

Grades inflation rates in a sample of graduate courses at King Abdulaziz University

Dr. Abdulelah Mohammed Alqarni

ABSTRACT

This study explores the extent to which grades were inflated for graduate students at King Abdulaziz University by analyzing (621) records from student records for four semesters within the time period (2023-2024). These records were selected randomly, and the results indicated that there was an increase in The average percentage of students who obtained grade categories (A+, A, B+) reached 86.3%, and this increase is offset by a decrease in the average percentage of students who obtained grade categories (B, C+, and C), which together reached 13.7%, while none of the students received grades in categories (D and F). Despite the presence of inflation in the four semesters, the results showed that there were significant differences between the ranking of the students' grade point averages due to the time period, as the average ranking of the first semester of 2024 was the least inflated compared to the first, second, and third semesters of 2023. The study arrives at this interpretation of the results as most academic programmes have started the process of academic accreditation. Finally, the study provides some which recommendations could resolve the consequent problems of grade inflation.

Keywords: grade, grade inflation, Postgraduate, courses.

نسب تضخم الدرجات في عينة من مقررات الدراسات العليا بجامعة الملك عبد العزيز د. عبدالاله مجد القرني

أستاذ القياس والتقويم والإحصاء المشارك – قسم علم النفس، كلية التربية، جامعة الملك عبد العزيز، جدة، المملكة العربية السعودية.

ملخص:

تستكشف هذه الدراسة مدى تضخيم درجات طلاب الدراسات العليا بجامعة الملك عبد العزيز من خلال تحليل (٦٢١) سجلاً من سجلات الطلاب لأربعة فصول دراسية خلال الفترة الزمنية (٢٠٢٤-٢٠٢٣). تم اختيار هذه السجلات بشكل عشوائي، وأشارت النتائج إلى أن هناك زيادة في متوسط نسبة الطلاب الحاصلين على فئات الدرجات (+A، A) الله أن هناك زيادة في متوسط نسبة الطلاب الذين حصلوا على درجات الفئات (C، C+، B) والتي بلغت مجتمعة الطلاب الذين حصلوا على درجات الفئات (B، +C، C) والتي بلغت مجتمعة الرغم من وجود تضخم في الفصول الأربعة، فقد أظهرت النتائج وجود فروق ذات دلالة الرغم من وجود تضخم في الفصول الأربعة، فقد أظهرت النتائج وجود فروق ذات دلالة إحصائية بين ترتيب متوسط درجات الطلاب تُعزى إلى الفترة الزمنية، حيث كان متوسط ترتيب الفصل الدراسي الأول لعام ٢٠٢٤ هو الأقل تضخماً مقارنة بالفصول الدراسية الأول والثاني والثالث لعام ٢٠٢٣. وأشارت الدراسة إلى هذه النتائج ووجود الفروق تبعاً لأختلاف الفصول الدراسية قد تعود إلى أن معظم البرامج الأكاديمية بدأت عملية الاعتماد الأكاديمي في الفصل الأول ٢٠٢٤م، وما يتطلب ذلك من تقييم لممارسات إعطاء الدرجات. وأخيراً قدمت الدراسة عدداً من التوصيات العملية التي من شأنها المساهمة في تضخم الدرجات.

الكلمات المفتاحية: الدرجات، تضخم الدرجات، الدراسات العليا، المقررات الدراسية للدراسات العليا

Introduction

The process of academic assessment is one of the most important elements in many educational institutions, as it helps those in charge of the educational process in making classification, selective, or developmental decisions. This enhances the students' learning process and helps refine their skills, develop their abilities, and develop their knowledge. Evaluation also, therefore, helps educators in defining and formulating appropriate educational objectives for learners, and verifying the appropriateness of the teaching methods and evaluation mechanisms that are used in courses .(Gronlund, 2000).

Grades are an indicator of students' achievement and their mastery of the skills and knowledge targeted in courses and study programs. In addition to the value for those in charge of the educational process, assessment and grades are also important for students and their families, and for employers, due to the interconnected educational decisions regarding students, the teaching staff, and the educational institution as a whole. Therefore, any imbalance in students' grades negatively affects the objectives of the educational institution and the educational system as a whole. (Pattison, E. et. al., 2013).

The phenomenon of grade inflation in higher education institutions has become one of the most important issues that concern those in charge of higher education during the past years. Grade inflation is defined as an increase in students' grades from a previous year to a subsequent year, without this increase being matched by an increase in the educational competencies and skills that students obtain. World-renowned universities and institutes, whether in the United States of America or abroad, are concerned with the issue of grade inflation, as they take the necessary measures and procedures to deal with it (Schiming 200½) For example, resource allocation to academic units should not be based solely on student enrollment. The motivation for grade inflation within and across departments often stems from the fact that university resources are directly

linked to increased enrollment in each department or school. According to Butler (1975), grades have become a tool in the increasingly aggressive competition for enrollment. Often there is a tremendous pressure on deans and department chairs to increase student enrollment. Hence, they may engage in grade inflation to improve student recruitment. In addition, institutions should use a balanced method to evaluate faculties teachers are often evaluated by a student evaluation system, but this technique does not often reflect how rigorous the courses are or what standards of teaching the teachers use in the class. The faculty evaluation forms generally reflect how popular the teachers are with the students.

The unprecedented rise in students' grades in postgraduate studies at universities in the recent years 2022-2024 in most postgraduate courses indicates a phenomenon that deserves to be examined and its causes and justifications investigated. Many studies indicate that this trend of inflated grades is an international phenomenon which is widespread in most institutions of higher education, which leads to reducing the importance of excellence and high performance among students, weak desire to learn, and low level and quality of thinking. In some cases, the main goal for students is to consistently obtain higher grades. Instances of inflation have been enabled in some institutions of higher education where academic staff and management may not have been vigilant or alert to the causation and impact of grade inflation (Wongsurawt 20 · A;. Finefter-Rosenbluh & Levinson 2015; Alphonso, 2014; Bamat, 2014; Maagan & Shapira, 2013; Wikstrom & Wikstrom, 2005).

Caruth and Caruth (2013) indicate that higher education in developed countries is at risk of losing society's trust due to the frequent discussion of education problems in various media, which makes it imperative for those in charge of education to reconsider education policies in order to restore society's trust. On the other hand, Kevin (2014) believes that the time has come to refer the issue of inflation of students' grades in higher education to be at the forefront of local events. As it is assumed that the grades given to students are the final and accurate output of the process of

continuous assessment of student learning, the grades that teachers award students must be an honest indication of the results of their learning during the school year.

It is widely agreed in educational pedagogic scholarship that good evaluation that measures students' achievements and their mastery of the required skills and knowledge contributes in a real way to helping students learn, helping teachers to improve the educational process, and helping the educational institution to identify deficiencies in the educational system and weaknesses in educational programs offered to students (Finefter-Rosenbluh & Levinson, 2015; Lackey & Lackey, 2006; Stanoyevitch, 2008; and Krautmann & Sander, 1999). In turn, this supports the development of strategies and programs to improve the teaching and learning process.

Moreover, based on the importance of the educational outcomes of higher education institutions, and the development of frameworks, legislation and controls that define the procedures that must be adhered to in order to reach good educational outcomes capable of competition in the labor market, attention comes to the mechanism of evaluating students and giving grades to those who deserve them so that these grades express the true capabilities of students.

In Saudi Arabian Institutions the cumulative GPA of the student is approved as an academic achievement for him after graduation, and the GPA of any student is approved based on tests that are developed by the faculty members in addition to the tasks that were assigned to the student during his study of the approved courses within his study program, and as a result of the different grades of students in the courses they study. Some differences in grades can occur be due to the nature of the course or to the course teacher in terms of their severity or leniency in their approach to giving grades.

The Saudi Ministry of Education's application of aptitude tests for graduating students as a criterion for classifying universities showed disparities in students' levels despite their high grades, which confirms the presence of inflation in students' cumulative GPAs,

which affects the credibility and reliability of these institutions and the opportunities of their graduates in the labor market. Therefore, this study explores the extent of inflation in selected postgraduate courses at King Abdulaziz University in the academic years 2023-2024 according to a sample of grade records. The study aims to answer the following questions:

- -What is the extent of inflation in students' scores in a sample of randomly selected records?
- To what extent are there differences in students' grades between semesters?
- -What are the most prominent solutions and recommendations to deal with the inflation of grades in higher education?

By seeking to answer these questions, this study provides an overview of the current situation of grade inflation by analyzing a random sample of graduate student records in universities .The study then turns to suggest possible solutions and recommendations to deal with inflation of grades in higher education.

Terminology of study:

Grading inflation:

The term 'grade inflation' indicates an increase in grade point average (GPA) without a real increase in achievement (Potter & Nyman, 2001). According to Eiszler (2002), grade inflation is the "student attainment of higher grades independent of increased levels of academic attainment". Therefore, grade inflation simply means that students are given higher marks without demonstrating higher levels of mastery of the academic subject. Grade inflation can lead to a compression of grades toward the top of the scale; therefore, the term 'grade compression' is also used to express grade inflation.

In other words, inflation of grades is an increase in students' grades without correspondence to an increase in achievement (Juola, 1980). The British dictionary defines it as a continuous increase in the

number of students who obtain high grades on exams (Collins 2015). Mullin's English Dictionary (1995) defines the concept as a change in the pattern of grades, such that most of the students in the class receive high grades for the same amount and quality of work that the previous students submitted. Therefore, grade inflation not only constitutes a high grade, but further, it suggests an inability of that high or low grade to represent the qualitative function that it expresses or symbolizes.

Study limitations:

This study was limited to analyzing a sample of graduates' records for the years 2023 and 2024.

Literature review:

Numerous educators have expressed concerns about inflating student grades, and many questions arise about this matter (Franklin, Theall, and Ludlow 1991; Coughlan, 2014; Alphonso, 2014; Bamat, 2014; Maagan & Shapira, 2013; Wikstrom & Wikstrom, 2005). Such concerns lead us to pose the following questions: Are these high grades deserved and do they demonstrate genuine academic capability? Or can analytical research evidence a generalized leniency in the awarding of higher grades in higher education providers? Grade inflation raises concerns about the credibility and reliability of the academic assessment process and accountability systems. It also leads to lowering standards and expectations, making grades no longer able to differentiate between performance (Kolevzon 1981).

Harvey (2001) conducted a study aimed at revealing the phenomenon of inflation in grades and trying to search for its causes. The researcher focused on the degrees of Harvard University students for the academic year 2001 to apply his study. The results of the study indicated that the percentage of students who obtained an A+ and A- rating reached 50% of the total number of students. The results also indicated that the high scores were in the divisions with a small number of students, as well as in the divisions of

human subjects .The study concluded that the grades suffer from the problem of inflation, which leads to a lack of appreciation of competence and distinction between effort and non-effort, failure to motivate students to improve and develop their performance in a better way, and lack of interest in the effectiveness of teaching. The researcher attributed the phenomenon of grade inflation to the difference in standards from one professor to another (Harvey 2002) In addition to the leniency of these standards, most teachers contribute to building high expectations among students to obtain high grades. This, in turn, leads to the educator's inability to resist or ignore the expectations of high grades for students, and this leads to most grades being high: a self-fulfilling prophecy.

In addition, Al-Kaabneh (2018) analyzed 819 records at Shaqra University and the results indicated an increase in the average percentage of students who obtained categories (A+, A, and B+), while there was a decrease in categories (B and C+). The study of Felton and Koper (2005) indicated that higher education in American society suffers from the problem of inflated grades. Average scores at educational institutions have increased by 0.6 on the four-way continuum since 1967.

In private colleges, where cases of grade inflation have been detected frequently, the rate has increased from 25% to 30% compared to public educational institutions. At the University of Washington, inflation in student grades rose from 2.13 in 1967 to 3.12 in 1996. Inflation also rose at the University of Chicago, from 2.5 in 1967 to 3.26 in 1999. This data confirms and supports the general impression of most academics. Standards for awarding grades or grades may change from time to time.

Felton and Koper believe that there are many factors that play a major role in weakening and diminishing the credibility of the grades obtained by students during their studies in American institutions of higher education, whether those institutions are governmental or private, in addition to the grades that teachers give to students while they are teaching a course. Thus, the grades for the

course vary according to the different modules and the different teachers.

Wikstrom (2005) also conducted a study aimed at explaining the reasons for the increase in the rates of students at the secondary level in Sweden. To carry out the study, the researcher analyzed data on test scores obtained by high school graduates over a period of six years. The researcher assumed that the phenomenon of inflation in student rates is linked to several factors including the improvement in the academic performance of students, the criteria for selecting students, the way the student chooses the courses they will study, and the decrease in the criteria for granting grades to students. The results indicated that the inflation of students' grades was not related to any factors that the researcher assumed in advance. Rather, the inflation of students' grades was related to the teachers' leniency in grades awarded to students, as well as the teachers' inability to resist the pressures exerted by students on them to obtain high rates that qualify them to gain entry to higher education institutions.

McAllister and others (Mcallister & et al, 2008) investigated the extent of inflation in the degrees of students at the College of Engineering. The researchers analyzed students' grades in engineering courses over an eight-year period. The results indicated that there is an upward trend in the students' average scores, and that most of the students' scores are in the appreciation category (A). The results also indicated that there is a difference between the students' averages depending on the students' home departments. The study also confirmed the importance of the number of students in the class as a predictor of student rates.

Al-Anani (2008) carried out a study evaluating the literal grading system at the University of Jordan. Within this study, the researcher showed the extent to which students' grades were inflated as a result of the grading system used by the University of Jordan. To achieve the aim of the study, the researcher analyzed 2073 records of students' grades in the time period 2007-1996.

The results of the analysis indicated that there was an inflation in students' scores in the period 1996-2004, and that there was a decrease in their scores during the period 2005-2007. The researcher pointed out that this inflation is a result of the educational policy pursued by the university, as well as the evaluation methods and tools, in addition to the leniency on the part of the faculty members in applying the evaluation methods, all of which leads to a rise in the percentages of high grades.

Researchers Caruth & Caruth (2013) published a study aimed at reviewing studies that focused on the inflation of student grades in American higher education institutions. The study sought to explain the reasons for this inflation and the consequences that follow. The researchers concluded that the reasons for students' grade inflation are due to several factors: students' evaluation of teachers, teaching methods followed by teachers, scholarships offered to students, as well as high expectations among students. The researchers also pointed out that there are several reasons why teachers are lenient in awarding grades to students, including: teachers' fear of students' assessments of them, avoiding bad relations with students. In the case of some teachers, leniency in terms of grades is rooted in a lack of clear educational goals of the course or institution, along with fears around job security.

The researchers suggested using a variety of methods to evaluate students, and that grades are not the best criterion for evaluating student work. In order to evaluate students more accurately, educational institutions must identify the problems that lead to making teachers lenient in giving grades to students.

Methodology:

The study sample:

The study sample consisted of (621) records of graduates' students, which were chosen randomly.

Method of data collection and statistical processing:

To reveal the inflation of students' grades according to the classification system of grades and estimates used in the graduate programs, the records of the selected random sample were reviewed within the years approved in the study.

Then, the percentage of students who obtained each category of the grading scale approved by the university in the years 2023-2024 AD was found, and then the percentage of students in each category of the deliberate grading categories was calculated. The general trend of the time series representing these ratios with the passage of time was also clarified.

Simple indices of scores were also used to indicate the change in students' scores during the time period approved in the study. The index is a good statistical indicator to indicate the amount of inflation or decline. Where the index consists of two parts (the base year and the comparison year), and the year 2021 AD was adopted as the base year in this study. Finally, one-way analysis of variance was used to indicate whether the change in the average percentage of students who obtained each grade category was statistically significant with the semester time.

Results and discussion:

To answer the research questions, the characteristics of grades were studied by analysing a sample of 621 grade records for the years 2023-2024, where averages, standard deviations, percentages, and the number of students corresponding to each percentage category were calculated according to the university's approved grading system.

Table (1) Percentage(P) of Grades Categories (GC)								
GC	A+	A	B+	В	C+	С	D	F
P	48.8	25.3	12.2	7.8	5.7	0.2	0	0

Chart (1) Indicates Grades Categories for 621 records

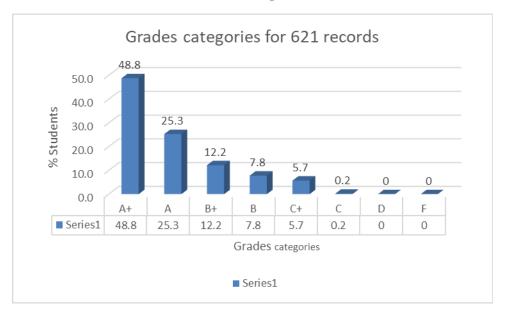
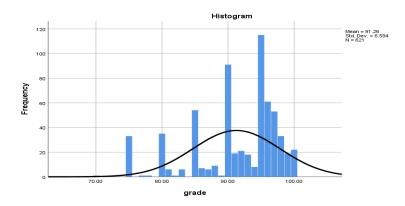


Table No. (1) shows that there is a difference in the percentages of the number of students who obtained each category of grades in effect at King Abdulaziz University. The statistical data also indicate an increase in the percentage of students who obtained the grade category (A+) compared to the other categories, as it reached 48%, followed by the grade category (A), where the percentage of those who obtained it reached 25%, then the grade category (B+), where the percentage of those who obtained it reached 12.2%. We also note that there is a decrease in the percentage of students who obtained grades in the lower categories (D, F, and C) as it did not reach 0.5%, and this confirms the inflation of grades and the remarkable increase in the number of students obtaining grades in the higher-grade categories. Accordingly, the characteristics of the statistical distributions indicate that in general, there is an inflation in grades, as the grades are clearly negatively skewed, as shown in Figure No. (1). Statistical indicators also confirm that the shape of the distribution is skewed to the left in all the courses and records that were monitored.

Chart (2) Indicates Grades curve for 621 records.



To ascertain the degree of inflation in the various courses, the percentages of grades of students who obtained a certain grade in the four semesters studied were compared, which confirmed the higher grades of students in the upper category of grades A+ and A, compared to the other categories. The statistical results for the grade categories during the time period of the four semesters also indicate that the grade percentages are consistent in terms of higher grades for students in the upper category of grades A+ and A compared to the other categories.

The statistical results show that the percentage of students who obtained the A+ category (95-100) is the highest during the four years and semesters at 48.8%, followed by the grade A category: (90 - less than 95) at a rate of 25.3%, making it the percentage of the highest category A+ and A (90 -100) with a total of 74.1%, which is a very high percentage of the number of students who obtained grades in the upper category. It is also clear from the data on the percentages of the number of students that they are decreasing in the B+ rating category (85 to less than 90), where the percentage of students in this category reached 12.2%, and the percentage of students continues to decrease as we move to a lower rating category, as it reached in the category The rating B (80 to less than 85) was 7.8%, and the percentage in the rating category C+ (75 to less than 80) was less than the highest category, which amounted to 5.7%. While the percentage of those receiving grades in the lower

categories C, D, and F (less than 75 combined was 0.2%). This inflation and high percentage of grades in the upper category can be attributed to the nature of the courses and graduate studies programs and the academic custom they entail, which makes professors lenient in giving most students grades within the upper grades category A+ and A (90 to 100).

Tables (2) and (3) also show the results of the Kruskal-Walls test, which indicate that there is an effect of the variable time period on the ranking of students' grade point averages that is statistically significant at the significance level of 0.000. The ranking of the averages for the third semester of 2023 was the highest value (379.45), while the ranking of the averages for the first semester of 2024 was the lowest value (287.26), while the ranking value of the averages for the first and second semesters of 2023 was 318.34 and 301.25 respectively. The decline in the average ranking of grades for the first semester of 2024 can be attributed to the start of most graduate programs entering the academic accreditation stage, which includes auditing and reviewing academic practices in general, and issues of evaluation and awarding grades in particular, as actual visits to quality and academic accreditation programs began at the end of the year 2023 and the beginning of the year of 2024.

It can be noted that that there is a statistical significance for the Chisquare value at 0.05, as the P value = 0.000, and therefore there are significant differences between the average ranks of the four semesters.

Table	(2)	Grades	Mean	Ranks	through
Semest	ers				

	Semeste	N	Mean Ranks
	rs		
grade	12023	140	318.34
	22023	130	301.25
	32023	93	379.45
	12024	258	287.26
	Total	621	

Table (3) Test Statistics^{a,b}

	grade
Kruskal-Wallis H	18.907
df	3
Asymp. Sig.	.000

a. Kruskal Wallis Test

b. Grouping Variable: semester

By analyzing the results related to the study question: To what extent is there inflation in university students' grades within the four semesters studied (the first, second and third semester of 2023, and the first semester of 2024)? It was found that there was inflation in students' grades by calculating the percentages for each category of grades approved by the university. There was a striking increase in the percentage of students obtaining grades A+ and A in all four semesters for the time period studied. The pattern of increasing percentages of students obtaining the highest grade category was prevalent in the four semesters, and the percentages decreased as we moved towards the lower grades categories in a striking manner. This is an indication of the presence and continuation of inflation in the time period studied. These results are consistent with the results of a number of studies (Al-Anani 2008; Wikstrom 2005; Felton & Cooper,2005; Harvey 2001).

It was also shown through Kruskal-Walls's analysis of the effect of the time period variable on the ranking of students' grade point averages that there is an effect of the time period variable on all the rankings of grade point averages in the four semesters, the first, second, and third semester of 2023, and the first semester of 2024. The ranking of the averages for the third semester of 2023 was the highest value (379.45), while the ranking of the averages for the first semester of 2024 was the lowest value (287.26), while the ranking value of the averages for the first and second semesters of 2023 was 318.34 and 301.25 respectively. The decline in the average ranking of grades for the first semester of 2024 can be attributed to the

beginning of most graduate programs entering the academic accreditation stage, which includes auditing and reviewing academic practices in general and issues of evaluation and grading in particular, as actual visits to accreditation programs began at the end of the year 2023 and the beginning of the year 2024.

We can reach a general conclusion about the phenomenon of inflation in the university's graduate programs during the time period studied (the three semesters of 2023 and the first semester of 2024). Despite the presence of inflation in the four semesters studied in the same pattern, there is a decline in the ranking of the averages in the first semester of 2024. This change may be due to the new implemented processes of the accreditation and quality phase for these programs, which would help to reduce the level of grade inflation during the future period if developmental and improvement reviews of academic programs continue.

Recommendations:

The study concludes with the following recommendations in light of its results:

- 1- The necessity of periodically reviewing students' grades, comparing them with the standard distributions of grades, and examining the reasons for their deviation from the normal distribution of grades.
- 2- Study the characteristics of students' grades annually and continuously and link those characteristics to some variables that are expected to have an impact on students' grades, such as the experience of faculty members, the teaching methods used, evaluation methods, the number of students in each section, and the high expectations of students to obtain grades. High, lack of job security for faculty members, especially contracted ones, as well as faculty members' fear of student evaluations.
- 3- Provide Instructor Training on Fair Student Assessment.
- 4- Use of the Quota System.

Restricting the number of high grades that instructors can award to their students in a particular class is another way to combat grade inflation. This approach was adopted by Princeton in 2004 when the administration provided guidelines to all faculty members stating that, on average, no more than 35% of the grades awarded in undergraduate courses should be in the 'A' range. (Chowdhury, 2018)

Department chairs or heads can prepare comparative statistics every year to indicate how each department has reported its grade distribution compared to other departments. Based on the findings, the university administrators can create a policy for allocating a quota on the number of 'A's among their departments. However, the quota system has limitations, as it may prevent a fraction of the students from receiving the grades that they deserve in reality. In less rigorous courses, a large number of students in the class may rightfully deserve an 'A' grade, but if the quota system is applied, some of these students will be unfairly penalized (Chowdhury, 2018).

Conclusion:

Considering the findings of the study, the following conclusions can be proposed: 1) The average percentage of students who obtained grade categories (A+, A, B+) reached 86.3%, and this increase is offset by a decrease in the average percentage of students who obtained grade categories (B, C+, and C), which together reached 13.7%, while none of the students received grades in categories (D and F). 2) Despite the presence of inflation in the four semesters, the results showed that there were significant differences between the ranking of the students' grade point averages due to the time period, as the average ranking of the first semester of 2024 was the least inflated compared to the first, second, and third semesters of 2023. This result could be interpreted as the academic programs engaged in the process of academic accreditation at the end of 2023 and the beginning of 2024.

This paper has provided basic reform suggestions and recommendations that can be adopted by academic institutions to alleviate the problem of grade inflation. The current researcher believes that this article will raise awareness of grade inflation and stimulate further discussions in order to formulate new strategies to address the issue.

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