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### EFFECTIVENESS OF GRADE INSPIRATION TO PROMOTE TEACHING LEARNING PROCESS: TEACHERS' PERCEPTIVE

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#### ABSTRACT

Primary focal point of the research was to realize the inspiration level of understudies regarding their grades towards science subjects and its effect on the learning achievement of understudies. Categorically it was focused to analyze the impact of grade inspiration on understudies' accomplishment at secondary level. To diagnose the issue, it was mentioned that there is no impact of grade inspiration on understudies' accomplishment at secondary level. To collect information 400 students were chosen randomly from Punjab province. A survey was taken for information and further process. The gathered information was investigated by SPSS programming by utilizing ANOVA examination. It was narrated by analysis that there was massive contrast among low and high inspiration level for their grades on learning accomplishment in science subjects. Further it was found that the impact of inspiration for grades had strong impact on the leaning completion of students in male and female students. As there were three categories of inspirational level and it was found the impact is significant among all three levels of inspiration. According to findings it was suggested that science instructors ought to be directed and prepared to keep up with high degree of inspiration among understudies regarding their grades.

#### INTRODUCTION

Inspiration is an innate ability that drives someone to take action and attain a set of predetermined goals. Inspiration and student achievement are strongly correlated. Inspiration encourages students to work extremely hard to achieve their goals. Inspiration is essential in science education to increase students' enthusiasm in science at the optional level. When compared to understudies

with lower self-adequacy, those with higher self-adequacy demonstrated excellent results.

Inspiration involves the following five key components: external inspiration, suitability of students, inspiration for reviewing, assurance for grades, and being motivated for a better career. In addition to a variety of other elements, such as standards, mindset, interest, and a person's desire for an effect or action of inspiration, inspiration is dependent on the impulse of desired needs of a person as a source (Akram, Norman, & Mahmood, 2015).

In this way, achievement motivation is acknowledged to be a crucial factor of insightful accomplishment (Barse, 2015). It empowers and enables leads towards achievement. Achievement motivation encompasses a wide range of factors, including strong emotions, task values, goals, and achievement points of view. It is not a singular phenomenon. Coincidentally, there are currently a predetermined number of investigations that looked at (1) various alluring elements that were equal to students' academic accomplishment in one model and (2) furthermore remembered to be students' intellectual skills and their earlier achievement. It is crucial to keep in mind students' intellectual prowess and past accomplishments for assessments while analysing the significance of significant components for students' progress because these traits are among the finest single indicators of academic achievement (Cavas, 2011).

Every person is shown to have a varying level of inspiration depending on the situation, personality, importance, and urgency of the task. Inspiration for science learning is demonstrated in each student's desire to learn science, planning and starting their advantage in science learning under persuasive influence at a secondary level. It is extremely vital for exploit interest of understudies in science realizing, which resultantly increments interest among understudies for additional learning and more information (De-Bilde, Vansteenkiste, & Lens, 2011).

According to Docan, (2006) Students' region unequivocal limit self-thoughts followed by space express endeavor values were the best marks of students' math and German grades stood out from students' goals and achievement manners of thinking. However, their survey has a flaw in that they didn't evaluate all persuading arguments with the same degree of clarity as the achievement principles. For instance, while students' performance as well as moving convictions and undertaking values were seen space unambiguously (e.g., math grades, math self-thought, math task values), achievement goals were evaluated on a general level (e.g., "Inconvenient issues appeal to me"). Because the identity levels of the marker and measure components weren't in order, the significance of students' accomplishment perspectives in math's and German grades may have been overstated (Erdoğan, 2013).

The purpose of the flow audit was to determine whether the significant revelations made by Glynn, & Koballa, (2006) would still hold true after a thorough evaluation of moving convictions, task values, targets, and achievement aims at an expresses level comparable to accomplishment models. In terms of motivation theory and upcoming research in this area, this is a major

request. Additionally, in light of the revelations, it might be possible to more quickly determine what type of motivation should be specifically encouraged in schools to further enhance accomplishment. This information is crucial for intercessions that try to improve students' motivation in the classroom.

It is shown that motivation has a multifaceted and intricate structure that affects how a person understands to proceed towards improved learning. When compared to other exhibiting strategies, a project-based displaying strategy is essential and effective. Additionally, it is evident that practical activities should be planned outside of classrooms because they foster student collaboration.

Glynn & Koballa, (2006), inspiration is that force which lifts demeanor. Understudy inspiration and tutoring inspiration is characterized as "the longing of an understudy explore significant and advantages of scholastic Scholarly and to exertion for to get a scholarly advantage for them. Inspiration is genuine individual instruction variable as it assists anxiously first with getting abilities strategies and conduct to increment new tutoring (Cavas 2011). Assessment of the educator's impact has advanced with gadgets and dispersal execution of progress all assembled under the term beating evaluating. Since we are discussing complementation or elective procedures of appraisal nowadays the rendering system is proceeding.

Many individual studies (Hattie, 2012) back up the social mental motivation models' contention that pupils' alluring convictions are essentially related to their astute success. However, criticizing the overall impact that motivation has on academic achievement emphasizes the need to (1) examine various forms of seduction in a lone model and (2) consider students' intellectual prowess and previous achievements as well, as the latter is one of the best indicators of academic success.

For persuading enlightening methodology and school reform, it is essential to gather ample, meticulous evidence of whether many potent forms may control variation in school performance far beyond knowledge and prior achievement. Without incorporating the last-choice forms, we risk misunderstanding what incentive for accomplishment really means. The need for setting up legal intercessions for further fostering students' school-related motivation would be highlighted by providing evidence that students' achievement motivation is gradually authentic in expecting their academic achievement beyond their insight or prior achievement (Kanfer, & Ackerman, 2004).

This is intensified by the school personnel's sharp decrease in societal position and their status of framework which is demotivating. Regardless, major relationship between climate outside and student's inspiration ought to be revealed as should a similarly outright connection between educator cooperation in the book of training of understudy inspiration for learning. Since disciplinary power turned out to be more financially savvy in propelling learning of understudies by zeroing in on their interest they accepted.

There are a couple of examinations that included expectation and worth pieces of motivation as signs of students' insightful achievement and besides

remembered to be students' previous achievement or their insight. Regardless, simply several audits considered information and before achievement alongside various powerful creates as signs of school students' achievement. Meyer, (2010) investigated the students' grades in math and German and their GPA.

Grades give off an impression of being utilized in this course to follow the disciplinary force of force proficiency. The fulfillment a student feels in the wake of completing a responsibility is diminished by grade. They are agreeable to cheating and the intricacy of the educator understudy relationship. They diminish a feeling of understudy of over-control his destiny and can prompt careless acknowledgment wishes of others the mark of some of the time where understudies are so eliminated from their own inclination. Individual' favored heading is progressively directed by other power, which makes collaborative systems (Millar., 2010).

Profession adaptability, vocation entrance, and profession character are the three fundamental parts of profession inspiration. Discernment is the fundamental and animating component of inspiration that animates the cooperation of profession arranging or judgment flexibility of vocation is the help or strength components toward inspiration (Muola, 2010). The capacity to accomplish objectives of a vocation or have mindfulness or a general downplaying of one's assets and defects is alluded to as profession knowledge. As per Mitra, & Serriere, 2012 Specialists with high vocation knowledge scores are bound to possess in exercises like the capability of work change the profession assortment of information on vocation prospects or activity plan and distinguishing proof of objectives of pragmatic bringing about better private property.

People groups' occupations are determined by the organization for which they work. It needs to be completed with skillful labor or structured teamwork. It takes into account how motivated people are to work hard and how appreciative they are of their leaders, as well as how involved they are in activities related to their jobs or organizations. Separately, employees in occupations with high scores devote more resources to their jobs, and their behavior oftentimes exhibits a more pronounced desire for promotion. Reduced motivation for one's career would decrease the value of maintaining social connections that could advance anyone's career (Pulfrey, Buchs, & Butera, 2011).

To address the designed hypothesis two types of data was collected i.e. five point rating scale to ass the grade motivation level of students studying at secondary level and annual examination results from Boards of Intermediate and Secondary Examination from Punjab province. The collected data was analyzed by SPSS and found following results regarding impact of different levels of grade motivation on the teaching learning process as perceived by teachers.

**Table 1:** *Impact of Grade Motivation on Student's Science Achievement*

	S. of S.	Df	M. S.	F	p.
Between Groups	3495.140	2	1747.570	13.753	.000

Within Groups	49557.822	390	127.071		
Total	53052.962	392			

A one-way between groups analysis of variance was conducted to examine the impact of grade motivation level on students' learning achievement in science areas. The three groups that were examined were Low grade motivation (0-1.5), Moderate grade motivation (1.5-2.50), and High-grade motivation.

Results of the ANOVA were displayed in Table 1 for students' motivation levels and science achievement across various grade levels. Data analysis revealed a significant difference in learning achievement in science courses across students with different grade motivation levels ( $f=13.753$ ,  $Sig. =0.000$ ). The hypothesis that "There is no effect of grade motivation on students' achievement at the secondary level" was rejected as the null hypothesis.

**Table 2.** Impact of Grade Motivation on Student's Science Achievement

	Motivation for Grade	N	Mean	Std. Deviation	M.D	Sig.
1	Low level	10	33.000	13.703	-4.102	.530
	Moderate level	68	37.103	11.288		
2	Low level	10	33.000	13.703	-10.895*	.008
	High level	315	43.895	11.191		
3	High level	315	43.895	11.191	6.792*	.000
	Moderate level	68	37.103	11.288		

The student learning outcomes in science disciplines across multiple grade levels were compared side by side in Table 2. The table shows that the low-grade motivation level ( $M=33.000$ ,  $SD=13.703$ ) and the moderate grade motivation level ( $M=37.103$ ,  $SD=11.288$ ) did not differ statistically significantly ( $p$  value =.530). A  $p$  value of.008 determined that there was a statistically significant difference between low grade motivation ( $M=33.000$ ,  $SD=13.703$ ) and high-grade motivation ( $M=43.895$ ,  $SD=11.191$ ). The  $p$  values.000 shows a significant difference between the high-grade motivation level ( $M=43.895$ ,  $SD=11.191$ ) and the moderate grade motivation level ( $M=37.103$ ,  $SD=11.288$ ).

**Table 3.:** ANOVA Analysis for Effect of Grade Motivation on Learning Achievement of Students (Total Marks)

	Sum of Squares	df	M. S.	$f$	$p$ .
Between Groups	213152.140	2	106576.070	12.452	.000
Within Groups	3337866.552	390	8558.632		
Total	3551018.692	392			

In order to investigate the effects of grade motivation level on teaching on students' learning achievement, a one-way between-groups analysis of variance was carried out. Grade motivation was further divided into three categories:

Low grade motivation (grades 0 to 1.5), Moderate grade motivation (grades 1.5 to 2.50), and High-grade motivation.

Results of the ANOVA were displayed in Table 3 above among students' learning achievement and motivation levels at various grade levels. The table showed a significant difference between students with different grade levels of motivation on learning achievement of pupils ( $f=12.452$ ,  $Sig. =0.000$ ). The hypothesis that "There is no effect of grade motivation on students' achievement at the secondary level" was rejected as the null hypothesis.

**Table 4.** Effect of Grade Motivation levels on Learning Achievement of Students (Total Marks)

#### *Multiple Comparison*

	<b>Grade Motivation</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>M.D</b>	<b>Sig.</b>
1	Low	10	304.000	138.086	-15.367	.876
	Moderate	68	319.368	86.527		
2	Low	10	304.000	138.086	-	.044
	High	315	375.505	92.120		
3	High	315	375.505	92.120	56.137*	.000
	Moderate	68	319.368	86.527		

The Tukey Post hoc test was used to determine the relative positions of student learning achievement and motivation levels across grades.

According to Table 4, which compared students' learning achievement across different grade levels of motivation, low grade motivation ( $M=304.000$ ,  $SD=138.086$ ) was not significantly different from moderate grade motivation ( $M=319.368$ ,  $SD=86.527$ ), which had a p value of .876, and high-grade motivation ( $M=375.505$ ,  $SD=92.120$ ), which had a p value of .044. High grade motivation level ( $M=375.505$ ,  $SD=92.120$ ) and moderate grade motivation level ( $M=319.368$ ,  $SD=86.527$ ) were significantly different, with a p value of .000.

**Table 5:** ANOVA Analysis for Effect of Grade Motivation levels on Learning Achievement in Science Subjects of Male Students

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>f</b>	<b>Sig.</b>
Between Groups	1391.908	2	695.954	5.269	.006
Within Groups	16774.984	127	132.086		
Total	18166.892	129			

To determine the impact of grade-motivation on instruction on male students' learning achievement in science topics, an ANOVA test was conducted. Low

Grade-Motivation (0-1.5), Moderate Grade-Motivation (1.51-2.50), and High Grade-Motivation were the three categories used to classify Grade-Motivation. Results of the ANOVA were displayed in Table 5 for male students' performance in science disciplines across various Grade-Motivation levels. Data analysis results revealed a significant difference in learning achievement in science disciplines among male students with different Grade-Motivation levels ( $f=5.269$ ,  $Sig. =0.006$ ).

**Table 6.:** Effect of Grade Motivation levels on Learning Achievement in Science Subjects of Male Students

### Multiple Comparison

	Grade-Motivation	N	Mean	Std.Deviation	M.D	Sig.
1	Low	12	31.667	14.079	-.191	.999
	Moderate	28	31.857	11.928		
2	Low	12	31.667	14.079	-7.222	.106
	High	90	38.889	10.992		
3	High	90	38.889	10.992	-	.015
	Moderate	28	31.857	11.928	7.032*	

The table 6 compared the learning achievement of male students in science classes across various grade-motivation levels and found that low grade-motivation level ( $M=31.667$ ,  $SD=14.079$ ) was not significantly different from moderate grade-motivation level ( $M=31.857$ ,  $SD=11.928$ ), which had a p value of .999, and high grade-motivation level ( $M=38.889$ ,  $SD=10.992$ ), which had a p value of .106. With a p value of .015, moderate grade-motivation level ( $M=31.857$ ,  $SD=11.928$ ) was shown to be significantly different from high grade-motivation level ( $M=38.889$ ,  $SD=10.992$ ).

**Table7.** ANOVA Analysis for Effect of Grade Motivation levels on Learning Achievement of Male Students (Total Marks)

	Sum of Squares	Df	M. S.	f	p.
Between Groups	107158.675	2	53579.338	5.792	.004
Within Groups	1174789.056	127	9250.308		
Total	1281947.731	129			

ANOVA analysis was performed to determine the impact of grade-motivation level on instruction on male students' academic progress. Low Grade-Motivation (0-1.5), Moderate Grade-Motivation (1.51-2.50), and High Grade-Motivation were the three categories used to classify Grade-Motivation.

Table 7 presented the findings from an ANOVA comparing the academic achievement of male students across various Grade-Motivation levels. Male students' learning achievement was significantly different among students with different Grade-Motivation levels, according to data analysis ( $f=5.792$ ,  $Sig. =0.004$ ).

**Table 8.:** Effect of Grade Motivation levels on Learning Achievement of Male Students (Total Marks)**Multiple Comparison**

	Grade-Motivation	N	Mean	Std.Deviation	M.D	Sig.
1	Low	12	276.667	127.696	-20.833	.805
	Moderate	28	297.500	91.887		
2	Low	12	276.667	127.696	-75.722*	.031
	High	90	352.389	92.860		
3	High	90	352.389	92.860	-54.889*	.025
	Moderate	28	297.500	91.887		

In the table 8, which compared the learning achievement of male students in science classes across various grade-motivation levels, it could be seen that low-grade motivation (M=276.667, SD=127.696) was significantly different from moderate grade motivation (M=297.500, SD=91.887), which had a p value of .805, and high-grade motivation (M=352.389, SD=92.860), which had a p value of .031. High grade-motivation level (M=352.389, SD=92.860) and Moderate grade-motivation level (M=297.500, SD=91.887) were statistically different, with a p value of .025.

**Table 9:** ANOVA Analysis for Effect of Grade Motivation levels on Learning Achievement of Female Students in Science Subject

	Sum of Squares	Df	M. S.	f	p.
Between Groups	977.396	2	488.698	4.617	.011
Within Groups	27519.342	260	105.844		
Total	28496.738	262			

ANOVA was used to determine the impact of grade-motivation level on instruction on female students' learning achievement in science disciplines. Low Grade-Motivation (0-1.5), Moderate Grade-Motivation (1.51-2.50), and High Grade-Motivation were the three categories used to classify Grade-Motivation. Results of the ANOVA were displayed in Table 9 for female students' performance in science disciplines across various Grade-Motivation levels. Data analysis revealed a significant difference in female students' learning achievement in science topics between students with different Grade-Motivation levels (f=4.617, Sig. =0.011).

**Table 10.:** Effect of Grade Motivation levels on Learning Achievement of Female Students in Science Subject**Multiple Comparison**

	Grade-Motivation	N	Mean	Std.Devia tion	M.D	Sig.
1	Low	16	44.750	8.843	4.092	.377
	Moderate	38	40.658	9.527		
2	Low	16	44.750	8.843	-1.408	.858
	High	209	46.158	10.513		
3	High	209	46.158	10.513	-5.500*	.008
	Moderate	38	40.658	9.527		

In the table 10, which compared the learning achievement of male students in science classes across various grade-motivation levels, it was found that low grade-motivation level (M=44.750, SD=8.843) was not significantly different from moderate grade-motivation level (M=40.658, SD=9.527), with a p value of .377, and that high grade-motivation level (M=46.158, SD=10.513) was not significantly different from low grade-motivation level With a p value of .008, the moderate grade-motivation level (M=40.658, SD=9.527) significantly differed from the high grade-motivation level (M=46.158, SD=10.513).

**Table 11.:** ANOVA Analysis for Effect of Grade Motivation levels on Learning Achievement of Female Students (Total Marks)

	Sum of Squares	Df	Mean Square	<i>f</i>	Sig.
Between Groups	85305.408	2	42652.704	5.533	.004
Within Groups	2004297.589	260	7708.837		
Total	2089602.996	262			

ANOVA demonstrated the impact of grade-motivation level on instruction on female students' academic progress. Low Grade-Motivation (0-1.5), Moderate Grade-Motivation (1.51-2.50), and High Grade-Motivation were the three categories used to classify Grade-Motivation.

Results of the ANOVA were displayed in Table 11 for female students' academic performance across various Grade-Motivation levels. The table's

figure ( $f=5.533$ , Sig. =0.004) showed a stark contrast in the learning achievement of female pupils from students in various Grade-Motivation levels.

**Table 12.** Effect of Grade Motivation levels on Learning Achievement of Female Students (Total Marks)

*Multiple Comparison*

	Grade-Motivation	N	Mean	Std.Deviation	M.D	Sig.
1	Low	16	399.000	68.478	63.105*	.044
	Moderate	38	335.895	82.035		
2	Low	16	399.000	68.478	13.699	.819
	High	209	385.301	90.004		
3	High	209	385.301	90.004	-49.407*	.005
	Moderate	38	335.895	82.035		

The table 12 compared the learning achievement of male students in science classes and their grade motivation levels. It revealed that low grade motivation (M=399.000, SD=68.478) was significantly different from moderate grade motivation (M=335.895, SD=82.035) and was not significantly different from high grade motivation (M=385.301, SD=90.004,  $p=.819$ ). High grade-motivation level (M=385.301, SD=90.004) significantly differed from Moderate grade-motivation level (M=335.895, SD=82.035), according to a.005 p value.

The data analysis presented above aimed to examine the impact of grade motivation levels on students' learning achievement in science subjects at the secondary level. The study utilized a five-point rating scale to assess students' grade motivation levels and collected annual examination results from the Boards of Intermediate and Secondary Education in Punjab province. The analysis was carried out using the Statistical Package for the Social Sciences (SPSS) software.

The findings of the study revealed several significant insights. Firstly, the results from the ANOVA tests demonstrated a clear relationship between grade motivation levels and students' learning achievement in science. Across various grade levels, there was a statistically significant difference in students' academic performance based on their grade motivation, with higher motivation levels being associated with better learning outcomes. The post hoc tests further substantiated these results, showing that students with high grade motivation significantly outperformed those with low or moderate motivation levels. Additionally, gender-specific analyses were conducted, and the results remained consistent, indicating that grade motivation's impact on learning achievement holds true for both male and female students.

In conclusion, this study provides strong evidence to support the notion that grade motivation plays a crucial role in students' learning achievement in science subjects at the secondary level. Educators and policymakers should take note of these findings and devise strategies to enhance and sustain students'

motivation towards their grades, as it can have a significant positive impact on their academic performance. Encouraging a supportive learning environment, recognizing and rewarding students' efforts, and implementing motivational interventions are some potential measures to enhance grade motivation and subsequently improve students' learning outcomes in science disciplines.

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