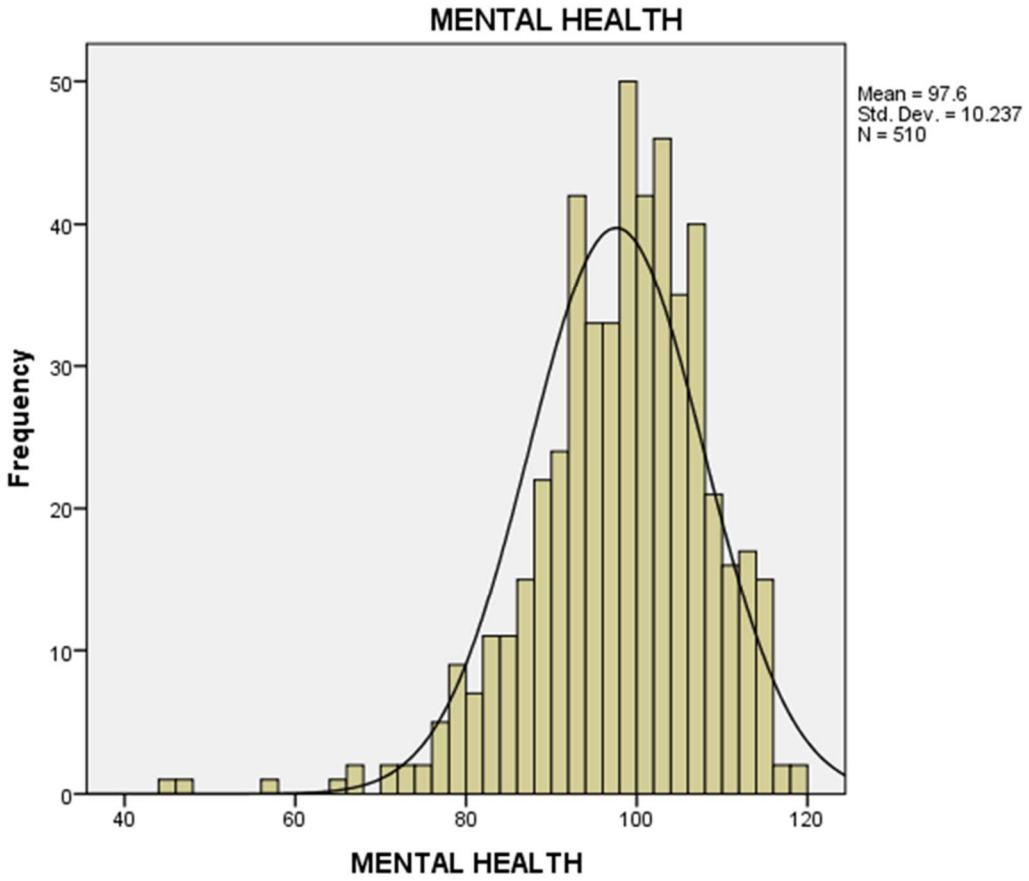
Variable	Number	Mean	Median	Mode	Standard Deviation	Skewness	Kurtosis
Mental Health	510	97.60	99.00	99	10.237	-1.003	2.594
Entrance Exam Stress	510	95.80	97.00	85	20.250	-.169	-.308
Perseverance	510	127.68	129.00	126	16.660	-.727	1.361

Discussion

Table shows that the obtained value of mean, median and mode of the variable, Mental Health are 97.60, 99.00 and 99 for the total sample. It indicates that the value of mean, median and mode coincide approximately for the total sample. The value of standard deviation is 10.237. The indices of skewness (SK= -1.003) show that the distribution of scores of Mental Health is negatively skewed for the total sample. The indices of kurtosis for Mental Health reveals that the distribution of scores of Mental Health (K=2.594) is platykurtic in nature for the total sample of the higher secondary school science students. The graphical representation of the scores of mental health for the total sample is given in figure 1.

Figure 1

Graphical representation of the distribution of scores of mental health for the total sample.



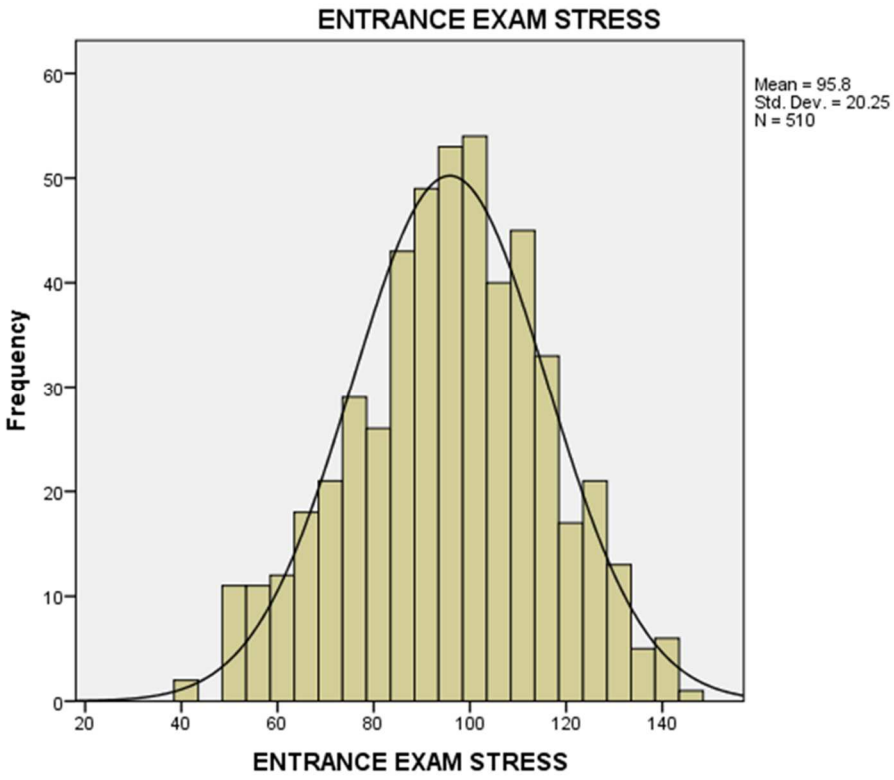
Discussion

Table shows that the obtained value of mean, median and mode of the variable, Entrance Exam Stress are 95.80, 97.00 and 85 for the total sample. This shows that the values of mean and median are almost equal whereas the value of mode is slightly lower than the mean and median scores. The value of standard deviation is 20.250. The indices of skewness (SK= -.169) show that the distribution of scores of Entrance Exam Stress is negatively skewed for the total sample. The

indices of kurtosis of Entrance Exam Stress reveals that the distribution of scores of Entrance Exam Stress (K= -.308) is platykurtic in nature for the total sample of the higher secondary school science students. The graphical representation of the scores of entrance exam stress for the total sample is given in figure 2.

Figure 2

Graphical representation of the distribution of scores of Entrance Exam Stress for the total sample.



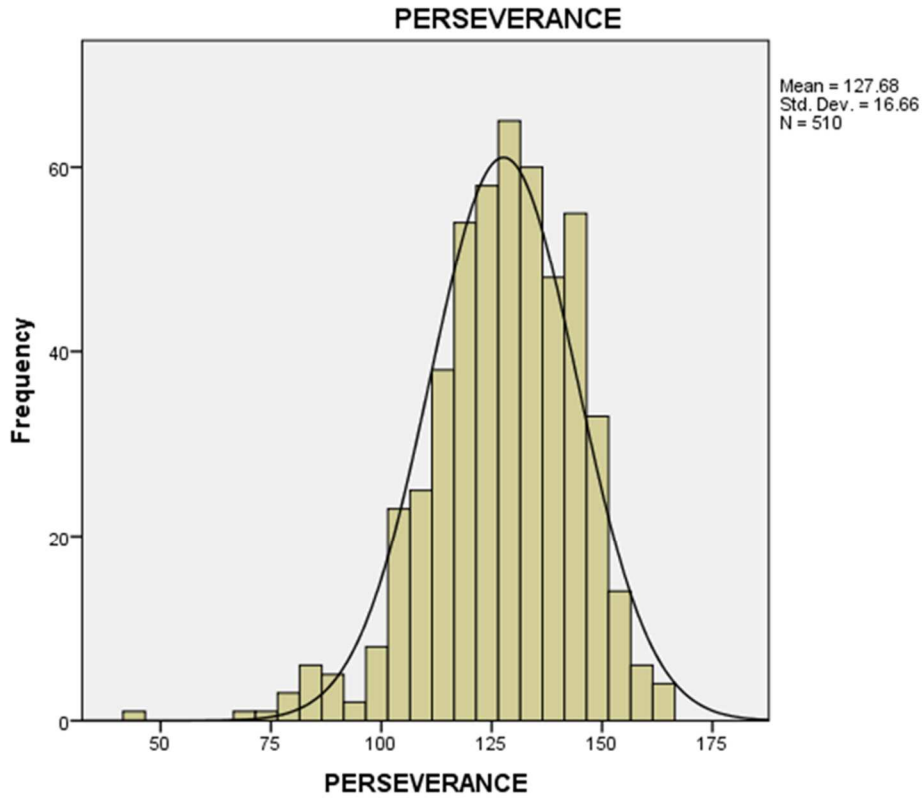
Discussion

Table shows that the obtained value of mean, median and mode of the variable, Perseverance are 127.68, 129.00 and 126 for the total sample. It indicates that the value of mean, median and mode coincide approximately for the total

sample. The value of standard deviation is 16.660. The indices of skewness (SK= -.727) show that the distribution of scores of Perseverance is negatively skewed for the total sample. The indices of kurtosis for Perseverance reveals that the distribution of scores of Perseverance (K= 1.361) is platykurtic in nature for the total sample of the higher secondary school science students. The graphical representation of the scores of Perseverance for the total sample is given in figure 3.

Figure 3

Graphical representation of the distribution of scores of perseverance for the total sample.



Major Statistical Analysis

Percentile Scores

Percentile scores of Mental Health, Entrance Exam Stress and Perseverance for the total sample

The percentile values from P_{10} to P_{90} were calculated for the total sample and they are provided in the table 10.

Table 10

Percentile scores of Mental Health, Entrance Exam Stress and Perseverance for the total sample.

Percentile	Mental Health Scores	Entrance Exam Stress Scores	Perseverance Scores
P_{10}	84.00	68.00	107.00
P_{20}	90.00	78.00	115.00
P_{30}	93.00	85.00	120.00
P_{40}	96.00	92.00	125.00
P_{50}	99.00	97.00	129.00
P_{60}	101.00	101.00	133.00
P_{70}	103.00	107.00	137.00
P_{80}	106.00	113.00	143.00
P_{90}	110.00	122.00	147.00

Discussion

From the table, the 10th percentile score for the total sample in Mental Health is found to be 84. This means that 90 percent of higher secondary science students have a score of 84 or more while 10 percent of students have a score less than 84. In the case of 50th percentile the score for total sample is 99 and it is clear from the table that 50 percent of higher secondary science students have a score of 99 or more and remaining 50 percent have a score less than 99. Likewise, the 90th percentile score for the total sample is 110. Here 90 percent students have a score less than 110 and 10 percent of students have score more than 110. The percentile scores of other percentiles can be interpreted in a similar manner.

From the table, the 10th percentile for the variable Entrance Exam Stress for the total sample is 68. This shows that 90 percentage of students possess a score of 68 or more whereas other 10 percentage of students have a score less than 68. In the same way the 50th percentile score for the total sample is 97. This reveals that 50 percentage of students obtained a score of 97 or more. In parallel the remaining 50 percentage have a score less than 97. Similarly, the 90th percentile score for the total sample is 122. This means that 90 percentage of students have a score less than 122 and 10 percentage of students holds a score more than 122. Likewise, the percentile scores of other percentiles can be interpreted.

From the table, the 10th percentile for the variable Perseverance for the total sample is 107. This shows that 90 percentage of students possess a score of 107 or more whereas other 10 percentage of students have a score less than 107. In the same way the 50th percentile score for the total sample is 129. This reveals that 50

percentage of students obtained a score of 129 or more. In parallel the remaining 50 percentage have a score less than 129. Similarly, the 90th percentile score for the total sample is 147. This means that 90 percentage of students have a score less than 147 and 10 percentage of students holds a score more than 147. Likewise, the percentile scores of other percentiles can be interpreted.

Percentage Analysis

Percentage analysis of Mental Health of higher secondary school science students

The percentage analysis was made to find out the level of mental health of higher secondary school science students for the total sample.

To know the extent of mental health of higher secondary school science students, the investigator categorised the mental health of higher secondary school science students for the total sample into three groups. ie; High, Average and Low.

The different levels of mental health were determined by classifying the whole sample into three groups- High, Average, and Low in the conventional procedure of finding σ distance from the mean. The standard deviation (σ) and mean (μ) of the scores are found to be 10.237 and 97.60 respectively. Students who obtained scores above the value of μ+1σ were considered as the high level and who obtained scores below the value of μ-1σ were considered as the low level. The students whose score lie between the values μ-1σ and μ+1σ were considered as the average level mental health group.

1. Based on gender

The percentage of the total sample based on gender falling into the three levels (high, average, and low) is given in Table 11.

Table 11

Percentage of Mental Health for the total sample based on gender

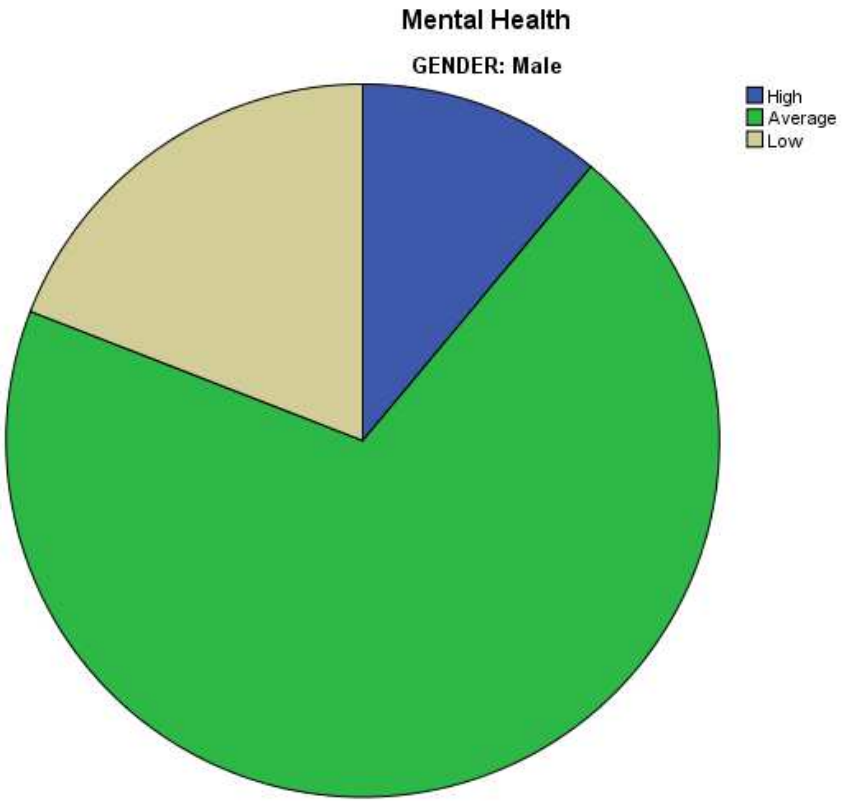
Gender	Level	N	%
Male	High	22	11.1
	Average	139	69.8
	Low	38	19.1
Female	High	51	16.4
	Average	228	73.3
	Low	32	10.3

Discussion

This table shows level of Mental Health of higher secondary school science students for the total sample based on gender. 11.1 percent of the male students has high level of Mental Health, 69.8 percent shows average level of Mental Health and 19.1 percent shows low level of Mental Health. Likewise, 16.4 percent of the female students has high level of Mental Health, 73.3 percent shows average level of Mental Health and 10.3 percent shows low level of Mental Health. The graphical representation of the distribution of the total sample based on gender in different level of Mental Health is given in the figure 4 & 5.

Figure 4

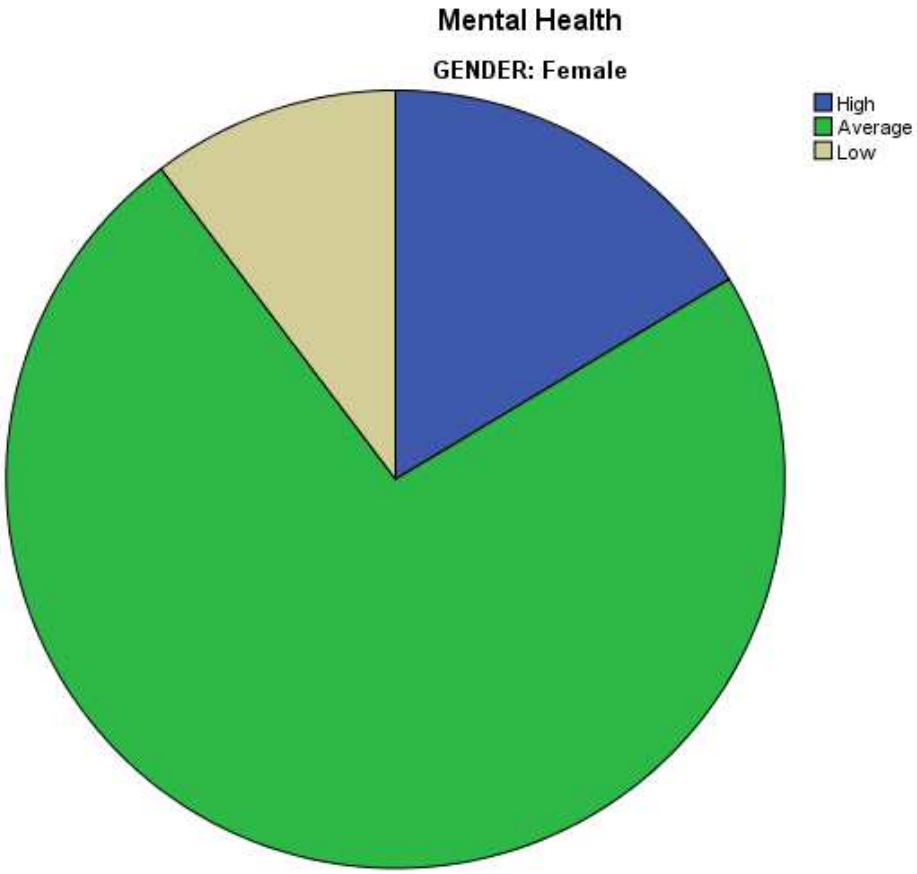
Pie diagram of the Mental Health of Higher Secondary School Science students based on gender (male)



Graphical representation of the Mental Health of Higher Secondary School Science Students based on gender (male) shows majority of the male students have an average level of Mental Health.

Figure 5

Pie diagram of the Mental Health of Higher Secondary School Science students based on gender (female)



Graphical representation of the Mental Health of Higher Secondary School Science Students based on gender (female) shows majority of the female students have an average level of Mental Health.

2. Based on locality of institution

The percentage of the total sample based on locality of institution falling into the three levels (high, average, and low) is given in Table 12.

Table 12

Percentage of Mental health for the total sample based on locality of institution

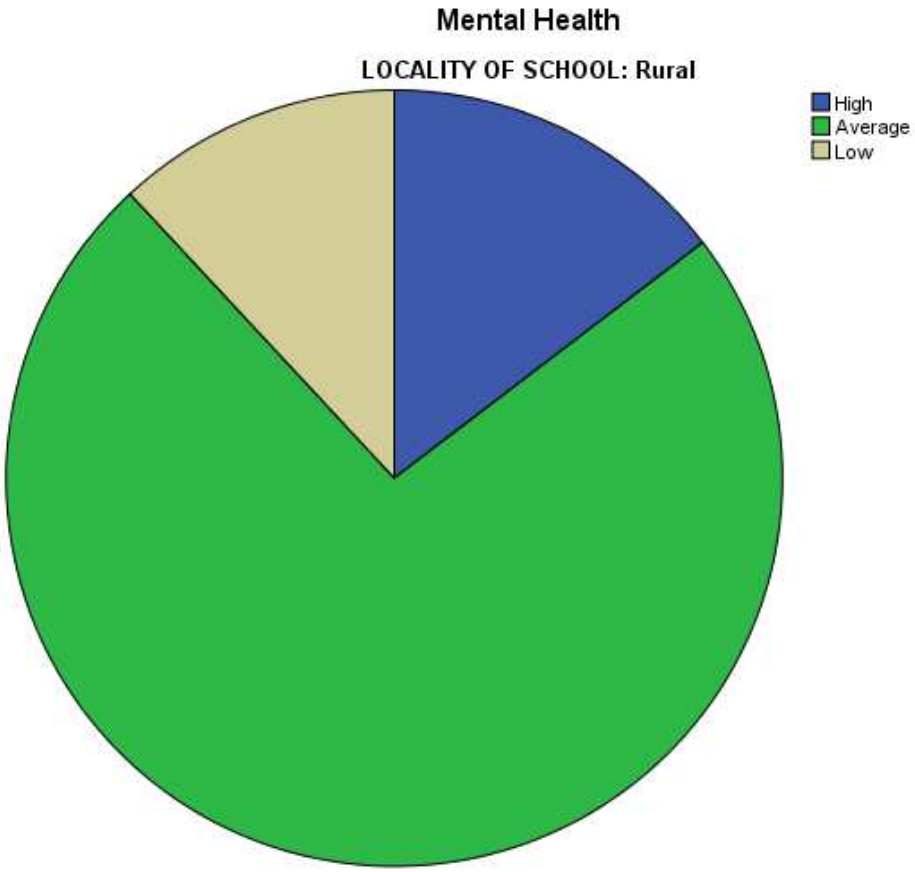
Locality	Level	N	%
Rural	High	38	14.6
	Average	191	73.5
	Low	31	11.9
Urban	High	35	14.0
	Average	176	70.4
	Low	39	15.6

Discussion

This table shows level of Mental Health of higher secondary school science students for the total sample based on locality of institution. 14.6 percent of the rural students has high level of Mental Health, 73.5 percent shows average level of Mental Health and 11.9 percent shows low level of Mental Health. Likewise, 14.0 percent of the urban students has high level of Mental Health, 70.4 percent shows average level of Mental Health and 15.6 percent shows low level of Mental Health. The graphical representation of the distribution of the total sample based on locality of institution in different level of Mental Health is given in the figure 6 & 7.

Figure 6

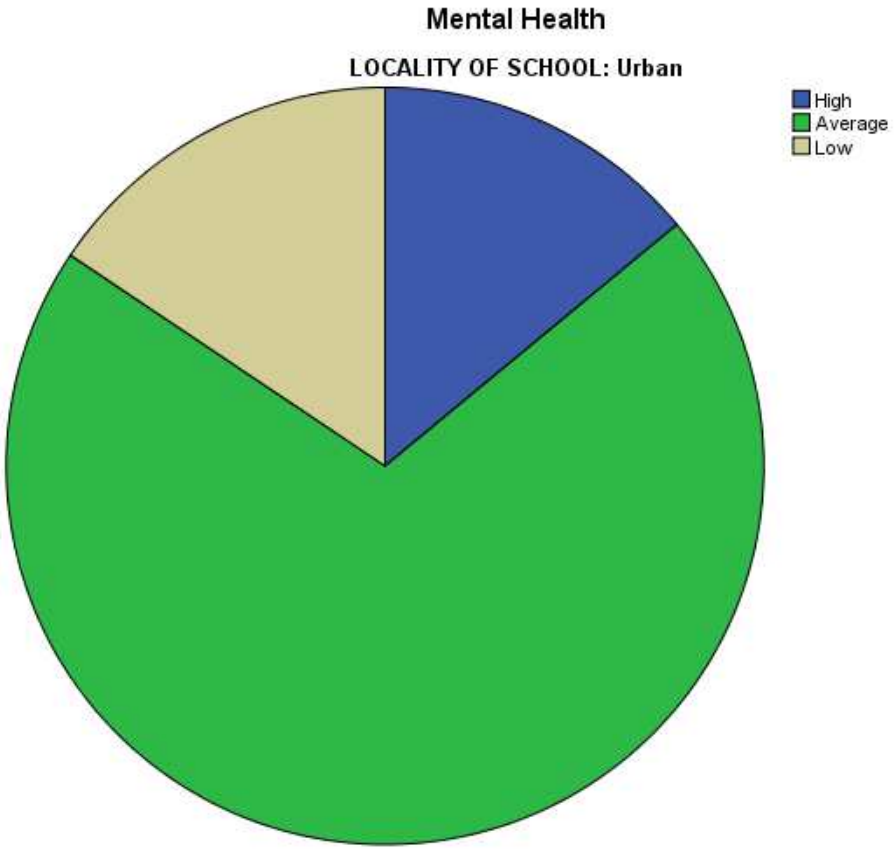
Pie diagram of the Mental Health of Higher Secondary School Science students based on locality (rural)



Graphical representation of the Mental Health of Higher Secondary School Science Students based on locality (rural) shows majority of the rural students have an average level of Mental Health.

Figure 7

Pie diagram of the Mental Health of Higher Secondary School Science students based on locality (urban)



Graphical representation of the Mental Health of Higher Secondary School Science Students based on locality (urban) shows majority of the urban students have an average level of Mental Health.

3. Type of institution

The percentage of the total sample based on type of institution falling into the three levels (high, average, and low) is given in Table 13.

Table 13

Percentage of Mental health for the total sample based on type of institution

Type of institution	Level	N	%
Government	High	32	15.9
	Average	145	72.1
	Low	24	11.9
Aided	High	19	12.7
	Average	109	72.7
	Low	22	14.7
Private	High	22	13.8
	Average	113	71.1
	Low	24	15.1

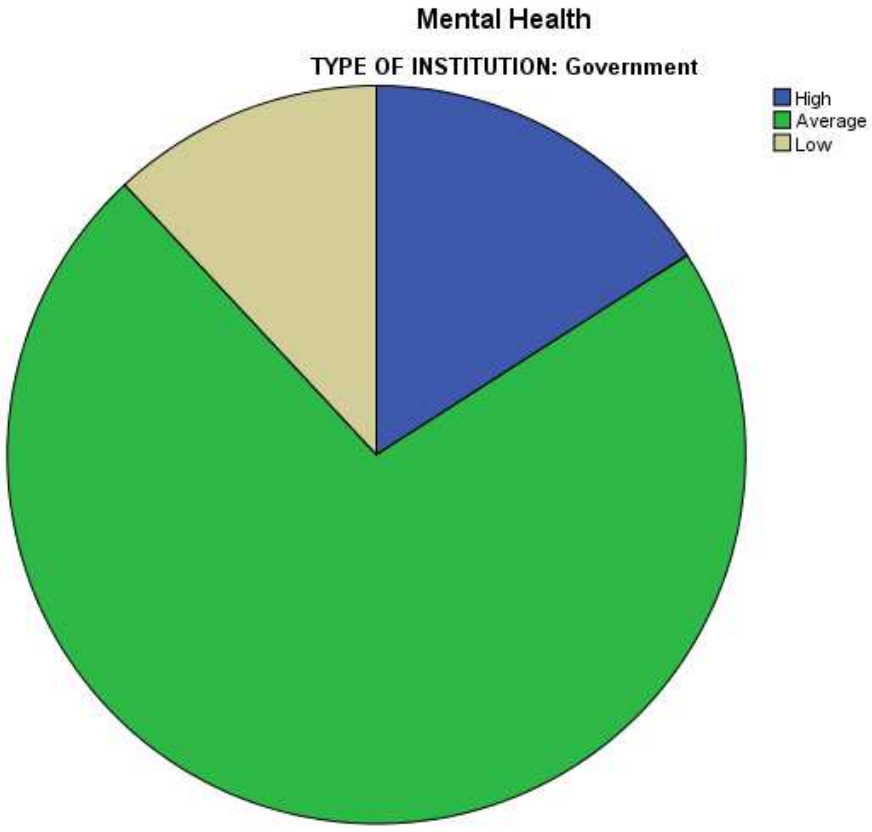
Discussion

This table shows level of Mental Health of higher secondary school science students for the total sample based on type of institution. 15.9 percent of the government students has high level of Mental Health, 72.1 percent shows average level of Mental Health and 11.9 percent shows low level of Mental Health. Likewise, 12.7 percent of the aided students has high level of Mental Health, 72.7 percent shows average level of Mental Health and 14.7 percent shows low level of Mental Health. Likewise, 13.8 percent of the private students has high level of

Mental Health, 71.1 percent shows average level of Mental Health and 15.1 percent shows low level of Mental Health. The graphical representation of the distribution of the total sample based on type of institution in different level of Mental Health is given in the figure 8,9 & 10.

Figure 8

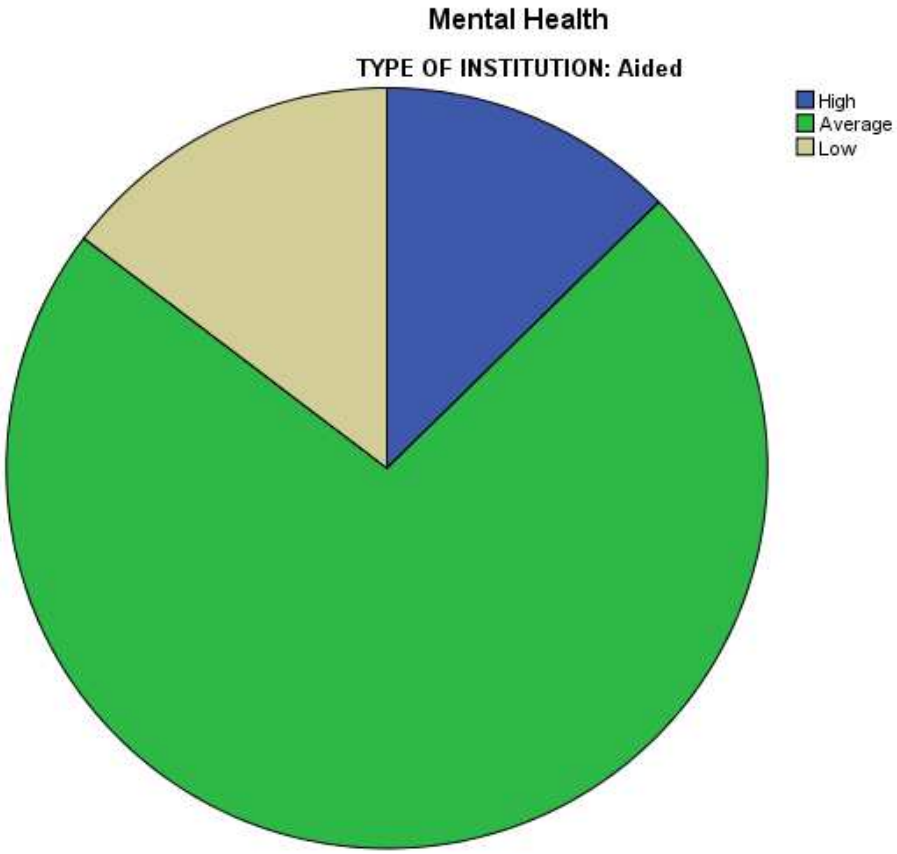
Pie diagram of the Mental Health of Higher Secondary School Science students based on type of institution (government)



Graphical representation of the Mental Health of Higher Secondary School Science Students based on type of institution (government) shows majority of the government students have an average level of Mental Health.

Figure 9

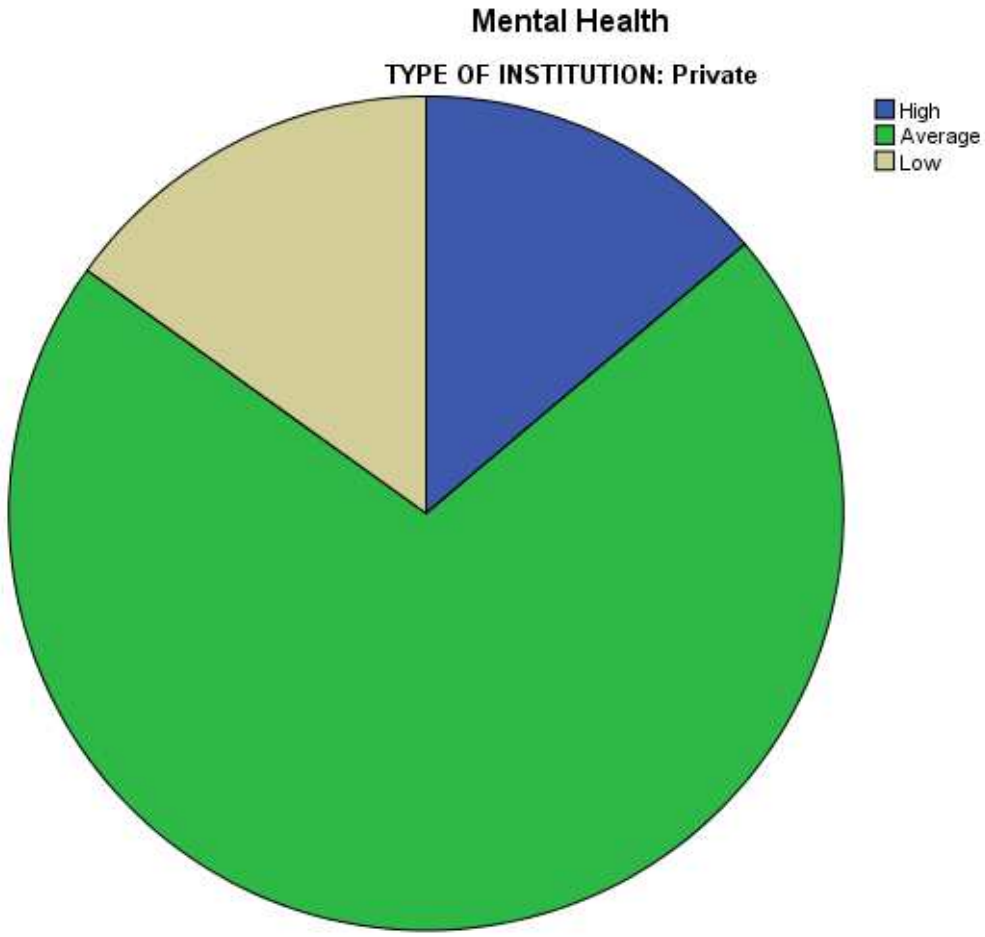
Pie diagram of the Mental Health of Higher Secondary School Science students based on type of institution (aided)



Graphical representation of the Mental Health of Higher Secondary School Science Students based on type of institution (aided) shows majority of the aided students have an average level of Mental Health.

Figure 10

Pie diagram of the Mental Health of Higher Secondary School Science students based on type of institution (private)



Graphical representation of the Mental Health of Higher Secondary School Science Students based on type of institution (private) shows majority of the private students have an average level of Mental Health.

4. Based on parental education

The percentage of the total sample based on parental qualification falling into the three levels (high, average, and low) is given in Table 14.

Table 14

Percentage of Mental health for the total sample based on parental qualification

Parental qualification	Level	N	%
Below plus two	High	26	12.1
	Average	157	73.4
	Low	31	14.5
Plus two & plus two above	High	47	15.9
	Average	210	70.9
	Low	39	13.2

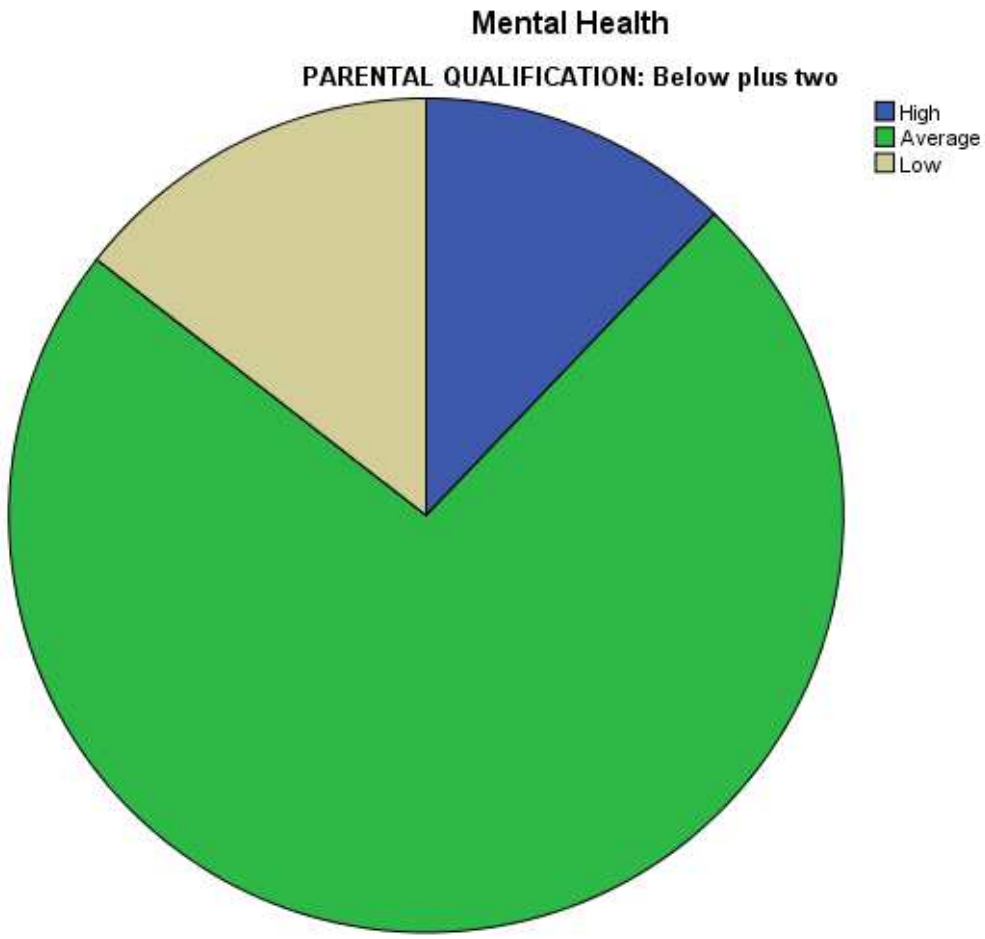
Discussion

This table shows level of Mental Health of higher secondary school science students for the total sample based on parental qualification. 12.1 percent of the students whose parent's qualification is below plus two has high level of Mental Health, 73.4 percent shows average level of Mental Health and 14.5 percent shows low level of Mental Health. Likewise, 15.9 percent of the students whose parent's qualification is plus two and above plus two has high level of Mental Health, 70.9 percent shows average level of Mental Health and 13.2 percent shows low level of Mental Health. The graphical representation of the distribution of the total sample

based on parental qualification in different level of Mental Health is given in the figure 11 & 12.

Figure 11

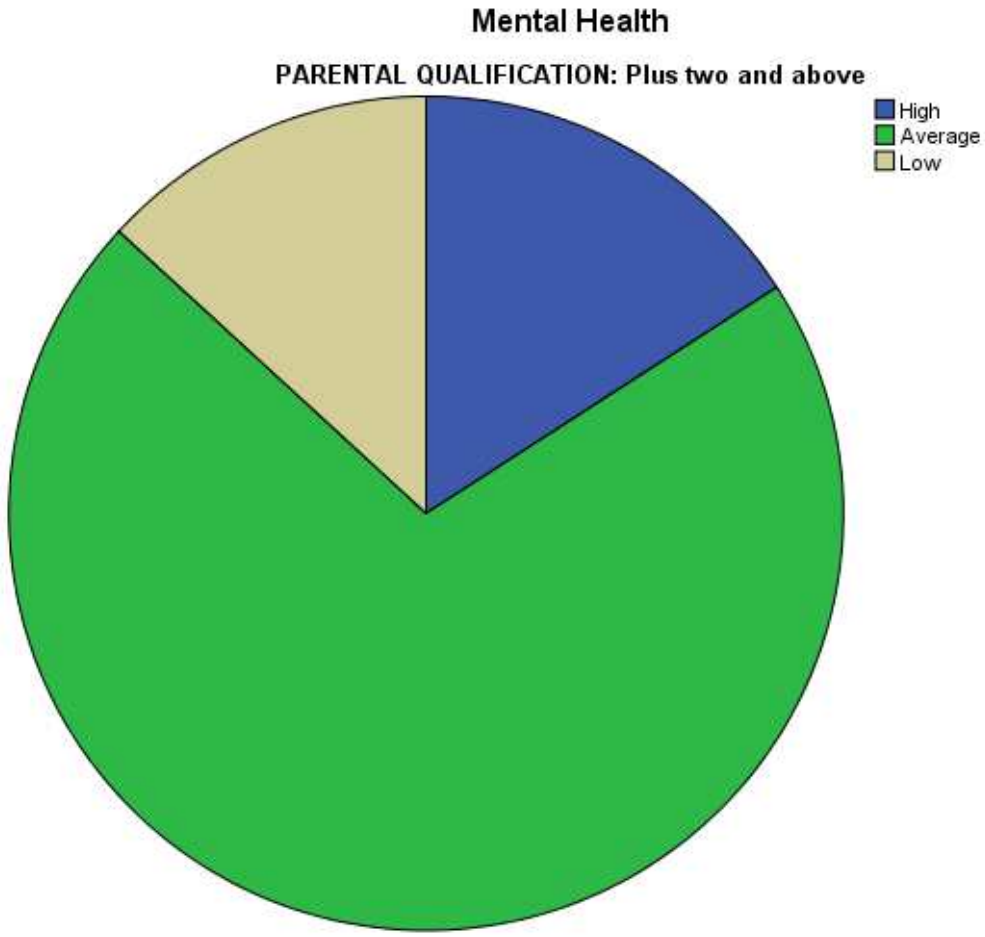
Pie diagram of the Mental Health of Higher Secondary School Science students based on parental qualification (below plus two)



Graphical representation of the Mental Health of Higher Secondary School Science Students based on parental qualification (below plus two) shows majority of the students whose parent's qualification is below plus two have an average level of Mental Health.

Figure 12

Pie diagram of the Mental Health of Higher Secondary School Science students based on parental qualification (plus two & above plus two)



Graphical representation of the Mental Health of Higher Secondary School Science Students based on parental qualification (plus two & above plus two) shows majority of the students whose parent's qualification is plus two & above plus two have an average level of Mental Health.

5. Based on parental employment

The percentage of the total sample based on parental employment falling into the three levels (high, average, and low) is given in Table 15.

Table 15

Percentage of Mental health for the total sample based on parental employment

Parental employment	Level	N	%
Professional	High	21	13.5
	Average	108	69.2
	Low	27	17.3
Business	High	28	13.7
	Average	153	74.6
	Low	24	11.7
Coolie	High	24	16.1
	Average	106	71.1
	Low	19	12.8

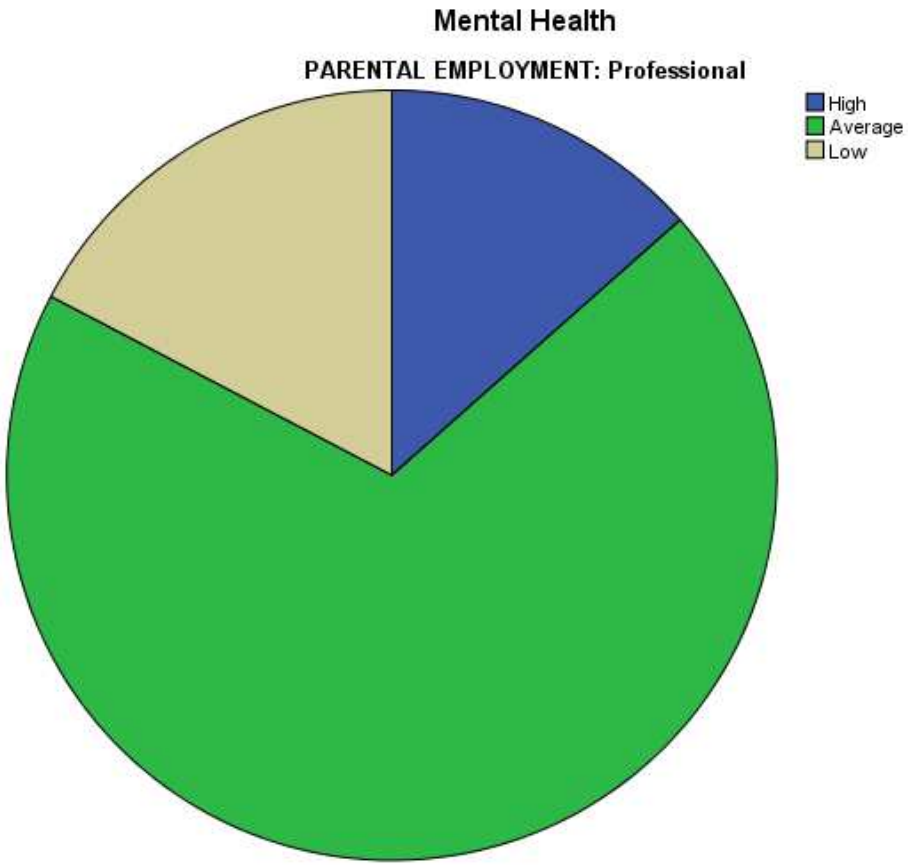
Discussion

This table shows level of Mental Health of higher secondary school science students for the total sample based on parental employment. 13.5 percent of the students whose parent have professional job has high level of Mental Health, 69.2 percent shows average level of Mental Health and 17.3 percent shows low level of Mental Health. Likewise, 13.7 percent of the students whose parent have business has high level of Mental Health, 74.6 percent shows average level of Mental Health and 11.7 percent shows low level of Mental Health. Likewise, 16.1 percent of the

students whose parent have coolie job has high level of Mental Health, 71.1 percent shows average level of Mental Health and 12.8 percent shows low level of Mental Health. The graphical representation of the distribution of the total sample based on parental employment in different level of Mental Health is given in the figure 13, 14 & 15.

Figure 13

Pie diagram of the Mental Health of Higher Secondary School Science students based on parental employment (professional)

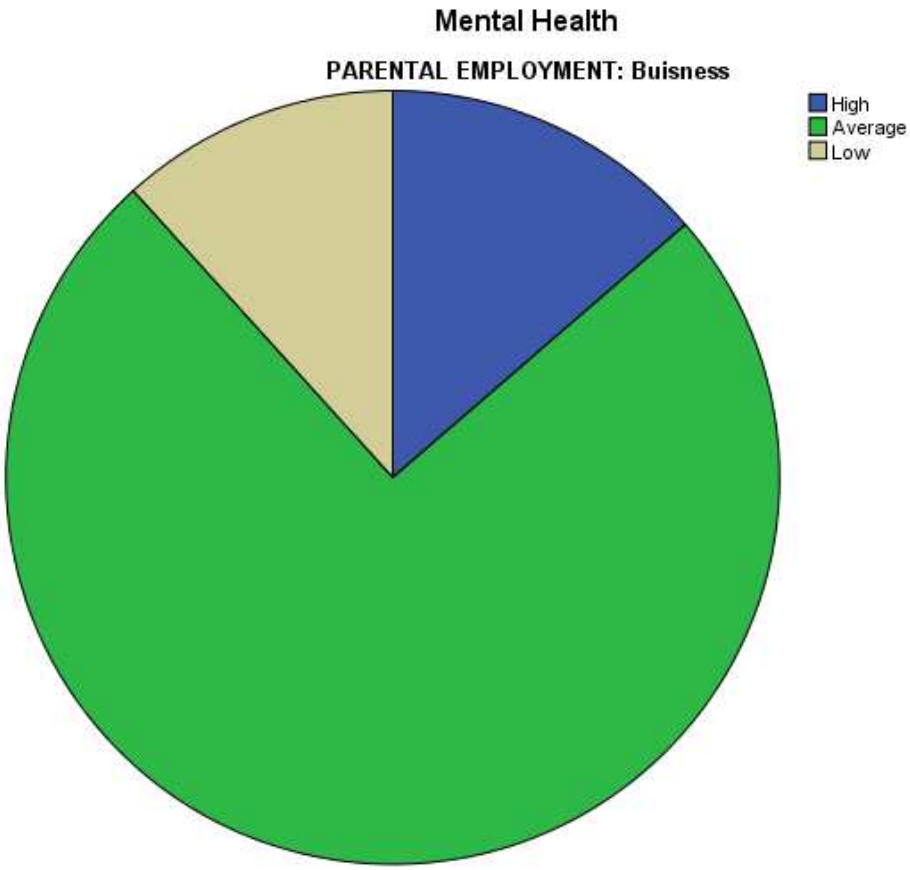


Graphical representation of the Mental Health of Higher Secondary School Science Students based on parental employment (professional) shows majority of

the students whose parent have professional job have an average level of Mental Health.

Figure 14

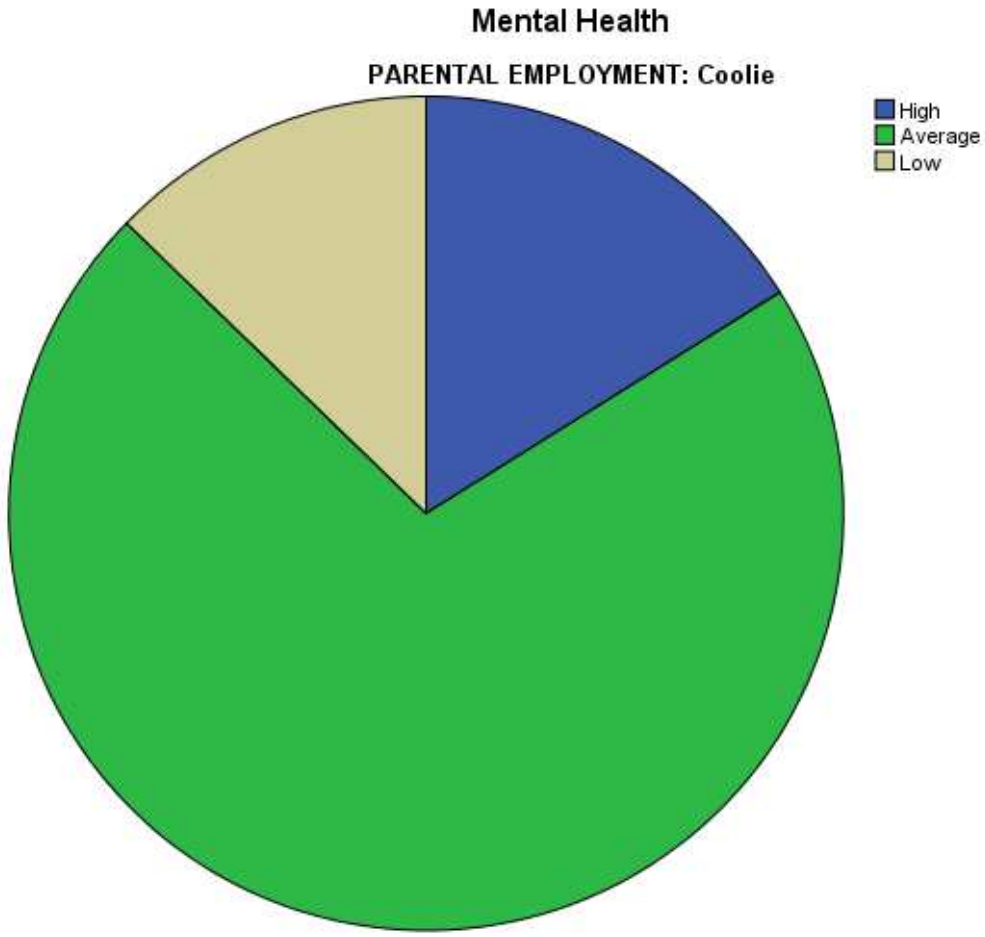
Pie diagram of the Mental Health of Higher Secondary School Science students based on parental employment (business)



Graphical representation of the Mental Health of Higher Secondary School Science Students based on parental employment (business) shows majority of the students whose parent have business have an average level of Mental Health.

Figure 15

Pie diagram of the Mental Health of Higher Secondary School Science students based on parental employment (coolie)



Graphical representation of the Mental Health of Higher Secondary School Science Students based on parental employment (coolie) shows majority of the students whose parent have coolie job have an average level of Mental Health.

Percentage analysis of Entrance Exam Stress of higher secondary school science students

The percentage analysis was made to find out the level of entrance exam stress of higher secondary school science students for the total sample.

To know the extent of entrance exam stress of higher secondary school science students, the investigator categorised the entrance exam stress of higher secondary school science students for the total sample into three groups. ie; High, Average and Low.

The different levels of entrance exam stress were determined by classifying the whole sample into three groups- High, Average, and Low in the conventional procedure of finding σ distance from the mean. The standard deviation (σ) and mean (μ) of the scores are found to be 20.250 and 95.80 respectively. Students who obtained scores above the value of μ+1σ were considered as the high level and who obtained scores below the value of μ-1σ were considered as the low level. The students whose score lie between the values μ-1σ and μ+1σ were considered as the average level entrance exam stress group.

1. Based on gender

The percentage of the total sample based on gender falling into the three levels (high, average, and low) is given in Table 16.

Table 16

Percentage of Entrance Exam Stress for the total sample based on gender

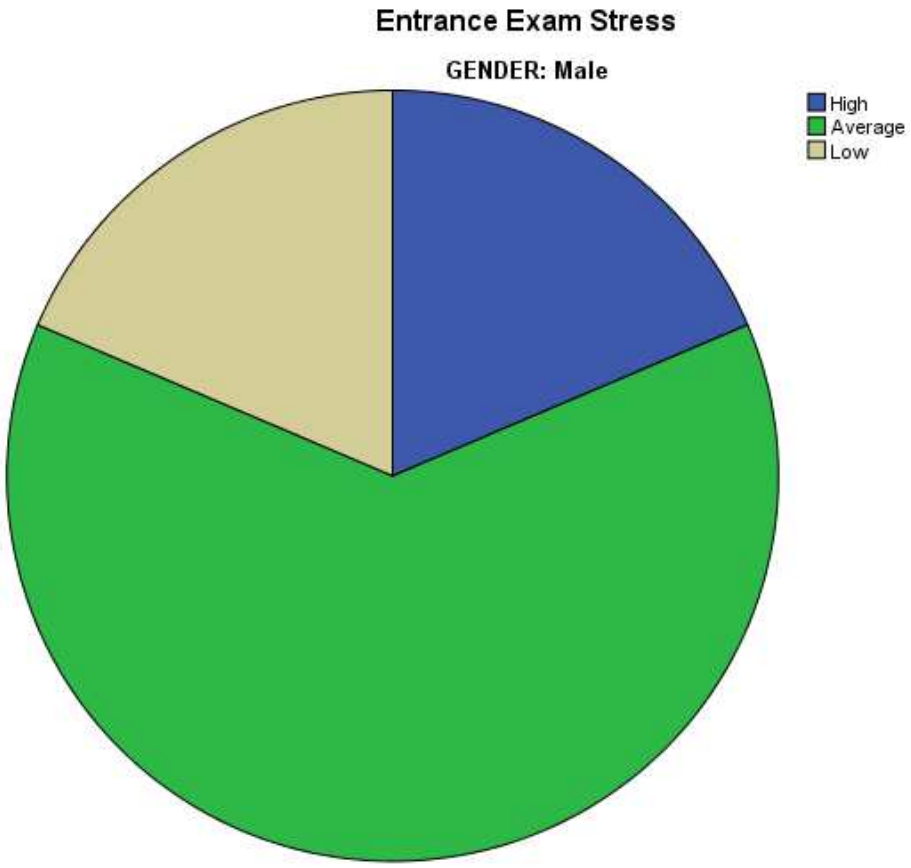
Gender	Level	N	%
Male	High	37	18.6
	Average	125	62.8
	Low	37	18.6
Female	High	44	14.1
	Average	216	69.5
	Low	51	16.4

Discussion

This table shows level of Entrance Exam Stress of higher secondary school science students for the total sample based on gender. 18.6 percent of the male students has high level of Entrance Exam Stress, 62.8 percent shows average level of Entrance Exam Stress and 18.6 percent shows low level of Entrance Exam Stress. Likewise, 14.1 percent of the female students has high level of Entrance Exam Stress, 69.5 percent shows average level of Entrance Exam Stress and 16.4 percent shows low level of Entrance Exam Stress. The graphical representation of the distribution of the total sample based on gender in different level of Entrance Exam Stress is given in the figure 16 & 17.

Figure 16

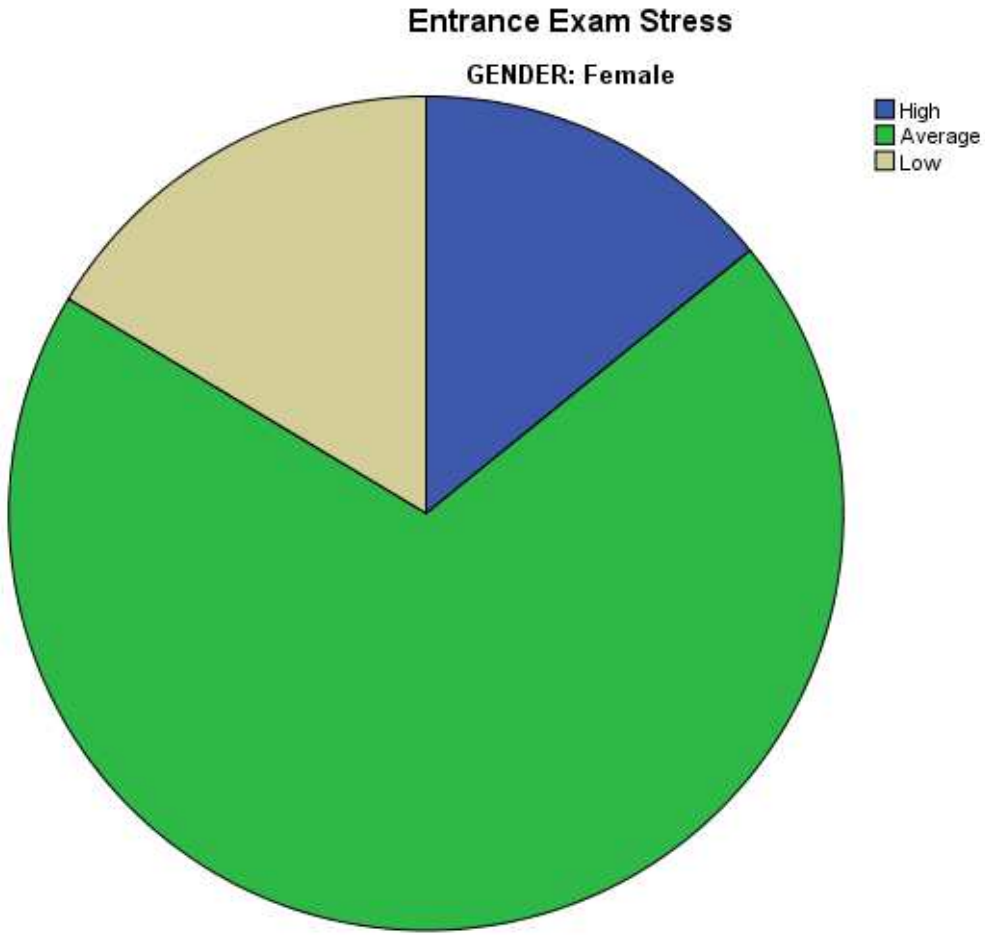
Pie diagram of the Entrance Exam Stress of Higher Secondary School Science students based on gender (male)



Graphical representation of the Entrance Exam Stress of Higher Secondary School Science Students based on gender (male) shows majority of the male students have an average level of Entrance Exam Stress.

Figure 17

Pie diagram of the Entrance Exam Stress of Higher Secondary School Science students based on gender (female)



Graphical representation of the Entrance Exam Stress of Higher Secondary School Science Students based on gender (female) shows majority of the female students have an average level of Entrance Exam Stress.

2. Based on locality of institution

The percentage of the total sample based on locality of institution falling into the three levels (high, average, and low) is given in Table 17.

Table 17

Percentage of Entrance Exam Stress for the total sample based on locality of institution

Locality	Level	N	%
Rural	High	39	15.0
	Average	174	66.9
	Low	47	18.1
Urban	High	42	16.8
	Average	167	66.8
	Low	41	16.4

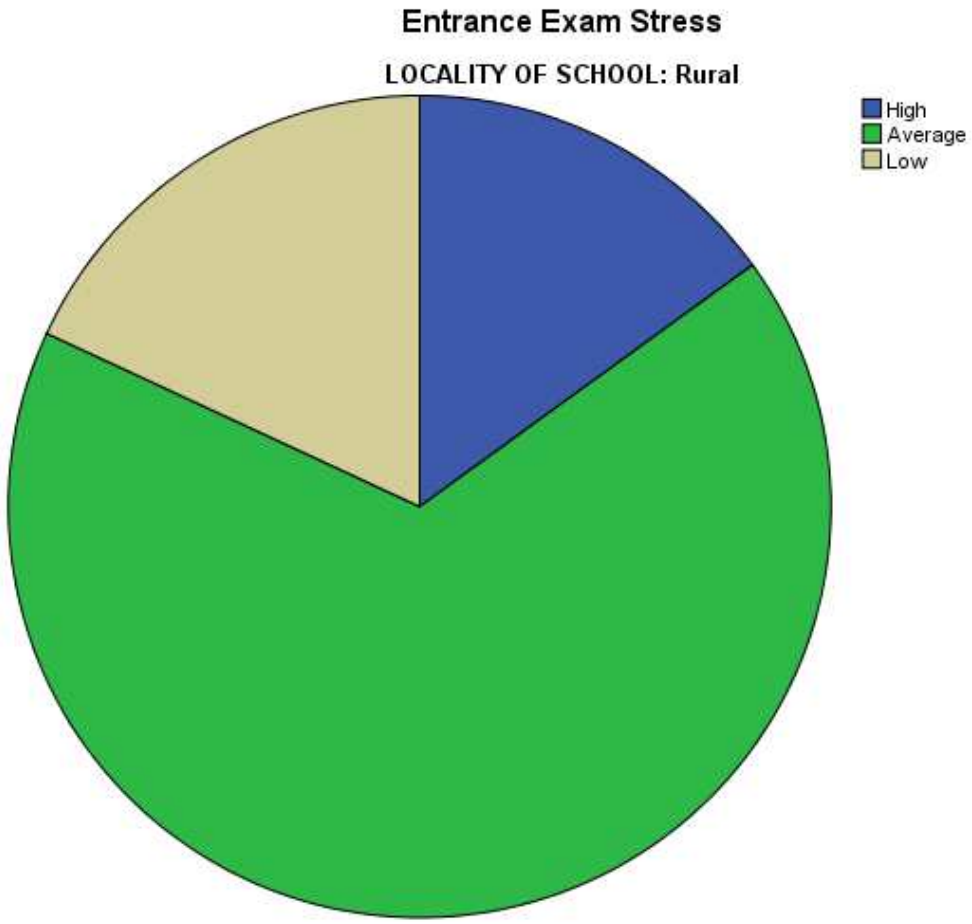
Discussion

This table shows level of Entrance Exam Stress of higher secondary school science students for the total sample based on locality of institution. 15.0 percent of the rural students has high level of Entrance Exam Stress, 66.9 percent shows average level of Entrance Exam Stress and 18.1 percent shows low level of Entrance Exam Stress. Likewise, 16.8 percent of the urban students has high level of Entrance Exam Stress, 66.8 percent shows average level of Entrance Exam Stress and 16.4 percent shows low level of Entrance Exam Stress. The graphical representation of

the distribution of the total sample based on locality of institution in different level of Entrance Exam Stress is given in the figure 18 & 19.

Figure 18

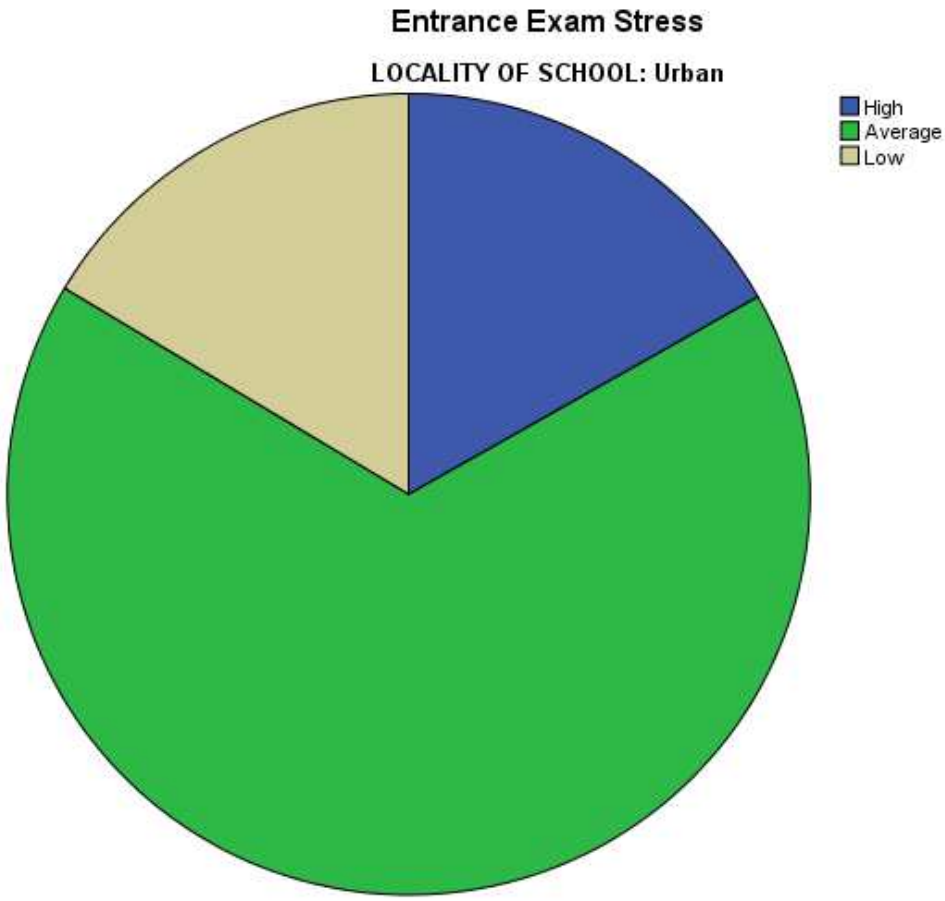
Pie diagram of the Entrance Exam Stress of Higher Secondary School Science students based on locality (rural)



Graphical representation of the Entrance Exam Stress of Higher Secondary School Science Students based on locality of institution (rural) shows majority of the rural students have an average level of Entrance Exam Stress.

Figure 19

Pie diagram of the Entrance Exam Stress of Higher Secondary School Science students based on locality (urban)



Graphical representation of the Entrance Exam Stress of Higher Secondary School Science Students based on locality of institution (urban) shows majority of the urban students have an average level of Entrance Exam Stress.

3. Based on type of institution

The percentage of the total sample based on type of institution falling into the three levels (high, average, and low) is given in Table 18.

Table 18

Percentage of Entrance Exam Stress for the total sample based on type of institution

Type of institution	Level	N	%
Government	High	37	18.4
	Average	125	62.2
	Low	39	19.4
Aided	High	19	12.7
	Average	104	69.3
	Low	27	18.0
Private	High	25	15.7
	Average	112	70.4
	Low	22	13.8

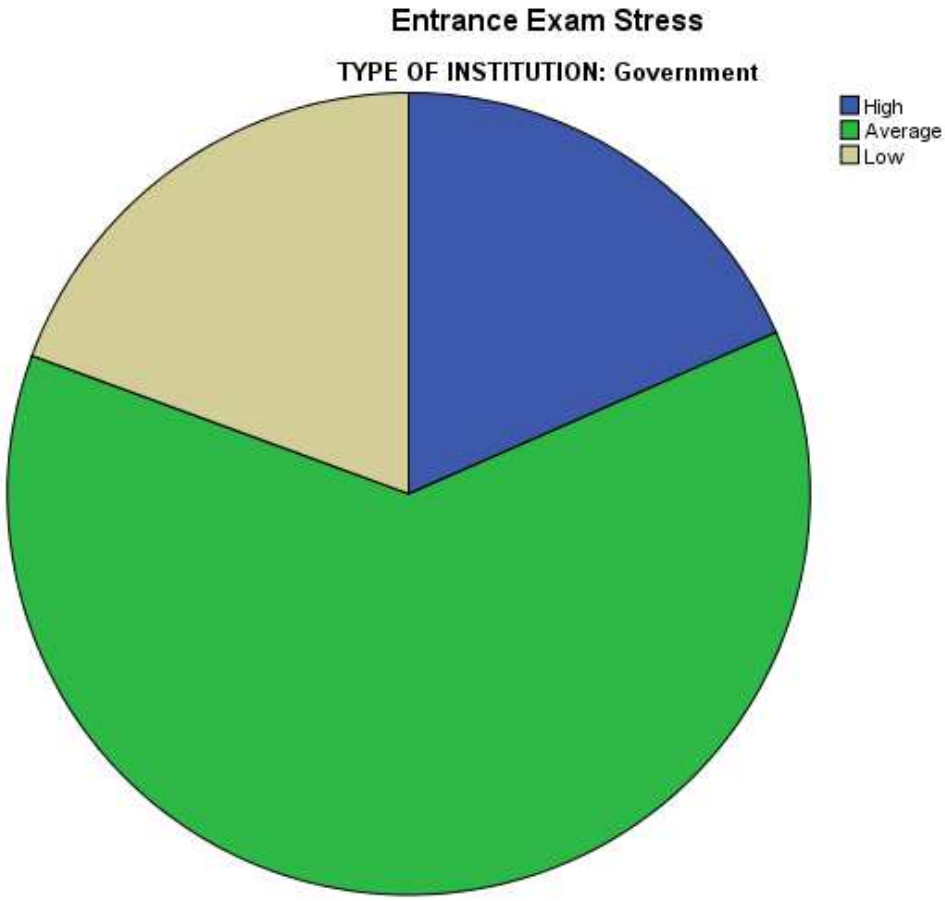
Discussion

This table shows level of Entrance Exam Stress of higher secondary school science students for the total sample based on type of institution. 18.4 percent of the government students has high level of Entrance Exam Stress, 62.2 percent shows average level of Entrance Exam Stress and 19.4 percent shows low level of Entrance Exam Stress. Likewise, 15.7 percent of the aided students has high level of Entrance Exam Stress, 69.3 percent shows average level of Entrance Exam Stress and 18.0 percent shows low level of Entrance Exam Stress. Likewise, 15.7 percent of the private students has high level of Entrance Exam Stress, 70.4 percent shows average level of Entrance Exam Stress and 13.8 percent shows low level of Entrance Exam Stress. The graphical representation of the distribution of the total sample based on

type of institution in different level of Entrance Exam Stress is given in the figure 20, 21 & 22.

Figure 20

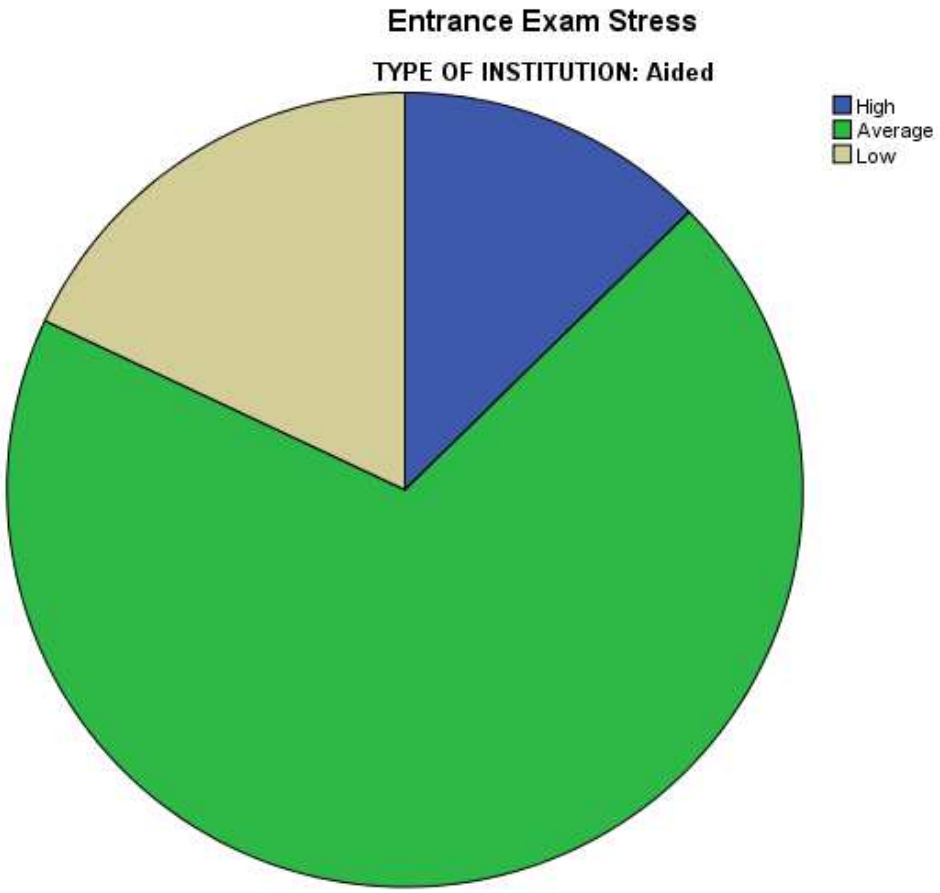
Pie diagram of the Entrance Exam Stress of Higher Secondary School Science students based on type of institution (government)



Graphical representation of the Entrance Exam Stress of Higher Secondary School Science Students based on type of institution (government) shows majority of the government students have an average level of Entrance Exam Stress.

Figure 21

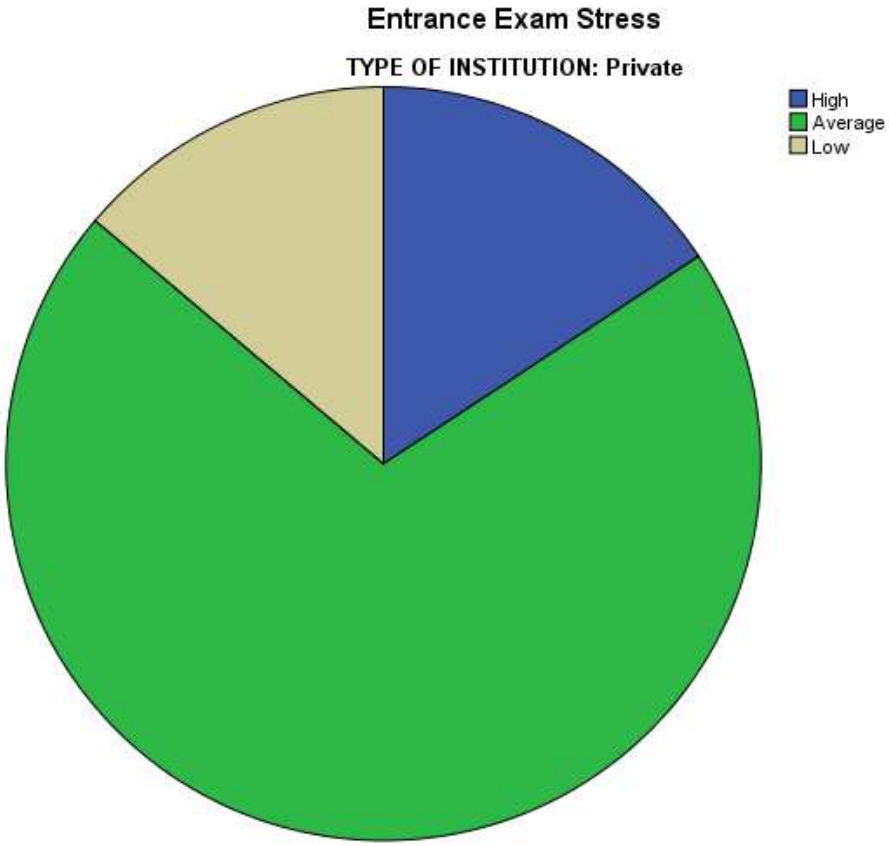
Pie diagram of the Entrance Exam Stress of Higher Secondary School Science students based on type of institution (aided)



Graphical representation of the Entrance Exam Stress of Higher Secondary School Science Students based on type of institution (aided) shows majority of the aided students have an average level of Entrance Exam Stress.

Figure 22

Pie diagram of the Entrance Exam Stress of Higher Secondary School Science students based on type of institution (private)



Graphical representation of the Entrance Exam Stress of Higher Secondary School Science Students based on type of institution (private) shows majority of the private students have an average level of Entrance Exam Stress.

4. Based on parental qualification

The percentage of the total sample based on parental qualification falling into the three levels (high, average, and low) is given in Table 19.

Table 19

Percentage of Entrance Exam Stress for the total sample based on parental qualification

Parental qualification	Level	N	%
Below plus two	High	33	15.4
	Average	144	67.3
	Low	37	17.3
Plus two & plus two above	High	48	16.2
	Average	197	66.6
	Low	51	17.2

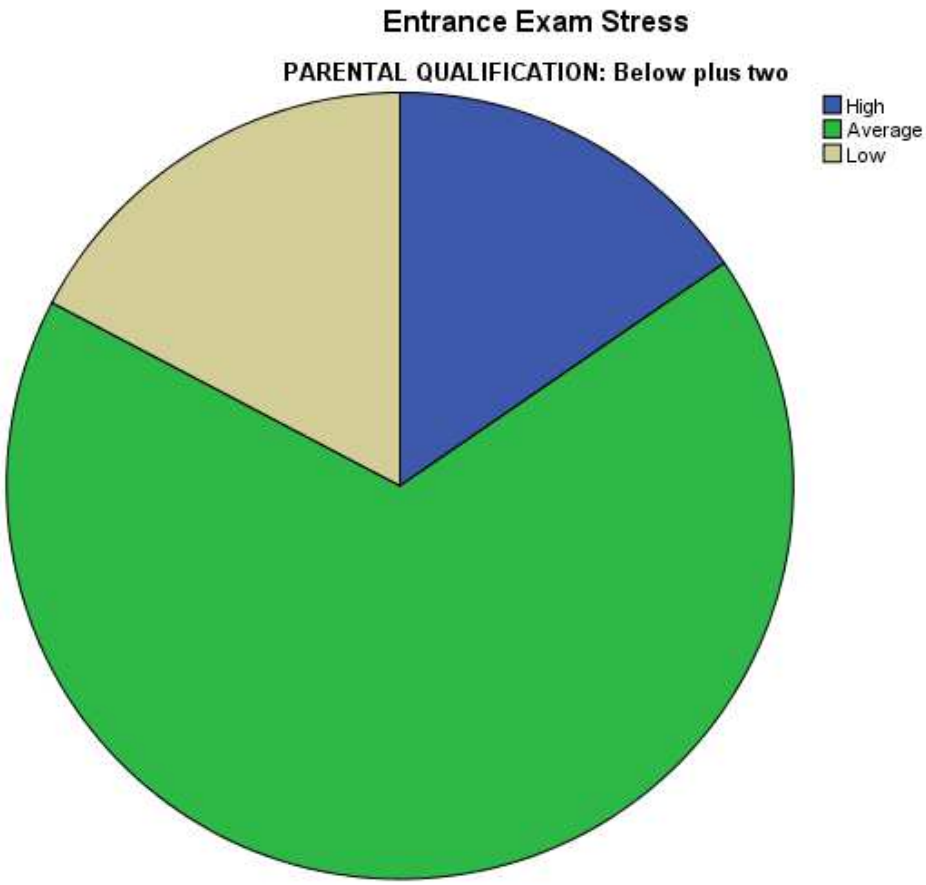
Discussion

This table shows level of Entrance Exam Stress of higher secondary school science students for the total sample based on parental qualification. 15.4 percent of the students whose parent's qualification is below plus two has high level of Entrance Exam Stress, 67.3 percent shows average level of Entrance Exam Stress and 17.3 percent shows low level of Entrance Exam Stress. Likewise, 16.2 percent of the students whose parent's qualification is plus two and above plus two has high level of Entrance Exam Stress, 66.6 percent shows average level of Entrance Exam Stress and 17.2 percent shows low level of Entrance Exam Stress. The graphical

representation of the distribution of the total sample based on parental qualification in different level of Entrance Exam Stress is given in the figure 23 & 24.

Figure 23

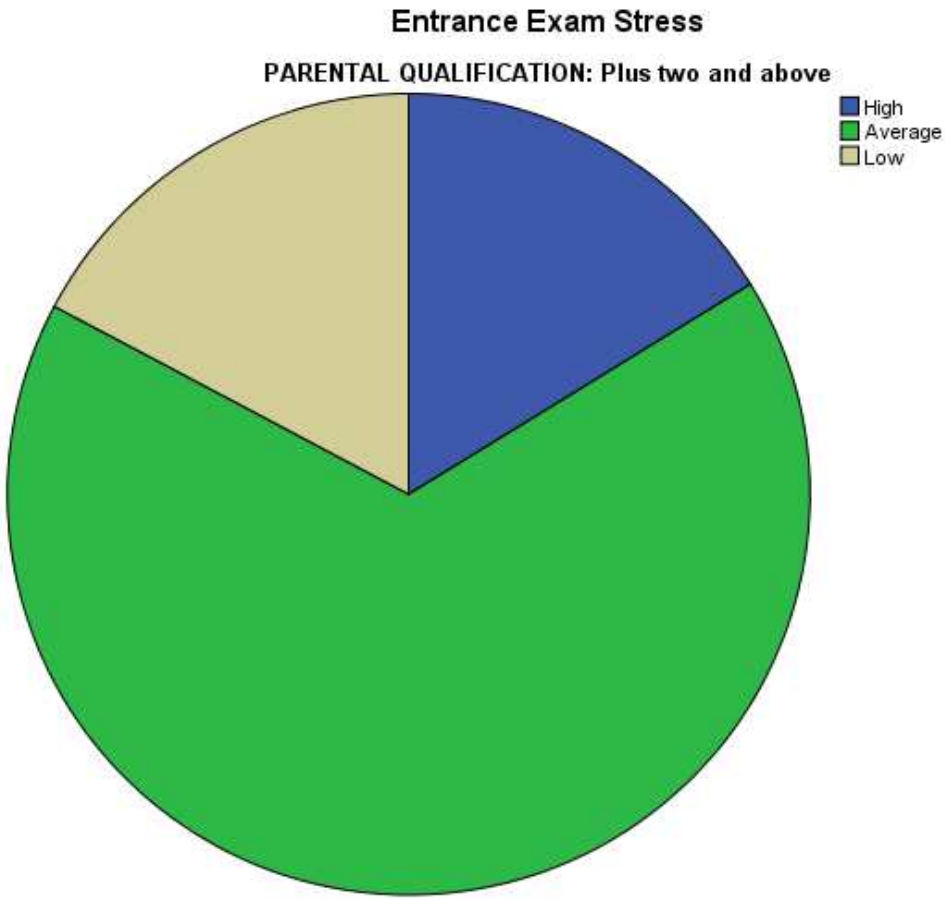
Pie diagram of the Entrance Exam Stress of Higher Secondary School Science students based on parental qualification (below plus two)



Graphical representation of the Entrance Exam Stress of Higher Secondary School Science Students based on parental qualification (below plus two) shows majority of the students whose parent's qualification is below plus two have an average level of Entrance Exam Stress.

Figure 24

Pie diagram of the Entrance Exam Stress of Higher Secondary School Science students based on parental qualification (plus two & above plus two)



Graphical representation of the Entrance Exam Stress of Higher Secondary School Science Students based on parental qualification (plus two & above plus two) shows majority of the students whose parent's qualification is plus two & above plus two have an average level of Entrance Exam Stress.

5. Based on parental employment

The percentage of the total sample based on parental employment falling into the three levels (high, average, and low) is given in Table 20.

Table 20

Percentage of Entrance Exam Stress for the total sample based on parental employment

Parental employment	Level	N	%
Professional	High	32	20.5
	Average	107	68.6
	Low	17	10.9
Business	High	30	14.6
	Average	139	67.8
	Low	36	17.6
Coolie	High	19	12.8
	Average	95	63.8
	Low	35	23.5

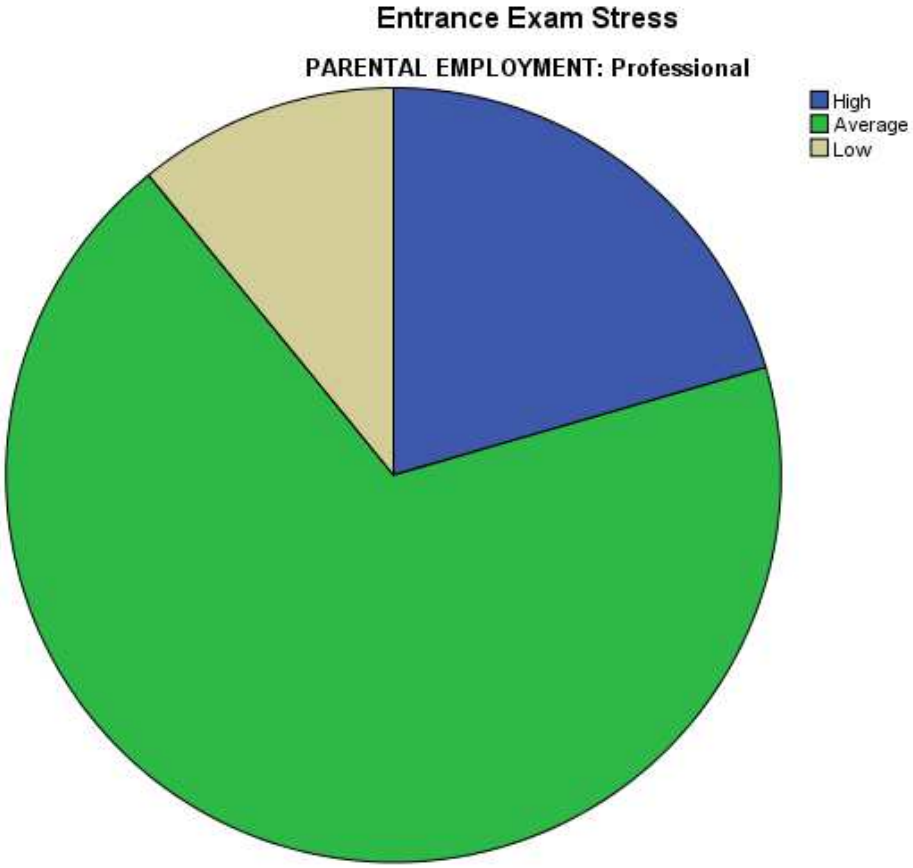
Discussion

This table shows level of Entrance Exam Stress of higher secondary school science students for the total sample based on parental employment. 20.5 percent of the students whose parent have professional job has high level of Entrance Exam Stress, 68.6 percent shows average level of Entrance Exam Stress and 10.9 percent shows low level of Entrance Exam Stress. Likewise, 14.6 percent of the students whose parent have business has high level of Entrance Exam Stress, 67.8 percent shows average level of Entrance Exam Stress and 17.6 percent shows low level of

Entrance Exam Stress. Likewise, 12.8 percent of the students whose parent have coolie job has high level of Entrance Exam Stress, 63.8 percent shows average level of Entrance Exam Stress and 23.5 percent shows low level of Entrance Exam Stress. The graphical representation of the distribution of the total sample based on parental employment in different level of Entrance Exam Stress is given in the figure 25, 26 & 27.

Figure 25

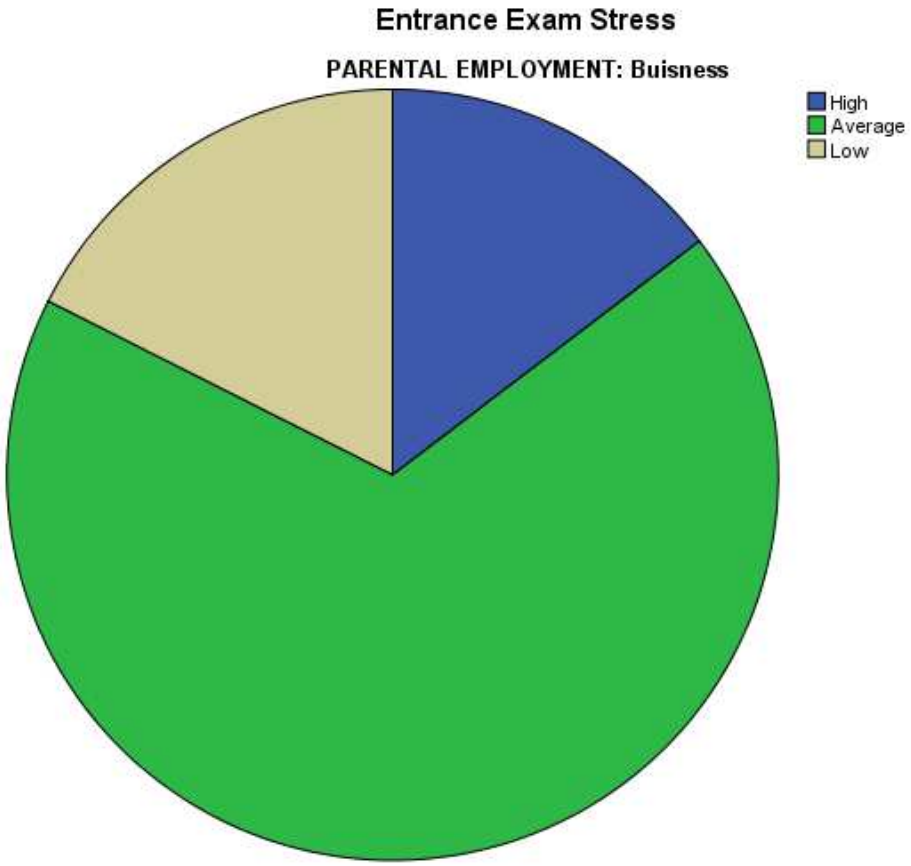
Pie diagram of the Entrance Exam Stress of Higher Secondary School Science students based on parental employment (professional)



Graphical representation of the Entrance Exam Stress of Higher Secondary School Science Students based on parental employment (professional) shows majority of the students whose parent have professional job have an average level of Entrance Exam Stress.

Figure 26

Pie diagram of the Entrance Exam Stress of Higher Secondary School Science students based on parental employment (business)

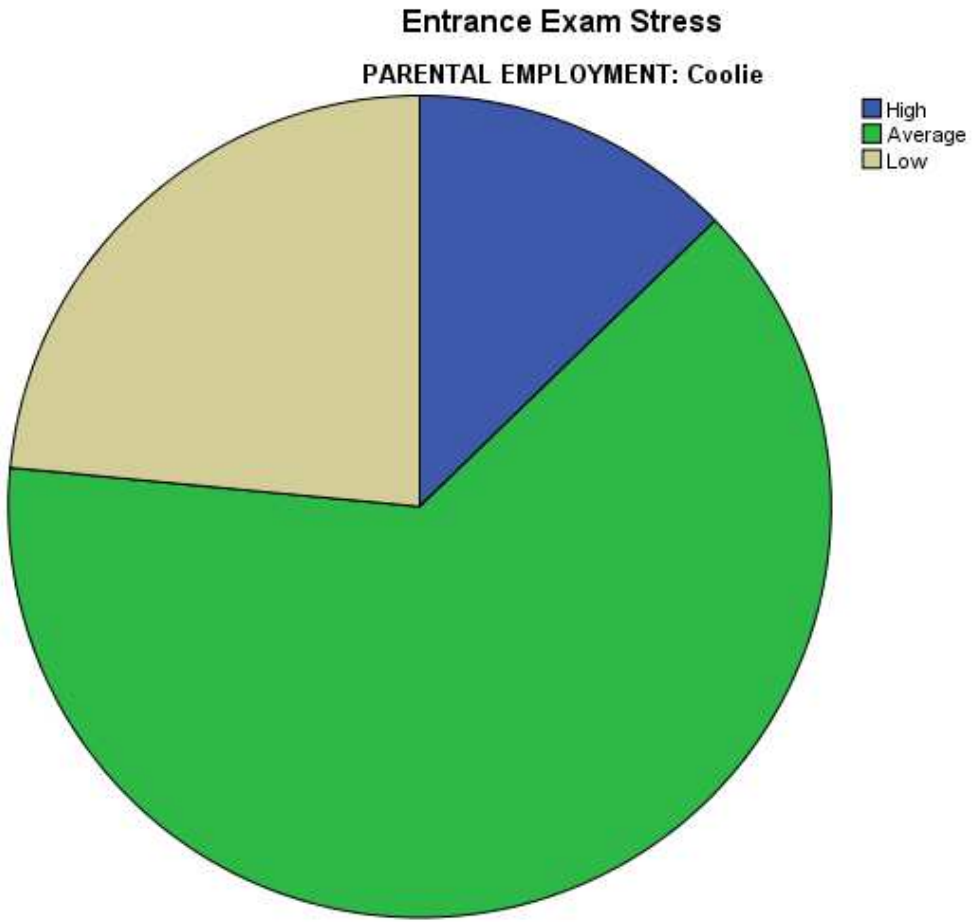


Graphical representation of the Entrance Exam Stress of Higher Secondary School Science Students based on parental employment (business) shows majority

of the students whose parent have business have an average level of Entrance Exam Stress.

Figure 27

Pie diagram of the Entrance Exam Stress of Higher Secondary School Science students based on parental employment (coolie)



Graphical representation of the Entrance Exam Stress of Higher Secondary School Science Students based on parental employment (coolie) shows majority of the students whose parent have coolie job have an average level of Entrance Exam Stress.

6. Based on entrance coaching preparation

The percentage of the total sample based on entrance coaching preparation falling into the three levels (high, average, and low) is given in Table 21.

Table 21

Percentage of Entrance Exam Stress for the total sample based on entrance coaching preparation

Entrance coaching preparation	Level	N	%
Coaching centre	High	54	19.9
	Average	175	64.6
	Low	42	15.5
Self	High	27	11.3
	Average	166	69.5
	Low	46	19.2

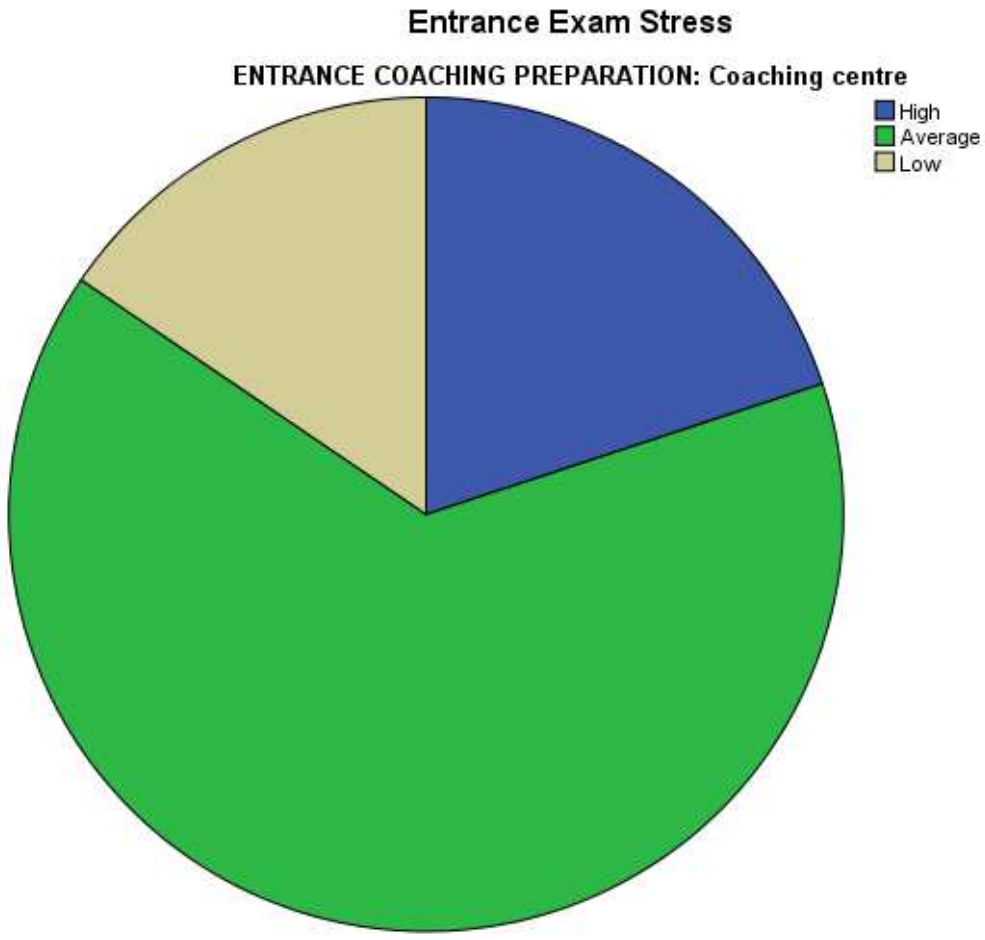
Discussion

This table shows level of Entrance Exam Stress of higher secondary school science students for the total sample based on entrance coaching preparation. 19.9 percent of the students who are going to coaching centre has high level of Entrance Exam Stress, 64.6 percent shows average level of Entrance Exam Stress and 15.5 percent shows low level of Entrance Exam Stress. Likewise, 11.3 percent of the students who studying self has high level of Entrance Exam Stress, 69.5 percent shows average level of Entrance Exam Stress and 19.2 percent shows low level of Entrance Exam Stress. The graphical representation of the distribution of the total

sample based on entrance coaching preparation in different level of Entrance Exam Stress is given in the figure 28 & 29.

Figure 28

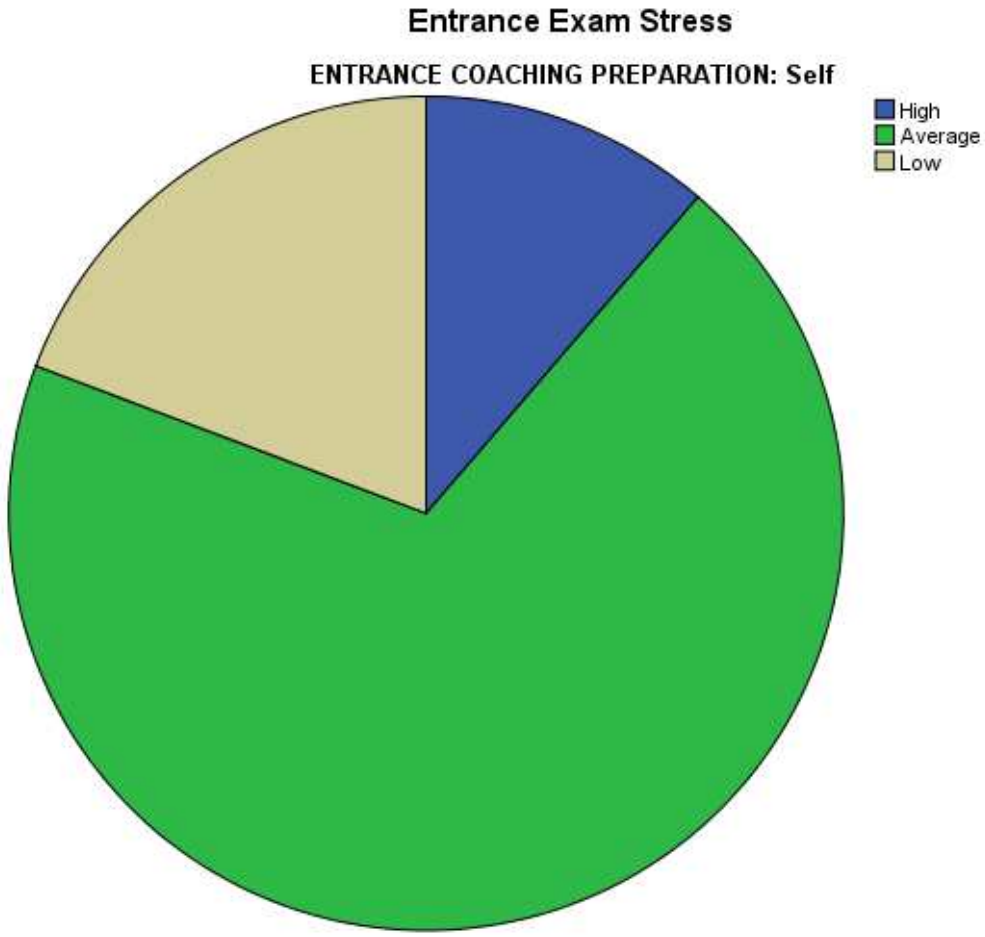
Pie diagram of the Entrance Exam Stress of Higher Secondary School Science students based on entrance coaching preparation (coaching centre)



Graphical representation of the Entrance Exam Stress of Higher Secondary School Science Students based on entrance coaching preparation (coaching centre) shows majority of the students who are going to coaching centre have an average level of Entrance Exam Stress.

Figure 29

Pie diagram of the Entrance Exam Stress of Higher Secondary School Science students based on entrance coaching preparation (self)



Graphical representation of the Entrance Exam Stress of Higher Secondary School Science Students based on entrance coaching preparation (self) shows majority of the students who are studying self have an average level of Entrance Exam Stress.

Percentage analysis of Perseverance of higher secondary school science students

The percentage analysis was made to find out the level of perseverance of higher secondary school science students for the total sample.

To know the extent of perseverance of higher secondary school science students, the investigator categorised the perseverance of higher secondary school science students for the total sample into three groups. ie; High, Average and Low.

The different levels of perseverance were determined by classifying the whole sample into three groups- High, Average, and Low in the conventional procedure of finding σ distance from the mean. The standard deviation (σ) and mean (μ) of the scores are found to be 16.660 and 127.68 respectively. Students who obtained scores above the value of μ+1σ were considered as the high level and who obtained scores below the value of μ-1σ were considered as the low level. The students whose score lie between the values μ-1σ and μ+1σ were considered as the average level perseverance group.

1. Based on gender

The percentage of the total sample based on gender falling into the three levels (high, average, and low) is given in Table 22.

Table 22

Percentage of Perseverance for the total sample based on gender

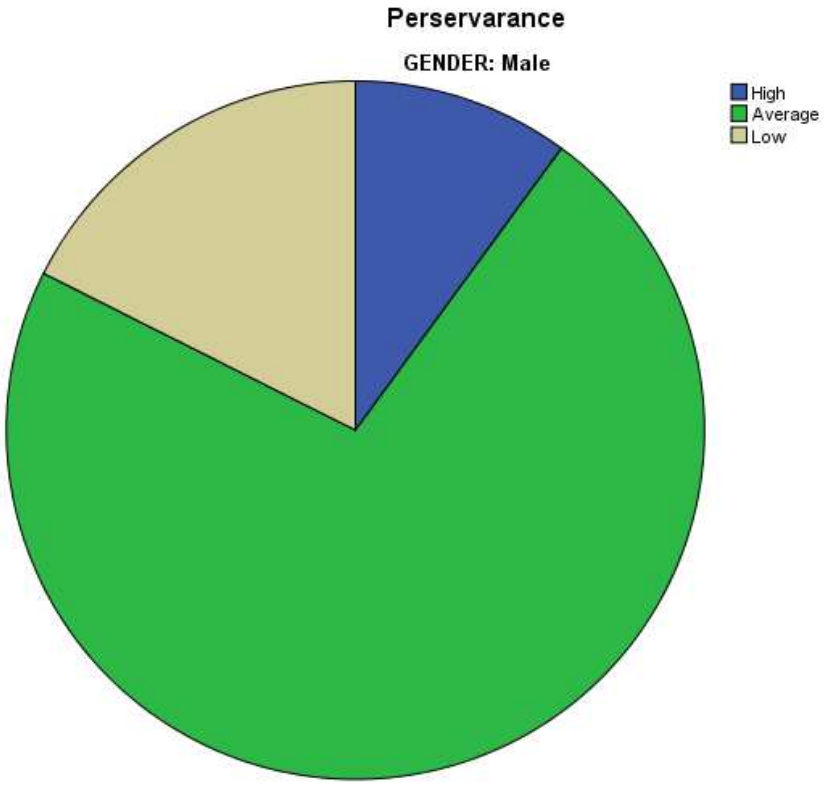
Gender	Level	N	%
Male	High	20	10.1
	Average	144	72.4
	Low	35	17.5
Female	High	61	19.6
	Average	210	67.5
	Low	40	12.9

Discussion

This table shows level of Perseverance of higher secondary school science students for the total sample based on gender. 10.1 percent of the male students has high level of Perseverance, 72.4 percent shows average level of Perseverance and 17.5 percent shows low level of Perseverance. Likewise, 19.6 percent of the female students has high level of Perseverance, 67.5 percent shows average level of Perseverance and 12.9 percent shows low level of Perseverance. The graphical representation of the distribution of the total sample based on gender in different level of Perseverance is given in the figure 30 & 31.

Figure 30

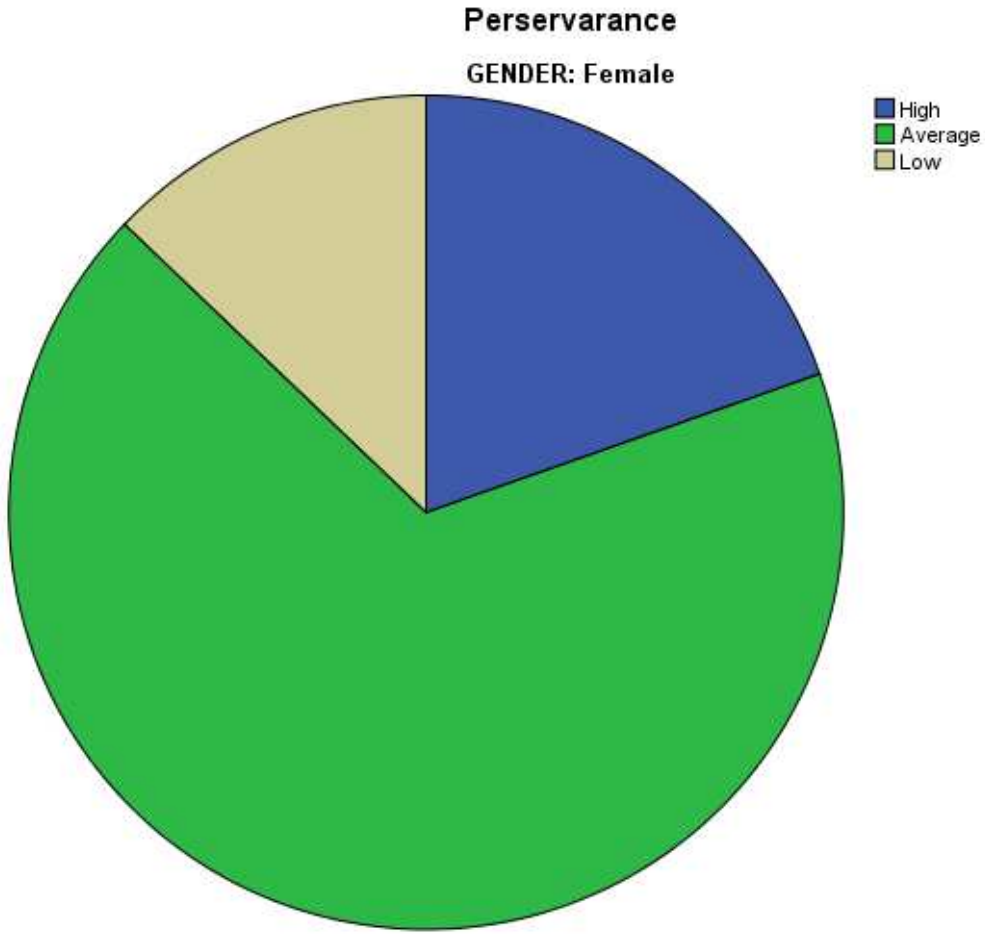
Pie diagram of the Perseverance of Higher Secondary School Science students based on gender (male)



Graphical representation of the Perseverance of Higher Secondary School Science Students based on gender (male) shows majority of the male students have an average level of Perseverance.

Figure 31

Pie diagram of the Perseverance of Higher Secondary School Science students based on gender (female)



Graphical representation of the Perseverance of Higher Secondary School Science Students based on gender (female) shows majority of the male students have an average level of Perseverance.

2. Based on locality of institution

The percentage of the total sample based on locality of institution falling into the three levels (high, average, and low) is given in Table 23.

Table 23

Percentage of Perseverance for the total sample based on locality of institution

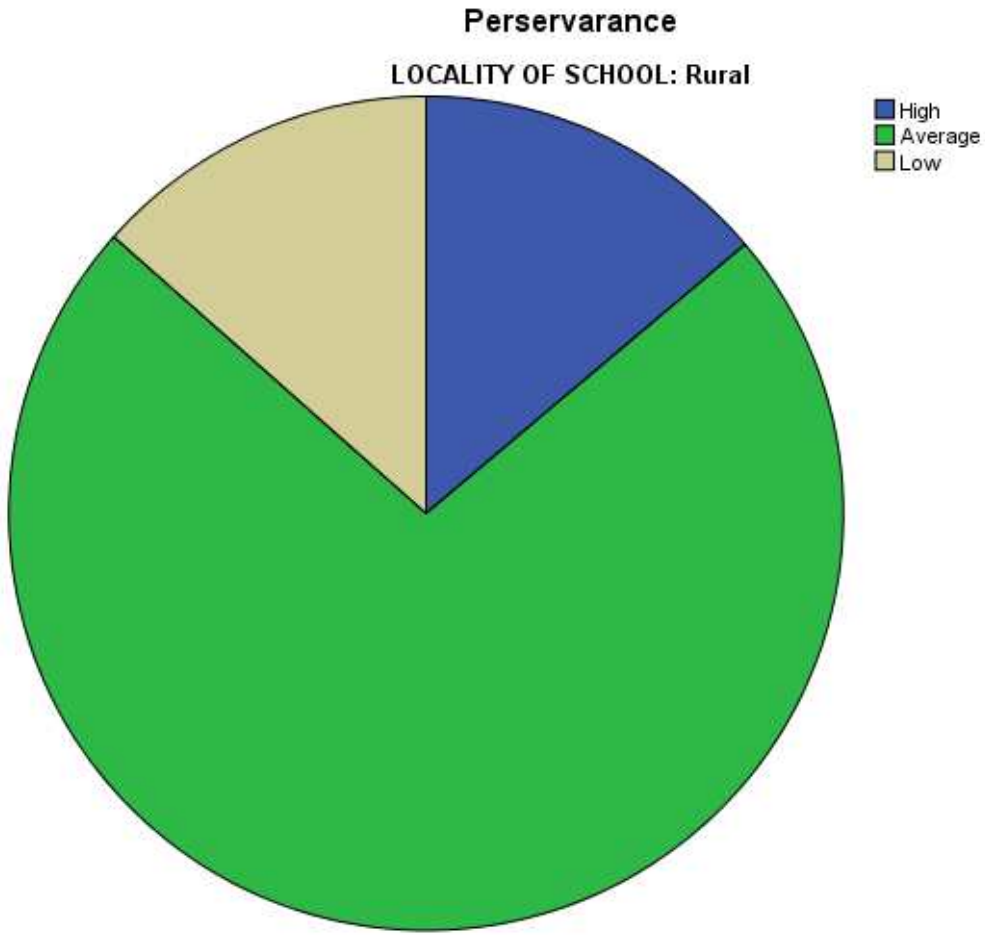
Locality	Level	N	%
Rural	High	36	13.8
	Average	189	72.7
	Low	35	13.5
Urban	High	45	18.0
	Average	165	66.0
	Low	40	16.0

Discussion

This table shows level of Perseverance of higher secondary school science students for the total sample based on locality of institution. 13.8 percent of the rural students has high level of Perseverance, 72.7 percent shows average level of Perseverance and 13.5 percent shows low level of Perseverance. Likewise, 18.0 percent of the urban students has high level of Perseverance, 66.0 percent shows average level of Perseverance and 16.0 percent shows low level of Perseverance. The graphical representation of the distribution of the total sample based on locality of institution in different level of Perseverance is given in the figure 32 & 33.

Figure 32

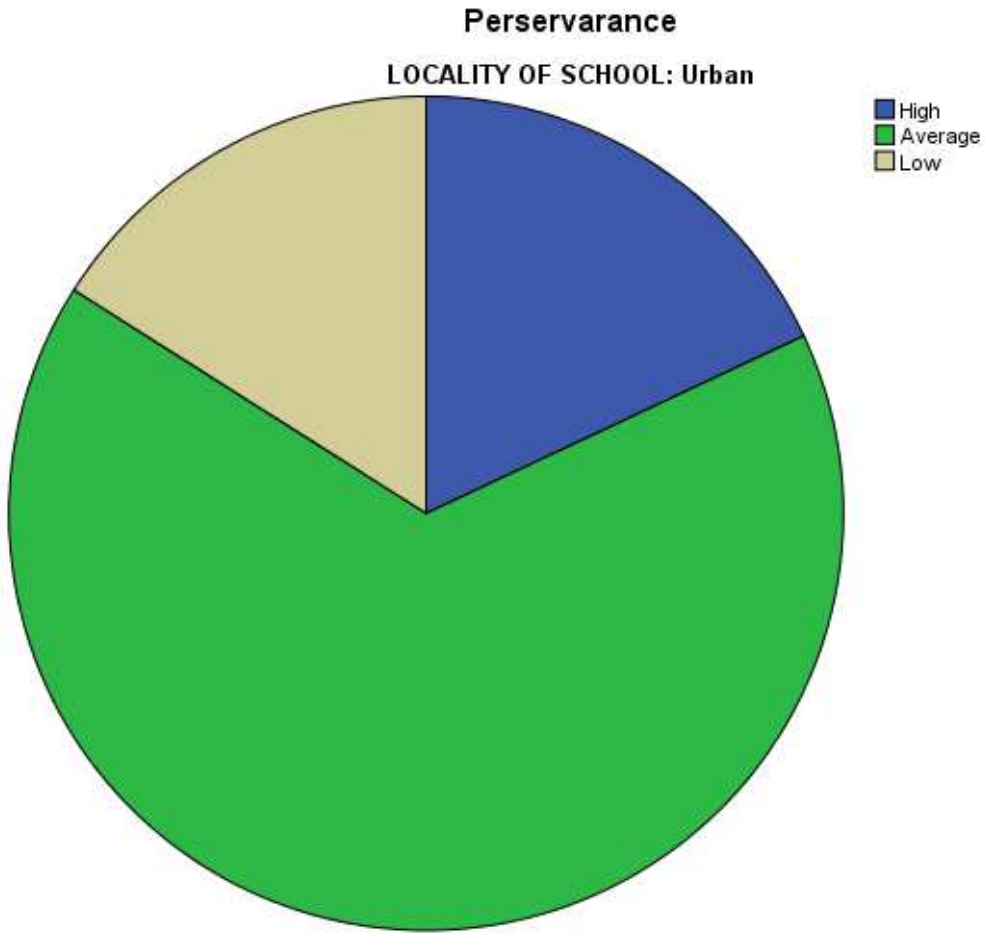
Pie diagram of the Perseverance of Higher Secondary School Science students based on locality (rural)



Graphical representation of the Perseverance of Higher Secondary School Science Students based on locality of institution (rural) shows majority of the rural students have an average level of Perseverance.

Figure 33

Pie diagram of the Perseverance of Higher Secondary School Science students based on locality (urban)



Graphical representation of the Perseverance of Higher Secondary School Science Students based on locality of institution (urban) shows majority of the urban students have an average level of Perseverance.

3. Based on type of institution

The percentage of the total sample based on type of institution falling into the three levels (high, average, and low) is given in Table 24.

Table 24

Percentage of Perseverance for the total sample based on type of institution

Type of institution	Level	N	%
Government	High	25	12.4
	Average	152	75.6
	Low	24	11.9
Aided	High	31	20.7
	Average	95	63.3
	Low	24	16.0
Private	High	25	15.7
	Average	107	67.3
	Low	27	17.0

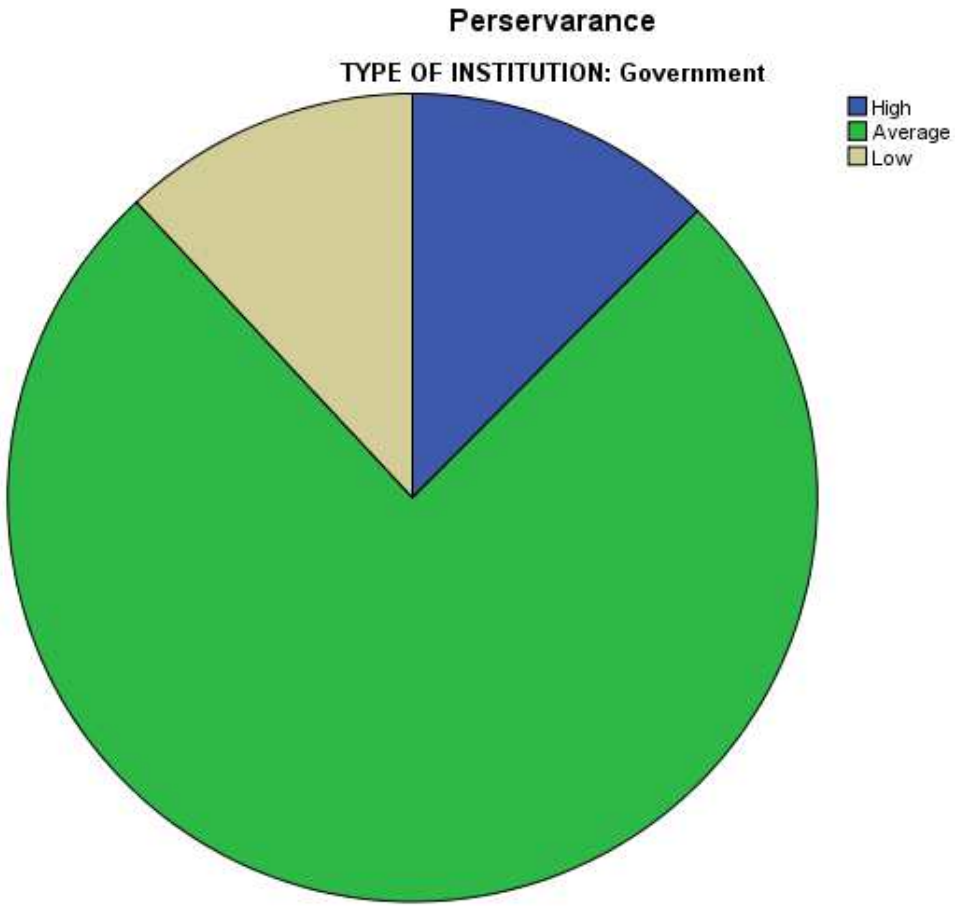
Discussion

This table shows level of Perseverance of higher secondary school science students for the total sample based on type of institution. 12.4 percent of the government students has high level of Perseverance, 75.6 percent shows average level of Perseverance and 11.9 percent shows low level of Perseverance. Likewise, 20.7 percent of the aided students has high level of Perseverance, 63.3 percent shows average level of Perseverance and 16.0 percent shows low level of Perseverance. Likewise, 15.7 percent of the private students has high level of Perseverance, 67.3 percent shows average level of Perseverance and 17.0 percent shows low level of Perseverance. The graphical representation of the distribution of

the total sample based on type of institution in different level of Perseverance is given in the figure 34, 35, & 36.

Figure 34

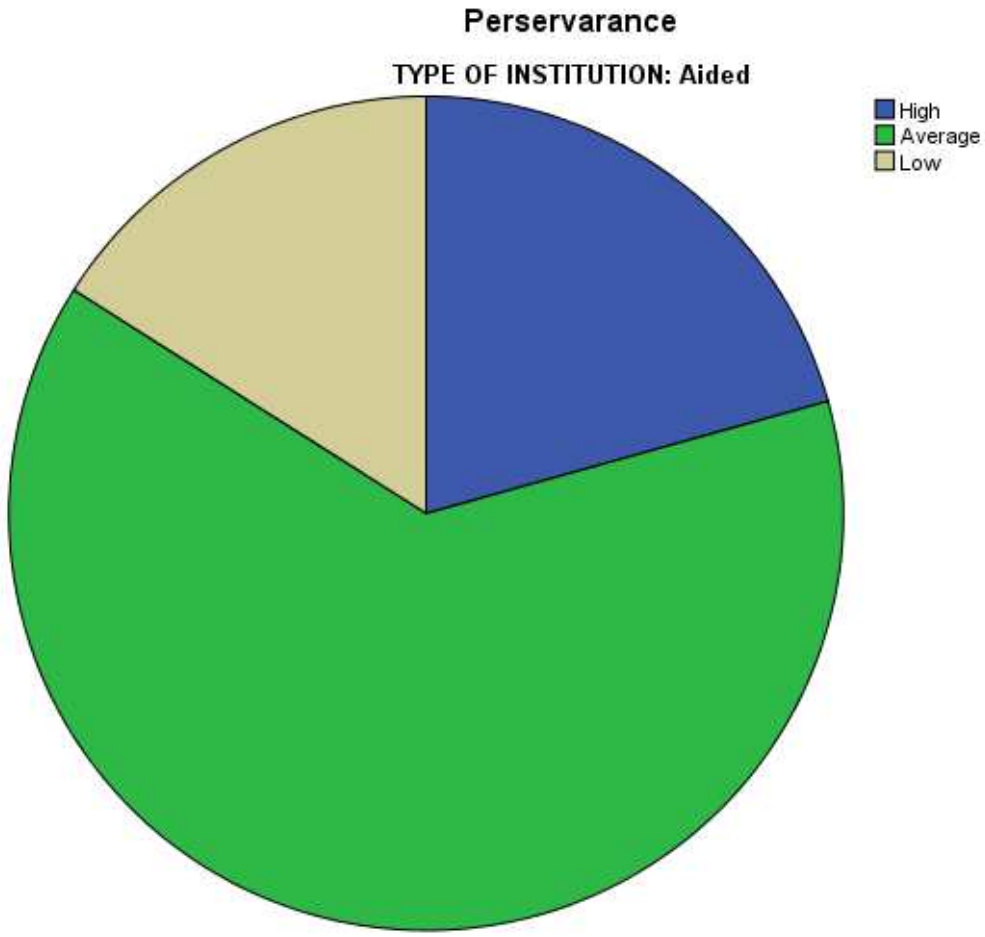
Pie diagram of the Perseverance of Higher Secondary School Science students based on type of institution (government)



Graphical representation of the Perseverance of Higher Secondary School Science Students based on type of institution (government) shows majority of the government students have an average level of Perseverance.

Figure 35

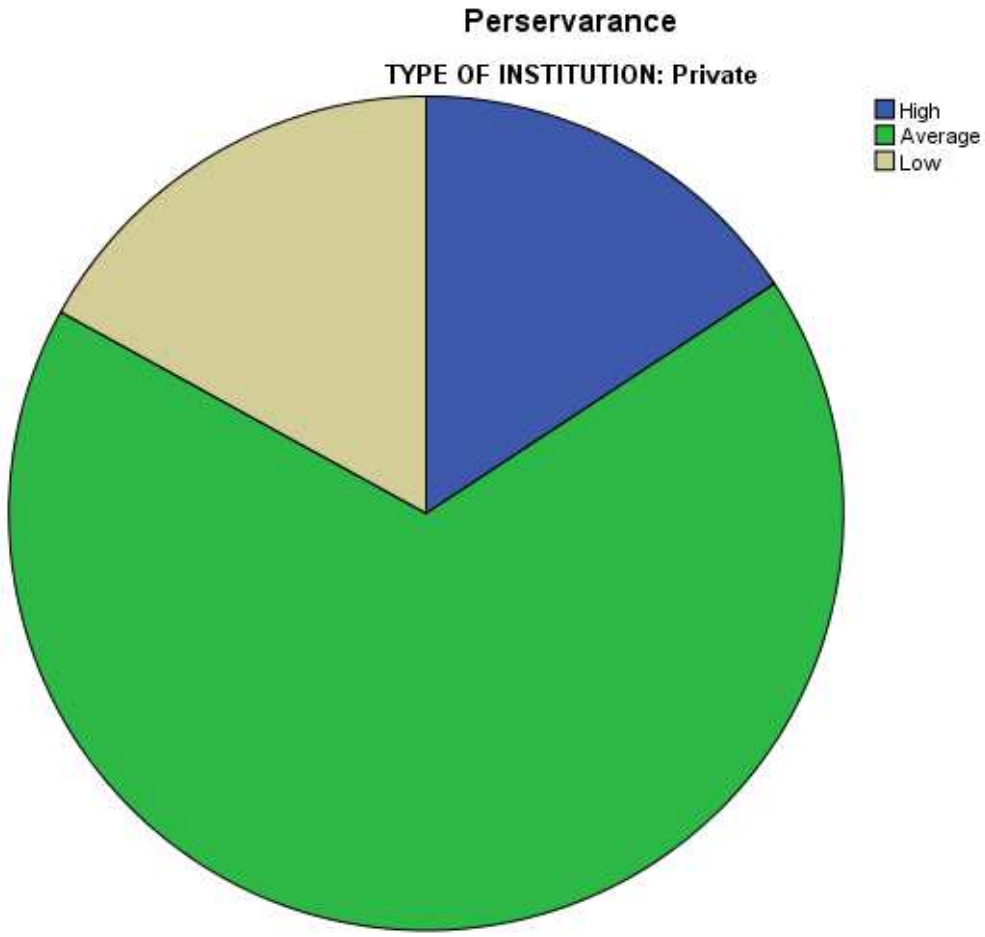
Pie diagram of the Perseverance of Higher Secondary School Science students based on type of institution (aided)



Graphical representation of the Perseverance of Higher Secondary School Science Students based on type of institution (aided) shows majority of the aided students have an average level of Perseverance.

Figure 36

Pie diagram of the Perseverance of Higher Secondary School Science students based on type of institution (private)



Graphical representation of the Perseverance of Higher Secondary School Science Students based on type of institution (private) shows majority of the private students have an average level of Perseverance.

4. Based on parental qualification

The percentage of the total sample based on parental qualification falling into the three levels (high, average, and low) is given in Table 25.

Table 25

Percentage of Perseverance for the total sample based on parental qualification

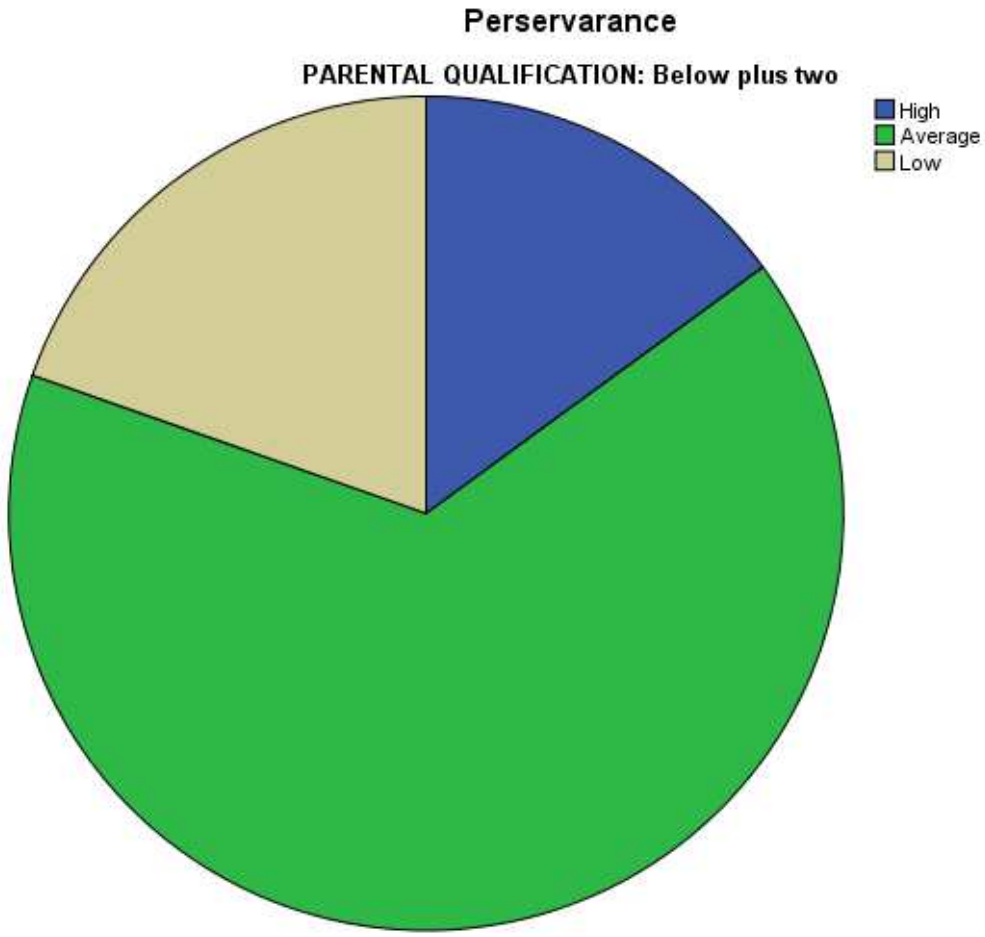
Parental qualification	Level	N	%
Below plus two	High	32	15.0
	Average	140	65.4
	Low	42	19.6
Plus two & plus two above	High	49	16.6
	Average	214	72.3
	Low	33	11.1

Discussion

This table shows level of Perseverance of higher secondary school science students for the total sample based on parental qualification. 15.0 percent of the students whose parent's qualification is below plus two has high level of Perseverance, 65.4 percent shows average level of Perseverance and 19.6 percent shows low level of Perseverance. Likewise, 16.6 percent of the students whose parent's qualification is plus two and above plus two has high level of Perseverance, 72.3 percent shows average level of Perseverance and 11.1 percent shows low level of Perseverance. The graphical representation of the distribution of the total sample based on parental qualification in different level of Perseverance is given in the figure 37 & 38.

Figure 37

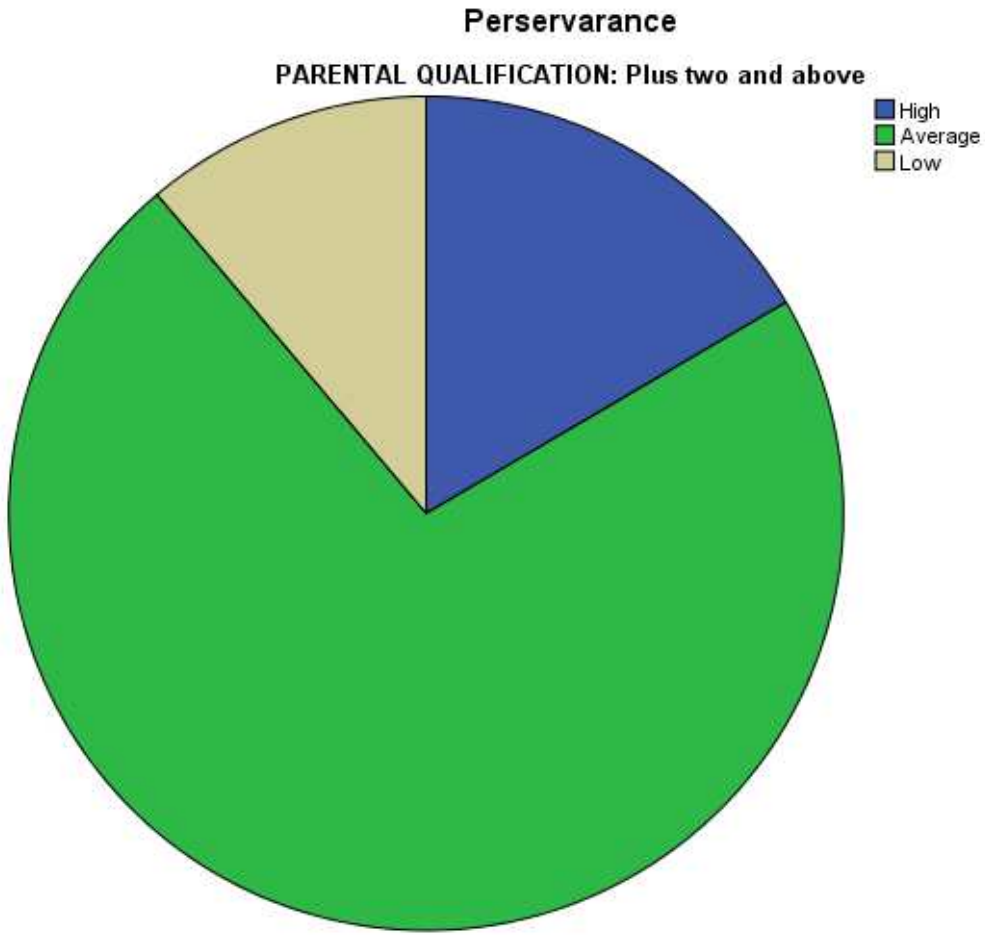
Pie diagram of the Perseverance of Higher Secondary School Science students based on parental qualification (below plus two)



Graphical representation of the Perseverance of Higher Secondary School Science Students based on parental qualification (below plus two) shows majority of the students whose parent's qualification is below plus two have an average level of Perseverance.

Figure 38

Pie diagram of the Perseverance of Higher Secondary School Science students based on parental qualification (plus two & above plus two)



Graphical representation of the Perseverance of Higher Secondary School Science Students based on parental qualification (plus two & above plus two) shows majority of the students whose parent's qualification is plus two & above plus two have an average level of Perseverance.

5. Based on parental employment

The percentage of the total sample based on parental employment falling into the three levels (high, average, and low) is given in Table 26.

Table 26

Percentage of Perseverance for the total sample based on parental employment

Parental employment	Level	N	%
Professional	High	21	13.5
	Average	109	69.9
	Low	26	16.7
Business	High	33	16.1
	Average	148	72.2
	Low	24	11.7
Coolie	High	27	18.1
	Average	97	65.1
	Low	25	16.8

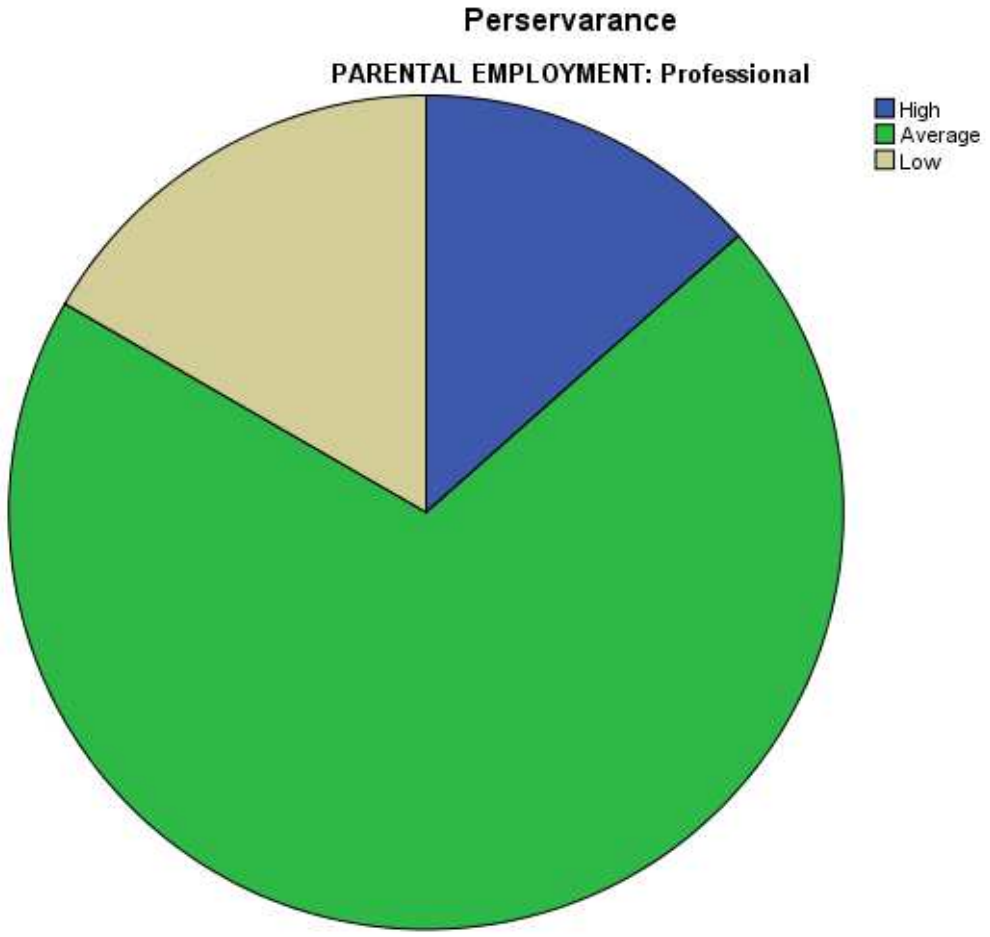
Discussion

This table shows level of Perseverance of higher secondary school science students for the total sample based on parental employment. 13.5 percent of the students whose parent have professional job has high level of Perseverance, 69.9 percent shows average level of Perseverance and 16.7 percent shows low level of Perseverance. Likewise, 16.1 percent of the students whose parent have business has high level of Perseverance, 72.2 percent shows average level of Perseverance and 11.7 percent shows low level of Perseverance. Likewise, 18.1 percent of the students whose parent have coolie job has high level of Perseverance, 65.1 percent shows

average level of Perseverance and 16.8 percent shows low level of Perseverance. The graphical representation of the distribution of the total sample based on parental employment in different level of Perseverance is given in the figure 39, 40 & 41.

Figure 39

Pie diagram of the Perseverance of Higher Secondary School Science students based on parental employment (professional)

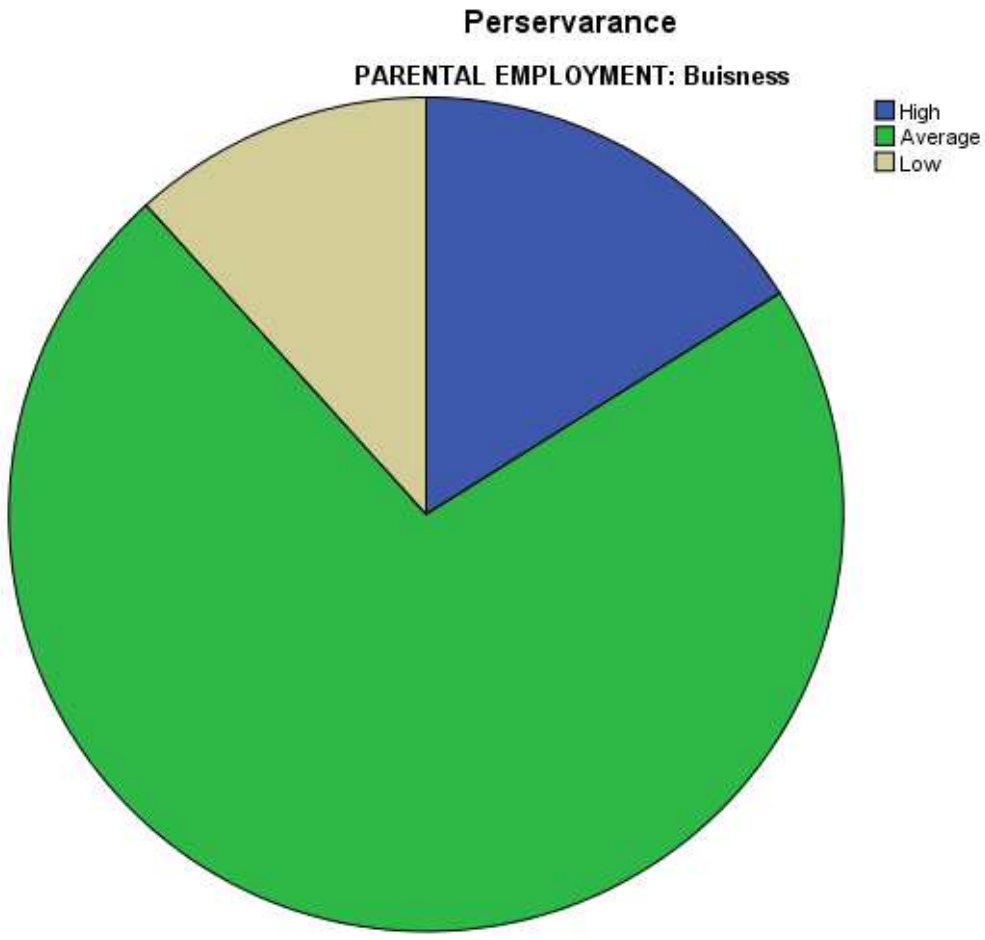


Graphical representation of the Perseverance of Higher Secondary School Science Students based on parental employment (professional) shows majority of

the students whose parent have professional job have an average level of Perseverance.

Figure 40

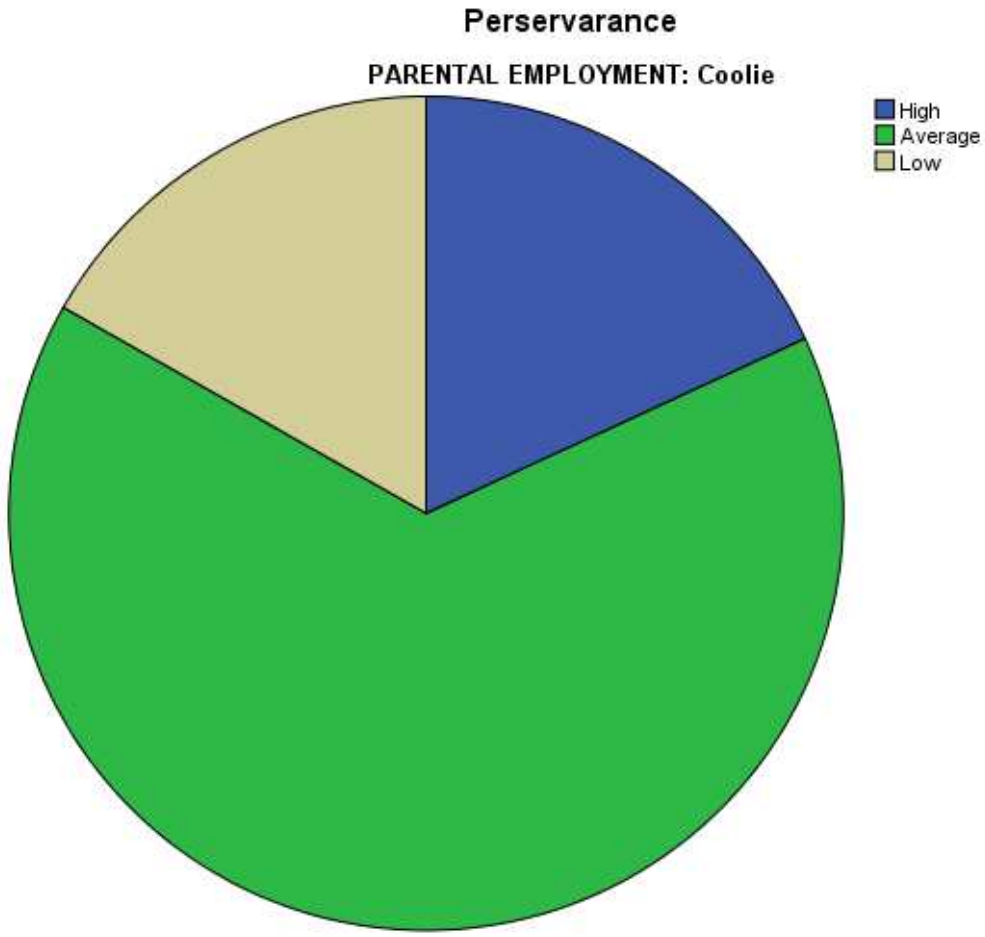
Pie diagram of the Perseverance of Higher Secondary School Science students based on parental employment (business)



Graphical representation of the Perseverance of Higher Secondary School Science Students based on parental employment (business) shows majority of the students whose parent have business have an average level of Perseverance.

Figure 41

Pie diagram of the Perseverance of Higher Secondary School Science students based on parental employment (coolie)



Graphical representation of the Perseverance of Higher Secondary School Science Students based on parental employment (coolie) shows majority of the students whose parent have coolie job have an average level of Perseverance.

Correlation

Pearson's product moment correlation for Mental Health and Perseverance of higher secondary school science students

The results about correlation between Mental Health and Perseverance of higher secondary science students are given in table 27.

Table 27

Results about correlation between Mental Health and Perseverance of higher secondary science students

Variable	Correlation Value (r value)
Total sample	.455

The collected data has been analysed to find out the extent of Mental Health and Perseverance of higher secondary science students. It is estimated using Pearson's Product Moment Coefficient of Correlation (r). As all the assumptions are satisfied, the investigator proceeded with the computation of Pearson's 'r.'

The table shows the Coefficient of Correlation between Mental Health and Perseverance of higher secondary science students of the total sample. The coefficient of correlation obtained for the total sample is .455. The magnitude and direction of 'r' indicate the existence of moderate and positive relationship between variables. Hence it can be concluded that there exists a significant moderate and

positive relationship between the variables Mental Health and Perseverance of Higher Secondary Science students.

Pearson's product moment correlation for Entrance Exam Stress and Perseverance of higher secondary school science students

The results about correlation between Entrance Exam Stress and Perseverance of higher secondary science students are given in table 28.

Table 28

Results about correlation between Entrance Exam Stress and Perseverance of higher secondary science students

Variable	Correlation Value (r value)
Total sample	-.113

The collected data has been analysed to find out the extent of Entrance Exam Stress and Perseverance of higher secondary science students. It is estimated using Pearson's Product Moment Coefficient of Correlation (r). As all the assumptions are satisfied, the investigator proceeded with the computation of Pearson's 'r.'

The table shows the Coefficient of Correlation between Entrance Exam Stress and Perseverance of higher secondary science students of the total sample. The coefficient of correlation obtained for the total sample is -.117. The magnitude and direction of 'r' indicate the existence of negligible and negative relationship between variables. Hence it can be concluded that there exists a slight, almost

negligible, and negative relationship between the variables Entrance Exam Stress and Perseverance of Higher Secondary Science students.

Test of significance of difference in the mean scores

The study of mean difference is conducted to find whether there exists any significant difference in Mental Health, Entrance Exam Stress and Perseverance of higher secondary school science students of Malappuram district in sub groups based of gender, locality of school, and parental qualification. The goal is to discover if there is any significant difference in the mean scores obtained. The sub groups under study are male, female, rural, urban, below plus two and plus two and above. The test of significance of mean difference between mean scores of Mental Health, Entrance Exam Stress and Perseverance for the sub group gender was performed.

Comparison of mean scores of Mental Health of male and female science students of higher secondary level.

The calculated mean scores in the test of significance of mean difference of male and female students are presented in the table 29.

Table 29

Results of the test of significance between mean scores of Mental Health for male and female science students of higher secondary schools

Variable	Gender	N	Mean	Std. Deviation	t-value
Mental Health	Male	199	95.38	11.396	3.794
	Female	311	99.03	9.161	

Discussion

Table shows that the mean score of Mental health of male students is 95.38 with a standard deviation 11.396 and the mean score of female students is 99.03 with a standard deviation 9.161. The critical ratio for the test of significance of difference in mean of Mental Health of male and female higher secondary science students is found to be 3.794 which is more than the table 2.58 at 0.01 level of significance. This reveals that there exists significant difference in the mean of Mental Health of male and female higher secondary science students.

- **Comparison of mean scores of Mental Health of science students of higher secondary level based on locality of institution.**

The calculated mean scores in the test of significance of mean difference of students based on their locality of institution are presented in the table 30.

Table 30

Results of the test of significance between mean scores of Mental Health for science students of higher secondary schools based on their locality of institution

Variable	Locality of institution	N	Mean	Std. Deviation	t-value
Mental Health	Rural	260	97.97	9.322	.830
	Urban	250	97.22	11.115	

Discussion

Table shows that the mean score of Mental health of rural students is 97.97 with a standard deviation 9.322 and the mean score of urban students is 97.22 with a standard deviation 11.115. The critical ratio for the test of significance of difference in mean of Mental Health of rural and urban higher secondary science students is found to be .830 which is less than the table 1.96 at 0.05 level of significance. This reveals that there exists no significant difference in the mean of Mental Health of rural and urban higher secondary science students.

Comparison of mean scores of Mental Health of science students of higher secondary level based on parental qualification.

The calculated mean scores in the test of significance of mean difference of students based on parental qualification are presented in the table 31.

Table 31

Results of the test of significance between mean scores of Mental Health for science students of higher secondary schools based on parental qualification

Variable	Parental qualification	N	Mean	Std. Deviation	t-value
Mental Health	Below plus two	214	96.91	9.975	1.300
	Plus two and above	296	98.10	10.410	

Discussion

Table shows that the mean score of Mental health of students with parental qualification below plus two is 96.91 with a standard deviation 9.975 and the mean score of students with parental qualification plus two and above is 98.10 with a standard deviation 10.410. The critical ratio for the test of significance of difference in mean of Mental Health of students with parental qualification below plus two and plus two and above is found to be 1.300 which is less than the table 1.96 at 0.05 level of significance. This reveals that there exists no significant difference in the mean of Mental Health of students with parental qualification below plus two and plus two and above.

Comparison of mean scores of Entrance Exam Stress of male and female science students of higher secondary level.

The calculated mean scores in the test of significance of mean difference of male and female students are presented in the table 32.

Table 32

Results of the test of significance between mean scores of Entrance Exam Stress for male and female science students of higher secondary schools

Variable	Gender	N	Mean	Std. Deviation	t-value
Entrance Exam Stress	Male	199	97.04	21.152	1.100
	Female	311	95.01	19.646	

Discussion

Table shows that the mean score of Entrance Exam Stress of male students is 97.04 with a standard deviation 21.152 and the mean score of female students is 95.01 with a standard deviation 19.646. The critical ratio for the test of significance of difference in mean of Entrance Exam Stress of male and female higher secondary science students is found to be 1.100 which is less than the table 1.96 at 0.05 level of significance. This reveals that there exists no significant difference in the mean of Entrance Exam Stress of male and female higher secondary science students.

Comparison of mean scores of Entrance Exam Stress of science students of higher secondary level based on locality of institution.

The calculated mean scores in the test of significance of mean difference of students based on their locality of institution are presented in the table 33.

Table 33

Results of the test of significance between mean scores of Entrance Exam Stress for science students of higher secondary schools based on their locality of institution

Variable	Locality of institution	N	Mean	Std. Deviation	t-value
Entrance Exam Stress	Rural	260	94.70	19.705	1.250
	Urban	250	96.94	20.780	

Discussion

Table shows that the mean score of Entrance Exam Stress of rural students is 94.70 with a standard deviation 19.705 and the mean score of urban students is

96.94 with a standard deviation 20.780. The critical ratio for the test of significance of difference in mean of Entrance Exam Stress of rural and urban higher secondary science students is found to be 1.250 which is less than the table 1.96 at 0.05 level of significance. This reveals that there exists no significant difference in the mean of Entrance Exam Stress of rural and urban higher secondary science students.

Comparison of mean scores of Entrance Exam Stress of science students of higher secondary level based on Entrance coaching preparation

The calculated mean scores in the test of significance of mean difference of students based on their locality of institution are presented in the table 34.

Table 34

Results of the test of significance between mean scores of Entrance Exam Stress for science students of higher secondary schools based on their Entrance coaching preparation

Variable	Entrance coaching preparation	N	Mean	Std. Deviation	t-value
Entrance Exam Stress	Coaching Centre	271	97.61	20.024	2.158
	Self	239	93.75	20.351	

Discussion

Table shows that the mean score of Entrance Exam Stress of students going for coaching is 97.61 with a standard deviation 20.024 and the mean score of students preparing self is 93.75 with a standard deviation 20.351. The critical ratio for the test of significance of difference in mean of Entrance Exam Stress of higher

secondary science students based on entrance exam preparation is found to be 2.158 which is more than the table 1.96 at 0.05 level of significance. This reveals that there exists significant difference in the mean of Entrance Exam Stress of higher secondary science students based on entrance exam preparation.

Comparison of mean scores of Entrance Exam Stress of science students of higher secondary level based on parental qualification.

The calculated mean scores in the test of significance of mean difference of students based on parental qualification are presented in the table 35.

Table 35

Results of the test of significance between mean scores of Entrance Exam Stress for science students of higher secondary schools based on parental qualification

Variable	Parental qualification	N	Mean	Std. Deviation	t-value
Entrance Exam Stress	Below plus two	214	95.71	20.650	.091
	Plus two and above	296	95.87	19.991	

Discussion

Table shows that the mean score of Entrance Exam Stress of students with parental qualification below plus two is 95.71 with a standard deviation 20.650 and the mean score of students with parental qualification plus two and above is 95.87 with a standard deviation 19.991. The critical ratio for the test of significance of difference in mean of Entrance Exam Stress of students with parental qualification

below plus two and plus two and above is found to be .091 which is less than the table 1.96 at 0.05 level of significance. This reveals that there exists no significant difference in the mean of Entrance Exam Stress of students with parental qualification below plus two and plus two and above.

Comparison of mean scores of Perseverance of male and female science students of higher secondary level.

The calculated mean scores in the test of significance of mean difference of male and female students are presented in the table 36.

Table 36

Results of the test of significance between mean scores of Perseverance for male and female science students of higher secondary schools

Variable	Gender	N	Mean	Std. Deviation	t-value
Perseverance	Male	199	124.97	15.662	2.966
	Female	311	129.42	17.068	

Discussion

Table shows that the mean score of Perseverance of male students is 124.97 with a standard deviation 15.662 and the mean score of female students is 129.42 with a standard deviation 17.068. The critical ratio for the test of significance of difference in mean of Perseverance of male and female higher secondary science

students is found to be 2.966 which is more than the table 2.58 at 0.01 level of significance. This reveals that there exists significant difference in the mean of Perseverance of male and female higher secondary science students.

Comparison of mean scores of Perseverance of science students of higher secondary level based on locality of institution.

The calculated mean scores in the test of significance of mean difference of students based on their locality of institution are presented in the table 37.

Table 37

Results of the test of significance between mean scores of Perseverance for science students of higher secondary schools based on their locality of institution

Variable	Locality of institution	N	Mean	Std. Deviation	t-value
Perseverance	Rural	260	128.01	15.372	.447
	Urban	250	127.35	17.927	

Discussion

Table shows that the mean score of Perseverance of rural students is 128.01 with a standard deviation 15.372 and the mean score of urban students is 127.35 with a standard deviation 17.927. The critical ratio for the test of significance of difference in mean of Perseverance of rural and urban higher secondary science students is found to be .447 which is less than the table 1.96 at 0.05 level of significance. This reveals that there exists no significant difference in the mean of Perseverance of rural and urban higher secondary science students.

Comparison of mean scores of Perseverance of science students of higher secondary level based on parental qualification.

The calculated mean scores in the test of significance of mean difference of students based on parental qualification are presented in the table 38.

Table 38

Results of the test of significance between mean scores of perseverance for science students of higher secondary schools based on parental qualification

Variable	Parental qualification	N	Mean	Std. Deviation	t-value
Perseverance	Below plus two	214	125.43	17.536	2.619
	Plus two and above	296	129.32	15.827	

Discussion

Table shows that the mean score of Perseverance of students with parental qualification below plus two is 125.43 with a standard deviation 17.536 and the mean score of students with parental qualification plus two and above is 129.32 with a standard deviation 15.827. The critical ratio for the test of significance of difference in mean of Perseverance of students with parental qualification below plus two and plus two and above is found to be 2.619 which is more than the table 2.58 at 0.01 level of significance. This reveals that there exists significant difference in the mean of Perseverance of students with parental qualification below plus two and plus two and above.

Comparison of the means scores of Mental Health of higher secondary science students based on type of institution

Based on type of institution of the school in which higher secondary school students study they were categorized into three groups viz; Government, Aided, and Private. Analysis of Variance has been done to test whether there exists any significant difference in the mean score of higher secondary school students based on type of institution.

The details regarding comparison of mean scores of the variable based on type of institution is given in table 39.

Table 39

Data and Results of One-way ANOVA for the Comparison of Mean Scores of Mental Health of Higher Secondary Science Students Based on Type of Institution

Variable	Source of Variance	Sum of Scores	Df	Mean Square	F Value	Significant
Mental Health	Between groups	353.079	2	176.540	1.689	.186
	Within groups	52988.913	507	104.515		
	Total	53341.992	509			

Discussion

From the table, it is revealed that the F value obtained for Mental Health of higher secondary science students for the sub sample based on the type of institution is 1.689. Hence, we can accept the null hypothesis. The three types of institutions

namely, Government, Aided and Private have no significant difference in their Mental Health of higher secondary science students.

Comparison of the means scores of Mental Health of higher secondary science students based on parental employment

Based on parental employment of the students they were categorized into three groups viz; Professional, Business and Coolie. Analysis of Variance has been done to test whether there exists any significant difference in the mean score of higher secondary school students based on parental employment.

The details regarding comparison of mean scores of the variable based on parental employment is given in table 40.

Table 40

Data and Results of One-way ANOVA for the Comparison of Mean Scores of Mental Health of Higher Secondary Science Students Based on Parental Employment

Variable	Source of Variance	Sum of Scores	Df	Mean Square	F Value	Significant
Mental Health	Between groups	311.122	2	155.561	1.487	.227
	Within groups	53030.870	507	104.591		
	Total	53341.992	509			

Discussion

From the table, it is revealed that the F value obtained for Mental Health of higher secondary science students for the sub sample based on the parental employment is 1.487. Hence, we can accept the null hypothesis. The three types of

parental employment namely, Professional, Business and Coolie have no significant difference in their Mental Health of higher secondary science students.

Comparison of the means scores of Entrance Exam Stress of higher secondary science students based on type of institution

Based on type of institution of the school in which higher secondary school students study they were categorized into three groups viz; Government, Aided, and Private. Analysis of Variance has been done to test whether there exists any significant difference in the mean score of higher secondary school students based on type of institution.

The details regarding comparison of mean scores of the variable based on type of institution is given in table 41.

Table 41

Data and Results of One-way ANOVA for the Comparison of Mean Scores of Entrance Exam Stress of Higher Secondary Science Students Based on Type of Institution

Variable	Source of Variance	Sum of Scores	Df	Mean Square	F Value	Significant
Entrance Exam Stress	Between groups	2.998	2	1.499	.004	.996
	Within groups	208726.000	507	411.688		
	Total	208728.998	509			

Discussion

From the table, it is revealed that the F value obtained for Entrance Exam Stress of higher secondary science students for the sub sample based on the type of institution is .004. Hence, we can accept the null hypothesis. The three types of institutions namely, Government, Aided and Private have no significant difference in their Entrance Exam Stress of higher secondary science students.

Comparison of the means scores of Entrance Exam Stress of higher secondary science students based on parental employment

Based on parental employment of the students they were categorized into three groups viz; Professional, Business and Coolie. Analysis of Variance has been done to test whether there exists any significant difference in the mean score of higher secondary school students based on parental employment.

The details regarding comparison of mean scores of the variable based on parental employment is given in table 42.

Table 42

Data and Results of One-way ANOVA for the Comparison of Mean Scores of Entrance Exam Stress of Higher Secondary Science Students Based on Parental Employment

Variable	Source of Variance	Sum of Scores	Df	Mean Square	F Value	Significant
Entrance Exam Stress	Between groups	2126.810	2	1063.405	2.610	.075
	Within groups	206602.188	507	407.499		
	Total	208728.998	509			

Discussion

From the table, it is revealed that the F value obtained for Entrance Exam Stress of higher secondary science students for the sub sample based on the parental employment is 2.610. Hence, we can accept the null hypothesis. The three types of parental employment namely, Professional, Business and Coolie have no significant difference in their Entrance Exam Stress of higher secondary science students.

Comparison of the means scores of Perseverance of higher secondary science students based on type of institution

Based on type of institution of the school in which higher secondary school students study they were categorized into three groups viz; Government, Aided, and Private. Analysis of Variance has been done to test whether there exists any significant difference in the mean score of higher secondary school students based on type of institution.

The details regarding comparison of mean scores of the variable based on type of institution is given in table 4.

Table 43

Data and Results of One-way ANOVA for the Comparison of Mean Scores of Perseverance of Higher Secondary Science Students Based on Type of Institution

Variable	Source of Variance	Sum of Scores	Df	Mean Square	F Value	Significant
Perseverance	Between groups	600.948	2	300.474	1.083	.339
	Within groups	140681.226	507	277.478		
	Total	141282.175	509			

Discussion

From the table, it is revealed that the F value obtained for Perseverance of higher secondary science students for the sub sample based on the type of institution is 1.083. Hence, we can accept the null hypothesis. The three types of institutions namely, Government, Aided and Private have no significant difference in their Perseverance of higher secondary science students.

Comparison of the means scores of Perseverance of higher secondary science students based on parental employment

Based on parental employment of the students they were categorized into three groups viz; Professional, Business and Coolie. Analysis of Variance has been done to test whether there exists any significant difference in the mean score of higher secondary school students based on parental employment.

The details regarding comparison of mean scores of the variable based on parental employment is given in table 44.

Table 44

Data and Results of One-way ANOVA for the Comparison of Mean Scores of Perseverance of Higher Secondary Science Students Based on Parental Employment

Variable	Source of Variance	Sum of Scores	Df	Mean Square	F Value	Significant
Perseverance	Between groups	951.507	2	475.754	1.719	.180
	Within groups	140330.667	507	276.786		
	Total	141282.175	509			

Discussion

From the table, it is revealed that the F value obtained for Perseverance of higher secondary science students for the sub sample based on the parental employment is 1.719. Hence, we can accept the null hypothesis. The three types of parental employment namely, Professional, Business and Coolie have no significant difference in their Perseverance of higher secondary science students.

Conclusion

In the present chapter, quantitative data were analysed and interpreted by checking of hypotheses through finding out descriptive statistics, percentile scores, t-value, correlation, and One-way ANOVA. The data analysed and interpreted helped the researcher to arrive at findings, suggestions, and conclusions. This was the final step of the research process which involved critical and logical thinking. Thus, the researcher was able to list all the findings about research study after analysis and interpretation of the data. In the next chapter the researcher will discuss the summary, findings, and suggestions for further research in detail. Thus, it will give a clear idea about the whole study.

CHAPTER V

SUMMARY, FINDINGS, CONCLUSION AND SUGGESTIONS

- *Study in retrospect*
- *Major findings of the study*
- *Conclusion*
- *Educational implications of the Study*
- *Suggestions for further research*

SUMMARY, FINDINGS, CONCLUSION AND SUGGESTIONS

For any kind of work, initial play a vital role in research. Similarly, end of work also needs proper conclusion. Conclusions are the mirror of research work; conclusions are presented in such a way that inferences of research are reflected clearly.

The result obtained out of statistical analysis is considered to be the findings of the study based on which the researcher makes appropriate suggestions. These findings are nothing but researcher's objective outlook based on the research conducted. The findings give the researcher an insight into the problem and the solution reflects scientific approach of the problem. The solution is a scientific manifestation of the systematic process of studying a complex problem.

Overall in the last chapter of research report, an overview of the significant aspects of the various stages of the study is provided. This chapter includes study in retrospect, major findings of the study, educational implications, and suggestions for the further research.

Study in Retrospect

This section tries to make a retrospective study of the title, variables, objectives, hypotheses, methodology, tools, and statistical technique used for the study.

Statement of the Problem

The present study is entitled as "Mental Health, Entrance Exam Stress and Perseverance of Higher Secondary Science Students in Malappuram District."

Variables of the Study

The study involves two types of variables, Independent Variable and Dependent Variable. The Independent Variables in the study are Entrance Exam Stress and Mental Health and Dependent Variable is the perseverance. The sub groups are gender, locality, type of institution, parental education, and parental employment.

Objectives of the Study

1. To assess the mental health status of higher secondary school science students in Malappuram district.
2. To examine the levels of entrance exam stress experienced by higher secondary school science students in Malappuram district.
3. To assess the perseverance of higher secondary school science students in Malappuram district.
4. To explore the relationship between mental health, entrance exam stress and perseverance of higher secondary school science students of Malappuram district.
5. To identify any significant differences in mental health, entrance exam stress and perseverance of higher secondary school science students of Malappuram district

based on a) gender b) locality c) type of institution d) parental education e) parental employment.

Hypotheses of the Study

1. There is no significant relationship between mental health, entrance exam stress and perseverance of higher secondary school science students of Malappuram district.

2. There is no significant difference between mental health, entrance exam stress and perseverance of higher secondary school science students of Malappuram district based on a) gender b) locality c) type of institution d) parental education e) parental employment.

Methodology

The study was intended to investigate the Mental Health, Entrance Exam Stress and Perseverance of Higher Secondary Science Students in Malappuram district. The investigator used quantitative research method for the study, where the descriptive research design was used. A precise description of sample, tools and statistical techniques used for the study are described.

Sample of the Study

The population for the study comprised of science students of Higher Secondary Schools in Kerala. The study was conducted on a sample of 510 higher secondary school science students from different higher secondary schools located at Malappuram district of Kerala using stratified random sampling technique by giving

due representation to gender, locality, type of institution, parental education, and parental employment.

Tools Used for the Study

For the present study, the investigator used Scale on Mental Health (constructed by Praseetha & Anees, 2023) Scale on Entrance Exam Stress (constructed by Praseetha & Anees, 2023), and Scale on Perseverance (constructed by Praseetha & Anees, 2023) as a tool. The investigator constructed and developed all these three tools with the help of the supervising teacher.

Statistical Techniques Used for the Study

For the purpose of analyzing the data, investigator carried the statistical techniques such as

- Descriptive statistics
- Inferential statistics

1. Percentile scores
2. Percentage analysis
3. t-test
4. Pearson's Product Moment Correlation
5. One way ANOVA

Major Findings of the Study

Important findings of the study are presented below:

1. The nature and extend of Mental health of the total sample was found. The 10^{th}, 50^{th}, and 90^{th} percentile scores were 84, 99, and 110 respectively for the total sample. Based on the mean scores, it was found that the Mental Health is satisfactory for the higher secondary science students.

- 11.1 percent of the male students has high level of Mental Health, 69.8 percent shows average level of Mental Health and 19.1 percent shows low level of Mental Health. Likewise, 16.4 percent of the female students has high level of Mental Health, 73.3 percent shows average level of Mental Health and 10.3 percent shows low level of Mental Health.
- 14.6 percent of the rural students has high level of Mental Health, 73.5 percent shows average level of Mental Health and 11.9 percent shows low level of Mental Health. Likewise, 14.0 percent of the urban students has high level of Mental Health, 70.4 percent shows average level of Mental Health and 15.6 percent shows low level of Mental Health.
- 15.9 percent of the government students has high level of Mental Health, 72.1 percent shows average level of Mental Health and 11.9 percent shows low level of Mental Health. Likewise, 12.7 percent of the aided students has high level of Mental Health, 72.7 percent shows average level of Mental Health and 14.7 percent shows low level of Mental Health. Likewise, 13.8 percent of the private students has high level of Mental Health, 71.1 percent shows average level of Mental Health and 15.1 percent shows low level of Mental Health.
- 12.1 percent of the students whose parent's qualification is below plus two has high level of Mental Health, 73.4 percent shows average level of Mental Health and 14.5 percent shows low level of Mental Health. Likewise, 15.9 percent of the students

whose parent's qualification is plus two and above plus two has high level of Mental Health, 70.9 percent shows average level of Mental Health and 13.2 percent shows low level of Mental Health.

- 13.5 percent of the students whose parent have professional job has high level of Mental Health, 69.2 percent shows average level of Mental Health and 17.3 percent shows low level of Mental Health. Likewise, 13.7 percent of the students whose parent have business has high level of Mental Health, 74.6 percent shows average level of Mental Health and 11.7 percent shows low level of Mental Health. Likewise, 16.1 percent of the students whose parent have coolie job has high level of Mental Health, 71.1 percent shows average level of Mental Health and 12.8 percent shows low level of Mental Health.

2. The level of Entrance Exam Stress of the total sample was found. The 10^{th}, 50^{th}, and 90^{th} percentile scores were 68, 97, and 122 respectively for the sample. Based on the mean scores, it was found that the Entrance Exam Stress is slightly present for the 50 percent of the higher secondary science students.

- 18.6 percent of the male students has high level of Entrance Exam Stress, 62.8 percent shows average level of Entrance Exam Stress and 18.6 percent shows low level of Entrance Exam Stress. Likewise, 14.1 percent of the female students has high level of Entrance Exam Stress, 69.5 percent shows average level of Entrance Exam Stress and 16.4 percent shows low level of Entrance Exam Stress.
- 15.0 percent of the rural students has high level of Entrance Exam Stress, 66.9 percent shows average level of Entrance Exam Stress and 18.1 percent shows low level of Entrance Exam Stress. Likewise, 16.8 percent of the urban students has high

level of Entrance Exam Stress, 66.8 percent shows average level of Entrance Exam Stress and 16.4 percent shows low level of Entrance Exam Stress.

- 18.4 percent of the government students has high level of Entrance Exam Stress, 62.2 percent shows average level of Entrance Exam Stress and 19.4 percent shows low level of Entrance Exam Stress. Likewise, 15.7 percent of the aided students has high level of Entrance Exam Stress, 69.3 percent shows average level of Entrance Exam Stress and 18.0 percent shows low level of Entrance Exam Stress. Likewise, 15.7 percent of the private students has high level of Entrance Exam Stress, 70.4 percent shows average level of Entrance Exam Stress and 13.8 percent shows low level of Entrance Exam Stress.
- 15.4 percent of the students whose parent's qualification is below plus two has high level of Entrance Exam Stress, 67.3 percent shows average level of Entrance Exam Stress and 17.3 percent shows low level of Entrance Exam Stress. Likewise, 16.2 percent of the students whose parent's qualification is plus two and above plus two has high level of Entrance Exam Stress, 66.6 percent shows average level of Entrance Exam Stress and 17.2 percent shows low level of Entrance Exam Stress.
- 20.5 percent of the students whose parent have professional job has high level of Entrance Exam Stress, 68.6 percent shows average level of Entrance Exam Stress and 10.9 percent shows low level of Entrance Exam Stress. Likewise, 14.6 percent of the students whose parent have business has high level of Entrance Exam Stress, 67.8 percent shows average level of Entrance Exam Stress and 17.6 percent shows low level of Entrance Exam Stress. Likewise, 12.8 percent of the students whose parent have coolie job has high level of Entrance Exam Stress, 63.8 percent shows

average level of Entrance Exam Stress and 23.5 percent shows low level of Entrance Exam Stress.

- 19.9 percent of the students who are going to coaching centre has high level of Entrance Exam Stress, 64.6 percent shows average level of Entrance Exam Stress and 15.5 percent shows low level of Entrance Exam Stress. Likewise, 11.3 percent of the students who studying self has high level of Entrance Exam Stress, 69.5 percent shows average level of Entrance Exam Stress and 19.2 percent shows low level of Entrance Exam Stress.

3. The nature and extend of Perseverance of the total sample was found. The 10^{th}, 50^{th}, and 90^{th} percentile scores were 110, 122, and 147 respectively for the sample. Based on the mean scores, it was found that the Perseverance is high for the higher secondary science students.

- 10.1 percent of the male students has high level of Perseverance, 72.4 percent shows average level of Perseverance and 17.5 percent shows low level of Perseverance. Likewise, 19.6 percent of the female students has high level of Perseverance, 67.5 percent shows average level of Perseverance and 12.9 percent shows low level of Perseverance.
- 13.8 percent of the rural students has high level of Perseverance, 72.7 percent shows average level of Perseverance and 13.5 percent shows low level of Perseverance. Likewise, 18.0 percent of the urban students has high level of Perseverance, 66.0 percent shows average level of Perseverance and 16.0 percent shows low level of Perseverance.
- 12.4 percent of the government students has high level of Perseverance, 75.6 percent shows average level of Perseverance and 11.9 percent shows low level of

Perseverance. Likewise, 20.7 percent of the aided students has high level of Perseverance, 63.3 percent shows average level of Perseverance and 16.0 percent shows low level of Perseverance. Likewise, 15.7 percent of the private students has high level of Perseverance, 67.3 percent shows average level of Perseverance and 17.0 percent shows low level of Perseverance.

- 15.0 percent of the students whose parent's qualification is below plus two has high level of Perseverance, 65.4 percent shows average level of Perseverance and 19.6 percent shows low level of Perseverance. Likewise, 16.6 percent of the students whose parent's qualification is plus two and above plus two has high level of Perseverance, 72.3 percent shows average level of Perseverance and 11.1 percent shows low level of Perseverance.
- 13.5 percent of the students whose parent have professional job has high level of Perseverance, 69.9 percent shows average level of Perseverance and 16.7 percent shows low level of Perseverance. Likewise, 16.1 percent of the students whose parent have business has high level of Perseverance, 72.2 percent shows average level of Perseverance and 11.7 percent shows low level of Perseverance. Likewise, 18.1 percent of the students whose parent have coolie job has high level of Perseverance, 65.1 percent shows average level of Perseverance and 16.8 percent shows low level of Perseverance.

4. There exists a significant moderate and positive relationship between Mental Health and Perseverance of Higher Secondary Science students (r = .455).
5. There exists a slight, almost negligible, and negative relationship between Entrance Exam Stress and Perseverance of Higher Secondary Science students (r = -.117).

6. There exists a significant difference in the mean score of Mental Health of male and female higher secondary science students (t = 3.794). Results shows that the mean score of Mental Health is higher for female students than the male students.
7. There exists no significant difference in the mean of Mental Health of rural and urban higher secondary science students (t = .830). Results shows that the mean score of Mental Health of higher secondary science students from both rural and urban areas are almost same.
8. There exists no significant difference in the mean of Mental Health of students with parental qualification below plus two and plus two and above (t = 1.300). Results indicate that there is no significant relationship between the Mental Health of students and parental qualification.
9. There exists no significant difference in the mean of Entrance Exam Stress of male and female higher secondary science students (t = 1.100). Results indicate that the mean score of Entrance Exam Stress for both male and female students are almost same.
10. There exists no significant difference in the mean of Entrance Exam Stress of rural and urban higher secondary science students (t = 1.250). Results shows that the mean score of Entrance Exam Stress of higher secondary science students from both rural and urban areas are almost same.
11. There exists a significant difference in the mean of Entrance Exam Stress of higher secondary science students based on entrance exam preparation (t = 2.158). Results indicate that the students who are going to coaching centre for entrance exam preparation have more stress than the students who are studying self.

12. There exists no significant difference in the mean of Entrance Exam Stress of students with parental qualification below plus two and plus two and above (t = .091). Results indicate that there is no significant relationship between the Entrance Exam Stress of students and parental qualification.

13. That there exists significant difference in the mean of Perseverance of male and female higher secondary science students (t = 2.966). Results shows that the mean score of Perseverance is higher for female students than the male students.

14. There exists no significant difference in the mean of Perseverance of rural and urban higher secondary science students (t = .447). Results shows that the mean score of Perseverance of higher secondary science students from both rural and urban areas are almost same.

15. There exists significant difference in the mean of Perseverance of students with parental qualification below plus two and plus two and above (t = 2.619). Results indicate that there is significant relationship between Perseverance of students and parental qualification.

16. The results of one-way ANOVA for Mental Health for the sub samples based on type of institution reveals that the F value is 1.689. The result shows that there exists no significant difference in Mental Health of higher secondary science students in the relevant sub sample based on type of institution.

17. The results of one-way ANOVA for Mental Health for the sub samples based on parental employment reveals that the F value is 1.487. The result shows that there exists no significant difference in Mental Health of higher secondary science students in the relevant sub sample based on parental employment.

18. The results of one-way ANOVA for Entrance Exam Stress for the sub samples based on type of institution reveals that the F value is .004. The result shows that there exists no significant difference in Entrance Exam Stress of higher secondary science students in the relevant sub sample based on type of institution.

19. The results of one-way ANOVA for Entrance Exam Stress for the sub samples based on parental employment reveals that the F value is 2.610. The result shows that there exists no significant difference in Entrance Exam Stress of higher secondary science students in the relevant sub sample based on parental employment.

20. The results of one-way ANOVA for Perseverance for the sub samples based on type of institution reveals that the F value is 1.083. The result shows that there exists no significant difference in Perseverance of higher secondary science students in the relevant sub sample based on type of institution.

21. The results of one-way ANOVA for Perseverance for the sub samples based on parental employment reveals that the F value is 1.719. The result shows that there exists no significant difference in Perseverance of higher secondary science students in the relevant sub sample based on parental employment.

Tenability of Hypotheses

The tenability of hypothesis is examined based on the above findings.

Hypothesis 1:

The first hypothesis states that there is no significant relationship between mental health, entrance exam stress and perseverance of higher secondary school science students. Analysis of data revealed that there is no significant relationship between these three variables, Mental Health, Entrance Exam Stress and Perseverance. Hence the first hypothesis is accepted.

Hypothesis 2:

The second hypothesis states that there is no significant difference between mental health, entrance exam stress and perseverance of higher secondary school science students sub samples based on gender, locality, type of institution, parental education, and parental employment.

- The result reveals that there is a significant difference in mental health of higher secondary science students for the sub group based on the gender. So, the hypothesis is rejected on the basis of gender.
- The result reveals that there is no significant difference in mental health of higher secondary science students for the sub group based on the locality. So, the hypothesis is accepted on the basis of locality.

- The result reveals that there is no significant difference in mental health of higher secondary science students for the sub group based on the type of institution. So, the hypothesis is accepted on the basis of type of institution.
- The result reveals that there is no significant difference in mental health of higher secondary science students for the sub group based on the parental education. So, the hypothesis is accepted on the basis of parental education.
- The result reveals that there is no significant difference in mental health of higher secondary science students for the sub group based on the parental employment. So, the hypothesis is accepted on the basis of parental employment.
- The result reveals that there is no significant difference in entrance exam stress of higher secondary science students for the sub group based on the gender. So, the hypothesis is rejected on the basis of gender.
- The result reveals that there is no significant difference in entrance exam stress of higher secondary science students for the sub group based on the locality. So, the hypothesis is accepted on the basis of locality.
- The result reveals that there is no significant difference in entrance exam stress of higher secondary science students for the sub group based on the type of institution. So, the hypothesis is accepted on the basis of type of institution.
- The result reveals that there is no significant difference in entrance exam stress of higher secondary science students for the sub group based on the parental education. So, the hypothesis is accepted on the basis of parental education.

- The result reveals that there is no significant difference in entrance exam stress of higher secondary science students for the sub group based on the parental employment. So, the hypothesis is accepted on the basis of parental employment.
- The result reveals that there is a significant difference in entrance exam stress of higher secondary science students for the sub group based on the entrance coaching preparation. So, the hypothesis is rejected on the basis of entrance coaching preparation.
- The result reveals that there is a significant difference in perseverance of higher secondary science students for the sub group based on the gender. So, the hypothesis is rejected on the basis of gender.
- The result reveals that there is no significant difference in perseverance of higher secondary science students for the sub group based on the locality. So, the hypothesis is accepted on the basis of locality.
- The result reveals that there is no significant difference in perseverance of higher secondary science students for the sub group based on the type of institution. So, the hypothesis is accepted on the basis of type of institution.
- The result reveals that there is a significant difference in perseverance of higher secondary science students for the sub group based on the parental education. So, the hypothesis is rejected on the basis of parental education.
- The result reveals that there is no significant difference in perseverance of higher secondary science students for the sub group based on the parental employment. So, the hypothesis is accepted on the basis of parental employment.

Conclusion

Based on the analysis, the investigator arrived at the following conclusion.

The results indicate that the extent of mental health and perseverance are satisfactory, while also about 50 percent of students are facing a small level of entrance exam stress. The result also indicate that the mental health of female students is better than the male students. Also, there is no significant difference in mental health based on sub group locality, type of institution, parental education, and parental employment. Likewise, entrance exam stress of higher secondary science students does not differ significantly with gender, locality, type of institution, parental education, and parental employment. But there exists a significant difference in entrance exam stress of higher secondary science students for the sub group based on the entrance coaching preparation. The students who are going to coaching centre for entrance exam preparation have more stress than the students who are studying self. Likewise, perseverance of female students is higher than the male students. Also, there is no significant difference in perseverance based on sub group locality, type of institution, and parental employment. But there exists a significant difference in perseverance of higher secondary science students for the sub group based on the parental education.

Educational Implications

The educational implications are important in a research. The present study was to find the mental health, entrance exam stress and perseverance of higher secondary science students of Malappuram district. Based on the major findings of

the study, the investigator has offered some practical recommendations to enhance the current educational practices. Some of the educational implications are the following:

1. Support for mental health:

With around 50% of students feeling some amount of entrance exam stress, it is critical to create support mechanisms within educational institutions. Counselling programs, stress management seminars, and fostering a supportive climate in which students feel comfortable sharing their mental health difficulties are the all-possible options.

2. Gender differences in mental health:

From the findings that female students have better mental health than male students highlight the need for focused programs to help male students. Educators and counsellors should be aware of potential gender-specific stressors and offer appropriate support.

3. Impact of entrance exam preparation:

Students who attend coaching institutes or centres for entrance exam preparation face increased stress. This highlights the necessity to assess the effectiveness and impact of coaching centres on student well-being. Students engaged in such programs may be eligible for additional support or supervision from educational institutions. Schools should provide programs and proper guidance for the exam preparation which should not increase their stress and student friendly approach should be followed.

4. Parental education and perseverance:

Perseverance varies significantly depending on parental education level. This emphasizes the importance of parental involvement and support in students' academic journeys. Educators can attempt to engage parents with poorer educational backgrounds by providing them with tools and strategies to help their children persevere and achieve academic achievement.

5. Promoting gender-specific strategies for perseverance:

Since female students exhibit higher levels of perseverance than male students, educators can investigate and apply techniques and strategies to encourage and support male students in building perseverance abilities.

6. Enhancing overall educational environment:

Creating an inclusive and supportive educational environment that recognizes and addresses the diverse needs of students based on various factors (gender, parental education, entrance exam preparation, etc.) is crucial. This can contribute to better mental health outcomes, increased perseverance, and overall academic success.

Suggestions for Further Research

Research means search of search, it means one research can open direction of new research, from present research. The scope of the present study was delimited in a number of ways. Hence in the humble view of the researcher, some suggestions in the continuity of this research endeavour are laid down for further research:

- Replication of the present study on different samples like undergraduate and other college students.
- The study can be conducted by taking into consideration other variables like grit, persistence, etc.
- A similar study could be conducted on a wider sample like state level or national level.
- The present study is limited to only one district Malappuram of Kerala. The same study can be studied in other districts too.
- Replication of the study based on subjects of specialization is recommended.

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APPENDICES

Appendix I
FAROOK TRAINING COLLEGE

SCALE FOR MENTAL HEALTH

Dr. Anees Mohammed. C
Supervising Teacher

Praseetha. R. P
M.Ed. Student

PERSONAL INFORMATION

NAME:

GENDER **:** MALE/ FEMALE

LOCALITY OF SCHOOL **:** RURAL/ URBAN

TYPE OF INSTITUTION **:** GOVT/ AIDED/ PRIVATE

PARENTAL QUALIFICATION **:** BELOW +2/ +2 & ABOVE +2

PARENTAL EMPLOYMENT **:** PROFESSIONAL/ BUSINESS/ COOLIE

നിർദ്ദേശങ്ങൾ

മാനസികാരോഗ്യവുമായി ബന്ധപ്പെട്ട പ്രസ്താവനകൾ താഴെ കൊടുത്തിട്ടുണ്ട്. ഓരോ പ്രസ്താവനയ്ക്കുനേരെ എപ്പോഴും, മിക്കപ്പോഴും, ചിലപ്പോൾ, വല്ലപ്പോഴും, ഒരിക്കലുമില്ല എന്നിങ്ങനെ അഞ്ചു വീതം പ്രതികരണങ്ങൾ കൊടുത്തിട്ടുണ്ട്. എല്ലാ പ്രസ്താവനകൾക്കും (✓) ചിഹ്നം ഉപയോഗിച്ച് പ്രതികരണം രേഖപ്പെടുത്തുക. ഓരോ പ്രസ്താവനകൾക്കും പ്രതികരണം മാത്രമേ നൽകാവൂ.

SL. NO	പ്രസ്താവനകൾ	ഒരിക്കലുമില്ല	അപൂർവ്വമായി	ചിലപ്പോൾ	പലപ്പോഴും	എപ്പോഴും
1	ഞാൻ സുഹൃത്തുക്കളുമായി വാദിക്കുമ്പോൾ പ്രതികരിക്കുന്നതിന് മുൻപ് അവരുടെ കാഴ്ചപ്പാട് ഞാൻ കേൾക്കാറുണ്ട്.					
2	സ്കൂൾ പഠന കാര്യങ്ങളിൽ ബുദ്ധിമുട്ട് അനുഭവപ്പെടുമ്പോൾ സഹായത്തിനായി സുഹൃത്തുക്കളെ ഞാൻ സമീപിക്കാറുണ്ട്.					
3	എനിക്ക് പിന്തുണ ആവശ്യമുള്ളപ്പോൾ മറ്റുള്ളവരിൽ നിന്ന് സഹായം തേടാൻ ഞാൻ തയ്യാറാണ്.					
4	എന്റെ സുഹൃത്തുക്കളുടെ നല്ല വശങ്ങൾ കാണാൻ ഞാൻ ശ്രമിക്കാറുണ്ട്.					
5	പുതിയ ചുറ്റുപാടിൽ പുതിയ സുഹൃത്തുക്കളെ കണ്ടെത്താനും ഇടപഴകാനും എനിക്ക് ബുദ്ധിമുട്ട് ഉണ്ടാകാറുണ്ട്.					
6	എനിക്കിഷ്ടപ്പെട്ടവരോടൊപ്പം സമയം ചിലവഴിക്കുമ്പോൾ ഞാൻ സന്തോഷവാനാണ്.					
7	എന്റെ സ്കൂൾ ജീവിതവും വ്യക്തിജീവിതവും ഒരേ രീതിയിൽ കൊണ്ടുപോകാൻ എനിക്ക് കഴിയാറുണ്ട്.					
8	എന്നിലും എന്റെ കഴിവുകളിലും എനിക്ക് വിശ്വാസമുണ്ട്.					
9	എന്റെ ജീവിതവുമായി ബന്ധപ്പെട്ട കാര്യങ്ങളിൽ എനിക്ക് ഉറച്ച തീരുമാനങ്ങൾ എടുക്കാൻ സാധിക്കാറുണ്ട്.					
10	എന്റെ എല്ലാ സുഹൃത്തുക്കളുമായി നല്ല രീതിയിൽ ഇടപഴകാൻ ഞാൻ ശ്രമിക്കാറുണ്ട്.					
11	എന്റെ ലക്ഷ്യങ്ങൾ നേടിയെടുക്കാനുള്ള കഴിവുകൾ എനിക്കുണ്ടെന്ന് ഞാൻ വിശ്വസിക്കുന്നുണ്ട്.					
12	ഒരു പരീക്ഷയിലും ഒരിക്കലും പരാജയപ്പെടില്ല എന്നുള്ള വിശ്വാസം എനിക്കുണ്ട്.					
13	എന്റെ സുഹൃത്തുക്കൾക്കോ കുടുംബങ്ങൾക്കോ ആവശ്യമുള്ള സമയങ്ങളിൽ വേണ്ട പിന്തുണ നൽകാൻ എനിക്ക് സാധിക്കാറില്ല.					
14	എന്റെ സുഹൃത്തുക്കളുമായി ഒരു വിശ്വസനീയമായ ബന്ധം നിലനിർത്താൻ എനിക്ക് കഴിയാറുണ്ട്.					
15	സുഹൃത്തുക്കൾ അവരുടെ വികാരങ്ങൾ പങ്കുവയ്ക്കുമ്പോൾ എനിക്ക് അവരെ ആശ്വസിപ്പിക്കാൻ സാധിക്കാറുണ്ട്.					
16	പാഠ്യേതര പ്രവർത്തനങ്ങളിൽ പങ്കെടുക്കുന്നതിന് എന്റെ സുഹൃത്തുക്കൾ എന്നെ പ്രോത്സാഹിപ്പിക്കാറുണ്ട്.					
17	എന്റെ വെല്ലുവിളികളെ മറികടക്കാൻ എന്റെ സുഹൃത്തുക്കളിൽ നിന്നും എനിക്ക് പിന്തുണ ലഭിക്കാറുണ്ട്.					
18	ശരീരത്തിന് ഹാനികരമായ വസ്തുക്കൾ ഉപയോഗിക്കുന്നതിന് എന്റെ സുഹൃത്തുക്കൾ എന്നിൽ സമ്മർദ്ദം ചെലുത്താറുണ്ട്.					
19	ജീവിതത്തിൽ നല്ല കാര്യങ്ങൾ ചെയ്യാൻ വേണ്ടി സുഹൃത്തുക്കളിൽ നിന്നും എനിക്ക് പ്രചോദനം ലഭിക്കാറുണ്ട്.					
20	NSS, NCC തുടങ്ങിയ സാമൂഹിക പ്രവർത്തനങ്ങളിൽ പങ്കെടുക്കാൻ എന്റെ സുഹൃത്തുക്കൾ എന്നെ പ്രോത്സാഹിപ്പിക്കാറുണ്ട്.					
21	മറ്റുള്ളവരുടെ വികാരങ്ങളെ മനസ്സിലാക്കാൻ ഞാൻ ശ്രമിക്കാറുണ്ട്.					
22	മറ്റുള്ളവരെ ബുദ്ധിമുട്ടിക്കാതെ രീതിയിൽ എന്റെ വികാരങ്ങളെ ഞാൻ പ്രകടിപ്പിക്കാറുണ്ട്.					

SL. NO	പ്രസ്താവനകൾ	ഒരിക്കലുമില്ല	ഒരിക്കൽ മാത്രം	ഇടയ്ക്കിടെ	ഒരിക്കൽ കൂടി	സ്ഥിരമായി
23	എന്റെ തെറ്റുകളെ സ്വയം അംഗീകരിക്കാനും അത് തിരുത്താനും ഞാൻ ശ്രമിക്കാറുണ്ട്.					
24	നിസ്സാര കാര്യങ്ങൾക്കുപോലും എന്റെ സുഹൃത്തുക്കളോട് ഞാൻ വാദിക്കാറുണ്ട്.					
25	ക്ലാസ്സ് റൂം ചർച്ചകളിൽ പെട്ടെന്ന് അഭിപ്രായങ്ങൾ പ്രകടിപ്പിക്കാൻ മടിയുള്ളതിനാൽ അവസരങ്ങൾ ഞാൻ നഷ്ടപ്പെടുത്താറുണ്ട്.					

Appendix II
FAROOK TRAINING COLLEGE

SCALE FOR ENTRANCE EXAM STRESS

Dr. Anees Mohammed. C
Supervising Teacher

Praseetha. R. P
M.Ed. Student

PERSONAL INFORMATION

NAME:

GENDER : MALE/ FEMALE

LOCALITY OF SCHOOL : RURAL/ URBAN

TYPE OF INSTITUTION : GOVT/ AIDED/ PRIVATE

PARENTAL QUALIFICATION : BELOW +2/ +2 & ABOVE +2

PARENTAL EMPLOYMENT : PROFESSIONAL/ BUSINESS/ COOLIE

നിർദ്ദേശങ്ങൾ

സ്ഥിരോത്സാഹവുമായി ബന്ധപ്പെട്ട പ്രസ്താവനകൾ താഴെ കൊടുത്തിട്ടുണ്ട്. ഓരോ പ്രസ്താവനയ്ക്കുനേരെ എപ്പോഴും, മിക്കപ്പോഴും, ചിലപ്പോൾ, വല്ലപ്പോഴും, ഒരിക്കലുമില്ല എന്നിങ്ങനെ അഞ്ചു വീതം പ്രതികരണങ്ങൾ കൊടുത്തിട്ടുണ്ട്. എല്ലാ പ്രസ്താവനകൾക്കും (✓) ചിഹ്നം ഉപയോഗിച്ച് പ്രതികരണം രേഖപ്പെടുത്തുക. ഓരോ പ്രസ്താവനകൾക്കും പ്രതികരണം മാത്രമേ നൽകാവൂ.

SL. NO	പ്രസ്താവനകൾ	തീരെ ശരിയല്ല	ശരിയല്ല	ഭാഗികമായി	ശരിയാണ്	തീർച്ചയായും ശരിയാണ്
1	എന്റെ പരിശ്രമത്തിലൂടെ പഠനത്തിൽ വിജയം കൈവരിക്കാൻ സാധിക്കുമെന്ന് എനിക്ക് ആത്മവിശ്വാസമുണ്ട്.					
2	അദ്ധ്യാപകരുടെയും സുഹൃത്തുക്കളുടെയോ സഹായത്തോടെ എന്റെ പഠന വെല്ലുവിളികളെ മറികടക്കാൻ എനിക്ക് സാധിക്കുമെന്ന് ഞാൻ വിശ്വസിക്കാറുണ്ട്.					
3	എന്റെ ലക്ഷ്യങ്ങളെ നിശ്ചയിക്കാനും അതിനു വേണ്ടി പരിശ്രമിക്കാനും എനിക്ക് സാധിക്കാറുണ്ട്.					
4	ബുദ്ധിമുട്ടുള്ള സ്കൂൾ അസൈൻമെന്റ് എന്റെ വിജയത്തിന് തടസ്സമാകും എന്നതിലുപരി എന്റെ വളർച്ചക്കും പഠനത്തിനുള്ള അവസരങ്ങൾ ആയിട്ടാണ് ഞാൻ കാണുന്നത്.					
5	ഞാൻ ഒരു ഗ്രൂപ്പിൽ പ്രവർത്തിക്കുമ്പോൾ ഗ്രൂപ്പിനെ പ്രവർത്തന സജ്ജമാക്കാൻ പതിവ് യോഗവും സമയക്രമീകരണവും നടത്താൻ ശ്രമിക്കാറുണ്ട്.					
6	പുതിയ കാര്യങ്ങൾ പഠിക്കാൻ ഞാൻ താല്പര്യപ്പെടാറുണ്ട്.					
7	എന്റെ പരാജയങ്ങളെ ഞാൻ ഭയപ്പെടുന്നതിനുപകരം അത് എനിക്ക് വളരാനുള്ള ഒരു അവസരമായിട്ടാണ് ഞാൻ കാണുന്നത്.					
8	ഒന്നിലധികം പരിഹാരമാർഗ്ഗങ്ങൾ ഉപയോഗിച്ച് ക്രിയാത്മകമായ ചിന്താഗതിയോടെ അറിയാത്ത പ്രശ്നങ്ങളെ സമീപിക്കാൻ എനിക്ക് കഴിയാറുണ്ട്.					
9	ഒരു ഗ്രൂപ്പ് പ്രോജക്ട് വികസിപ്പിക്കുന്നതിന് ഞാൻ ഗ്രൂപ്പ് ചർച്ചകളിലും ആശയങ്ങൾ പങ്കിടുന്നതിൽ സുഹൃത്തുക്കളുമായി സഹകരിക്കുന്നതിൽ സജീവമായ സംഭാവന ചെയ്യാറുണ്ട്.					
10	ക്ലാസിനിടയിൽ മനസ്സിലാകാത്ത കാര്യങ്ങൾ അധ്യാപകരോടും ചോദിച്ചു മനസ്സിലാക്കുന്നതിൽ എനിക്ക് ബുദ്ധിമുട്ട് തോന്നാറില്ല.					
11	എന്റെ സഹപാഠികൾ അവരുടെ പഠനത്തിൽ മികവ് പുലർത്തുന്നത് കാണുമ്പോൾ അത് കൂടുതൽ കഠിനാധ്വാനം ചെയ്യാനും സമാനമായ നേട്ടങ്ങൾ ലക്ഷമിടാനും എന്നെ പ്രേരിപ്പിക്കാറുണ്ട്.					
12	എന്റെ കഠിന പരിശ്രമത്തിലൂടെ എന്റെ പഠനനിലവാരം ഉയർത്താനും അതുവഴി അവസരങ്ങൾ ലഭിക്കുമെന്നും ഞാൻ വിശ്വസിക്കുന്നുണ്ട്.					
13	എന്നെ നിരുത്സാഹപ്പെടുത്തുമ്പോഴും സമ്മർദ്ദം നേരിടുമ്പോഴും എന്റെ വികാരങ്ങളെ നിയന്ത്രിക്കാൻ എനിക്ക് സാധിക്കാറുണ്ട്.					
14	വ്യക്തമായ ലക്ഷ്യങ്ങൾ നിശ്ചയിക്കാനും അത് നേടിയെടുക്കാനും എനിക്ക് സാധിക്കാറുണ്ട്.					
15	സുഹൃത്തുക്കളുടെ കൂടെ ഗ്രൂപ്പ് ചർച്ചകളിൽ പങ്കെടുക്കുന്നത് എന്റെ ലക്ഷ്യത്തിലേക്കുള്ള മൂല്യവത്തായ ഒരു കാഴ്ചപ്പാടായിട്ടാണ് ഞാൻ കാണുന്നത്.					

SL. NO	പ്രസ്താവനകൾ	ഒട്ടുമിക്കപ്പോഴും	മിക്കപ്പോഴും	ഇടയ്ക്കിടെ	അപൂർവമായി	ഒരിക്കലുമില്ല
16	എന്റെ ചെറിയ നേട്ടങ്ങളിൽ പോലും എനിക്ക് സന്തോഷം കണ്ടെത്താൻ സാധിക്കാറുണ്ട്. അതെന്നെ വലിയ ലക്ഷ്യങ്ങൾ മുൻകൂട്ടി കാണാനും സഹായിക്കാറുണ്ട്.					
17	എന്റെ ലക്ഷ്യത്തിലേക്ക് എത്താൻ അധ്യാപകരിൽ നിന്നും അഭിപ്രായങ്ങൾ തേടാറുണ്ട്.					
18	യാതൊരു തടസവും കൂടാതെ പഠനത്തിൽ ശ്രദ്ധ നിലനിർത്താൻ എനിക്ക് സാധിക്കാറുണ്ട്.					
19	എന്റെ പഠനത്തിലെ ശ്രദ്ധ നിലനിർത്താൻ വേണ്ടി പ്രയാസമേറിയ ഭാഗങ്ങളെ ചെറിയ ഭാഗങ്ങളാക്കി വിഭജിക്കാറുണ്ട്.					
20	പഠനത്തിനിടയിൽ മനസ്സിന് ഉന്മേഷം ലഭിക്കാനും ശ്രദ്ധ കേന്ദ്രീകരിക്കാനും വേണ്ടി ഞാൻ ഇടവേളകൾ എടുക്കാറുണ്ട്.					
21	ജീവിതവിജയം കൈവരിച്ച വ്യക്തികളെ കുറിച്ചുള്ള വീഡിയോകൾ എന്റെ പഠനത്തിൽ ശ്രദ്ധ കേന്ദ്രീകരിക്കുന്നത്.					
22	എന്റെ തെറ്റുകളെ പുതിയ പഠനാവസരങ്ങൾ ആയിട്ടാണ് ഞാൻ കാണുന്നത്.					
23	എന്റെ തെറ്റുകളെ വിലയിരുത്താനും തുടർന്ന് അതിനാവശ്യമായ പഠന തന്ത്രങ്ങൾ വികസിപ്പിക്കാനും എനിക്ക് സാധിക്കാറുണ്ട്.					
24	പഠനത്തിലെ തെറ്റുകൾ കുറയ്ക്കുന്നതിനായി ഫലപ്രദമായ പഠനരീതികൾ തിരഞ്ഞെടുക്കാറുണ്ട്.					
25	മറ്റുള്ളവരുടെ അഭിപ്രായങ്ങൾ തുറന്ന മനസ്സോടെ ഞാൻ സ്വീകരിക്കാറുണ്ട്.					
26	പഠനവും ലക്ഷ്യം കൈവരിക്കുന്നതും എല്ലാം സമയവും പ്രയത്നവും വേണ്ട ഒന്നാണെന്ന് ഞാൻ മനസ്സിലാക്കുന്നു.					
27	വെല്ലുവിളികൾ എപ്പോഴും താൽക്കാലികവും അത്യന്താപേക്ഷിതമാണെന്ന് ഞാൻ മനസ്സിലാക്കുന്നുണ്ട്.					
28	എന്റെ കഴിവിലും ശക്തിയിലും എനിക്ക് ഉറച്ച വിശ്വാസമുണ്ട്.					
29	എന്റെ ഗൃഹ പാഠങ്ങളും അസൈൻമെന്റ്കളും സമയബന്ധിതമായി പൂർത്തീകരിക്കാൻ എനിക്ക് സാധിക്കാറുണ്ട്.					
30	എന്റെ പഠന വേളകൾ സമയബന്ധിതമായും വളരെ ഉപയോഗപ്രദമായ രീതിയിലും കൈകാര്യം ചെയ്യാൻ എനിക്ക് സാധിക്കാറുണ്ട്.					
31	എന്റെ മുൻഗണനകൾക്കും വെല്ലുവിളികൾക്കും അനുസരിച്ച് എന്റെ പഠനത്തെ ക്രമപ്പെടുത്താൻ എനിക്ക് സാധിക്കാറുണ്ട്.					
32	എന്റെ പഠനകാര്യങ്ങൾ ചിട്ടയോടു കൂടി തുടരുന്നതിന് പഠനസമയത്ത് ഞാൻ ക്രമപ്പെടുത്താൻ ഉണ്ട്.					
33	പഠനത്തിൽ ശ്രദ്ധ കേന്ദ്രീകരിക്കാൻ ഒരേസമയം ഒന്നിലധികം കാര്യങ്ങൾ ചെയ്യുന്നത് ഞാൻ ഒഴിവാക്കാറുണ്ട്.					

Appendix II
FAROOK TRAINING COLLEGE

SCALE FOR PERSEVERANCE

Dr. Anees Mohammed. C — Supervising Teacher
Praseetha. R. P — M.Ed. Student

PERSONAL INFORMATION

NAME:

GENDER : MALE/ FEMALE

LOCALITY OF SCHOOL : RURAL/ URBAN

TYPE OF INSTITUTION : GOVT/ AIDED/ PRIVATE

PARENTAL QUALIFICATION : BELOW +2/ +2 & ABOVE +2

PARENTAL EMPLOYMENT : PROFESSIONAL/ BUSINESS/ COOLIE

ENTRANCE EXAM PREPARATION : SELF/ COACHING CENTRE

നിർദ്ദേശങ്ങൾ

എൻട്രൻസ് പരീക്ഷ സമ്മർദ്ദവുമായി ബന്ധപ്പെട്ട പ്രസ്താവനകൾ താഴെ കൊടുത്തിട്ടുണ്ട്. ഓരോ പ്രസ്താവനയ്ക്കുനേരെ എപ്പോഴും, മിക്കപ്പോഴും, ചിലപ്പോൾ, വല്ലപ്പോഴും, ഒരിക്കലുമില്ല എന്നിങ്ങനെ അഞ്ചു വീതം പ്രതികരണങ്ങൾ കൊടുത്തിട്ടുണ്ട്. എല്ലാ പ്രസ്താവനകൾക്കും (✓) ചിഹ്നം ഉപയോഗിച്ച് പ്രതികരണം രേഖപ്പെടുത്തുക. ഓരോ പ്രസ്താവനകൾക്കും പ്രതികരണം മാത്രമേ നൽകാവൂ.

SL. NO	പ്രസ്താവനകൾ	തീർച്ചയായും	ഒരുപക്ഷേ	ഉറപ്പില്ല	ഒരുപക്ഷേ അല്ല	തീർച്ചയായും അല്ല
1	മത്സരപരീക്ഷകൾ നേരിടുന്നതിന് എനിക്ക് ഉത്കണ്ഠ തോന്നാറുണ്ട്.					
2	എൻട്രൻസ് പരീക്ഷയെ പറ്റി ചിന്തിക്കുമ്പോൾ എനിക്ക് എന്നിലും എന്റെ കഴിവിലും സംശയം തോന്നാറുണ്ട്.					
3	എൻട്രൻസ് പരീക്ഷയ്ക്കുള്ള തയ്യാറെടുപ്പ് തുടങ്ങിയതിനു ശേഷം പഠനത്തിൽ ശ്രദ്ധ കേന്ദ്രീകരിക്കാൻ ബുദ്ധിമുട്ട് തോന്നാറുണ്ട്.					
4	എൻട്രൻസ് പരീക്ഷയെ കുറിച്ച് ചിന്തിക്കുമ്പോൾ തന്നെ എന്റെ ഹൃദയമിടിപ്പ് കൂടാറുണ്ട്.					
5	ഞാൻ എൻട്രൻസ് പരീക്ഷയിൽ പരാജയപ്പെട്ടാൽ മറ്റുള്ളവർ എന്നെ എങ്ങനെ വിലയിരുത്തും എന്ന് ഞാൻ ഭയപ്പെടാറുണ്ട്.					
6	എൻട്രൻസ് പരീക്ഷയെ കുറിച്ചുള്ള എന്റെ ഉൽക്കണ്ഠയും ആശങ്കകളും കൈകാര്യം ചെയ്യാൻ എനിക്ക് ബുദ്ധിമുട്ട് തോന്നാറുണ്ട്.					
7	എന്റെ മുഴുവൻ ഭാവിയും എൻട്രൻസ് പരീക്ഷയെ ആശ്രയിച്ചിരിക്കുന്നു എന്ന് ഞാൻ ആശങ്കപ്പെടുന്നുണ്ട്.					
8	എൻട്രൻസ് പരീക്ഷ ഉപേക്ഷിക്കുന്നതിന് കുറിച്ച് ഞാൻ ചിന്തിക്കാറുണ്ട്.					
9	എൻട്രൻസ് പരീക്ഷയെ കുറിച്ചുള്ള ചിന്തകൾ ആ ദിവസം മുഴുവൻ എന്നെ അലട്ടുന്നതായി തോന്നാറുണ്ട്.					
10	എൻട്രൻസ് പരീക്ഷ പാസാകാൻ ഉള്ള മതിയായ കഴിവ് എനിക്കുണ്ടെന്ന് തോന്നുന്നില്ല.					
11	എൻട്രൻസ് പരീക്ഷയെ കുറിച്ച് ഞാൻ അമിതമായി ചിന്തിക്കുന്നത് എനിക്ക് തോന്നാറുണ്ട്.					
12	സമ്മർദ്ദം കാരണം ശരിയായ പഠനരീതി തിരഞ്ഞെടുക്കുന്നതിൽ എനിക്ക് ബുദ്ധിമുട്ട് തോന്നാറുണ്ട്.					
13	എൻട്രൻസ് പരീക്ഷയിൽ മികച്ച പ്രകടനം നടത്താനുള്ള എന്റെ കഴിവിനെ കുറിച്ച് എനിക്ക് നെഗറ്റീവ് ചിന്തകൾ ഉണ്ടാകാറുണ്ട്.					
14	എൻട്രൻസ് പരീക്ഷക്ക് പഠിക്കുമ്പോൾ സമയം ഫലപ്രദമായി കൈകാര്യം ചെയ്യാൻ എനിക്ക് ബുദ്ധിമുട്ട് തോന്നാറുണ്ട്.					
15	ക്ലാസിൽ ശ്രദ്ധിക്കാൻ എനിക്ക് ബുദ്ധിമുട്ട് തോന്നാറുണ്ട്.					

SL. NO	പ്രസ്താവനകൾ	ഒരിക്കലുമില്ല	അപൂർവ്വമായി	ഇടയ്ക്കിടെ	പലപ്പോഴും	എപ്പോഴും
16	എൻട്രൻസ് പരീക്ഷ കാരണം എനിക്ക് മറ്റ് വിഷയങ്ങളിൽ ശ്രദ്ധ കേന്ദ്രീകരിക്കാൻ സാധിക്കാറില്ല.					
17	ഏത് എൻട്രൻസ് പരീക്ഷയിൽ പങ്കെടുക്കണമെന്ന് കാര്യത്തിൽ തീരുമാനമെടുക്കുന്നതിന് എനിക്ക് ആശയക്കുഴപ്പം തോന്നാറുണ്ട്.					
18	എൻട്രൻസ് പരീക്ഷയ്ക്ക് തയ്യാറെടുക്കാൻ തുടങ്ങിയതിനുശേഷം എനിക്ക് ഒരു പുതിയ ദിനചര്യ ഉണ്ടായതായി തോന്നിയിട്ടുണ്ട്.					
19	എൻട്രൻസ് പരീക്ഷയ്ക്കുള്ള തയ്യാറെടുപ്പ് തുടങ്ങിയതിനു ശേഷം ഉറക്കമില്ലായ്മ എനിക്ക് അനുഭവപ്പെടുന്നുണ്ട്.					
20	എൻട്രൻസ് പരീക്ഷയുടെ സമ്മർദ്ദം നിയന്ത്രിക്കാൻ വേണ്ടി അനാരോഗ്യകരമായ ഭക്ഷണപാനീയങ്ങൾ ഉപയോഗിക്കേണ്ടി വരാറുണ്ട്.					
21	ഞാൻ സാമൂഹിക പ്രവർത്തനങ്ങൾ ഒഴിവാക്കുകയും കൂടുതൽ സമയം ഒറ്റയ്ക്ക് ചെലവഴിക്കുകയും ചെയ്യാറുണ്ട്.					
22	എനിക്ക് ക്ഷീണം അനുഭവപ്പെടുന്നുണ്ടെങ്കിൽ പോലും പഠനഭാരം മൂലം രാത്രി വൈകിയും ഇരുന്ന് പഠിക്കാറുണ്ട്.					
23	പരീക്ഷയിൽ മികച്ച പ്രകടനം നടത്താൻ എന്റെ കുടുംബത്തിൽ നിന്ന് എനിക്ക് സമ്മർദ്ദം നേരിടാറുണ്ട്.					
24	എൻട്രൻസ് പരീക്ഷയ്ക്ക് തയ്യാറെടുക്കാൻ തുടങ്ങിയതിനു ശേഷം എന്റെ സുഹൃത്തുക്കളുമായും കുടുംബാംഗങ്ങളുമായി ബന്ധം നിലനിർത്താൻ ബുദ്ധിമുട്ട് തോന്നാറുണ്ട്.					
25	പഠനകാര്യത്തിൽ എന്റെ സഹോദരങ്ങളുമായി എന്നെ താരതമ്യം ചെയ്യുന്നതായി അനുഭവപ്പെടാറുണ്ട്.					
26	എൻട്രൻസ് പരീക്ഷയുമായി ബന്ധപ്പെട്ട എന്റെ കുടുംബത്തിന്റെ സാമ്പത്തികസ്ഥിതി എന്നെ അലട്ടാറുണ്ട്.					
27	പരീക്ഷകളിലെ എന്റെ മാർക്കുകൾ എന്റെ സഹപാഠികളുമായി താരതമ്യം ചെയ്യുന്നത് എന്നെ അലട്ടാറുണ്ട്.					
28	എൻട്രൻസ് പരീക്ഷയെ കുറിച്ചുള്ള എന്റെ പ്രതീക്ഷകളെ ഞാൻ എന്റെ സുഹൃത്തുക്കളുടെതുമായി താരതമ്യം ചെയ്യാറുണ്ട്.					
29	മറ്റുള്ളവരുമായി എന്നെ താരതമ്യം ചെയ്യുന്നതിന് പകരം ഞാൻ എന്റെ സ്വന്തം ശക്തികളിലും കഴിവുകളിലും ശ്രദ്ധ കേന്ദ്രീകരിക്കാറുണ്ട്.					

SL. NO	പ്രസ്താവനകൾ	തീർച്ചയായും	ഒരുപക്ഷേ	ഉറപ്പില്ല	ഒരുപക്ഷേ അല്ല	തീർച്ചയായും അല്ല
30	എന്റെ സഹപാഠികൾക്കിടയിൽ പഠനത്തിനുള്ള തയ്യാറെടുപ്പുകളിലുള്ള വ്യത്യാസങ്ങൾ എന്നിൽ പിരിമുറുക്കം സൃഷ്ടിക്കാറുണ്ട്.					
31	എൻട്രൻസ് പരീക്ഷയിൽ ഞാൻ ഉയർന്ന മാർക്ക് നേടുമെന്ന് എന്റെ കുടുംബം പ്രതീക്ഷിക്കുന്നു.					
32	എൻട്രൻസ് പരീക്ഷയെ കുറിച്ച് എനിക്ക് എന്നിൽ തന്നെ പ്രതീക്ഷകളുണ്ട്.					
33	എൻട്രൻസ് പരീക്ഷയുമായി ബന്ധപ്പെട്ട് ഞങ്ങൾ വിദ്യാർത്ഥികൾക്കിടയിൽ മത്സരം ഉണ്ട്.					

Appendix IV
FAROOK TRAINING COLLEGE

SCALE FOR MENTAL HEALTH

Dr. Anees Mohammed. C — Supervising Teacher
Praseetha. R. P — M.Ed. Student

Personal Information

NAME :

GENDER : MALE/FEMALE

LOCALITY OF SCHOOL : RURAL/URBAN

TYPE OF INSTITUTION : GOVT/AIDED/PRIVATE

PARENTAL QUALIFICATION : BELOW +2/ +2 & ABOVE +2

PARENTAL EMPLOYMENT : PROFESSIONAL/ BUSINESS/ COOLIE

Instructions

Statements related to mental health are given below. For each statement, 5 responses are given such as always, often, sometimes, rarely, and never. After reading each statement carefully, use (✓) to record your response. Please select only one response for each statement.

Sl. No	Statements	Always	Often	Sometimes	Rarely	Never
1.	When I argue with friends, I listen to their perspective before responding.					
2.	When I face difficulties with my school studies, I approach my friends for help.					
3.	When I need support, I am willing to seek help from others.					
4.	I try to see the good qualities in my friends.					
5.	I struggle to find and connect with new friends in a new environment.					
6.	When I spend time with people I like, I feel happy.					
7.	I can manage my school life and personal life in a balanced way.					
8.	I believe in myself and my abilities.					
9.	I can make confident and firm decisions about my life.					
10.	I try to have a good relationship with all my friends.					
11.	I believe I have the abilities to achieve my goals.					
12.	I am confident that I will always succeed in every exam.					
13.	I may not be able to provide the necessary support to my friends and family when they need it.					
14.	I can build and maintain trustworthy relationship with my friends.					
15.	I can offer comfort and support to my friends when they share their emotions with me.					
16.	My friends encourage me to participate in extracurricular activities.					
17.	I receive support from my friends to overcome my challenges.					

Sl. No	Statements	Always	Often	Sometimes	Rarely	Never
18.	My friends try to influence me or pressure me to use harmful substances.					
19.	My friends encourage me to make positive choices and do great things in life.					
20.	My friends encourage me to participate in social activities like NCC, NSS, etc.					
21.	I try to understand others' feelings.					
22.	I express my feelings in a way that does not hurt others.					
23.	I try to recognize and learn from my mistakes, and correct them.					
24.	I argue with my friends over silly or unnecessary things.					
25.	I miss opportunities because of my hesitation to express my opinions in class discussions.					

Appendix V
FAROOK TRAINING COLLEGE

SCALE FOR ENTRANCE EXAM STRESS

Dr. Anees Mohammed. C
Supervising Teacher

Praseetha. R. P
M.Ed. Student

Personal Information

NAME:

GENDER **:** MALE/FEMALE

LOCALITY OF SCHOOL **:** RURAL/URBAN

TYPE OF INSTITUTION **:** GOVT/AIDED/PRIVATE

PARENTAL QUALIFICATION : BELOW +2/ +2 & ABOVE +2

PARENTAL EMPLOYMENT **:** PROFESSIONAL/ BUSINESS/ COOLIE

ENTRANCE EXAM PREPARATION: COACHING CENTRE/ SELF

Instructions

Statements related to entrance exam stress are given below. For each statement, 5 responses are given such as always, often, sometimes, rarely, and never. After reading each statement carefully, use (✓) to record your response. Please select only one response for each statement.

Sl. No	Statements	Always	Often	Sometimes	Rarely	Never
1.	I feel anxious when facing competitive exams.					
2.	When I think about the entrance exam, I have doubts about myself and my abilities.					
3.	After starting preparations for the entrance exam, I find it difficult to focus on my studies.					
4.	When I think about the entrance exam, my heart beats faster.					
5.	I fear how others will judge me if I fail the entrance exam.					
6.	I struggle to manage my worries and anxiety about the entrance exam.					
7.	I worry that my entire future depends on the entrance exam.					
8.	I think about giving up on the entrance exam.					
9.	I feel the thoughts about the entrance exam bother me throughout the day.					
10.	I do not feel confident that I have the ability to pass the entrance exam.					
11.	I feel like I am overthinking about the entrance exam.					
12.	I feel like struggle with choosing the right study method due to stress.					
13.	I have negative thoughts about my ability to perform well in the entrance exam.					
14.	I struggle to manage my time effectively while studying for the entrance exam.					

15.	I have difficulty in paying attention in the class.					
16.	I cannot focus on other subjects because of the entrance exam.					
17.	I am confused about which entrance exam to take participate.					
18.	After starting to prepare for the entrance exam, I feel like I have developed a new daily routine.					
19.	After starting to prepare for the entrance exam, I am experiencing sleeplessness.					
20.	I am depending to unhealthy eating and drinking habits to cope with the pressure of the entrance exam.					
21.	I am avoiding social activities and spending more time alone.					
22.	Even if I am feeling tired, I am staying up late at night to study due to the heavy study load.					
23.	I am facing pressure from my family to perform well in the exam.					
24.	After starting to prepare for the entrance exam, I am finding it difficult to maintain relationships with my friends and family members.					
25.	I feel compared to my siblings when it comes to exam performance.					
26.	My family's financial situation related to the entrance exam is worrying me.					
27.	I am anxious about how my grades compare to those of my classmates, and it is causing me stress.					
28.	I am comparing my expectations about the entrance exam with those of my friends.					
29.	Instead of comparing myself with others,					

	I am focusing on my own strengths and abilities.					
30.	The differences in study preparations among my classmates create anxiety in me.					
31.	My family expects me to get high marks in the entrance exam.					
32.	I have expectations for myself regarding the entrance exam.					
33.	I feel there is a competition among friends related to entrance exam.					

Appendix VI
FAROOK TRAINING COLLEGE

SCALE FOR PERSEVERANCE

Dr. Anees Mohammed. C
Supervising Teacher

Praseetha. R. P
M.Ed. Student

Personal Information

NAME:

GENDER **:** MALE/FEMALE

LOCALITY OF SCHOOL **:** RURAL/URBAN

TYPE OF INSTITUTION **:** GOVT/AIDED/PRIVATE

PARENTAL QUALIFICATION : BELOW +2/ +2 & ABOVE +2

PARENTAL EMPLOYMENT **:** PROFESSIONAL/ BUSINESS/ COOLIE

Instructions

Statements related to perseverance are given below. For each statement, 5 responses are given such as always, often, sometimes, rarely, and never. After reading each statement carefully, use (✓) to record your response. Please select only one response for each statement.

Sl. No	Statements	Always	Often	Sometimes	Rarely	Never
1.	I have confidence that I can achieve success in my studies through my hard work.					
2.	I believe that with the help of teachers or friends, I can overcome my academic challenges.					
3.	I am able to set my goals and work hard to achieve them.					
4.	I see challenging school assignments not only as obstacles to my success, but also as opportunities for growth and learning.					
5.	When I am working on a group project, I schedule regular meetings with my teammates to stay on track and avoid wasting time.					
6.	I am interested in learning new things.					
7.	I view my failures not with fear or discouragement, but as valuable opportunities to learn, improve, and grow.					
8.	I can approach unfamiliar math problems with a creative mindset, using multiple solution methods.					
9.	I actively contribute to group projects by participating in discussions, sharing ideas, and collaborating with friends.					
10.	I do not hesitate to ask teachers questions to clarify things that I do not understand in class.					
11.	When I see my classmates excelling in their studies, it motivates me to work harder and strive for similar achievements.					

12.	I believe that my hard work will improve my academic performance and lead to many opportunities in the future.					
13.	When I am discouraged or under pressure, I find it difficult to control my emotions.					
14.	I am able to set specific, achievable goals and work towards accomplishing them.					
15.	I view participating in group discussions with friends as a valuable asset that helps me achieve my objectives and drives me closer to my goals.					
16.	I can find joy in my small achievements, and it also helps me to look forward to bigger goals.					
17.	I seek feedback from teachers to help me achieve my goals.					
18.	I can maintain focus in my studies without any distractions.					
19.	I break down large topics into smaller parts to help me stay focused in my studies.					
20.	I take breaks to refresh my mind and regain focus during my studies.					
21.	I watch inspirational videos of successful persons and motivate me to focus on my studies.					
22.	I see my mistakes as new learning opportunities.					
23.	I am able to reflect on my mistakes and develop necessary learning strategies to improve.					
24.	I choose effective learning methods to reduce mistakes in my studies.					
25.	I am not able to receive others' opinions with an open mind.					

26.	I understand that studying and achieving goals require time and effort.					
27.	I understand that challenges are temporary and can be overcome.					
28.	I have complete confidence in my capabilities and strength.					
29.	I am able to complete my homework and assignments on time.					
30.	I am not able to manage my study time effectively and productively.					
31.	I am able to adjust my studies according to my priorities and challenges.					
32.	I organize my study time to ensure that my studies continue in an organized manner.					
33.	I avoid doing multiple things at the same time while studying, and instead focus my attention on one thing.					