A Study on Elements Influencing Students' Examination Performance at the University Level

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Abstract— An examination is a method used to assess a student's capabilities or accomplishments within any academic field. The prevailing belief suggests that various elements such as personal traits, study methods and college environment contribute to students' performance at the University level. These factors are believed to have a direct or indirect connection with academic success. The study involved the survey of 112 students, with 63 from the Faculty of Computer Application, 28 from the Faculty Pharmacy and 21 from Faculty of Paramedical Sciences at Bhagwant Global University, Uttarakhand. The average score was computed to ascertain the practical response of students to each statement. This study aims to recognize the factors affecting student performance in examination at University level. The research relies on primary data and employs a combination of convenient and cluster random sampling techniques for data collection. The analysis of responses utilizes a 4-point Likert scale of measurement. Based on the study's findings, several conclusions were drawn. Inadequate preparation with undefined objectives, short attendance in class, difficult questions in question paper, exam-related stress were identified as the factors affecting exam performance. In light of these findings, several recommendations were proposed to enhance the examination system: (1) Provide students with thorough examination training prior to final exams to mitigate both overconfidence and exam anxiety. (2) Ensure that the internal examination environment is tranquil and conducive to student focus. (3) Maintain a moderate level of difficulty in question papers, avoiding extremes of simplicity or complexity. (4) Accentuate the significance of enhanced vigilance among paper evaluators during the grading process.

Index Terms- Student Performance, Factors, Achievement, Implications, Examination.

I. INTRODUCTION

Each educational framework includes an examination system that evaluates students' qualities and abilities through assigning grades and rankings (Ahmed, 1993). According to dictionary of education (1998)

Examination is defined as under: "It is test of a person's knowledge or proficiency in which he or she is required to answer questions or perform tasks." Universities continually grapple with the need to demonstrate their effectiveness to society, government entities and the global higher education community. Their leaders are especially focused on presenting student performance as a means to demonstrate their institution's worth on a global level. The inadequate structure of questions, the format and nature of exam papers, subjective grading criteria, variations in individual assessment methods, untrustworthy invigilators, erroneous marking of papers, and other similar factors significantly impact students' performance in examinations. These obstacles hinder the accurate measurement of students' capabilities. Consequently, many students experience failure in exams. It's important to recognize that students' failures are not solely predetermined; rather, they result from various challenges that impede their success. Despite possessing high intelligence quotient (IQ) levels, deserving students are often unable to demonstrate their true potential due to these systemic issues within the examination process. Various aspects of the examination system directly or indirectly influence students' performance. A schematic representation of the factors is given below:
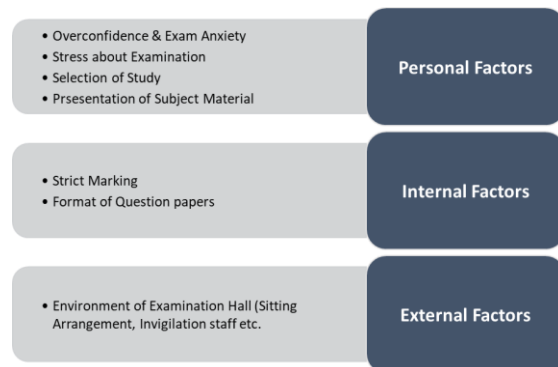
II.   OBJECTIVES OF THE STUDY

The precise aim of the study is to recognize factors that impact students performance in examination. To facilitate a simpler analysis of these factors, the aim is further categorized as follows:

1. To explore the impact of personal factors on students' achievements.
2. To investigate the external factors influencing students' performance.
3. To evaluate the influence of internal factors on students' academic performance

III.   SCOPE OF STUDY

The study seeks to examine the impact of factors on student's performance, with a specific emphasis on outcomes within a private university. Additionally, the study offers recommendations based on its findings to enhance the student performance.
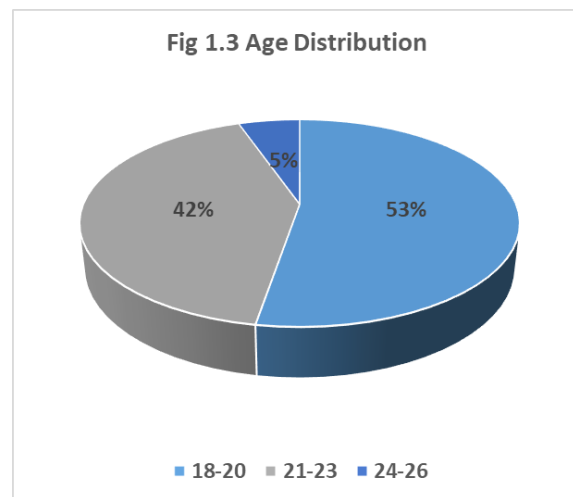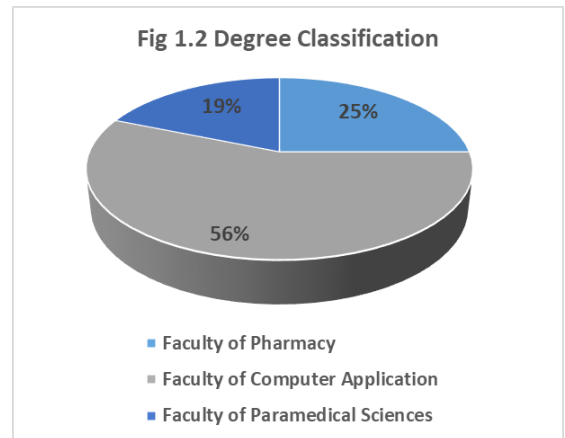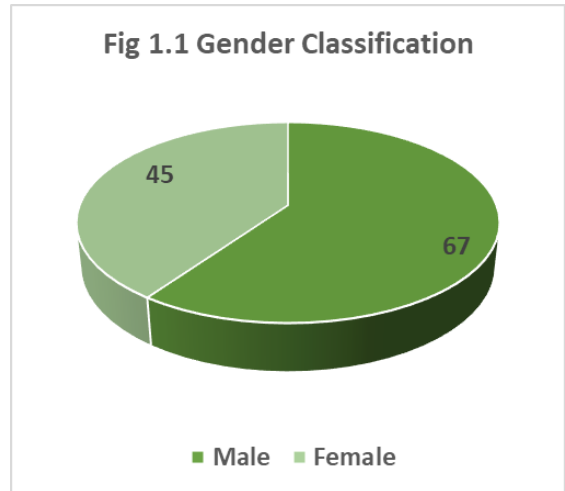
IV.   METHODOLOGY

The study aimed to encompass all students, both male and female, from Pharmacy, Computer Application and Paramedical at BGU, Uttarakhand. From the entire population, a sample of 112 students was chosen using the simple random sampling technique.

The research conducted was descriptive in nature, employing a 4-point Likert scale questionnaire to gather data. Highly Influential (HI) = 4 points; Moderately Influential (MI) = 3 points; Slightly Influential (SI) = 2 points and Not Influential (NI) = 1 point. The findings from the analyses are used to create tables, which offer responses to the research questions posed in the study.

V.   ANALYSIS OF DATA

Section A: Personal Information of Students

Fig 1.1 Gender Classification

- Male   - Female

Fig 1.2 Degree Classification

- Faculty of Pharmacy
- Faculty of Computer Application
- Faculty of Paramedical Sciences

Fig 1.3 Age Distribution

- 18-20   - 21-23   - 24-26

Fig 1.4 Marital Status
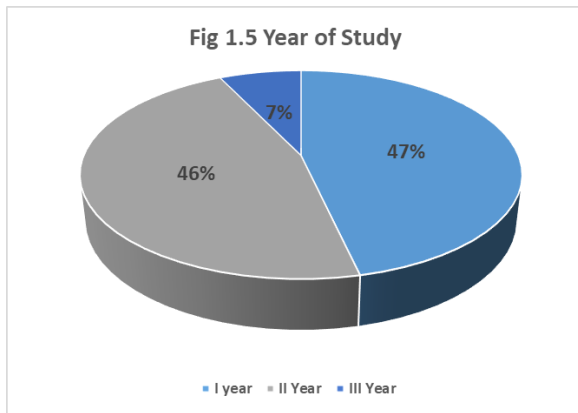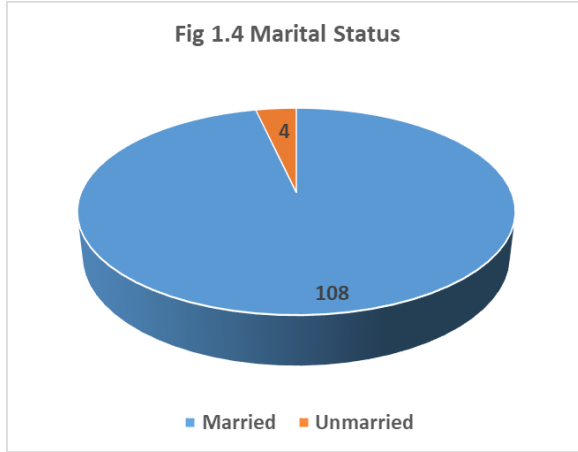

Fig 1.5 Year of Study

Figure 1: Different Properties of Personal Information

Interpretation: This segment pertains to the characteristics of personal data belonging to undergraduate students enrolled at Bhagwant Global University, Uttarakhand. Data from 112 students was collected via a questionnaire for analysis. The participants comprised 67 male and 45 female (Fig 1.1). The demographics of the research sample, consisting of undergraduate students, are delineated as follows: 53% students fall within the 18-20 age bracket, 42 are aged 21-23, and 5% student falls within the 24-26 age range shown by Fig 1.3. Regarding academic pursuits, 25% are from Faculty of Pharmacy, 56% from Faculty of Computer Application and 19% are from Faculty of Paramedical Sciences shown by Fig 1.2. Maritally, 108 students are unmarried, with the remaining 4 being married (Fig 1.4). Fig 1.5 indicates the year of study, 47% of surveyed students are from the first year, 46% of surveyed students are from the second year and the rest are from the third year.

Section B: Academic Information

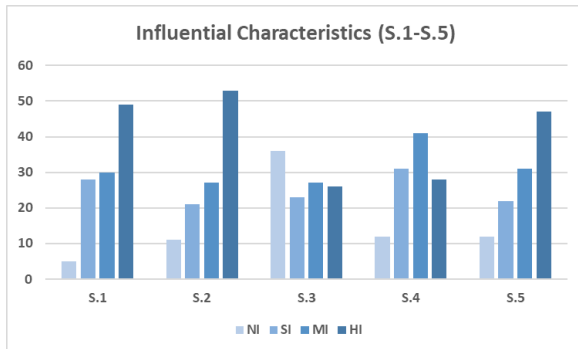| Sr. No.	Statements	NI	SI	MI	HI	Mean	Standard Deviation
S.1	Environment of examination hall	5	28	30	49	3.1	2.72
S.2	Inadequate preparation without clearly defined objective	11	21	27	53	3.09	2.76
S.3	Extra and detail study for exams	36	23	27	26	2.38	2.23
S.4	Strict behavior of invigilation staff in examination hall	12	31	41	28	2.76	2.42
S.5	Rigorous Grading	12	22	31	47	3.01	2.68

Figure 2: Influential Characteristics and their properties (S.1-S.5)

Interpretation: The table and figure present influential statements paired with their respective outcomes, measured in Likert format. It's evident from the table that factors such as insufficient preparation without well-defined objectives, the examination hall environment, and strict grading rigorously impact student's performance. The mean and standard deviation values for each statement strongly corroborate this analysis.

| Sr.No.	Statements	NI	SI	MI	HI	Mean	Standard Deviation
S.6	Over confidence about exam preparation	6	23	34	49	3.13	2.75
S.7	Short attendance in class	8	21	29	54	3.15	2.79
S.8	Methods of exam preparation	16	29	39	28	2.71	2.40
S.9	Change in paper pattern in examination	2	16	53	41	3.19	2.75
S.10	Handwriting of students in paper	23	31	27	31	2.59	2.35
S.11	Difficult questions in question paper	1	5	34	72	3.58	3.10
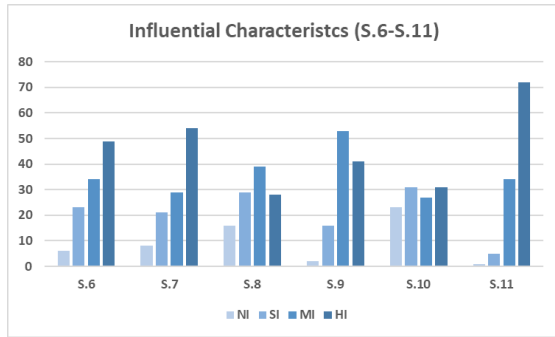
Figure 3: Influential Characteristics and their properties (S.6-S.11)

Interpretation: The table displays impactful statements and their resulting outcomes. It's noticeable that a majority of the statements are rated with moderate to high levels of influence. Complex questions on exam papers are regarded as significantly influential, as is overconfidence regarding exam preparation.

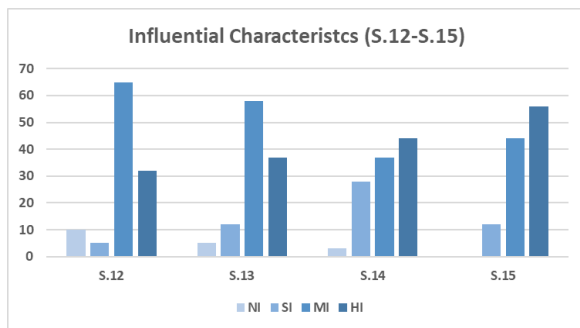| Sr.No.	Statements	NI	SI	MI	HI	Mean	Standard Deviation
S.12	Method of solving the paper	10	5	65	32	3.06	2.66
S.13	Sitting plan of examination hall	5	12	58	37	3.13	2.71
S.14	Mismanagement in examination hall	3	28	37	44	3.09	2.69
S.15	Tension about exams	0	12	44	56	3.39	2.93

Figure 3: Influential Characteristics and their properties (S.12-S.15)

Interpretation: The figure indicates that the factors contributing to failure hold both moderate and high levels of influence. Notably, factors such as Mismanagement in examination hall, Tension about exams, have the most pronounced negative impact. While other factors such as Method of solving the paper, Sitting plan of examination hall also affect performance adversely. Their influence is slightly less than those aforementioned.

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