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ORGANIZATIONAL CLIMATE AND MENTAL HEALTH AS PREDICTORS OF JOB SATISFACTION OF SECONDARY SCHOOL TEACHERS IN POST COVID-19 SITUATION

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Associate Professor, G.H.G. Khalsa College of Education, Gurusar Sadhar, Punjab, India *Abstract*

The study was undertaken to investigate conjoint effect of organizational climate and mental health towards the prediction of job satisfaction of secondary school teachers in post COVID-19 situation. 165 teachers (75 science and 90 arts) selected from 20 secondary schools of Moga district of Punjab, India formed the sample of study. Teacher's Job Satisfaction Scale (2020) by Madan and Malik (adapted by the investigator in the light of present COVID-19 situation), Organizational Climate Scale for Teachers (2015) by Singh, and Positive Mental Health Inventory (2008) by Agashe and Helode were used to collect the data. Result of the study revealed significant positive relationship between organizational climate and job satisfaction for secondary school teachers. Significant positive relationship was also found between mental health and job satisfaction for secondary school teachers. Conjoint prediction of job satisfaction on the basis of organizational climate and mental health was also found to be significant for secondary school teachers.

Key words: Organizational climate, mental health, job satisfaction, secondary school teachers.

Introduction

Teaching is regarded as the noblest profession. If a teacher is happy with his or her job, he or she will give his or her all. Teachers are more likely to be satisfied in their jobs if they believe they are supported by their superiors and have control over teaching and learning methods. Teachers who believe they are unable to adequately support their students remotely are less

satisfied with their jobs. This could be due to limitations in the systems used by schools to support remote learning, or it could be a reflection of the difficulties teachers are having engaging their students and adapting their teaching to meet this new way of working.

Job satisfaction

Job satisfaction research began in earnest in the early 1930s, influenced by both the

depression's economic and employment crises, as well as new developments in attitude measurement (Weiss & Merlo, 2015).

Job satisfaction, according to Hoppock (1935), is "any combination of psychological, physiological, environmental circumstances that leads a person to say truthfully, "I am satisfied with my job." While many external factors influence job satisfaction, it remains an internal factor that has to do with how the employee feels, according to this approach. In other words, job satisfaction refers to a collection of factors that contribute to a sense of fulfilment. Job satisfaction was defined by Vroom (1964) as "affective orientations on the part of individuals toward work roles which they are currently occupying."Job satisfaction, according to Statt (2004), can also be defined as the extent to which a worker is satisfied with the rewards he or she receives from his or her job, particularly in terms of intrinsic motivation. According to Armstrong (2006), job satisfaction refers to people's attitudes feelings toward their jobs. Job and satisfaction is indicated by positive and favourable attitudes toward the job. Job dissatisfaction is indicated by negative and unfavourable attitudes toward the job. Job

satisfaction, according to Fernández-Macias and Llorente (2014), is the degree to which people enjoy their jobs. In other words, it refers to a subjective assessment of the worker's own job, either overall or in terms of its various attributes. According to Singh and Jain (2013), job satisfaction refers to an employee's positive and negative feelings toward his or her job, as well as the amount of happiness associated with the job. According (2019),to Sharma iob satisfaction is the way employees feel about their jobs and various aspects of their jobs. Job satisfaction or employee satisfaction, according to Bhardwaj (2020), is a measure of workers' contentment with their job, whether or not they like the job or individual aspects or facets of jobs, such as nature of work or supervision.

Job satisfaction refers to a person's sense of fulfilment or enjoyment at work. Our level of contentment is determined by the ratio of what we have to what we want.

Organizational climate

The term "organizational climate" was coined in 1939 after Kurt Lewin and his colleagues conducted a study of children's school clubs. Lewin and his colleagues classified club leadership as falling into one of three categories (autocratic, democratic, or laissez faire) (Ashkanasy, 2008).

Halpin and Croft (1963) defined organizational climate as an organization's personality. The 'personality' of a school was described in terms of social interactions between teachers and principals, as well as among members of the teaching staff. The term organizational climate has been defined in a variety of ways, including "the atmosphere," "the environment," "the zeal," "the condition prevailing," and "the tune of the institution." Organizational climate is defined by the dictionary of education (Good, 1959) as the pattern of social interaction that characterizes organization. "Organizational climate" refers to "a set of characteristics that describe an organization, distinguish it from other organizations, and influence the behaviour of its employees." The human interaction that occurs in the school is very important. The school is a web of interaction among people who live and work in a specific way. The atmosphere in which the school operates is referred to as its organizational climate. According to Hoy (1990), "school climate is the relatively enduring quality of the school environment that is experienced by participants, affects their behaviour, and is based on their collective perceptions of behaviour in schools." According to Bhasin (2020), organizational climate is defined as

a professional environment element that has a significant impact on the actions and performance of employees working in that workplace. It indicates whether or not individuals' expectations and beliefs are met.

The result of various environmental factors prevailing in a school can be defined as the school organizational climate. It is made up of all the human and physical factors that are made available in a wellorganized manner to achieve the desired end results.' The term "school organizational climate" has been defined in a variety of feel." "the ways, including "the atmosphere," "the "the environment," condition," and "the tone of the institution." The term "school organizational climate" has been defined in a variety of ways.

Mental health

Although references to mental health as a state can be found in the English language long before the twentieth century, technical references to mental health as a field or discipline do not appear until 1946. The International Health Conference in New York that year decided to establish the World Health Organization (WHO), and a Mental Health Association was established in London (Bertolote, 2008).

According to Lewkan (1949), a mentally healthy person is one who is

happy, lives peacefully with his neighbours, raises his children to be good citizens, and while fulfilling such basic responsibilities, is still empowered with enough strength to serve the cause of society in any way. Crow and Crow (1951) define mental health as "physical well-being, adjustment to mental ability, emotional control, social and sexual adjustment." According to Hadfield (1952), mental health is the full and harmonious functioning of the entire personality. Legg and Felman (2020) define mental health as "cognitive, behavioural, and emotional wellbeing." It all comes down to how people think, feel, and act. Mental health, according to the World Health Organization (2022), is a state of mental well-being that enables people to cope with life's stresses, realize their abilities, learn and work well, and contribute to their community. It is an essential component of health and wellbeing that underpins our individual and collective abilities to make decisions, form relationships, and shape the world in which we live.

Mental health is a broad term that refers to an individual's state of mind as a result of his moral organization and functioning. Mental health, like physical health, is an aspect of an individual's totality. It is the result of five types of

health, namely physical, emotional, moral, spiritual, and social health. Mental health is also known as the process of human self-realization, self-satisfaction, and full success. A person's mental health, among other things, is concerned with his overall sense of growth and development and adjustment, peace, success, happiness, and effective membership in a group or community.

Review of related literature: Review of related literature in the present study is classified into following two parts:

Job satisfaction in relation to organizational climate

Significant positive relationship between job satisfaction and organizational climate was reported by Park (2001); Sofianos (2005); Mishra (2005); Paul (2005); Dhingra (2006); Brown (2008); Castro and Martins (2010); Pangil, Yahya, Johri, Isa & Daud (2011); Saxena and Shabana (2012); Jenitta and Saminathan (2013); Shahram, Hamid, and Rahim (2013); Meena and Agarwal (2014); Fatemeh (2015); Ghavifekr and Pillail Hashemi and Sadeqi (2016); (2016);Niafard and Heidarei (2016); Monika and Kaliyamurthy (2017); Okoli (2018); Valdez, Guro, Cana and Lawi (2019); Maiti (2019); Potdar (2019) and Kumar, Kumar and Kaur (2021). Sinha and Ahmad (2020) revealed

that male group of +2 school teachers reported higher degree of job satisfaction towards organizational change than female group of teachers especially working in +2 private schools of North Bihar during COVID-19. Whereas Badoni (2010); Rani and Rani (2014) and Yadav (2015) reported no signification between job satisfaction and organizational climate. But there is one study by Okeke, Igbokwe, Ogbo, Ekweogu and Anyanwu (2020) show negative relationship between job satisfaction and organizational climate.

Job satisfaction in relation to mental health

Significant positive relationship between job satisfaction and mental health of was reported by Maheshbabu and Jadhav, (2012); Manikandan (2012); Maheshbabu (2012); Galgotra (2013); Behera (2014); Singh (2015); Qamar and Ahmad (2015); Gahlawat (2017); Rinsangi (2019); and Sarker, Siddique and Nishad (2021). Janyam significant (2009)found negative relationship between job satisfaction and somatic symptoms, anxiety and insomnia, social dysfunction. Ahadi (2009) results indicated that global job satisfaction and its 5 components have negative correlations with the 9 mental disorders. Azami, Shamsuddin, Akmal and Azami (2015)

revealed significant negative relationship between job satisfaction and psychological distress. Nadinloyi, Sadeghi and Hajloo (2013)found significant negative relationship between depression and job satisfaction. Ali, Naoreen, Iqbal and Jalal (2020) revealed that the online teaching does have a significant negative effect on the psychological state of university teachers and this is invariable that psychological distress does have significant negative effect on the job satisfaction of university teachers. Rajsinghani (2020) shows that due to lockdown government school teachers were not equipped with proper facilities to take online class and new pattern of teaching causes dissatisfaction to them. Babu (2014) on the other hand revealed no significant correlation between job satisfaction and mental health.

Emergence of the problem

Numerous studies on job satisfaction have been conducted, but the majority of them were conducted prior to COVID-19. COVID-19 had a substantial impact on human life. Schools were forced to deal with a difficult situation due to the CORONA Pandemic in 2020. Many questions had to be answered by the teachers, such as how to proceed with lessons when there was physical distance, and they also had to

perform their duties from home. They were under a lot of pressure back then. As a result, research into school teachers' job satisfaction in relation to organizational climate and mental health in the post-COVID situation is required.

Objectives

- 1. To investigate the significance of relationship between job satisfaction and organizational climate of the secondary school teachers.
- 2 To investigate the significance of relationship between job satisfaction and mental health of the secondary school teachers.
- 3. To investigate the conjoint effect of organizational climate and mental health towards the prediction of job satisfaction of secondary school teachers.

Hypotheses

- 1. There is no significant relationship between job satisfaction and organizational climate of secondary school teachers.
- 2. There is no significant relationship between job satisfaction and mental health of secondary school teachers.
- 3. The conjoint effect of organizational climate and mental health towards the prediction of job satisfaction of secondary school teachers is not significant

Method

Descriptive survey method was used in the present study

Sample

20 schools were selected randomly from the secondary schools of Moga district of Punjab, India. 165 (75 science and 90 arts) teachers who filled all the tools formed the sample of the study. Science teachers were those who were teaching science and or mathematics, whereas arts teachers were those who were teaching social studies and or languages.

Tools

- Teacher's Job Satisfaction Scale (2020)
 by Madan and Malik (adapted by the investigator in the light of present COVID-19 situation).
- 2. Organizational Climate Scale for Teachers (2015) by Singh.
- 3. Positive Mental Health Inventory (2008) by Agashe and Helode was used by the investigator.

Result and discussion

Result of the study are discussed in following three parts:

Part-I: Significance of relationship between job satisfaction and organizational climate: To investigate the significance of relationship between job

satisfaction and organizational climate Pearson's coefficient of correlation was used and the values are given in table 1 below:

Table 1: Relationship between job satisfaction and organizational climate of secondary school teachers (N=165)

Variables	r
Job Satisfaction	0.58*
Organizational Climate	

*Significant at 0.01 level of significance

Table 1 reveals that the value of correlation between job satisfaction and organizational climate of secondary school teachers is 0.58 which is significant (p<0.01). It indicates that there is significant positive relationship between job satisfaction and organizational climate of secondary school teachers. Hypothesis 1 which states that 'There is no significant relationship between job satisfaction and organizational climate of secondary school teachers' is thus rejected.

There is significant positive relationship between job satisfaction and organizational climate of secondary school. This finding is in line with studies conducted by Park (2001); Sofianos (2005); Mishra (2005); Paul (2005); Dhingra (2006); Brown (2008); Castro and Martins (2010); Pangil et al. (2011); Saxena and Shabana (2012); Jenitta and Saminathan (2013); Shahram et al. (2013); Meena and

Agarwal (2014); Fatemeh (2015); Ghavifekr and Pillail (2016); Hashemi and Sadeqi (2016); Niafard and Heidarei (2016); Monika and Kaliyamurthy (2017); Okoli (2018); Valdez et al. (2019); Maiti (2019); Potdar (2019) and Kumar et al. (2021).

Part-II: Significance of relationship between job satisfaction and mental health: To investigate the significance of relationship between job satisfaction and mental health, Pearson's coefficient of correlation was used and the values are given in table 2 below:

Table 2 Relationship between job satisfaction and mental health of secondary school teachers (N=165)

Variables	r
Job Satisfaction	0.40*
Mental Health	

*Significant at 0.01 level of significance

Table 2 shows that the value of correlation between job satisfaction and mental health of secondary school teachers is 0.40 which is significant (p<0.01). It indicates that there is significant positive relationship between job satisfaction and mental health of secondary school teachers. Hypothesis 2 which states that 'There is no significant relationship between job satisfaction and mental health of secondary school teachers' is thus rejected.

There is significant positive relationship between job satisfaction and mental health of secondary school teachers. This finding is in line with studies conducted by Maheshbabu and Jadhav, (2012); Manikandan (2012); Maheshbabu (2012); Galgotra (2013); Behera (2014); Singh (2015); Qamar and Ahmad (2015); Gahlawat (2017); Rinsangi (2019); and Sarker et al. (2021).

Part-III: The conjoint effect of organizational climate and mental health towards the prediction of job satisfaction:

To investigate the significance of conjoint effect of organizational climate and mental health towards the prediction of job satisfaction R along with R² and F-ratio were worked out and the values are given in table 3 below:

Table 3: Step-up regression equations for secondary school teachers for job satisfaction on the basis of organizational climate and mental health (N=165)

Variable Degree of		R	\mathbb{R}^2	F	Step up regression
	freedom				equation
Organizational climate	1, 163	0.56	0.33	80.45*	$Y = 27.94 + 0.31X_1$
Mental health	1, 163	0.40	0.16	31.64*	$Y = 74.19 + 1.61X_2$
Organizational climate	2, 162	0.60	0.36	44.92*	$Y = 23.22 + 0.27X_1$
+Mental health					$0.73X_2$

^{*} Significant at 0.01 level

Table 3 reveals that for secondary school teachers, value of R² for organizational climate is 0.33, and for mental health is 0.16. Thus 33% of job satisfaction is predicted by organizational climate, and 16% by mental health. The combined R² is equal to 0.36. So 36% of job satisfaction is predicted by organizational climate and mental health conjointly. The remaining 64% of job satisfaction for secondary school teachers is predicted by the variable not included in the present study. If taken

together, the value of F for organizational climate and mental health is 44.92 which is significant (p<0.01). Thus organizational climate and mental health conjointly predict job satisfaction significantly higher as compared to their separate predictions for secondary school teachers. Hypothesis 3 which states that 'The conjoint effect of organizational climate and mental health towards the prediction of job satisfaction of secondary school teachers is not significant' is thus rejected.

The conjoint effect of organizational climate and mental health towards the prediction of job satisfaction is significant for secondary school teachers. It may be due to the significant positive relationships between organizational climate and job satisfaction, which is shown above in table 1, and between mental health and job satisfaction, which is shown above in table 2.

Implication

Result of the study reveals significant positive relationship of both organizational climate and mental health with job satisfaction. Both organizational climate and mental health are significant predictors of job satisfaction. Thus, stressing and regulating organizational climate and mental health contribute to fostering job satisfaction.

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GENDER DIFFERENCES IN ACADEMIC PROCRASTINATION AMONG ADOLESCENTS OF PUNJAB

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Abstract

Adolescents' primary issue is procrastination in academic pursuits. The current study's goal was to investigate how gender disparities in academic procrastination differ. In the study, 800 secondary school students from government schools in eight districts of Punjab took part. Kalia and Yadav's (2015) academic procrastination scale was used to collect data. The findings indicate that there is a considerable gender difference in academic procrastination. This study's key finding is that teenage boys and girls behave significantly differently when it comes to putting off academic work. Teenage girls procrastinate more in school than do teenage boys. The teacher and parents must use strong supervision and follow-up strategy to prevent academic procrastination among adolescents.

Keywords: Academic procrastination, adolescents, gender

Introduction

The present century is marked by rapid technological advancements and progress of the society. To keep pace with these advancements, humans have now become more informative, knowledgeable and with changing time have adapted to multi-tasking skills. However, it has also made life very competitive, complex, challenging and modern society also characterizes tension, frustration. worry, nervousness, stress, aggression, anxiety among humans, especially in the life of adolescent students as a result of which their mental health and emotional well-being is affected

incapacitating their normal life. One of the major problems which arises out of these changes in the adolescence is the academic procrastination. Academic procrastination has been seen as an impediment to students' academic success because it decreases the quality and quantity of learning while increasing the severity of negative outcomes in students' lives.

Academic procrastination is the delay of academic work, even though one wants to complete it on time (Wolters, 2003). For school students, this is closer to reality, because no students would like to delay their work purposefully to get a poor

grade. According to Deniz, Tras and Aydogan, (2009), academic procrastination is the delay of academic responsibility, such as submitting schoolwork or a delay of preparation for examination. Academic procrastination is the delay of an academic responsibilities until it has passed the optimal point of time (Solomon & Rothblum, 1984; Hess. & Sherman, Goodman, 2000).

Academic procrastination is a phenomenon that is entrenched in students ranging from high school to college. It is interpreted as the act of delaying or postponing academic-related tasks and assignments, which is influenced by the experiences and perceptions of individuals in achieving success (Aydogan & Akbarov, 2018). This means that the experiences and perceptions acquired by students regarding academics tend to affect their accuracy in completing assignments. Previous studies defined procrastination as the avoidance or delay in carrying out tasks or activities due to lack of motivation and feeling of failure. Therefore, it can be concluded procrastination is the act of delaying and postponing work due to lack of motivation, self-regulation, ability to carry out the task, and an anxiety feeling of failure. The tendency of individuals to delay

postpone related academic assignments is called academic procrastination. This is consistent with the statement that academic procrastination is the delay in the completion of assignments, which is common among college and high school students

Significance of study

The present century is marked by rapid technological advancements and swift progress of the society. Man has now become informative, knowledgeable and with changing time has adapted to multitasking skills. However, it has also made life very competitive, complex and challenging due to several socio, economic and political problems like nuclear families, unhealthy lifestyle, varying socio-economic levels, unemployment, lack of equal educational opportunities, gender disparity, materialism, degeneration of value system etc. The modern society also characterises tension, frustration. stress, worry, nervousness, aggression, anxiety among humans, especially in the life of adolescent students as a result of which their mental health and emotional well-being is affected incapacitating their normal life. Adolescence is a time of great change and it is a transitional period between childhood and adulthood during which a lot of physical,

psychological and social changes occurs. Thus, adolescence becomes a problem age in which young people suffer from mental, emotional and behaviour problems. These problems severely disrupt a child's ability to function socially, academically and emotionally. One of the major problems which arises out of these changes in the adolescence is the academic procrastination. So it is very important to study the academic procrastination on the basis of gender differences.

Objective

To investigate the significance of difference between academic procrastination of adolescent boys and adolescent girls.

Hypothesis

There exists no significant difference between academic procrastination of adolescent boys and adolescent girls.

Sample

A sample of 800 secondary school students aged between 15-17 years of government schools from six districts of Punjab were participated in the study. Out of the total sample 50 % are Male (400) and 50 % are females (400). Two districts were selected

randomly from Doaba, Majha and four districts from Malwa region of Punjab. Equal number of students (100) were taken from the each district randomly selected districts of Punjab.

Tool used

Academic procrastination scale (APS–KAYM) by Kalia and Yadav (2015).

Data analysis

Statistical analysis of data was conducted by using SPSS programme. First of all, to check the nature of distribution of data descriptive statistics were calculated which includes mean, median, standard deviation, skewness and kurtosis. Then "t" test was calculated to find the significance of difference between academic procrastination of adolescent boys and adolescent girls.

Results

First of all, to check the nature of distribution and normalcy of data values of mean, median, standard deviation, skewness and kurtosis were calculated. Since both the measures of central tendency (mean and median) are in close proximity to each other therefore these are normally distributed.

Table 1: Nature of distribution of data for academic procrastination

Variables	N	Mean	Median	Standard Deviation	Skewness	Kurtosis
Adolescent boys	400	67.78	70.50	12.29	-0.571	-0.674
Adolescent girls	400	72.14	73.00	10.53	-0.071	-0.825

Table 1 indicates that both the values of skewness and kurtosis lie within the permissible limits of chance fluctuation -2.0 to 2.0 (Trochim, & Donnelly, 2006; Gravetter & Wallnau, 2014) and the

distortion is negligible, therefore the data can be taken as normally distributed. Since the values of academic procrastination are normally distributed thus it fulfils the condition of parametric statistics (t-ratio).

Table 2: Showing difference in academic procrastination of adolescent boys and girls

Groups	N	Mean	Standard Deviation	SE _D	t-ratio
Adolescent Boys	400	67.78	12.29	0.01	5.39*
Adolescent Girls	400	72.14	10.53	0.81	3.39*

^{*}Significant at 0.01 level of significance

Table 2 shows that mean scores of adolescent boys and adolescent girls are 67.78 and 72.14 respectively. The t-ratio is 5.39 which is significant (p<0.01). Thus, significant difference exits in academic procrastination of adolescent boys and girls. This indicates that academic procrastination is more in adolescent girls as compared to adolescent boys. It leads to rejection of hypothesis that 'There exists no significant difference between academic procrastination of adolescent boys and adolescent girls.'

Adolescent boys and girls differ in academic procrastination due to lack of

motivational level in girls which is further influenced by behavioural and emotional processes which are related with task averting situation. Further researches showed that girls report less self-efficacy, less self-control, less delay of gratification and scored significantly higher anxiety level than boys. Now a days, boys and girls are equal and there are no gender differences in the eyes of parents. Girls also roam around with friends, miss the school and indulge in undesirable forms of behaviour that leads to procrastination in academics as well as daily routine activities. In our culture, girls stay

more at home than boys and they have to help in daily domestic activities. Girls are more dependent on parents as compared to boys for completing their educational work on time. Girls always want to improve their work or educational assignments to be more perfect. This perfectionist behaviour leads girls towards academic procrastination. The studies by Haycock, McCarthy and Skay (1998); and Paludi and Frankell-Hauser (1986) are in line with the findings of the present study that adolescent girls are more prone to academic procrastination than adolescent boys. This could be because girls experience higher anxiety levels associated with procrastination (Rothblum, Solomon, & Murakami, 1986). Studies conducted by Balkis and Duru (2009); and Khan, Arif, Noor and Muneer (2014) contradict findings of the present study.

Educational implications

Important finding of this study is that there significant difference in academic procrastination of adolescent boys and girls. Academic procrastination is more in adolescent girls than adolescent boys. Adolescent academically girls more procrastinate to produce perfect work (perfectionism) and thus put of starting the assignments given in effort to protect their academic ability if outcomes were unpleasant. Adolescent girls have more positive attitude towards making multiple drafts of their assignments prior to completing and submitting them whereas adolescent boys were more reluctant to do so. The researchers attributed the findings to the students' inability in decision making, low self-esteem, poor time management and perfectionism which hindered individuals from either starting or completing a task within a given time frame. This indicates that same type of remedies cannot be used to prevent and treat academic procrastination in adolescent boys and adolescent girls. One strategy may be more beneficial for boys and another one may be beneficial for girls. Parents may be made aware of this difference so that they may help in reducing academic procrastination among adolescents effective applicability of diverse strategies. The teacher and parents must use strong supervision and follow up strategy to prevent academic procrastination among adolescents. The counselling opportunity can be provided either by school or by any other government-aided or non- government aided agencies.

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STUDY OF HAPPINESS AMONG GRADUATE STUDENTS IN RELATION TO MODERNIZATION

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Abstract

The current study investigated graduate students' happiness in relation to modernity. The researcher's method of choice was a descriptive survey. 200 graduate students (100 male and 100 female) were selected randomly as the sample of study from degree colleges of Abohar Tehsil of Punjab, India. Modernization scale by Singh, Tripathi and Lal (2012), and happiness, scale of happiness by Rastogi and Moorjani (2017) were used to collect data. The result of the study indicated significant positive relationship between modernization and happiness among graduate students. The study's findings also indicated that both male and female graduate students who belonged to the high modernization group were happier than those who belonged to the low modernization group.

Keywords: Happiness, Modernization, Graduate Students

Introduction

desires Everyone happiness. Happiness, which is regarded as an inalienable right in the US Declaration of Independence, may actually be the final main "objective" that the general public pursues in their lives (Diener, 2000). A significant amount of current research, much of it falling under the umbrella of "positive psychology," a growing field that also takes into account matters like what makes for ideal relationships, ideal cluster functioning, and ideal communities, is focused on the question of what produces happiness and wellbeing. The question is if it is possible to increase one's level of happiness and

maintain it over the long term. It is possible to increase one's level of happiness. Even the question of what can make them happy is a mystery to most people. People want to learn how to be joyful and at peace no matter what is going on outside of them (Cloninger, 2004). Happiness is preferred by the majority of people over external accomplishments like fame, riches, societal prestige (Diener & Lucas, 2002). A happy population is less self-centered, angry, and prone to illness. Compared to unhappy people, they are more compassionate, understanding, trustworthy, motivated, innovative, helpful, and sociable (Lyubomirsky, Sheldon & Schkade, 2005).

Overview of the theory 21 in today's society, happiness is greatly valued. Not only do people want to be happy in their own lives, but there is growing support for the notion that we should also care about the happiness of other people and that governments should make plans to increase happiness for more individuals (Bentham, 1789). In modern usage, the pursuit of happiness can be abandoned without even a suggestion of abandoning the pursuit of what is best for oneself.

India is a huge country with numerous diverse and advanced civilizations spread throughout its various states. There appears to be more than one major nation than there actually is due to the diversity of dialects, foods, architectural designs, and civilizations found in India's diverse areas. Despite the fact that it is difficult to generalize when talking about these cultures as a whole, there are few things we can say with certainty about happiness in India.

With a happiness score of 6.84, India may be one of the top 25 happiest nations in the world, according to HappyPlus Consulting's The State of Happiness study. In contrast, India received a 3.77 happiness rating in the UN's World Happiness Report 2022 (Bureau, 2022).

Happiness

Since experiencing happiness is a wonderful emotional and mental experience, it makes sense that we would want to experience more of it. A joyful demeanour and a positive outlook on life have both been used to describe happiness. Happiness is essential in life. One's lifetime will be considerably increased if they are pleased. Happiness is something that we all look for and strive to achieve, yet it is elusive. Everyone hopes for happiness and a life filled with more contentment. A big part of happiness is being happy with who you are and where you are in the world. One should avoid stress and depression if they want to live a happy life. He should not compromise on many things if he wants to be happy.

Happiness is a life experience characterized by a preponderance pleasant emotion. Two of the important aspects of subjective well-being are feelings of happiness and ideas of life satisfaction (Myres, 2007). Satisfaction, joy, love. pleasure, and contentment characteristics of the state of being that is known as happiness (Hyman, 2018). Joy, satisfaction, contentment, and a sense of completion are all emotional characteristics of happiness. Despite the fact that there are many various definitions of happiness, they all tend to involve positive feelings and a

sense of fulfilment in life (Cherry, 2022). Happiness, in psychology, is a state of emotional well-being that a person can feel when nice things happen in a particular moment or more broadly, when they feel good about their lives and accomplishments as a whole. This is known as subjective well-being (Encyclopaedia Britannica, 2022). According to APA Dictionary of Psychology (2022a) happiness is an emotion of joy, gladness, satisfaction, and well-being.

Modernization

The fundamental ideas of modernization theory have its roots in the Idea of Progress, which emerged in the 18th century's Age of Enlightenment with the idea that people could improve and change society (White, 2018). Condorcet was the first to propose the notion that social and economic development are intertwined and that human affairs can progress and improve (Gilman, 2003).

Modernization is thought to be a process of political culture transformation that frequently results in the development of novel forms of governance and a reorganization of the relationships between the state apparatus and the socioeconomic structure (Giddens, 1998). Modernization, once set in motion, is a thorough process of

fundamental societal change that has a tendency to pervade all aspects of life, including economic endeavours, social interactions, political and institutions. Modernization is predicated on the idea that human cultures are developing, and with that awareness of innovation and change (Welzel & Ronald, 2007). The idea of modernization is broad and complicated. It is a procedure wherein current scientific knowledge is introduced into the society with the ultimate goal of providing a better and more fulfilling life in the most inclusive definition of the term approved by the society in question (Maheshwari, 2016). A substantial portion of a rural, traditional community transforms into a developed industrial civilization through a complicated set of procedures known as modernization. Generally speaking, modernized societies are those that regard science and technology, education, social mobility, acquired wealth, democratic government, and the rule of law highly. They also tend to be secular and urbanized. Progress ideas in society and the economy serve as the foundation for modernization. It is sometimes contrasted with the traditionalism of underdeveloped or undeveloped civilizations, which are frequently characterized as religious and rural, with little social mobility, technology,

and other factors (APA Dictionary of Psychology, 2022b).

The process of modernization involves altering society and behaviour. Throughout all societies, change is a constant. The members of the society can be seen to have consistent, persistent ideals, beliefs, attitudes, and behaviour. Stability and change are crucial elements of every society, but it also demonstrates how social life is developing. Even the notion of modernization demands substantial changes in traditional societies in every facet of life. Among other phenomena, general is modernization characterized by industrialization, urbanization, socialization, vocationalization. technological advancements in agriculture, economy, education, commerce, transportation, and communication. It also describes the process of change, or the alteration of societal norms in response to scientific and technological advancements.

Review of related literature

Modernity has promoted happiness as a method of social control. It is undeniable that this has economic ramifications and can help to reshape societal optimism as a fundamental axis of creative changes and the prosperity of the states. To date, many countries have associated happiness as a

significant component in the population, as it is the case with the GDP. Countries like Canada, the United Kingdom, and France have valued this indication in their economies in this regard. Sheikh Mohamed ben Rashid Al Maktoum, the prime minister of the United Arab Emirates, pushed for social goodness, increased the population's subjective levels of contentment, and established a Ministry of Happiness a few years ago (Monaco, 2016). How modern life has impacted our physical and mental health is discussed in an essay by Nicholas (July 3, 2017). Depression, social isolation, and discontent are results of modern living.

Veenhoven and Berg (2013)conducting a study on 141 present-day countries revealed that people living in most modern countries are substantially happier than people in the less modern countries. According to Inglehart (2018), although religious individuals are generally happier than non-religious people in most countries, secular but modern countries have happier citizens than less modern but religious nations. Further evidence that increased happiness is often associated with progress comes from the strong association between life satisfaction and a society's per capita (GDP) domestic product gross demonstrating that the vast majority of the

62 countries experienced an increase in happiness using evidence from representative national surveys.

Emergence of the problem

Although technology has made life easier for people, it has also brought along a lot of new challenges. Man appears to be happy on the outside, but he is unhappy on the inside. As a result, each person is affected by modernization differently. Examining how modernization affects graduate students' happiness is a weak attempt in the current study. According to a review of related literature, there has not been much research on the relationship between happiness and modernity. The suggested inquiry therefore seems to be fully justified.

Objectives

- To investigate the significance of relationship between modernization and happiness of graduate students.
- To compare the happiness of male graduate students having high and low level of modernization.
- To compare the happiness of female graduate students having high and low level of modernization.

Hypotheses

- 1. There exists no significant relationship between modernization and happiness of graduate students.
- 2. There exists no significant difference in the happiness of male graduate students having high and low level of modernization.
- There exists no significant difference in the happiness of female graduate students having high and low level of modernization.

Method and procedure: Descriptive survey method of research was used in the present study.

Sample: A disproportionate stratified random sample of 200 (100 boys + 100 girls) graduate students of Abohar Tehsil of Punjab, India were drawn from different colleges.

Tools

- 1) Happiness scale by Rastogi and Moorjani (2017).
- 2) Modernization scale by Singh, Tripathi and Lal (2007)

Results and discussion: Result of the study are discussed below:

(I) Significance of relationship between modernization and happiness among graduate students: To investigate the significance of relationship between modernization and happiness among

graduate students Pearson's coefficient of correlation was used and the value is given in table below:

Table 1: Relationship between modernization and happiness of graduate students (N=200).

Variables	r	p
Modernization of graduate students	0.47	0.00
Happiness of graduate students		

Table 1 reveals that the value of correlation between modernization happiness and among graduate students is 0.47, which is significant (p<0.01). It indicate that there is significant positive relationship between modernization happiness and among

graduate students. Hypothesis 1 which states that 'There exists no significant relationship between modernization and happiness of graduate students', is thus rejected. This finding is in line with the study conducted by Veenhoven and Berg (2013).

Significance (II)of difference in happiness among male graduate students on the basis of high and low levels of modernization: To investigate the significance of difference in happiness among male graduate students on the basis of high and low levels of modernization tratio was worked out and the values are given in table below:

Table 2: Significance of difference in happiness of male graduate students having high and low levels of modernization.

Variables	N	Mean	SED	Mean Diff.	t-ratio
High level of Modernization (Male)	27	266.61			
Low level of Modernization (Male)	27	241.37	4.37	25.24	5.77*

^{*}Significant at 0.01 level of significance

Table 2 shows that the mean values of happiness of male graduate students from high and low modernization groups are 266.61 and 241.37 respectively. The t-ratio is 5.77, which is significant (p<0.01). It indicates that there is significant difference in the happiness of male graduate students from high and low modernization groups. Male graduate students from high modernization group (mean=266.61) is significantly happier as compared to male graduate students from low modernization group (mean=241.37). Hypothesis 2 which states that 'There exists no significant difference in the happiness of male graduate students having high and low level of modernization' is thus rejected.

(III)Significance of difference in female happiness among graduate students on the basis of high and low **levels of modernization:** To investigate the significance of difference in happiness Malwa Journal of Education, Vol. 1, No. 13, Issue 13, Annual, 30th Oct. 2022

among female graduate students on the basis of high and low levels of modernization t-

ratios were worked out and the values are given in table below:

Table 3: Significance of difference in happiness of graduate students having high and low levels of modernization.

Variables	N	Mean	SE _D	Mean Diff.	t-ratio
High level of Modernization (Female)	27	263.42			
Low level of Modernization (Female)	27	248.81	4.684	14.61	3.11*

^{*}Significant at 0.01 level of significance

Table 3 shows that the mean values of happiness of female graduate students from high and low modernization groups are 263.42 and 248.81 respectively. The t-ratio is 3.11, which is significant (p<0.01). It indicates that there is significant difference in the happiness of female graduate students from high and low modernization groups. Female graduate students from high modernization group (mean=263.42) is significantly happier as compared to female graduate students from low modernization group (mean=248.81). Hypothesis 3 which states that 'There exists no significant difference in the happiness of female graduate students having high and low level of modernization' is thus rejected.

Implications

As for the impact of modernization on degree college students, we can state that it is a time when young people prepare themselves for their future life as adults. Modernization is attitudinal changes. Modern pupils approach society with a

fairly pluralistic perspective. In order to foster happiness in students, it is advised teachers, parents, that and college administrators organize programmes to help students become more modern. In spite of preconceived religious myths about castes, the gap between lower and upper castes, the martial background, the old educational system, and the education of women. in modern students believe amalgamation of many cultures. Young people are therefore functional means to bring about the kind of complete transformation that today's society demands.

Parents and educators should put their trust in children and should give them many opportunity to share duties. Teachers should guide their charges in learning how to handle stress, irritation, and disagreement. In order to overcome obstacles and maintain stability in life, pupils need to be happy. Students who plan to enroll in college should be taught strategies for increasing happiness. A person who is joyful is better

able to handle stress and provide the greatest results.

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ACADEMIC OVERLOAD AMONG SENIOR SECONDARY SCHOOL STUDENTS PREPARING FOR COMPETITIVE EXAMINATION IN RELATION TO GENDER AND STREAM OF STUDY

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Abstract

Academic overload is most abused problem of modern education system which is leading to distaste among students for studies. The present study is a humble attempt to find academic overload among secondary school students who are preparing for competitive examination. The sample of the study was 400 secondary school students who are preparing for engineering, medical and law/management courses. Academic Overload Questionnaire (AOQ) by Mitra and Sengupta (2005) was used to collect the data. The study revealed that male secondary school students experienced more academic overload as compared to female students. It further revealed that the secondary school students who were preparing for engineering and medical courses experienced more academic overload as compared to students preparing for law/management courses.

Key Words: Academic overload, senior secondary school students, competitive examinations, gender, stream of study

Introduction

India has single ladder system of education and the secondary and senior secondary school level pave path to the entry into the higher education in colleges/universities. When it comes to higher education, we aspire for those courses which land us in lucrative jobs with impressive pay package. This makes engineering, medical, law and

management courses being at the top and hence most sought of. Again it is not any engineering, medical, law and management colleges that one wants to get admission in. The admission into IITs (Indian Institutes of Technology), NITs (Indian Institutes of Technology), AIMS (All India Institute of Medical Sciences), IIMs (Indian Institutes of Management) and NLUs (National Law

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Universities) is the dream of each Indian parent and student. However getting admission in such institutions is the hardest nut to crack. The admission into these high profile institutions is done through all India entrance examination - for admission in IITs, NITs and other top engineering colleges, there is JEE (Joint Entrance Examination) - Main and Advance, for admission in AIMS and other medical colleges, there is NEET (National Eligibility cum Entrance Test), for admission in IIMs and other management colleges, there is CAT (Common Admission Test), and for admission in NLUs and other top law colleges, there is CLAT (Common Law Admission Test) and lacs of students appear for these exams every years. One has to score top rank in these exams to get admission in these prestigious institutions and for this; they have to score more than 90% marks in 12th board examination and very high score in competitive examination. However the pattern of examination for +2 board examination and the competitive examination is entirely different. Board examination is subjective in nature whereas competitive examination is purely objective. For board examination, students have to go through the prescribed text books thoroughly and for competitive examination,

students have to learn how to solve the questions quickly in shortest frame of time. Thus in a way, preparation of both examination is different in content and approach which put students in tremendous pressure.

Education sector in India has been an ever-growing entity. India has been one of the largest sectors in the world when it comes to higher education. Our present education system and its high stakes testing (e.g., the board examinations, entrance exams for various professional institutes, etc.) may exacerbate the competitive academic climate and generate high levels of academic stress. Excessive stress during this stage could result in increased prevalence of psychological problems like depression and nervousness, which could ultimately have negative impact on the outcome of the achievements. Anxiety levels of students are at an all-time high among senior secondary school students as they undergo the tremendous pressure from parents, teachers and society at large on one hand and on the with other, they have to deal uncertainties of their careers and future. At academic front, students undergo the feeling of academic overload. Most of the students struggle hard to manage their academic workload (Bitzer & Troskie-De Bruin, 2004)

and many failed in this pursuit of coping with academic overload and suffer from anxiety, frustration, depression and suicide ideation and sometimes committing suicide as well.

Academic overload

Academic overload can be defined as students' thoughts and emotions of being weighed down by their academic requisites or compulsions while pursuing an academic qualification/degree. The efforts which the students put into their pursuit of academic achievement is determined by students' perceptions of the challenges posed by the academic tasks and how they perceive their ability to complete those academic assignments whereas an inadequate amount of efforts on the part of the students may lead to their academic failure (Petersen, Louw, & Dumont, 2011).

Academic overload is conceptualized as excessive external as well as internal pressure exhibit high academic to performance which leads to imbalance in the mental health of the student (Pfiffer, 2001). It is a specific type of stressor related to academic overburdening. The pressure from various sources does not pose any problem as long as the student is capable of creating a balance and maintaining its equilibrium between his/her capacities the and

expectations and the pressure to deliver the results. However, when the expectations surpass the student's ability to reach a balance, he/she feels overburdened or overstressed. The person then starts complaining about having to do too many things in too little time.

Today students, at secondary and senior secondary level are facing a greater academic load than ever before and the reason behind it is that the present competitive world is pushing children beyond their limits without providing opportunities to maximise their potential. board Getting good scores in competitive examination is like fighting in a battlefield to win a war which calls for rigorous planning, strategizing, and practicing and low scores is like losing the war and end of life with no future. The cross-cultural studies revealed that average high school student in India spends on an average 5.5 - 7.5 hours per day in doing schoolwork as compared to their counterparts in America just 2-3 hours per Moreover adolescents in North day. America spend more time in leisure as compare to Indian student (Larson & Verma, 1999). **Psychologists** have deliberated that academic overload or stress

is causing distress among Indian adolescents (Iype, 2004).

A study conducted by a nonorganization 850 governmental with students found that 57% were depressed and 9% had thought of committing suicide as a result of academic stress (Pasmantier, 2005). Singhal, Manjula and Sagar (2016) also reported that adolescents in India scored higher on measures of depression, negative cognitions, lower social problem-solving skills, and problematic interpersonal relationships due to academic difficulties faced by them as compared to their counterparts in West. Government of India, MHRD, found the situation so alarming that it constituted National Advisory Committee (1993) and reported that academics are becoming an increasingly burdensome in schools due to over emphasis on cramming, homework, tuitions and making leisure a highly scarce for them. The growing trend of overloading young children is making learning tedious. The same had been reported by Ishwarbhai Patel Review Committee (1977), National Council of Educational Research and Training (NCERT) Working Group (1984) and National Policy on Education (NPE, 1990). Teachers also reported to feel that they failed to achieve the wider aims of education

in a realistic sense under harsh circumstances such as excessively large overcrowded classes, heavy syllabus and so on (N.A.C., 1993). It is also a widespread feeling that unless and until the students spend 10-12 hours in their studies, they won't not be able to cope with the competitive ethos of getting entry into the good professional courses.

Academic overload is one of the most common psychological stressors for our country's young people as a result of competition. It has been reported that 75% -90% visit to doctors are due to stress related problems (Agarwal, 2001). Agolla and Ongori (2009)studies reported that expectations of parents/family members as well as from own self were the stressors for academic overload among students. Academic overload is a mental distress aroused out of the academic failure or fear of such failure or even an awareness of the possibility of such failure (Gupta & Khan, 1987). Zeidner (1992) also reported that students were found to be under high mental pressure due to course overload and the prevailing academic evaluation procedures than from any personal and social factors. Bachman & Bachman (2006) also resolved that academic overload has negative impact

on learning quality and academic and nonacademic performance of students.

Wire, the news website reported in 2022 that more students in India died due to academic stress than for any other reason but it is yet to catch the public concern. Education has always taken as a tool to prepare the next generation to become responsible citizens, however, the process of education today has evolved as a social catastrophe in the form of academic distress. The gravity of situation is evident from this that the Tamil Nadu government has decided to appoint 800 doctors to provide psychological counselling to school students (Education and Career Desk, 2022, July 27).

Emergence of the study

The education system in India is in a state of flux. There was a time when education was considered as a means to inculcate moral values and refinement of body and soul. Over the period, it has attained utilitarian value and as a guarantee to get job and economic independence and there starts the cut throat competition to score higher and higher, causing extreme mental stress among students. When it reached to the dangerous level of causing multiple psychological ailments and even suicide, government and other social stakeholders at least started recognizing the negative side of

'grade/marks race'. At school there is a range of academic pressure feel, derived from a need for perfection, worry over grades, parental pressure, competition, sports, or a tough class load. The nervous breakdowns, panic attacks, burnouts, and depression are also apparent in many younger students. However it has been found that the score oriented orthodox assessment system still exists requiring the students to face a series of peak periods throughout the year burdened with academic Dumlao, overloads (Hudd, Erdmann. Murray, Phan, & Soukas, 2000). Further the gender and stream of study i.e. medical, non-medical and commerce as the pressure felt by male and female students and the students of different streams is different.

A lot many studies have been so far been conducted in this direction. However no study was found to be conducted on academic overload felt by secondary and senior school students preparing for competitive examinations. Students were considered to be the future pillars who take the responsibilities to take our country to the next phase they should be in better way. Therefore the investigator decided analysis the academic overload among preparing secondary students for

competitive examinations with respect to gender and stream of study.

Operational definition

Academic overload: In the present study, academic overload is defined by the excessive internal and external demands regarding academic performance, which creates disequilibrium in the mental life of the student. The stress or the feeling of burden resulting from various associated aspects of academic achievement is called academic overload.

Objectives

- To compare academic overload of male and female senior secondary school students
- To compare academic overload of senior secondary school students of medical, non-medical and commerce streams

Hypotheses

- There exists no significant difference between academic overload of male and female senior secondary school students.
- There exists no significant difference among academic overload of senior secondary school students of medical, non-medical and commerce streams.

Method

Descriptive survey method of research was used in the present study.

Sample

The target population for the present study was senior secondary school students i.e. students studying in +1 and +2 classes preparing for competitive examination for Engineering, Medical and Management/Law courses. A sample of 400 senior secondary school students comprising 200 male and 200 female students were selected from four senior secondary schools of Ludhiana district of Punjab.

Tool

Academic Overload Questionnaire (AOQ) by Mitra and Sengupta (2005)

Statistical techniques

To test the hypotheses, t-test and One-way ANOVA followed by least significant difference (LSD) post hoc test were employed.

Results: Result of the study is discussed below:

Table 1: Difference of Means of Senior Secondary Male and Female students preparing for competitive examination on the variable of Academic Overload (N=400)

Variable	Category	N	Mean	SD	SE _M	t
Academic Overload	Male	200	83.68	16.43	1.16	6.08*
Academic Overload	Female	200	74.64	13.14	0.93	0.08

^{*}Significant at 0.01 level of significance

The perusal of Table 1 shows that there exists a significant difference between male and female senior secondary school students preparing for competitive examinations after +2 (t=6.08; df=398), Thus hypothesis 1 stating that there exists no significant difference between academic overload of male and female senior secondary school students stands rejected.

Further as mean scores of male senior secondary school students preparing for competitive examination was found significantly higher than that of their female counterparts. Hence it may be concluded that male senior secondary school students preparing for competitive examination feel more academic overload as compared to female students.

Table 2: Summary of Analysis of Variance for Scores of Academic Overload among Senior Secondary Students preparing for Engineering, Medical and Law/management courses (N=400)

	Source of Variation	SS	$\mathbf{d_f}$	MS	F- value	p- value
Academic	Between Groups	4248.08	2	2124.04		
Overload	Within Groups	92005.68	397	231.75	9.17	0.000
	Total	96253.76	399			

Table 2 depicts the F-ratio among the groups of senior secondary school students preparing for Engineering, Medical and Management/Law courses on academic overload. The *F*-ratio (F=9.17, p=0.000) indicates that there exists a significant difference in academic overload among

senior secondary school students preparing for Engineering, Medical and Management/Law courses as the corresponding p-value has been calculated as .000 which is less than 0.01, which shows, that the difference is significant at 0.01 level.

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Hence, hypothesis 2 stating, 'There exists no significant difference among academic overload of senior secondary school students of medical, non-medical and commerce streams 'is not retained.

academic overload, least significant difference (LSD) post hoc test has been applied for conducting post hoc tests on one-way ANOVA as, is the preferred test for the above said purpose.

Further, to find out which pair of groups differed from each other in their

Table 3: Pair-wise Comparison of Academic Overload among Senior Secondary Students preparing for Engineering, Medical and Law/management courses (N=400)

	Academic Overload			
	Engineering Stream	Medical Stream	Law/Management Stream	
	N=142 Mean=80.01 Standard Deviation=12.48	N=196 Mean= 80.93 Standard Deviation = 16.55	N=62 Mean=71.61 Standard Deviation = 16.51	
Engineering Stream	-	Mean Difference=0.91 SE _D =1.65 t=0.55 p=0.580	Mean Difference=8.40 SE _D =2.10 t=3.99** p=0.000	
Medical Stream	-	-	Mean Difference=9.32 SE _D =2.41 t=3.86** p=0.000	
Law/Management Stream	-	-	-	

^{**}Significant at 0.01 level of significance

Table 3 represents the results of LSD post hoc test which reveals that there is no significant difference between mean scores of academic overload among senior secondary students preparing for engineering and medical courses with non-significant p-value (t=0.55, p=0.580>0.05).

Similarly, scores of academic overload shows significant mean difference between senior secondary students preparing for engineering and law/management courses with significant p-value (t=3.99, p=0.000) which indicates difference is significant at 0.01 level of confidence.

Further, scores of academic overload also shows mean difference between senior secondary students preparing for medical and law/management courses (t=3.86, p=0.000) with significant p-value at 0.01 level.

To sum up, it can be concluded that out of senior secondary students preparing for engineering, medical and law/management courses. academic overload is highest among students preparing for engineering and medical courses whereas academic overload is least students preparing for among law/management courses.

Conclusion: On the basis of the above results shown in the above Tables, it may be concluded that:

 Gender has a significant impact on academic overload among senior secondary students preparing for engineering, medical and law/management courses with male

- students experiencing higher academic overload.
- 2. The stream of the study has a significant impact on academic overload among senior secondary students preparing for engineering, medical and law/management courses with male students experiencing higher academic overload.
- 3. The academic overload among senior secondary students preparing for engineering and law/management courses; and medical and law/management differ courses significantly with senior secondary students preparing for engineering and medical courses experience academic higher overload compared to students preparing for law/management courses.

Implications: The academic overload among students especially those preparing for competitive examinations have become a gigantic problem which needs to be addressed at the earliest. All efforts to curb it at government level have failed so far leading to still loss of many precious young lives every year. The present study gives an insight into

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the patriarchic structure of society where male is still under more pressure to achieve excellence leading to higher academic overload on them causing frustration, anxiety, suicidal ideation and even actual suicide in certain cases. study reveals Moreover the academic overload is highest among students preparing for engineering and medical courses which indicates that we are still in the rat race of making our children either engineer or doctor without taking their own potential and aspiration into consideration and hence putting them on tight rope.

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CONSTRUCTION OF ACHIEVEMENT TEST IN SCIENCE

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Abstract

The investigator under the Punjab School Education Board has created and standardized the Science achievement test for class IX. The steps involved in creating an achievement test for science include planning, getting ready, choosing the items, testing, scoring, and item analysis. After consultation with experts and administration on students, the test's original 92 items were cut to 77. A draught of 62 test items was produced after the problematic test items were removed. The test's final version had 45 items after a thorough item analysis. The test retest reliability of the test after a gap of 20 days was found to be 0.83. The content validity was ascertained by preparing a blue print of the test items indicating the weightage given for the objectives and discussing it with the panel of experts. 65 minutes was established as the test's time limit.

Key Words: Achievement test, Science, IX class students, Government schools

Introduction

A student's grades, honours, and marks in academics and other extracurricular activities in school are often correlated with their level of achievement. Psychologists and educators have used a variety of definitions describe achievement. to Achievement was defined by Crow and Crow (1965) as the extent to which a student gains knowledge from instruction in a particular subject. Achievement in science is the collective term for all behavioural adjustments that people go through as a result of theoretical and practical learning experiences. According to Spinath (2012),

academic achievement is associated with performance outcomes in the intellectual disciplines taught in high school, college, and university. According to APA Dictionary of Psychology (2022) any discernible success in the fields of scholarship or disciplined study is referred to as academic achievement.

Achievement in science refers to all those behavioural changes that people go through as a result of learning experiences of many types, both theoretical and practical, in the discipline of science. The degree or amount of success or proficiency gained in a particular area of science is thus

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referred science achievement. to as Typically, it relates to the grade received in the science subject (Renu, 2014). Science achievement is the comprehension of scientific ideas, the use of information and abilities in novel contexts, and logical reasoning. Achievement test also aids in: (1) **Improving** student motivation. Increasing retention and transfer of learning. (3) Increasing student self-understanding. Providing feedback (4) concerning instructional effectiveness.

Achievement test in the current study was based on the selected topics of science of grade IX text book. The test was based on the taxonomy of educational objectives suggested by Bloom (1956). The various steps undertaken to develop the test are given below:

Planning the achievement test: The most crucial phase of any test development is careful planning. In this step, the investigator specified the test's learning objectives. After reviewing the material, it was decided what kinds of questions and how many things would be on the examination. Additionally planned were the test's blueprint and the shape of the draught's objectives.

The aim of the test was to measure achievement of students of class IX of

P.S.E.B. in the subject of Science. The achievement test items were created based on learning objectives such as knowledge, understanding, analysis and application in Science. The IX class students studying in Government schools in the Gurdaspur district affiliated with the P.S.E.B. Mohali, Punjab, India were the test's target population.

The test's subject matter was carefully chosen, and the test objects were meticulously made. A large number of achievement tests were carefully observed and studied prior to the development of test items. The achievement test's material was basic, kept simple and written in understandable English and Punjabi. The format of the test was decided, along with its type and quantity of questions, and the blueprint of the test was created.

Test items for the achievement test: The main objective of achievement test in present study is to measure the learning outcomes of students when taught by specific teaching strategy i.e. Problem Based Learning and lecture method in the subject of science. For assessing the science proficiency, only multiple-choice questions were included in the test. These type of questions are objective in nature and by

these tests one can reduce the subjectivity at minimal level.

The following points were considered while writing multiple choice test items:

- Each question measured knowledge, understanding, analysis, and application of the topic; it did not measure non-significant aspect of the content.
- 2. Each question evaluated a single objective.
- The information was presented in concise, understandable, and straightforward English and was also translated side by side into Punjabi.
- 4. Each item underwent a basic grammatical, punctuation, and spelling check.
- 5. Items that might have offered a hint to the solution were avoided.
- Specific determiners such as always, never, rarely, and occasionally were avoided.
- 7. The use of the options "all of the above" and "none of the above" was reduced because it has been shown in numerous studies that doing so reduces item discrimination and test score.

Preparation of achievement test: After carefully considering the reasons mentioned above, the investigator created a multiple-choice achievement test. The subjects from six chapters of the science textbook for the ninth grade were used to create the test items. A total of 92 questions were created from the purposed science themes by carefully including the distractors in the form of Multiple Choice questions (MCQ). Experts of science teaching were consulted for this test in order to obtain their insightful views.

On the basis of advice from experts, fifteen questions were dropped from the test. The items were eliminated because of their high level of difficulty, unclear questions, insufficient options, or distractions. After incorporating advice from experts, the investigator drafted 77 multiple-choice questions.

Small group try out: The test, which consisted of 77 multiple-choice questions, was given to 35 students of tenth class from Government High School, Moni Mandir, Dhariwal, district Gurdaspur, Punjab, India (school not included in the sample for conducting the experiment), affiliated to the Punjab School Education Board, Mohali. This stage in the development of an achievement test aids in the detection of

items that are too difficult for the students as well as the detection of difficult words in test items. A good rapport had been established with the pupils before the test's administration. The major goal of this test was to identify the challenging and ambiguous items or words, and it was adequately communicated to them that test results would not be disclosed to anybody. Following instructions test booklets containing 77 multiple-choice questions were distributed to the students.

After the small group trial, 15 test items out of a total of 77 were eliminated because of difficult words, confusion in options, and other ambiguities. Therefore, a draught of 62 test items was made after the problematic test items were eliminated, along with a blueprint, and it was prepared for large group testing.

Large group try out (Final try out): 214 students from three Government Senior Secondary Schools in the Gurdaspur district of Punjab, India- Government Senior Secondary School Kaler Kala, Government Senior Secondary School Kot Santokh Rai, and Government Senior Secondary School Rania were given the achievement test's final draught. Before beginning the test, all students received thorough instruction. They were told to carefully study each question

before selecting the best response from the available options. They were also told to fill out the Optical Mark Recognition (OMR) form after selecting the correct answer, to try every question, and to darken no more than one circle for every given question. After receiving all of this instruction, students were given a test booklet and an OMR sheet to complete the responses. Students were told not to write anything on the question booklet and to simply fill out the OMR page with their name, roll number, and name of school. OMR sheets were evaluated using the answer key once the test was finished. On the basis of this criterion, the total marks were determined. Correct responses received 1 mark. whereas incorrect and unattempted responses received 0.

Item Analysis: In item analysis suitability of each item was seen statistically one by one and it is used for selecting and rejecting the items of a test based on their difficulty value and discriminative power. Item analysis is a set of procedures that is applied to know the indices for the truthfulness of items. Item analysis, according to Franzen (2011), is a crucial step in the test construction in classical test theory since it helps determine whether to remove, revise, or reassign a specific item to the test.

Purpose of item analysis

- To select the appropriate items for the final draft of the test.
- Rejection of the weak items that do not contribute in the test.
- To calculate the difficulty value of all the items of the test.
- Classification of items as difficult, moderate and easy.
- To obtain the discriminative power to classify students on the basis of their capability to attempt the items.
- Modify the items that need modification
- For arranging the items in systematic order.
- Indicate the role of distractors as options in multiple choice questions. This helps to change the confusing and overlapping distractors.

Steps of item analysis

- Scores of students were arranged in descending order
- By following 27% criterion two sub groups were formed, named upper and lower group (Kelley, 1939; Ebel, 1965).
- Upper group is consist of 27% high score students and lower group

- consist of bottom 27% score of students (Kelley, 1939; Ebel, 1965).
- These were called the Extreme Group number.
- Both groups (High and Low) were kept separately.
- Central/ middle 46% of the sheets were kept aside.
- Number of students answered a particular item correctly in higher group was calculated.
- Number of students answered a particular item correctly in lower group was calculated.

For Item Analysis one should calculate the Difficulty Value (D.V.) and Discriminative power (D.P.)

Difficulty value (D.V.)

The difficulty of an item is defined as the proportion of people who correctly answer a test item (Nunnally, 1972; Crocker & Algina, 1986; Thorndike, Cunningham, Thorndike, & Hagen, 1991). The greater this proportion, the easier the task. It denotes an inverse relationship, i.e. the greater the difficulty of an item, the lower its index (Wood, 1960). To determine the difficulty of an item, divide the number of students who correctly answered it in both groups by the

total number of students in both upper and lower groups.

D.V. = R.U + R.L/(N.U + N.L)

R.H = Rightly answered in upper group

R.L = Rightly answered in lower group

N.U = Number of students in upper group

N.L = Number of students in lower group

Discriminative power (D.P.)

A good item should discriminate between those who score high on the test and those who score low. Blood and Budd (1972) defined "Index of discrimination is that ability of an item on the basis of which the discrimination is made between superiors and inferiors". For calculating the Discriminative power (D.P.) following formula is used

D.P. = R.U. - R.L. / N.U. or N.L.

R.H = Rightly answered in upper group

R.L = Rightly answered in lower group

N.U = Number of students in upper group

N.L = Number of students in lower group

The item discrimination index value is typically expressed as a decimal and ranges from -1.00 to 1.00 (Amedahe & Asamoah-Gyimah, 2016).

Zero discrimination or no discrimination:

An item has Zero or No discrimination if, it is answered correctly by all the students or, it is not answered correctly by any of the student. The items whose Discrimination Power is zero should also be rejected (Ebel, 1972; Ebel & Frisbie, 1986; Maheshwari & Maheshwari, 2013).

Positive discrimination: when an item is answered correctly by higher group and is not answered correctly by lower group of students. The items whose Discrimination Power is higher than 0.40 are very good items and 0.20 to 0.39 can be accepted with little modification and item below 0.20 should be rejected (Ebel, 1972; Ebel & Frisbie, 1986).

Negative Discrimination: An item has negative discrimination power if it is answered correctly by the lower group and answered incorrectly by the higher group. The items whose Discrimination Power is negative should also be rejected (Ebel, 1972; Ebel & Frisbie, 1986; Maheshwari & Maheshwari, 2013).

This test was administered to a total of 213 students in the final trial run, and the students were arranged in descending order of achievement to calculate the difficulty value and discriminative value. The students were divided into three groups based on the 27% criterion: upper, lower, and middle. Because we only need the upper and lower groups, the middle group scores are set aside. 27% of 213 equalled 57 students, but the score from the 57th to the 59th student

was the same. As a result, 59 students were assigned to the higher group. Similarly, the lower group consisted of 59 students who scored lowest from bottom. D.V and D.P

values were calculated using the difficulty value and discriminative value formulas.

Investigator followed a criterion to select the items as shown below:

Table 1: Criteria for selection of items

Negative or Zero discrimination	Rejected
Positive discrimination between 0.20 to 0.70 D.P. value.	Accepted
High and low difficulty value i.e. below 0.20 and above 0.70	Rejected

Final draft of the achievement test

The final draft of the achievement test of Science was prepared and organized on the basis of item analysis for difficulty value and discriminating power. Garrett and Woodworth (1981) state that "as a general rule, validity indices of 0.20 or greater are regarded as satisfactory." On this basis, items with difficulty values and

discriminating values ranging from 0.20 to 0.70 (Streiner, Norman, & Cairney, 2015) were retained in the achievement test. Item numbers 2,6,7,9,14,20,22,29,31,32,33, 38,44,50,57,61, and 62 were rejected based on this criterion. 45 items were retained from a total of 62 for the final draught of the achievement test. The final blue print of achievement test is given below:

Table 2: Blue print of final draft of achievement test of Science.

Sr.	Chapters	Knowledge	Under-standing	Analysis	Application	Total
No.						
1.	Matter in our surrounding	3	3	1	1	08
2.	Is matter around us pure	2	3	1	2	08
3.	Motion	2	3	1	1	07
4.	Force and laws of motion	2	3	0	1	06
5.	Why do we fall ill	2	4	1	1	07
6.	Natural resources	3	4	1	1	09
	Total	14	20	5	7	46
	Weightage	30.43%	43.49%	10.87%	15.22%	

Reliability of the achievement test: The reliability of achievement test of Science was determined by test-retest method for the present study. Test was again conducted on a sample of 213 students Government Senior Secondary school Kaler Kala, district Gurdaspur; Government Senior Secondary school Kot Santokh Rai, district Gurdaspur; and Government Senior Secondary school

Rania, Dhariwal, district Gurdaspur. Retest was conducted on the same students after the time interval of 20 days. The product moment coefficient of correlation between the scores of first test and the scores of retest was found to be 0.83. Which is significant (p<0.01). The value of coefficient of correlation was fairly high to express the soundness of achievement test of Science.

Table 3: Index of reliability of achievement test in Science

N	Index of reliability	p
213	0.83	0.00

Validity of the achievement test: In the current study, the investigator used careful observation to create the achievement test only from the selected topics of science text book of ninth class. While constructing the test, best efforts were for controlling the factors effecting validity. For determining the content and face validity, test is discussed with experts and supervisor. The test was given to 9 science teachers and 7 experts from colleges of education. The panel was asked to identify which test items corresponded to which outcomes.

The experts agreed that the test items are assigned to the corresponding objective. This procedure aided the investigator in determining the face and content validity of the Science achievement test.

Time limit of the test

A test's time limits should be standardized to ensure that there are no irregularities and that the conditions are uniform and identical for all students. The time taken by each student while administering the test was recorded by the investigator in order to estimate the time required to complete the test. The average time of the first 95% of students was calculated to be 65 minutes. As a result, it was established as the test's time limit.

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GAMIFICATION: AN INNOVATIVE APPROACH OF TEACHING

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Abstract

Gamification is gaining popularity across a number of industries, including education. Researching gamification's many dimensions is essential because it is now widely used in education. In this study, the researcher used secondary data to examine the significance and gamification strategy. The purpose of the study was to examine the development and various forms of gamification. Finally, it can be said that gamification is a useful technique for influencing students' attitudes about learning and boosting their motivation to learn. According to the study's findings, it enhances performance and increases content understanding, along with producing a favourable learning environment. It has the potential to be a formidable tool for retaining students' attention in the classroom, but if it is introduced and applied incorrectly, this novel idea runs the risk of losing its value and relevance. Understanding the dangers and limitations of using gamification is essential for implementing it the field of education.

Keywords: Gamification, innovative, approach, teaching.

Introduction

The current era is competitive, and it is critical that students develop an interest in their teaching-learning process, or they will fall behind in this horse race. So, in order to stimulate students' interest in their learning, several new techniques to teaching must be used to broaden their knowledge. Gamification is one of these ways. The term "gamification" was first used in 2002 (Burke, 2014), but it gained popularity in 2008, with no prior evidence, and it was extensively used in the second half of 2010. However, the concept is not new; Soviet Union officials used military badges and ranks to replace monetary prizes for good performance and other reasons. Gamification is quickly being adopted in business, wellness environmental and efforts. marketing, and corporate management (Deterding, Dixon, Khaled, & Nacke, 2011). This approach has been used in many fields, including education, health, environmental project management, software protection, outsourcing, and development, by numerous academics and practitioners (Deterding, 2012). Gamification is utilized in a wide range of situations and for a wide range of purposes.

It can also be used as an operator to promote fundamental concepts such as consumer connection, company branding, learning, staff performance, and crowd-sourcing initiatives (Pathak, & Aggarwal, 2021). It is the discipline of applying features and concepts from game design to non-gaming environments. It can also be defined as a set of activities and strategies used to solve problems by leveraging or utilizing game elements' capabilities. For thousands of years, games and game-like characteristics have been utilized to educate, entertain, and engage people. Points. badges, leaderboards are all traditional game aspects. Leaderboards are used in sports, sales teams, and everyday life to represent competitive placement. Military service or a gold star on a school report card are examples of badges used to demonstrate success. Aside from indicators of that, visual athletic development include incentive cards and video games (Walter, 2022).

Meaning of Gamification in Education

In 2010, the term "gamification" became more popular in academia (Hamari, Koivisto, & Sarsa 2014). In the fields of work and school, this technology is still rather young. It involves applying game mechanics, such as game rules, point scoring, and rivalry with others, to various

types of activities, particularly encouraging individuals to solve problems. It is a method for enhancing motivation and engagement by adding game-like components to nongaming activities. Its objective is to compel users to engage with the content, especially when it comes to less enjoyable duties like a thorough safety training programme or compliance training. Gamification is the latest emerging trend in education, as has been discussed above. Numerous studies on gamification have been conducted, and they are periodically published. People are engaged, educated, and motivated via gamebased techniques. It is the use of game thinking in a situation that is not a game. Additionally, it fosters education and inspiration in both official and informal contexts. The term "gamification" describes a combination of various cognitive exercises and gaming elements that aren't actually games. According to Crawford (2003), gamification can also be employed in the classroom to improve student behavior. When students engage in examples of good behavior, they might be rewarded. The awards that result can be specific badges that serve as a concrete reminder of their efforts. The game allows the teacher to provide real-time feedback, which aids in positively reinforcing acceptable behavior.

According to Deterding et al. (2011) gamification is the application of game design ideas to contexts outside of games. Gamification was defined as "the technique of game-thinking using game mechanics to engage people and solve problems" by Zichermann and Cunningham (2011).Gamification, according to Zichermann and Linder (2013), is the "use of design elements from schemes, games, loyalty behavioural economics to encourage user engagement." Rasure (2021)defines gamification as the use of game-like features to encourage individuals to participate in non-game contexts and activities. According to Fiuza-Fernández, Lomba-Portela, Soto-Carballo. Pino-Juste and (2022)gamification is the application of game elements in non-recreational situations, such as the classroom, to promote motivation, focus, effort, dedication, and other good values shared by all games. Gamification in education, according to Blankman (2022), is the process by which teachers incorporate elements of game design into a classroom environment. Usually, the aim is to increase learning engagement.

Gamification is not a direct correlate of expertise and knowledge. According to Huang and Soman (2013), gamification has an impact on students' commitment,

behaviour, and motivation, which can result in an improvement in their knowledge and skills.

Elements of Successful Gamification

Points, scoring, leaderboards, progress bars, ranks, awards, and incentives are all typical gamification components that frequently show up in the application of gamification Telaprolu, (Nah, Zeng, Ayyappa Eschenbrenner, 2014; Seaborn & Fels, 2015; Armstrong & Landers, 2018). Gamification also includes the insertion of a narrative or stories (Armstrong & Landers, 2017). Goals and challenges, personalization, feedback, visible feedback, freedom of choice, freedom to fail, and social involvement are common gamification design elements (Dicheva, Dichev, Agre & Angelova, 2015).

The most common elements are points, challenges, badges, and leaderboards, while gamification elements can be categorized into five different types, including progressive achievement, social interaction, immersion experience, nondigital elements, and others. (Majuri, & 2018). Koivisto Hamari. Acknowledgement is often referred to by the terms achievement, badges, medals, and trophies. It is one of the components that gamified applications employ the most

(Klock, Ogawa, Gasparini & Pimenta, 2018; Koivisto & Hamari, 2019).

Mechanism of gamification

- (1) **Objectives:** Complete the assignment and receive a prize, such as a badge or points (Narula, 2022; Sajitha, 2022).
- (2) Status: Users' levels or ranks rise as they complete tasks. When users view leaderboards that display the names of the "winners," they are inspired to work harder to compete (Narula, 2022; Sajitha, 2022).
- (3) Community: Users are partnered or put into groups to solve issues, finish tasks, or accomplish goals (Narula, 2022; Sajitha, 2022).
- (4) **Education:** Throughout the procedure, the user is given hints, shortcuts, and tests (Narula, 2022; Sajitha, 2022).
- (5) **Rewards:** Common and practical rewards include badges and points. Another option for the incentive is a discount, coupon, or gift card. As a result, the user experiences a high level of motivation and engagement (Narula, 2022; Sajitha, 2022).

Using gamification in education, Meyer (2016) advises that teacher should: (a) start by defining goals and objectives, (b) begin small and develop gradually, (c) connect with other educators by playing games, and (d) employ basic game-creation tools.

Objectives

- 1. To study the need and significance of gamification.
- 2. To study the platform of gamification in the field of education.
- 1. Need for the gamification in **Education:** The main issues in modern education are a lack of student involvement and motivation to actively participate in the learning process. As a result, teachers are attempting to employ innovative strategies and approaches to stimulate student activity and encourage them to participate in training. Making lessons interactive is the biggest error a teacher can make. Some teachers find it challenging to communicate with their students while in class. If you find that your attention is being drawn away from your work, set aside a day only for conversation. You might include some interactive exercises in your lesson. To encourage student involvement in your classroom, employ brainstorming sessions, group discussions. debates. peer assessments, or other activities. As a teacher, you must be aware of your students' pulses and how they react to certain events situations (Vallikat, 2020). and One alternative option is to use prizes to recognize and reward efforts and outcomes, an increased desire resulting in

involvement and activity. The utilization of gaming components in the learning process influenced this decision. The application of game mechanics and aspects in an educational setting is known as gamification in education. E-learning, which is based on modern ICT, makes it easier to use gamification because data processing and tracking are automated, and software tools can generate extensive results.

The use of game components in education makes sense because some truths are common to both games and training. In games, players' activities are geared at obtaining a specified goal (victory) in the face of difficulties. There is a learning objective in education that must be met through specific learning activities or engagement with educational content. The ability to track the progress of players in games is critical because subsequent actions moves are determined by their and outcomes. It is critical in education to keep track of pupils' development to meet learning objectives. The degrees information and skills attained by students define their learning path (Glover, 2013).

Collaboration in education is a key component of successful active learning implementation. Games with a strong competitive aspect, as opposed to training games, have a strong competitive element. Instead of rivalry among students, the focus of the learning process should be on building abilities for collaboration and teamwork, as well as accountability for the group's performance. Gamification has nothing to do with knowledge or abilities. It has an impact on students' behavior, dedication, and motivation, which can lead to knowledge and skill gains (Huang & Soman, 2013).

2. Various Platforms of Gamification use in Education

a) Computer Games (Minecraft-Education Edition): Math Blaster and Treasure Mountain are two of the first instances of popular educational games (Barrios. 2022), but Minecraft: Education Edition is one of the best and most recent examples of Gamebased Learning (Whitworth, 2022). This game uses one of the most popular game forms in the world to educate kids on how to code. If you're a teacher, you already know how much this game and the game mechanics that come with it are loved by your

- students (Burmeste, 2022; Kanazawa, 2022; Walter, 2022).
- b) Apps (Read-Along by Google):
 Google's "Read Along" is another appbased learning activity (Hyder, 2020;
 Khan, 2022). The software encourages
 kids to read and follow along with
 stories using Google's speech
 technology. It gets a lot of positive
 feedback and is used all around the
 world (Burmeste, 2022; Kanazawa,
 2022; Walter, 2022).
- c) Kahoot in the classroom: With Kahoot, you can quickly create a multiple-choice quiz by sharing a website URL. Students can now use their phones for constructive purposes, such as selecting or entering their answers to in-class quizzes in real-time. One of the most simple and dynamic instances of gamification inspiring students in the classroom is Kahoot (Bariuad, 2022; Burmeste, 2022; Kanazawa, 2022; Walter, 2022).
- d) Archy Learning's eLearning
 Platforms: Archy Learning is a
 gamified eLearning platform (Bariuad,
 2022) that is simple to use. Teachers
 can use a learning pathway to cut and
 paste YouTube links and classroom
 notes. The addition of gamification

techniques in the form of class quizzes, instructional video games, mixed media exams, and handed certificates upon course completion for an all-around gamification learning experience is where it becomes truly exciting (Burmeste, 2022; Kanazawa, 2022; Walter, 2022).

Ways to Gamify the Classroom: When planning lectures, teachers should always keep student motivation in mind. If gamification was employed in the classroom, students might be encouraged to learn in unique ways or appreciate subjects that would otherwise be boring.

- a) Assign students "quests" to learn about a new topic or finish a project in place of worksheets in class (Kolb, 2015).
- b) Play cooperative games like Jeopardy as a class to study for a test (Rivera, & Mathews, 2004).
- c) Have students earn points toward a class field trip by acting appropriately and completing their work (McCarthy, 2021).
- d) To boost motivation, pair subjects that a student struggles with or dislikes with enjoyable literature or activities (Tripathi, n.d.).

e) If you're having trouble motivating your class to learn, have a conversation with them about what drives them as students, either collectively or individually, and include that into your student engagement tactics (Cook, 2013).

Significance of Gamification as an **Innovative Technique:** Gamification in education is a relatively new and rising topic that has received a lot of attention in the educational community. Along with it, uses gamified components to help organizations solve complicated challenges by using the incentives of natural gameplay (Rutkauskiene, Gudoniene, Masukeliunas & Blazauskas, 2016).

- student's 1) Enhances learning: Gamification in education can boost student engagement more than a typical lecture or textbook reading. Students who do not find a subject interesting could appreciate it if it is presented in a fun way. Additionally, gamification has the ability to give immediate performance feedback and show progress, which can serve as a motivator (Bujan, 2021; Cheung & Lg, 2021).
- 2) **Obsoletes:** Gamification has the potential to take the place of textbooks,

- conventional brick-and-mortar schools, and classrooms in the field of education. Gamification is often advantageous for distance learning when a structure or classroom are required. not Theoretically, computer-based or online educational resources like textbooks, articles, websites, and other pertinent available might be made material through gamification and distance learning, doing away with the necessity for printed textbooks and articles. Because internet databases would house all of the resources needed by the gamified student, libraries would become unnecessary (Alsaad & Durugubo, 2021).
- 3) **Retrieves:** Another 21st-century skill that our students need is collaboration, gamification may help resurrect this practice by offering them opportunity to more connect. collaborate, and interact with other students from different backgrounds and cultures (Riar, 2020). While learning from failures is the main method of learning in gamification, traditional learning has long reinforced the idea that failure is not an option. Failure encourages students to reevaluate their problem-solving techniques and examine

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- their theories, which enhances their learning (Kallevig, 2015).
- 4) Reverses: While the benefits of gamification in education that have been stated are commendable, it would be folly to ignore any potential drawbacks or problems. Gamification in a learning environment has the potential infantilize learning if not used properly. Students can think that learning the material is useless if the gamification experience is not fun. Furthermore, the emphasis would be on the advantages and triumphs a student could achieve rather than the self-satisfaction of recently gained knowledge. Learning with a higher intrinsic value is learning that is only concerned with reaching a certain (Joannelushdesigns, goal 2015).

According to study conducted by Loos and Crosby (2017), gamification enhances learning results. In on-campus, online, and hybrid classrooms, a wide range of subjects are taught, from languages to multimedia journalism to computer science. Smiderle, Rigo, Coelho and Jaques (2020) contend that the gamification of education can raise student engagement levels in a manner akin to those of games, helping

students to develop specific abilities and maximize their learning. The study by Mee, Shahdan, Ismail, Ghani, Pek, Von, Woo and Rao (2020) revealed that gamification in education is crucial for enhancing students' problem-solving, critical thinking, creative abilities. Subconsciously, learners become more interested in language acquisition when engaging and exciting activities included. Benefits are gamifying education according to Barghani (2020)include: increasing student engagement, motivating students, fostering teamwork, aiding in information retention, and creating a more individualized learning environment.

Gamification's drawbacks in schooling:

Gamification in education is an innovative strategy that gives students the chance to excel. But if we use it excessively and experiment with it just because it is fashionable, we would not obtain the outcomes we want. In some situations, gamification can be beneficial; in others, not so much. It should be carefully crafted to meet the objectives of your business and audience (Savonin, 2019).

1) **Expensive to Construct:** Compared to conventional instructional design, games require more time to develop.

Money is time. Due to the increased pressure on time, it doesn't take much to go over budget (Johnson, 2017; Savonin, 2019; Gupta, 2022; Stewart, 2022).

- 2) Diminished Value over Time:
 Games are expensive to develop as well as to maintain. Cool games released a few years ago quickly start to look out of date (Gupta, 2022; Stewart, 2022).
- 3) Only Poorly Masked Games: Games are supposed to be enjoyable. Who finds exams and quizzes enjoyable? It takes time and imagination to design engaging, interactive games that aren't just quizzes masquerading as entertainment. Just as in any other eLearning course, assessments in games must be related to the learning objectives (Gupta, 2022; Stewart, 2022).
- 4) **Surface Motivation:** Gamification may just present a pupil with a superficial sense of motivation that won't necessarily help them become ready for the real world. Because of this, educators must make sure to incorporate gamification with other teaching resources that will help

students address real-world issues (Johnson, 2017).

Conclusion: Gamification in the classroom has the potential to be a powerful tool for holding students' attention, but if it is introduced and implemented incorrectly, this unique notion runs the risk of losing its usefulness and relevance. It is critical to understand the risks and restrictions related to the use of gamification. Even though gamification has the potential to raise student accomplishment and engagement, educators must keep their focus on learning objectives rather than merely adopting the latest and most in-demand technological innovations.

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LOCUS OF CONTROL OF SOCIALLY DISADVANTAGED SECONDARY SCHOOL STUDENTS IN RELATION TO THEIR SELF-EFFICACY

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Abstract

The present study was aimed to find the locus of control among socially disadvantaged secondary school students in relation to their self-efficacy. The sample of the study consisted of both boys and girls of 9th and 10th classes from Govt. and private schools in the age range of 13 to 17 years. Locus of control scale (LCS) by Hasnain and Joshi (2017) and Self-Efficacy Scale (SES-SANS) by Singh and Narain (2014) were used to collect the data. The results showed no significant difference in the mean scores of the locus of control of Government and Private school socially disadvantaged students. The results showed no significant difference in the mean scores of the self-efficacy of Government and Private school socially disadvantaged students. There is a strong positive correlation between locus of control and self-efficacy of socially disadvantaged students.

Key words: Socially disadvantaged children, locus of control, self-efficacy, Government and Private school.

Introduction

Children who originate from economically and socially poor backgrounds are said to be socially disadvantaged. Children who are socially disadvantaged frequently lack have adequate nutrition and their fundamental needs not properly met. Their parents could struggle to buy the required textbooks and might not be able to cover the fees. The best illustration of a socially disadvantaged child is one who belongs to a scheduled caste, is from lower socioeconomic class, lives in a border region, or lives in a distant portion of the nation. He never gets the same benefits that the majority of other kids do. A socially disadvantaged child is a deprived child from cultural point of view. The cultural deprivation is the result of poverty for which a large number of children do not get the opportunity for their educational development. In this way, the term deprivation is defined as Singh (2015) "for all those deficiencies, defects and ailments prevailing in one's environment that may cause him to face disfavor, loss, or deficit

with respect to the desired facilities, opportunities, help and guidance for his proper development and adjustment in comparison to other people living in the same or some other environment."

Locus of control

The degree to which people think they have some control over circumstances that impact them is referred to as their locus of control (Rotter, 1954). Rotter created the idea in 1954, and it has since grown to be a crucial component of personality research. The belief system a person has about what led to his her experiences and circumstances were responsible for success or failure is known as the locus of control (Joelson, 2017). A person's perceptions about their level of control over their life's events and their ability to impact the environment around them are referred to as their locus of control (Eatough, 2022). A concept known as locus of control is used to classify people's fundamental motivational inclinations and perceptions of their level of control over their lives (APA Dictionary of Psychology, 2022).

An individual with internal locus of control thinks that their successes in life are determined by their own decisions and actions (Neill, 2006). An individual with an external locus of control feels that "luck,

chance, or powerful others" are responsible for their successes or outcomes in life (Mearns, 2008). One can have an internal locus (Latin for "place" or "location," indicating that the person thinks they are in control of their lives) or an external locus (meaning they believe that their environment, some higher power, or other people control their decisions and their life) (Eubanks, 2018).

How a person attributes their own or other people's activities to accomplishment or failure of their goals defines their locus of control. There are two types of loci of control: internal and external. An internal locus of control is when the accomplishment or failure of a task is attributed to individual traits, actions, and abilities. An external locus of control ascribes achievement to chance, fate, or other elements beyond the subject's control. People with an external locus of control are less likely to exert the effort necessary to study challenging information and comprehend its content.

Self-efficacy

Self-efficacy is the phrase used to describe a person's belief in their capacity to carry out an activity or realize a goal. Albert Bandura was the one who first came up with the idea. Today, scientists assert that our perception

of our ability to perform at a task can affect whether we actually do so (Hopper, 2021).

"A person's appraisal of his capacity to undertake an activity and the effect this impression has on ongoing and future conduct of the activity," according to Smith (1989), is what self-efficacy is defined as. Self-efficacy was described by Bandura (1977) as the confidence people have in their ability to bring about desired results through their own efforts. A major predictor of the achievement of further competences and successes is one's sense of self-efficacy.

A belief in one's capacity to carry out a specific activity or task successfully is referred to as self-efficacy (Cassidy & Eachus. 1998). Self-efficacy is the confidence we have in our own talents, particularly our capacity to overcome obstacles and successfully accomplish a task (Akhtar, 2008). A person's self-efficacy is their confidence in their capacity to finish a task or accomplish a goal (Cherry, 2022). Your perceptions of your capacity to successfully carry out the tasks necessary to achieve a desired objective are referred to as your "self-efficacy" (Maddux, & Kleiman, 2022).

Self-efficacy is the conviction that a learner has the intrinsic ability to accomplish goals. It is crucial for the ability to make decisions and solve problems. Self-efficacy is future-focused and correlated with aspirational positivity. Self-efficacy is a measure of pupils' confidence in their ability to carry out a task successfully.

Emergence of the problem

Ashagi and Beheshtifar (2015) found a significant positive correlation between internal locus of control and self-efficacy beliefs. However, no significant correlation was reported between self-efficacy and external locus of control. On the other hand Malarkodi and Magdalin (2019) revealed no significant relationship between internal locus of control and self-efficacy. Whereas significant relationship was found between external locus of control and self-efficacy. The locus of control and self-efficacy of the from disadvantaged youngsters backgrounds must therefore be investigated.

Whereas Hopkins, Ferrell, Ferrell, Hopkins and Merkle, (2020) and Mahi (2020) revealed strong association self-efficacy and internal locus of control. Abraham and Rajalakshmi (2021) on the other hand found no significant relationship between self-efficacy and locus of control. Kader (2022) found a strong negative correlation between the locus of control and self-efficacy groups.

Above studies indicate that no definite conclusion can be drawn regarding the relationship between locus of control and self-efficacy. Only one study by Mahi (2020) was found by the investigator on the relationship between locus of control and self-efficacy of socially disadvantaged students. The proposed study thus seems fully justified.

Objective

1 To investigate the significance of relationship between locus of control and self-efficacy of socially disadvantaged students.

Hypothesis

 There is no significant relationship between locus of control and selfefficacy of socially disadvantaged students.

Design

A descriptive research study was designed to obtain the pertinent and precise

information concerning the current status of phenomena and to draw the valid conclusion from the facts discovered.

Sample: Simple random technique of sampling was used in the present study. 800 students of 9th and 10th standard were selected randomly from government and private schools of Moga district giving equal representation to male and female students.

Tools

- 1. Locus of control scale (LCS) by Hasnain and Joshi (2017)
- 2. Self-Efficacy Scale (SES-SANS) by Singh and Narain (2014)

Results and discussion

To investigate the significance of relationship between locus of control and self-efficacy of socially disadvantaged students Pearsons' coefficient of correlation was used and the values are given in table 1 below:

Table 1: Relationship between Locus of Control and Self-Efficacy of Socially

Disadvantaged Students (N=800)

Variables	r
Internal locus of control	0.42*
Self-efficacy	
External locus of control	-0.05 (N.S.)
Self-efficacy	

^{*}Significant at 0.01 levels, N.S. means non-significant

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From the table it is evident that the value of correlation between internal locus of control and self-efficacy is 0.42, which is significant (p<0.01); and the value of correlation between external locus of control and selfefficacy is -0.05, which is non-significant (p>0.05). It reveals that there is significant positive relationship between internal locus of control and self-efficacy of socially disadvantaged students whereas significant relationship is revealed between external locus of control and self-efficacy of socially disadvantaged students. Hypothesis 1 which states that 'There is no significant relationship between locus of control and self-efficacy of socially disadvantaged students,' is partially rejected.

Result of the study indicate significant positive relationship between internal locus of control and self-efficacy. Whereas no significant relationship is found between external locus of control and self-efficacy. The findings of the study are is in line with the study conducted by Ashagi and Beheshtifar (2015).

Implications: The result of the study shows that there is a strong positive correlation between internal locus of control and self-efficacy and no significant relationship between external locus of control and self-efficacy of socially disadvantaged students.

It is suggested that if the status of the external source is changed to the internal locus of control, one's self-concept is elevated, assignments are valued, and there is an increase in the application of cognitive methods, which strengthens student selfefficacy (Hormozi, 2007). It is recommended to parents, siblings, friends, and teachers that extra care should be taken to help socially disadvantaged adolescents build internal locus of control at home and in the classroom. Self-efficacy will grow among the socially disadvantaged kids as their internal locus of control does. As Maxey and Beckert (2016) emphasized, relationships with parents, siblings, and friends are important as well as the influence of school, the accessibility of technologies, and involvement in extracurricular activities as factors that affect adolescents' locus of control and their psychosocial functioning.

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