

## A Study of Existence of Grade Inflation Perceived by University Administrators and Teachers at Higher Education Level

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### Abstract

Grade inflation occurs when there is an upward trend in awarded grades with the absence of a matching improvement in academic excellence over a period of time. This phenomenon has become a norm in public and private universities of Pakistan. Even though most academic institutions are aware of the dangers of grade inflation, it is typically overlooked because its trend is very hard to measure. In this context, main objective of this analytical study was to examine the identification of existence of grade inflation in public sector universities of Punjab. To achieve the objective of this research study descriptive research design was used. For this purpose, university administrators and teachers' perceptions were explored regarding existence, intensity and nature of grades through survey questionnaire at university level in Panjab. By using the simple random sampling, accessible faculty members and administrators from nine public sector universities of Punjab were approached via email to participate in an online questionnaire (five-points Likert scale statements, yes/no items and one open-ended). A total 276 filled questionnaires were received which reflected the perceptions of university teachers and administrators regarding the identification of existence of grade inflation from 71 administrators and 205 teachers after reminding them 3 to 4 times reminders with the interval 4 to 5 days. Reliability analysis of the questionnaire was also computed through Cronbach's Alpha Model where the value of 0.814 was deducted which showed that the scale was very consistent and reliable. Collected data was tabulated, analysis and interpreted in the light of objectives of study. Descriptive statistics (i.e., Frequency Counts, Percentage, Mean, and SD) and thematic analysis were applied to obtain the answers of research question. Data analysis revealed that university administrators and teachers' perceptions data suggested that university teachers in universities of Punjab moderately believe in existence of grade inflation in their departments. Highest percentage (80.8%) of faculty members showed their consensus that grade inflation exists in their institutions. Furthermore, they also showed the consensus that grade inflation occurs to the extent of 58% in their institutions. It was suggested that further studies can be made to explore the measures to control the grade inflation at university level that could support them to develop policies concerning uniform grading system, both at institutional and departmental level. Specific policies, clear criteria, procedures and detailed guidelines for powerful and fruitful implementation of the grading system could be developed.

**Keywords:** Grade inflation, Existence, Public sector, Punjab

### Introduction

Grading of university students is an issue that has been under discussion for decades in universities and the mainstream media in various countries all over the globe (Baker, 2018; Caruth & Caruth, 2013; Nikolakakos, Reeves & Shuch, 2012). Many countries have reported that majority of the academic institutions are giving higher grades to the students today as compared to their precursors for the same quality of work that causes grade inflation (Tucker & Courts, 2010). According to Bachan (2017) the term 'grade inflation' represents a situation when higher grade is awarded to a student for his/her lower performance, or when students gain grades 'A' & 'B' too easily without much effort and ability (Kostal, Kuncel & Sackett, 2016). Kohn (2002) stated that grade inflation is an increase in the students' GPAs (grade-point averages) without a rise in their academic achievement

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and progress. Jaschik (2009) and O' Grady (2009) explain grade inflation as the awarding of higher grades in absence of visible improvement in the student's academic progress.

Most of the researchers defined grade inflation as an increase in grades and grade point averages (GPAs) over time due to modifications made in grading standards and practices not evident from changes related to the quality of students' work (Hurwitz & Lee, 2018; Kostal, et al., 2016; O'Halloran & Gordon, 2014). Likewise, Wood, Ridley and Summerville (1999) defined grade inflation as a decreasing value of grades in the coin of students' achievement while Ziomek and Svec (1997) argued that a rise in high grades without an increase in skills and abilities occurs when grades in a class are negatively skewed and this is characterized by an increase in A and B grades. Finally, according to Milton, Pollio and Eison (1986) grade inflation is a phenomenon which occurs when a mark/grade is less rigorous than it should be and teachers' feedback is biased, unjustified and falsely favorable (Mullen, 1995; Zirkel, 1999). Thus, a student's grade can be called inflated if it does not reflect an accurate measurement of his/her knowledge, ability and performance (Popov & Bernhardt, 2013; Ray, 2014). Moreover, when grades are inflated the skill distribution does not vary with the varying ranking of students (Nordin, Heckley & Gerdtha, 2019).

Some researchers including Cizek (1996) and Kohn (2011) disagreed to use the term grade inflation and preferred the term grade compression instead. They are of view that increase in GPAs or grades are something different from price inflation because grade inflation compresses the distribution of grades at high end. Unlike price inflation, however, grades cannot rise above A. Thus, in view of Rosovsky and Hartley (2002) grade compression emerges in the upper boundary of distribution. Grades may lose their power of discrimination between different abilities and may become less informative signals of ability that help low achievers at the cost of high achievers (Rojstaczer & Healy, 2012). Thus, an increase in GPAs and grades cannot be credited to the students enrolling in tertiary education better prepared and more skilled than the students of previous sessions (Baker, 2018). Grade inflation may have a negative effect on the overall productive potential of the society and is unfair because it has a benefit for the students that achieve higher grades at the cost of those with better skills and abilities (Nordin et al., 2019).

The interest in grade inflation accelerated in the past 40 years especially in America, Europe and Canada due to rapid rise in GPA and decline in achievement at all levels of education from schools to universities as documented in several previous quantitative studies. Studies by Caruth and Caruth (2013), Kuh and Hu (1999), and Nordin et al., (2019) and numerous others, claim to prove that grade inflation exists. According to O' Grady (2013) grade increase continued over the period, though first peaked across the sector in 2005. Bello and Valientes (2008) attempted to trace out grade inflation by using the grade data of economics courses in University of Philippines from 1998 to 2005 and reported an upward trend of rising grades in 10 out of 18 courses. Rojstaczer and Healy (2012) in a study used grade data from 1940-2009 and found that grade A representing 43% of total grades grew to 28 percent since 1960 and 12 percent since 1988 while D's and F's declined to less than 10 percent of all grades. They further observed that private sector institutions award significantly more A's and B's combined than public colleges and universities.

Caruth and Caruth (2013) postulated that grade inflation increased more rapidly in the public universities and liberal arts colleges in the United States. Rojstaczer (2015) found that the rate of grade inflation was increased 25% to 30% at the private schools and the CGPAs at the private schools was 0.3 points greater than the public universities. Further, Lee (2018) collected data during 1998-2016 from the United States high schools and concluded that the percentage of high school students who achieved top marks/grades increased from 39% to 47% whereas, the SAT scores decreased during this period. Continuous increases in top grades and high marks have been showed in many countries including Sweden, UK and France (Bamat, 2014). Similarly, a research study by Noureen (2014) was conducted in Pakistan to either prove or disprove the existence of grade inflation in schools at secondary level using the statistical data of grades of matriculation annual examinations held from 2004 to 2013 in BISE D.G. Khan and found evidence of grade inflation. A study was conducted by Aton and Penaluna (2019) indicating an increase in the number first class degrees being awarded as compared to the lower second-class degrees from the year 2007-2016 that cannot be explained by the qualification of the students and investment of the provider in the process of teaching and learning and is an evidence of grade inflation.

Grade inflation also has adverse effects on the admissions processes of professional and graduate schools because these institutions also receive less authentic information about college graduates receiving inflated grades (Aton& Penaluna, 2019; Nordin et al.,2019). Similarly, Wongsurawat (2009) found that the influence of grades on admissions decisions of law schools decreased significantly from 2000 to 2007, whereas grades of candidates increased during the same time period. Anglin and Meng (2000) explained that this issue is also aggravated when the college graduates number increases, which in turn rises the applicant pool whereas simultaneously it decreases the graduate and professional schools' abilities to differentiate between those applicants.

Grade inflation has deep rooted effects on quality of education. It is problematic in each and every society for all the stake holders i.e. teachers, institutions, employers, administrators and students themselves due to a number of detrimental effects. Grades lose their power of discrimination and usefulness as a symptom of ability and effort, both externally and internally for students, employers and universities. Inflated grades provide inaccurate feedback to graduates about their actual performance and reduce the student-teacher relationship to one of the consumerisms (Chowdhury, 2018). It means that students expect only higher grades from teachers whether they are capable or not because they have paid heavy fees and wish to be served only in ways, they find pleasing (Bleemer, 2018).

### **Rational of the study**

This background suggests that literature and discourse on grade inflation in higher education is although abundant. This background suggests that grade inflation exists, but all these researches did not exhibit an elaborate and comprehensive view of the phenomenon of grade inflation particularly in Pakistani context. From working in a public university, experiences in classroom teaching and assessment of students, discussions with academics as well as colleagues provided the researcher an opportunity to closely observe the phenomenon of grade inflation and deeply understand existence of grade inflation. Findings of previous studies, personal observations of the researcher and conversations with relevant stakeholders strongly support the argument that grade inflation exists at higher education level. Universities in Pakistan, therefore, need to develop strategies and modify their assessment procedures to overcome the problem of grade inflation at university level.

### **Statement of the Problem**

The studies to explore the presence of grade inflation have been conducted in different parts of the world. Majority of these studies found a higher level of grade inflation and there are sufficient evidences to conclude that grade inflation has turned into a dilemma across nations. Literature reveals that no such study was conducted to explore inflated grades at higher level in Pakistan, there was a dire need to examine the situation prevalent at tertiary level in country. This research study was done to examine and identify the existence of grade inflation at university level.

### **Objectives of Study**

The key objective of this study was to examine and identify the existence of grade inflation at university level. To achieve this major purpose, the following objectives were devised.

1. To analyze and identify the existence of grade inflation at department level in universities of Punjab.
2. To analyze and identify the existence of grade inflation at institutional level in universities of Punjab.
3. To examine the existence and extent of grade inflation at university level in universities of Punjab.

### **Research Question**

1. What is the extent of existence of grade inflation at university level as perceived by university teachers and administrators in the universities of Punjab?

### **Significance of study**

- This study will be significant to the stakeholders (authorities, administrators and teachers) specifically about existence of grade inflation in universities of Punjab in relation to its effect on quality of education, grading standards and evaluation practices.
- The study will be significant to provide useful information for authorities, policy makers administrators for understanding the existing grading evaluation criteria and/or practices in the universities of Punjab and the extent to which essential structural changes should be designed for grading standards/criteria.

- The study will be provided authentic/research-based knowledge for teachers to evaluate their own assessment practices and improve their grading practices/ standard.
- The study will be significant to guide the university faculty and administrators, to achieve the intended purposes of grading standards and grading system.

### Research Methodology

The present study was descriptive in nature. For this study perceptions of university administrators and teachers about the existence of grade inflation at online survey questionnaire served as a data. Quantitative analysis supported by analysis of qualitative open- ended responses was done to determine the nature and extent of the existence of grade inflation. The lottery technique (simple random sampling) was used to select 9 public sector universities out of 36 universities of public sector of Punjab to make the true representation of the population. For administration of online questionnaire all (2815) accessible university administrators and teachers from nine public sector universities of Punjab were requested to take part via e-mail and their consent was obtained to participate in the research. A sum of 903 (32.07%) respondents (182 administrators and 721 teachers) from nine public sector universities across Punjab gave their consent to participate in the process of data collection. Lastly, the link of online survey questionnaire conducted through Google forms, was sent to these 903 participants via e-mail (administrators and teachers) at nine universities of public sector at Punjab. A total 276 filled questionnaires were received from 71 administrators and 205 teachers after reminding them 3 to 4 times reminders with the interval of 4 to 5 days. For the present study, a mixed item (five-points Likert scale statements, yes/no items and one open-ended) electronic/online questionnaire was used to identify the existence of grade inflation as perceived by university teachers and administrators. Questionnaire contained two sections and one open- ended question. Section I asked the demographic information, section II of questionnaire comprised of two parts. First part A comprised 13 statements. All these thirteen statements were divided in to two parts (departmental and institutional level). Second part B consisted of three sub parts. In part C, there was one open ended question. All these three parts inquired respondent's opinions regarding the existence and extent of grade inflation in the universities of public sector of Punjab. The response categories for 5-points Likert scale were: Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree. Scores were assigned as 5, 4, 3, 2, and 1 respectively for arithmetical analyses. Descriptive statistics (i.e., Percentage, Frequency Counts, Mean, and SD) and thematic analysis (open-ended item) were applied by using the SPSS software version 20 to analyze the collected data taking into consideration the nature of survey questionnaire and the suitability of responses.

### Analysis and Interpretation

The results of descriptive analysis of 276 sample participants are given below.

**Table 1**

#### *Perceptions of participants about Existence of Grade Inflation at Departmental Level*

Sr#	Statements	M.	SD	95% CI	
				LL	UL
1	Grade inflation in past five years	3.84	0.81	3.74	3.94
2	High CGPAs as the evidence of grade inflation	3.76	0.90	3.65	3.87
3	High grades but less academic achievement	3.56	1.02	3.44	3.68
4	As and Bs have increased than past	3.76	0.90	3.65	3.87
5	Assigned grades do not predict student's ability	3.55	1.02	3.43	3.67
6	CGPAs of students do not measure intended learning outcome	3.47	1.04	3.35	3.59
7	Discrepancy between student's achievement and CGPAs	3.58	0.96	3.47	3.69
	Overall	3.64	0.95	3.53	3.75

Table 1 indicates that majority of university faculty in Panjab agreed moderately that grade inflation exists in their departments because their overall mean score 3.64 was greater than 3.5 but less than 4 that shows grades have inflated in the universities of Punjab. Total variance between lower limit (LL) of confidence interval and upper limit (UL) confidence interval occurred 0.22 which shows the 95% confidence interval that true mean value 3.64 exist between 3.53 and 3.75. Correspondingly overall SD value 0.89 is below 1 which shows a great level of consensus of university teachers on these statements in term of existence of grade inflation. Overall, it can be inferred that university administrators and teachers in universities of Punjab in Pakistan moderately believe in existence of grade inflation in their departments.

**Table 2****Perceptions of Participants about Existence of Grade Inflation at University Level.**

Sr. No	Statements	M.	SD	95% CI	
				LL	UL
1	High grade but less actual academic potential	3.89	0.85	3.79	3.99
2	Effect of high grades on the assessment system	3.86	0.91	3.75	3.97
3	Teacher leniency towards high grades	3.81	0.94	3.70	3.92
4	High grade in absence of academic improvement	3.84	0.81	3.74	3.94
5	CGPAs of students do not represent their specified Knowledge	3.45	1.08	3.32	3.58
6	Assigned grades do not justify students specify Skills	3.53	1.097	3.40	3.66
	Overall	3.73	0.94	3.61	3.84

Table 2 indicates that majority of university faculty in Panjab agreed moderately that grade inflation exist in their universities, because their overall mean score 3.73 was greater than 3.5 but less than 4 that shows the evidence of grade inflation in the universities of Punjab in Pakistan. Total variance occurred 0.23 which shows the 95% confidence interval that true mean value 3.73 exist between 3.61 and 3.84. Correspondingly overall SD value 0.94 is below 1 which shows a great level of consensus of university administrators and teachers on these statements in term of existence of grade inflation. It is inferred those overall results revealed that university respondents (administrators and teachers) in Pakistan moderately believe in existence of grade inflation in their departments.

**Table 3****Perceptions of Participants Regarding the Existence and Extent of Grade Inflation of A and B Grades at University Level**

S.#	Statement	Yes		No	
1	Numbers. Of A and B grades achieved by students in subject area in the year 2017 as compared to year 2007.	209		67	
		(76%)		(24%)	
2	percentage increase in number of As and Bs grades in subject area in 2017 as compared to 2007	25%	50%	75%	100%

Table 3 indicates that out of 276 faculty members of universities of Panjab, 209 faculty members answered in yes while 67 responded with no. Among the 209 faculty members who answered yes, 60 of them agreed that 25% increase in numbers As and Bs grades occurred in year 2017 as compared to year 2007. While, 101 of out of 209 faculty members of universities of Panjab agreed upon 50%, 40 faculty members agreed upon 75% and 8 faculty members upon 100% increase in As and Bs grades in year 2017 as compared to year 2007. The results of the table depict that majority of faculty members of universities of Panjab agreed upon that grade inflated in their subject area in 2017 as compared to 2007.

**Table 4****Respondents' Perceptions Regarding the Existence and extent of Grade inflation of A Grade at University Level**

S.#	Statement	Yes		No.	
3	Nos. of A grades achieved by students in university generally, in the year 2017 as compared to year 2007	227		49	
		(82%)		(18%)	
4	Percentage increase in number of A grades in year 2017 as compared to 2007	25%	50%	75%	100%

Table 4 indicates that out of 276 faculty members of universities of Panjab, 227 faculty members answered in yes while 49 responded with no. Among the 227 faculty members who answered yes, 53 of them agreed that 25% increase in numbers as grades occurred in year 2017 as compared to year 2007. While, 102 out of 227 faculty members of universities of Pakistan agreed upon 50%, 71 faculty members agreed upon 75% and 01 faculty member upon 100% increase in As grades in year 2017 as compared to year 2007. The results of the table depict that majority of faculty members of universities of Pakistan agreed upon the grade inflated in 2017 as compared to 2007.

**Table 5****Respondents' Perceptions Regarding the Existence and Extent of Grade Inflation of Percentage of As at University level.**

	Too high	High	Acceptable	Low	Too Low
Percentage increase in number of As	10	126	118	20	2
	(3.62%)	(45.65%)	(42.75%)	(7.26%)	(0.72%)

Table 5 reveals that 3.62% of university teachers and administrators of Pakistan agreed that A grades increased too high, while 45.65% agreed that A grades increased high, 42.7% agreed upon that they were acceptable while 7.26% considered them low and 0.72% chose too low. Overall results illustrate that a large percentage of faculty members of universities of Panjab highly agreed that percentage of A grades in their department inflated over the past years.

### **An Analysis of Respondents' Perceptions Regarding the Existence and Extent of Grade Inflation through open-ended item**

University administrators and teachers were asked about their opinions through open ended question regarding the existence and extent of grade inflation in the universities of Punjab. For the analysis of responses to the open-ended item thematic analysis was employed. When asked any grade inflation occurred in their institute, the most of faculty members responded that it had. Highest percentage (80.8%) of faculty member agreed that grade inflation exist in their institutions. Furthermore, they also showed the consensus that grade inflation occurs to the extent of 58% in their institutions. Overall results revealed that a large percentage of faculty members of universities of Panjab highly agreed that percentage of A and B grades in their departments and institutions inflated over the past year that shows grade inflation exists.

### **Findings**

Findings of study regarding the analysis of university administrators and teachers' perceptions about existence and extent of grade inflation both at departmental and university level. It was revealed that grade inflation existed at departmental level by consensus of university faculty members. The lowest contributing factor was accepted to be the existing CGPAs of students which do not accurately measure their achievements or their intended learning outcomes. The highest factor was accepted to be the grades that have inflated over the past five years at departmental level. Similarly, at the university level, consensus of university participants revealed that grade inflation existed. Least contributing factor culminated to be the CGPAs of students which do not accurately represent their achievements in a specified subject matter knowledge. Contrarily, most accepted fact was that the students' today are earning high grades than their actual academic potential. It was based on the findings that Nos. and percentage increase of A and B grades achieved by students in university generally, has created the phenomenon of grade inflation in the year 2017 as compared to year 2007. The results also showed by the consensus of participants that grade inflation existed to the extent of 58% at university level

### **Discussion**

There is a consistent pattern of increment in the higher grades A & B and decrement in the lower grade C which is prevalent during the entire period under analysis i.e. 2007 to 2017. Indisputable evidence indicates that grade distributions have become more concentrated towards the higher end distorting the traditional normal grading curve. In Pakistan, no attention has been given to investigate the grading patterns or the possibility of inflated grades in education sector, yet the results of our analysis that identifies existence of grade inflation are consistent with the findings of other researchers that have attempted to quantify the changes in grading patterns by investigating the existence and distribution of grades and grading trends in schools, colleges and universities (Ali et al., 2016; Anglin & Meng, 2000; Ayyappan et al., 2017; Blum, 2018; Love & Kotchen, 2010; Nelson, 2002; Nordin et al., 2019; O'Grady, 2009; O'Halloran & Gordon, 2014; Ostrovsky & Schwartz, 2003; Ray, 2014; Ridley & Summerville, 1999; Rojstaczer & Healy 2012).

### **Recommendations**

1. It is recommended that university should focus on developing policies concerning uniform grading system, both at institutional and departmental level.
2. University should improvise to publicize the guidelines, grading policies, criteria and procedures to the stakeholders by arranging workshops, departmental meetings and seminars.
3. University should also by giving out published policy booklets/manuals before the beginning of every semester
4. Rakenal scale may be developed keeping in view the course guidelines and outcomes of the content to abate the grade inflation

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