Students Really Evaluate the Performance of the Teacher?

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Abstract: Evaluation is in one of the essential steps of the teaching-apprenticeship process. This actually happens in two ways: the teacher regarding the student the student in relation to the teacher. It is believed that the student-teacher evaluation does not receive the same attention as the evaluation in the opposite direction. Because of this, this work aims to identify the existence of certain factors relevant to the student, skew their assessments with respect to their teachers. For this, we used secondary data obtained from the Department of Administration of the Federal University of Goiás - Campus Catalan (DADM-CAC / UFG). These data came from the student-teacher evaluation instrument for each of the travel period from the second half of 2006 and the second half of 2008, totaling 67 cases. The results represent an encouragement for higher education teachers, as the lack of a stronger correlation between student-teacher evaluation and teacher-student evaluation to suggest that, as a rule, students are not guided in note receiving to assess their teachers.

Keywords: Teacher evaluation; Student assessment; Teaching; Learning

1. Introduction

Evaluation is in one of the essential steps of the teachingapprenticeship process. This actually happens in two ways, namely: (1) the teacher regarding the student (studentteacher evaluation) and (2) the student regarding the teacher (teacher-student evaluation). These evaluations take place both formally and informally, from the first time contact is established between these two subjects of the aforementioned process. As regards the formal assessment is the use of performance measurement instruments valued part, such as tests, exams, papers, seminars, participation in activities, opinion surveys etc. In turn, the informal is established at times when the contacts between the subjects are set, regardless of any device that promotes a note objective result of the other's performance in this interaction.

However, although the assessment in the teaching-learning process is a step that seems to have a high recurrence of use, in addition to a consensus on the importance of its use, it is believed there is a need to conduct reflections on the evaluation process. Search is such reflections because it is assumed the fallibility of measuring instruments, on which conjectures about the lack of validity in measuring the same, i.e. they cannot measure what is proposed. It is assumed that such validity arising out of problems of different sources in the preparation of measurement instruments in the implementation of these instruments and the subsequent analysis of the collected data.

It is believed that the student-teacher evaluation does not receive the same attention as the evaluation in the opposite direction. This attitude of the academy can weaken the process of teaching and learning, as this assessment may lead teachers to reflect on their practice, improving it from the results provided by the students. It is assumed that the faculty does not dispense with due attention to such evaluation believing that students use subjective factors to measure the performance, a fact which skews the results, making them inconsistent for a more substantial reflection.

In view of the above, this study aims to identify the existence of certain factors relevant to the student, skew their assessments with respect to their teachers.

Two hypotheses were built to assist in achieving this goal: H1 - identify the correlation of "grade given by the teacher to the student" (teacher-student evaluation) with the studentteacher evaluation;

H2 - identify the correlation of "student's presence in the classroom" (frequency) with the student-teacher evaluation.

2. Methodological Aspects

To achieve the objectives of this study, we used secondary data obtained from the Department of Administration of the Federal University of Goiás - Campus Catalan (dadm-CAC / UFG). These data come from the student-teacher evaluation instrument for each of the travel period from the second half of 2006 and the second half of 2008, totaling 67 cases. Each of these cases represents a subject taught in the course of those department directors. Please note that these figures are all subjects taught in the course since its installation (which had more than ten students enrolled), which characterized the research as longitudinal. It is worth noting that the findings of this study cannot be generalized to other cases other than those belonging to the database used.

The approach of this research is explanatory nature (RICHARDSON et al., 1999), it aims to identify the relationship between the result of the student-teacher assessment with the "grade given by the teacher to the student" and "student's presence in the classroom ".

The research was used the quantitative type, which used the correlation analysis and statistical evaluation of the data

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tool. The correlation analysis "[...] is used to describe the strength and direction of a linear relationship between two variables" (PALLANT, 2005, p. 121, our translation). To analyze the results from the application of the aforementioned statistical technique, it should be borne in mind that the Pearson correlation coefficient (r - used in this study) can vary from -1 to +1. According Pallant (2005, p. 121, our translation)

It should also be mentioned that the magnitude of the value of the Pearson correlation coefficient (r) ranging between 0 and 1 (both negative as positive) could be evaluated in several ways. Cohen (1988 apudPALLANT, 2005) points out that 0.10 to 0.29, the correlation can be considered small; between 0.30 and 0.49, it can be judged medium; lastly, from 0.50, the correlation should be considered large.

It should also highlight the existence of the coefficient of determination (R^2), which indicates the percentage of shared variance between two correlated variables (PALLANT, 2005) - namely as an independent variable explains the variation in the dependent variable. This value is obtained by multiplying the Pearson correlation coefficient (r) for himself.

3. Theoretical

The student-teacher assessment is a tool to know, under the vision of students, teacher performance that carries several objections.

As pointed star and Simon (2003, p. 112, our translation), in an article that reflects on a comparative project of student and teacher assessment in eight European countries, resistance is observed as such an assessment as a result. "[..] The fear of lack of objectivity, 'revanchism' and lack of scientific knowledge "set of characteristics likely to be observed in students.

Regarding revanchism if surmise that one of the main reasons for the existence of this feeling is the discontent of the student with respect to the notes you receive from the teacher. Loureiro et al. elucidate this fact (2001, p 121): Some authors point out that after the course completion cannot be the most appropriate time; the stress of finals can strongly influence this assessment of the teacher and his discipline. The beginning of the next school year would be the ideal time, or the first time, and the end of the degree course, a second very interesting time, because the whole vision better evaluate teaching performance.

Thus, due to a possible sense of injustice if the students do not agree with a given note provided by the teacher to them, students can take revenge at the time of evaluation, revenge herein as "revenge" because the same can present in the student view as a threat mechanism to teaching (JULIATTO 1987 apudLOUREIRO*et al.*, 2001).

However, a previous study developed by Genevois (2001), which analyzed the student-teacher assessment filed by the Civil Engineering students of the Federal University of Pernambuco (UFPE), obtained a correlation close to zero (0.0), or is, note that the student received the teacher was not characterized as a predictor element of note that the student has offered to teachers. It is worth mentioning on assertive with regard to this study, because it has clear limitations spatiotemporal, which exempts to be considered a certificate of a trend or another regarding the relationship studentteacher evaluation and the property that students develop such action.

Students in relation to teachers worth noting the existence of a work by Murray (2005), which analyzes the validity and reliability of these evaluations, perform it. Concerning the validity, we conducted an experiment in which students were undergoing various courses with different teachers, and each course a test was applied - all similar. The results showed a correlation coefficient of 0.50, a fact that reveals a general trend that best teachers evaluated the students are the ones that offer the best grades to students.

However, it is interesting to note that the same authors referred in the previous paragraph shows that, although the average of studies have pointed resulting experiment a correlation value of 0.50, is acute studies note that, individually, varied from -0, 70 and +0.90, a fact that indicates a wide variation in said correlation, indicating a difficulty of student behavior prediction and leads to the conclusion of the need for observation of the environment for the realization of such foretells.

Thus, to continue the discussion on validity, it should be noted the results of the study conducted by Langbein (1994), the School of Public Affairs, American University, in the United States. The author states that there is evidence to support the hypothesis that the student-teacher evaluation measures both the popularity of the teacher, as the quality of their work. In the first case, it was observed that students who expect better grades evaluate more positively teachers. As for the second case, it is observed that students with more positive overall academic performance evaluate more negatively teachers. Thus, it can be stated that: "[...] Students with better academic record (overall high average) provides its lower grades instructors, while those who only expect to do well in a given discipline offer an evaluation with high notes" (LANGBEIN, 1994 p. 550).

On the reliability of measurement instruments of the studentteacher assessment should be said that is not a factor that raises concerns, as shown by the studies Aubrecht (1981 apud LANGBEIN, 1994) and Cranton and Smith (1990 apud LANGBEIN, 1994).

Finally, it is worth mentioning that another important dimension to compose this theoretical framework rests on the discussion about the relationship "student-teacher evaluation grade" versus presence index in class by the students. However, nothing has been found on the subject, which allows us to affirm the seminal contribution that this study offer in this area.

Presentation and Discussion of Results

This part of the work is presented in Table 1, which summarizes the database obtained after tabulation of the student-teacher assessment instruments for each of the travel period from the second half of 2006 and the second half of

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2008. It is presented in the first column all the disciplines and teachers Administration Course of UFG / CAC who gave class between 2006 and 2008, which were duly renamed to maintain their anonymity. Table 1, also contains the period in which the students were enrolled when carried

out the assessment, the class that corresponds to the time of admission of students and the semester in which each subject was given, as well as the frequency (%) and mean student –teacher ratings (which is at 1 and 5 its maximum) and teacher-teacher (ranging from 0 to 10).

Table	I. Prequent	y, averages	of student-t			ings of the subjects	anaryzeu.
Discipline	teacher	Period	groups	years-half	Average teacher-		Frequency (%)
	т	59	1	2008.2	student	teacher	
A	L	5° 3°	1	2008-2 2007-2	4,97	4,15	100,00
B	R	3°	1		5,62	4,52	90,84
C	I	3°	2	2008-2	4,32	4,00	75,28
С	I		1	2007-2	6,35	4,04	82,86
D	K	2°	1	2008-1	6,25	4,20	90,06
D	K	2°	2	2007-1	5,14	4,15	88,17
E	E	5°	1	2008-2	7,40	4,50	99,69
F	F	1°	3	2008-1	7,73	3,80	89,56
F	F	1°	1	2007-2	6,70	3,26	75,36
F	А	1°	2	2006-2	6,59	4,66	82,50
G	Ι	1°	3	2007-2	5,23	4,65	77,02
G	N	1°	2	2006-2	6,89	4,64	85,09
G	Ι	1°	1	2008-1	3,61	4,35	77,25
Н	Н	2°	3	2008-2	6,5	4,13	97,86
Н	Н	2°	2	2008-1	8,40	3,90	90,06
I	K	<u> </u>	2	2008-1	6,14	4,30	87,06
I	K	1°	1	2007-2	5,28	4,23	82,14
I	K	1 1°	3	2007-2	6,02	3,50	86,86
J	B	1 1°	3	2008-2	5,10		85,56
J	B	1°	3			4,00	
			-	2007-1	6,28	3,21	96,88
J	В	1°	2	2007-2	6,33	3,79	90,16
K	Н	2°	1	2007-1	7,11	4,32	85,19
L	W	3°	2	2008-2	6,69	4,37	85,13
L	Α	3°	1	2007-2	5,95	4,29	83,59
М	W	4°	1	2008-1	5,93	4,12	81,38
Ν	W	5°	1	2008-2	7,38	4,09	92,44
0	D	5°	1	2008-2	6,38	3,76	91,03
Р	S	4°	1	2008-1	7,44	3,50	86,69
Q	Y	5°	1	2008-2	5,25	3,28	88,80
R	R	2°	1	2008-1	6,05	4,10	91,09
R	R	2°	3	2008-2	5,36	3,98	89,13
R	R	<u> </u>	2	2006-2	5,53	4,38	87,63
S	R	3°	1	2000-2	5,45	4,55	87,03
S	R	4°	1	2007-2	7,27	4,60	83,89
	Y	4 3°	1	2008-2	5,39	3,70	85,36
		3°		2008-2			
T	S		2		5,79	4,31	85,42
U	I	5°	1	2008-2	4,00	3,51	80,14
V	U	1°	2	2006-2	4,44	3,46	80,81
V	G	1°	3	2007-2	5,33	4,64	79,28
V	G	1°	1	2008-1	5,95	4,70	91,89
W	R	2°	3	2008-1	5,19	4,10	90,81
W	R	2°	2	2008-2	3,33	3,77	88,50
W	R	2°	1	2007-1	6,35	4,38	92,09
Х	Х	4°	1	2008-1	7,39	4,40	85,39
Y	Н	3°	2	2007-2	8,13	4,07	92,59
Y	0	3°	1	2008-2	5,32	3,50	92,84
Z	S	2°	1	2008-1	6,31	3,60	89,70
Z	S	2°	2	2008-1	4,18	4,51	88,50
Z	N	2°	3	2008-2	7,29	4,59	85,61
AA	W	2 3°	2	2007-1 2008-2	6,38	4,39	87,98
		3°		2008-2			
AA	A		1		5,91	4,23	90,63
AB	V	1°	1	2006-2	7,13	4,59	88,13
AB	Т	1°	1	2007-2	6,28	3,61	80,89
AB	Q	1°	2	2007-2	6,28	4,26	80,89
AB	С	1°	3	2008-1	8,34	4,90	92,22
AB	Р	1°	2	2006-2	7,13	4,75	88,13
AC	Z	2°	3	2008-1	6,12	3,70	97,25

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AC	Z	2°	2	2007-1	5,72	4,18	89,47
AC	J	2°	1	2008-2	5,41	4,58	90,63
AD	R	1°	3	2006-2	6,29	4,24	89,06
AD	Ι	1°	1	2008-1	3,90	4,30	79,16
AE	М	4°	1	2008-1	6,36	3,90	87,17
AF	А	2°	1	2008-1	6,68	4,30	92,06
AF	A	2°	3	2007-1	6,34	4,37	85,05
AF	Т	2°	2	2008-2	5,93	4,08	90,83

First, we analyzed the strength of association between the dependent variable (the average student-teacher assessment) with the independent variables (average teacher-student evaluation and frequency), using Pearson's partial correlation calculation, as shown in Table2.

Table 2: Matrix of correlation between the dependent variable and the independent variables observed:

	Independent variables		
Dependent variables	Evaluations teacher-student	Frequency	
Evaluations student-teacher	0,16	-0,02	

It was found associations between student-teaching evaluation with the teacher-student evaluation and later with the frequency are 0.16 and -0.02 respectively. According to criteria used by Plallant (2005), the correlation between student-teaching evaluation with the teacher-student evaluation is small (r = 0.16) and that as often cannot even be classified (r < 0.10). However, it should be noted that the relationship between the student-teacher evaluations with the teacher-student assessment is positive, indicating directly proportional magnitudes. That is, the greater the teacherstudent assessment, the greater the student-teacher evaluation; and when lower the teacher-student evaluation, the lower the student-teacher evaluation. This proportion incites a direction to revanchism appointed by Star and Simon (2003), but that cannot be certified as a factor that recurrently notice due to the low correlation found.

If the frequency happens the opposite, i.e., the relationship is negative, which entails an inverse association of the type: the higher the frequency the lower the student will be teacher-student evaluation; and the lower the frequency the greater the student will be teacher-student evaluation. However, these correlations are too small or even classifiable as criteria Pallant (2005), which does not mean that the student-teacher evaluation is influenced by the teacher-student assessment or student attendance.

In addition to the small correlations, it should be noted the calculation result of calculating the coefficient of determination (\mathbb{R}^2), shown in Table 3.

Table 3: Coefficient of determination (R²) between the

 dependent variable and the independent variables observed:

Independent variables					
Dependent variable Evaluation-teacher-student Frequency					
Evaluation Student-Teacher	0,03	0,00			

These results show that only 3% of the student-teacher assessment can be explained by the teacher-student evaluation. As for the frequency, this is not even a minimal explanation of the student-teacher assessment.

An analysis for the dataset without any segregation can obscure certain associations that might be observed after a division by using objective criteria. To better observe this database, it was partitioned from two criteria: time and class.

Through this segregation aimed to assess whether students to pass the periods of the course or because they belong to the same classes follow the same behavior when performing student-teacher evaluation.

Correlation analysis, separated by periods, between studentteacher evaluation with (a) the teacher-student assessment and (b) the frequency of students, is presented in Table 4.

Table 4: Correlation matrix between the independent	
variable and the observed independent variables (segregated	

by period)					
Independent variables					
Dependent variable Period Evaluation-teacher-student Frequency					
	1	0,12	0,01		
Evoluction	2	0,08	-0,36		
Evaluation Student-Teacher	3	0,17	-0,03		
	4	0,08	-0,48		
	5	0,65	0,81		

The results presented in Table 4 show that the direction to the student's revanchism remains even when the analysis is done separately, in all periods. This fact is represented by positive correlations between student-teacher evaluation and teacher-student evaluation. It is noted, however, that revanchism had little or unclassifiable degree of correlation between dependent and independent variables, as in analysis performed with the data set, except for the fifth period in which the correlation was 0.65 therefore large, the second criterion Pallant (2005).

The relationship between the student-teacher evaluation and frequency, there is a predominance of negative correlations represented by the second, third and fourth periods, indicating an inverse relationship between these variables. As regards the magnitude of the correlation, the first and third period's results showed unclassifiable; in turn, the others presented revealing results: the second and fourth periods obtained average correlations - with great emphasis on the latter, which came quite the 0.50 limit - and the fifth time, a rather strong correlation.

It will be interesting to note the difference in behavior between the fourth and fifth period: both showed significant correlations, but directing to opposite sides.

Similarly, we calculated the coefficients of determination of interactions analyzes already segregated by period, which can be seen in Table 5.

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 Table 5: Coefficient of determination (R²) analysis for periods

Independent variables					
Dependent variable	Period	Evaluation-teacher-student	Frequency		
	1	0,01	0,00		
	2	0,01	0,13		
Evaluation Student-Teacher	3	0,03	0,00		
Student-Teacher	4	0,01	0,23		
	5	0,42	0,65		

In the first, second and fourth periods, the student-teacher assessment can be explained by 1% by the teacher-student evaluation (R 2 = 0.01). In the third period, this value is 3%. In the fifth period has the highest R² in the student-teacher assessment can be explained by 42% by the teacher-student evaluation (R 2 = 0.42). Already often explains 13% of the student-teacher assessment of the second period; 23% and 65% of the fourth and fifth anything in the first and third periods. Therefore, the correlation and significance analysis for the fifth period are exceptions, because they have much higher coefficients of determination to the other periods. Finally, the analysis secreted by panels exposed correlations presented in Table 6.

Table 6: Correlation matrix between the independent variable and the observed independent variables (segregated by class)

Independent variables					
Dependent variable groups Evaluation-teacher-student Frequency					
	1	0,38	-0,03		
Evaluation Student-Teacher	2	-0,18	-0,18		
Student-Teacher	3	0,23	0,07		

The first observation to be made is that the correlations between student-teacher evaluations with teacher-student evaluation were low or medium. The second observation is that the direction to revanchism remains in most cases (turma1 and 3), reflected by the positive correlation between these variables.

Finally, it is noteworthy that the correlation with the frequency are unclassifiable in classes 1 and 3, and the small class 2. Noteworthy is also the maintenance of negative correlation (classes 1 and 2), corroborating previous analyzes. The exception is the positive correlation with the frequency observed for class 3.

In addition, the coefficient of determination calculated for the data separated by classes, which results in Table 7 are available.

 Table 7: Coefficient of determination (R ²) of analysis

 groups:

groups.						
Independent variables						
dependent variable groups Student-teacher ratings frequency						
Student-Teacher Evaluation	1	0,15	0,00			
	2	0,03	0,03			
Evaluation	3	0,05	0,01			

The aforementioned results it follows that the studentteacher assessment results have a greater explanation of charge by the teacher-student evaluation in the first group (15%); in the other, the power of explanation proves to be low (3% for class 2 to 5% of class 3).

Conclusions

The correlation between the student-teacher evaluations were analyzed: a) the teacher-student evaluation and b) the frequency of students. Correlations were observed by calculating the correlation coefficient under different optics:

- Joint analysis of student-teacher assessments without any segregation;
- Analysis of student-teacher ratings segregated by period;
- Analysis of student-teacher ratings segregated by class.

The results did not indicate that, exhaustively, the existence of factors relevant to the student, skew their assessments with respect to their teachers, more specifically, the teacherstudent assessment and student attendance to classes - that is, two hypotheses elucidated for this work were a priori rejected.

However, the results, either for all of the student-teacher assessments without any segregation, either to the studentteacher ratings broken down by period, either by class, show a pattern of behavior. This pattern is (a) the high frequency rate of positive correlations between variables studentteacher evaluation and teacher-student evaluation; (B) the predominance of negative correlation between studentteacher evaluation and frequency; (C) the low correlation between dependent and independent variables; and (d) the low explanatory power of the dependent variable, by means of the independent variables.

Excepting the segregated analysis of the fifth period, segregated analysis of the teaching student evaluation with the teacher-student evaluation of class 1, and the correlation with the frequency of classes 2 and 4, all correlations were low as well as its coefficient determination, which does not say that there is a strong relationship between student-teaching evaluation with the teacher-student assessment and student attendance. However, these disparate results demonstrate the possibility of a stronger correlation between the variables student-teacher evaluation and (1) teacher-student evaluation and (2) frequency, in certain contexts.

It is considered notorious such exceptions, especially in the behavior of the fifth period and the class 1 - with regard to the correlation with the teacher-student evaluation - and (almost) dichotomy between the fourth and fifth periods, when correlated with the frequency. These facts come to the survival hypothesis initially elucidated, which, consequently, proposes to continue the discussion.

Moreover, such exceptions deserve special consideration, because the fifth reporting period count primarily with students from class 1; it is believed that this would point to a trend of this group of students to consider, with greater intensity, the note provided by the teacher so that they can evaluate the teacher.

It is believed that these additional peculiarities motivate deepening in the search for more knowledge about the topic

covered in this work. Thus, thought to be pertinent to quote some suggestions for future work, which follow:

- The continuation of this work, adding up more and more cases of this proposal (the more classes as new analysis periods);
- Verification of biographical characteristics, cultural and psychographic of the members of each group to verify the existence of a pattern in the characteristics of the components thereof, which may help explain the different behaviors presented in this work, especially in relation to elements of class 1 and possible their differences for the other classes; and
- Observation of continuity (or not) the strength of the positive correlation between the variables student-teacher evaluation and teacher-student evaluation in classes who attend the fifth period, which may indicate the existence of some peculiarity in all disciplines usually processed through this time travel, which can skew the evaluation behavior of the student.

It is postulated that the results obtained from the complete database of this study represent an encouragement for higher education teachers, as the lack of a stronger correlation between student-teacher evaluation and teacher-student evaluation to suggest that, as a rule, students are not guided in note they receive to evaluate their teachers. This fact enables teachers to perform their work within the normal premises without any actions deviations less "orthodox" as favoritism to students and a more tenuous charges for obtaining more positive notes provided by students, as seems to be expendable supplies "Free" notes to students, so that they shall value appropriately.

On the other hand, the various results presented by class 1 and the fifth period again raise the concern on the same subject, a fact that further research may help decisively point out the actions to be taken so that both the bias of the student-teacher evaluation, as the teacher-student evaluation, be avoided.

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