

Teaching Performance and Research According to the Students of the Doctorate in Educational Sciences at the UNE-Lima Graduate School, 2022

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Abstract

Teaching performance and research are two significant factors for achieving qualifying results from universities, requiring the reflection of the academic community in order to understand the interaction between these aspects. In this sense, the present study has been developed with the objective of determining the relationship that exists between teaching performance and research according to the students of the Doctorate in Educational Sciences at the UNE-Lima Graduate School, 2022. Likewise, this The research has a quantitative approach, basic type, correlational descriptive, with a non-experimental, cross-sectional design, with a hypothetical-deductive method. The sample was made up of 100 students of the Doctorate in Educational Sciences of the EPG of the UNE. The students were given two questionnaires structured through items with a Likert scale, duly validated by expert judgment and with a Cronbach's Alpha reliability of 0.893 for the first instrument and 0.898 for the second instrument. The results were obtained using the Chi-square statistic and the gamma coefficient for ordinal variables, where at a reliability level of 95% and with a p-value = 0.000; That is, less than 0.05, it was evident that there is a significant relationship between both study variables, having obtained a gamma value of 0.870, determining that there is a high degree of association, being positive. It is concluded then that the better the teaching performance, the higher the level of research of the students.

Keywords: *Teaching performance – Research.*

1. Introduction

In contemporary Society, taking into account the various substantial changes that have manifested throughout the last decades of the 21st century, such as the progress of science, engineering, and technology; as well as education, the political, economic, environmental and social situation; as well as the context of COVID 19 have shown the imperative of strengthening the educational process, where, among the different components on which educational policies must focus, we have teaching performance and research, as they are endowed with utmost significance for achieve adequate educational quality; Likewise, in order to achieve the development of the expected achievements in the graduation profile at the postgraduate level; in such a way that students are equipped with the skills, tools and instruments in research to respond to problems aligned with their scope of academic and professional development.

In this regard, teaching performance according to Añorga (2006) becomes the faculty of professionals to carry out actions, carry out their duties and obligations in relation to their

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position or functions in accordance with the demands of their work. This is manifested in the real behavior of the teacher with respect to the other pending tasks in the exercise of his office; what is consistent with what they really do and not only with what they know how to do (p.34).

For Robalino (2007, as cited in Estrada and Mamani, 2020), teaching performance is connected to the process in which their professional capabilities, social responsibility, and personal disposition are manifested.

Likewise, according to Santisteban (2003) the teacher's suitability reflects the execution of actions specific to his work, which must reflect his political-ideological domain, the technical-professional domain; as well as leadership, which enable them to know how to be, around the essentialities of work in the sector, in response to current demands and manifesting it in the evaluation of the determined results of their center (p. 9).

In attention to what was mentioned, in this research, it is worth highlighting that teaching performance is constituted by their actions sustained in knowledge, skills, attitudes; as well as the mastery of their generic and specific competencies; those that are evident in the activities of compliance with what is established in the curriculum and its respective study plan, in the methodology used to achieve the expected learning, the conduct of information technologies-ICTs; as well as the evaluation of the planned learning outcomes; with inclusion not only of transversal research skills in their professional development; but also, as a facilitating agent of research in the process and activities of their classes; thus promoting inquiry and passion for knowledge and scientific method in master's and doctoral students.

Regarding research, this helps teachers, paying attention to their practice, to strengthen their self-knowledge and self-reflection; This is when the essentiality of what research entails is understood, when the research begins through inquiry, the information is collected, the problem solution approach is made, the problematic situation is explained in an argued manner. , the information that has been collected is schematized, duly outlining the report where the results of the investigated problem are written (Hernández, 2021).

Likewise, research becomes a systematic and reasoned conjugation that seeks to discover and make an interpretation of the phenomena, facts, laws and relationships of a certain area of reality, as well as a path to observe reality; meanwhile, to a procedure to find scientific truths and not half truths (Ander-Egg, 1992)

It should be noted that we agree that research is a heuristic, social, cognitive, duly planned and dialectical process in which the scientific method is applied rigorously, in such a way that hypotheses or theories pending verification regarding the relationships are demonstrated. of the facts, characteristics, causes and consequences; as well as everything related to phenomena and society, human thought and the processes of nature (Ñaupas et al., 2013, p.68).

Along these lines, teaching professionals at the Graduate level must strive to generate higher levels of competitiveness and quality around their performance; combining a high specialization in the development of research and innovation, with the ability to produce and practice scientific research, with the purpose of responding and solving social, educational, and economic problems; this from the context of observable reality and thus finds itself in the capacity to provide solutions to the country's problematic social needs.

Likewise, in order to reflect adequate teaching performance in relation to Research at the postgraduate level, the research teacher faces many challenges; Therefore, when taking on the challenge of reflecting and responding to the extraordinary scientific, technological and social development, you must have a good level of research, demonstrating mastery of knowledge, development of skills, attitudes and values combined with adequate

motivation to formulate and promote processes around research; in addition to solid professional training.

As a consequence, the social scenario of change, the current scientific advances that demand greater training and updating in university higher education teachers as well as in the participants in Education studies at the Undergraduate and Postgraduate level, must be prioritized. Organizational and investigative success in university management is impossible without individual excellence; Thus, teamwork in teaching performance today requires more than just technological innovation, demanding a deep commitment from teachers and an archetype of social skill: where professionals are trained effectively and efficiently to achieve objectives and important goals; However, the existence of difficulties in education, the changes and transformations that the world is currently going through.

In this order of ideas, different individuals, in the development of their functions, acquire behaviors that will be their own in different situations and areas; which gives it a very particular characteristic in the way in which teaching performance is carried out, meanwhile, the fulfillment of its activities and duties according to the University Law; Therefore, it is necessary to promote the culture of a new teaching to reformulate teachers' practices through scientific research, aiming to improve the quality of learning together with the development of investigative skills with a transversal approach to all areas of education. postgraduate level study based on the needs of the market in response to their academic and professional development.

Taking into account the above considerations, this research aims to determine the existing association around teaching performance and research according to the students of the Doctorate in Educational Sciences at the UNE-Lima Graduate School, 2022, in such a way that it can be evidenced said relationship and that it helps to reinforce its role as a guiding agent of postgraduate students for the construction of their own knowledge and development of skills; as well as attitudes to investigate efficiently and effectively; in such a way that doctoral students from public or private universities increase their ability to contribute to optimizing or solving social problems or their professional environment with innovative responses and proposals resulting from previously developed research, thereby contributing to society.

2. Methodology

The research includes a quantitative approach, with a non-experimental and cross-sectional design, given that data analysis was used to verify the hypotheses supported by numerical measurement together with statistical analysis, where it was not altered or intervened in. the composition of the variables; Furthermore, its transversality refers to the fact that the information or data was collected at a certain time.

It is of a basic type, whose inclination is encouraged in the application of theoretical knowledge to certain situations and to the practical effects derived from it; seeking the increase of scientific knowledge; It is also descriptive correlational, since its object is to describe the relationships between two or more variables at a given time (Andrés, 1999). The sample was made up of 100 doctoral students enrolled in the year 2022 in the Doctorate in Educational Sciences of the EPG at UNE, it was obtained according to the sample size formula, applying simple probabilistic sampling.

The instrument applied was the questionnaire, which was composed of two parts i) teaching performance and ii) research; The first section was composed of 49 items and the second section of 29 items. Both sections were structured with an evaluation scale between terrible, poor, average, good and excellent with scores from one to five points; In the case of teaching performance, it was distributed in four dimensions (academic, responsibility, scientific-technological domain and interpersonal relationships and

training in ethical values) and in the case of research, it was distributed in three dimensions (knowledge about the principles, uses and potentialities of research, skills for the use of research procedures and skills for the use of research results). The content validity of said instrument was determined based on the expert judgment method, taking into account the criteria of relevance, relevance and clarity; The reliability was established using Cronbach's Alpha coefficient for the first section of 0.893 and for the second section of 0.898, obtaining good reliability in accordance with (George and Mallery, 2003, cited by Rojas and Martínez, 2021), this, subsequently to obtain data according to the application of a pilot test to 30 doctoral students.

Descriptive statistics were used to analyze the data. For the hypothesis test, the Chi-square test and the Gamma coefficient were applied in order to determine the association between both variables given their nature. Statistical data processing was carried out with SPSS v26 software.

3. Results

The data were analyzed based on the application of the evaluation instruments, first analyzing the results at a descriptive level and subsequently at an inferential level.

Description and analysis of socio-demographic characteristics

Table 1. Distribution of students of the Doctorate in Educational Sciences at the EPG UNE according to gender.

	No. of respondents	Percentage
Male	25	25%
Female	75	75%
Total	100	100%

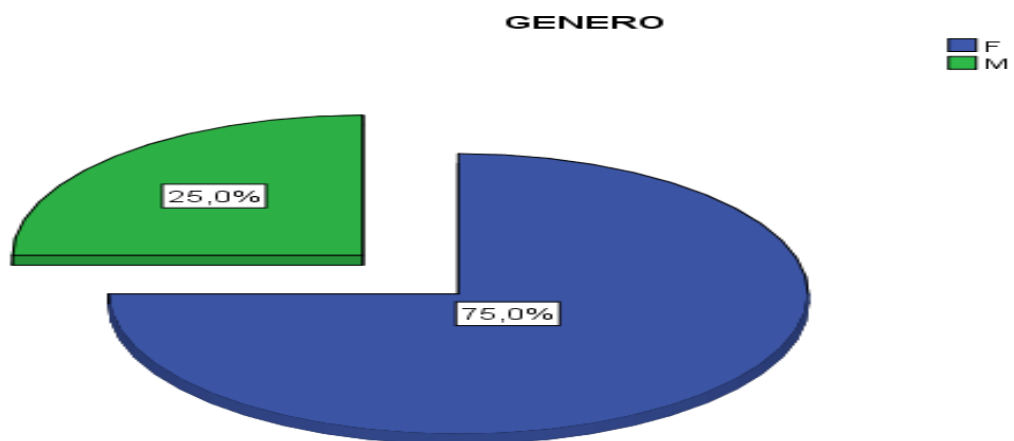


Figure No. 01. Distribution of students of the Doctorate in Educational Sciences at the EPG UNE -Lima according to gender

It can be noted that 75% of the doctoral students surveyed were female students, while only 25% of the Doctorate in Educational Sciences students are made up of men.

Description and analysis of the results of the teaching performance variable

Table No. 02 On the distribution of the perception of EPG-UNE doctoral students regarding teaching performance

Level	Frequency	Percentage	accumulated Percentage
Negative	32	32,0%	32,0%
Relative	35	35,0%	67,0%
Positive	33	33,0%	100,0%
Total	100	100,0%	

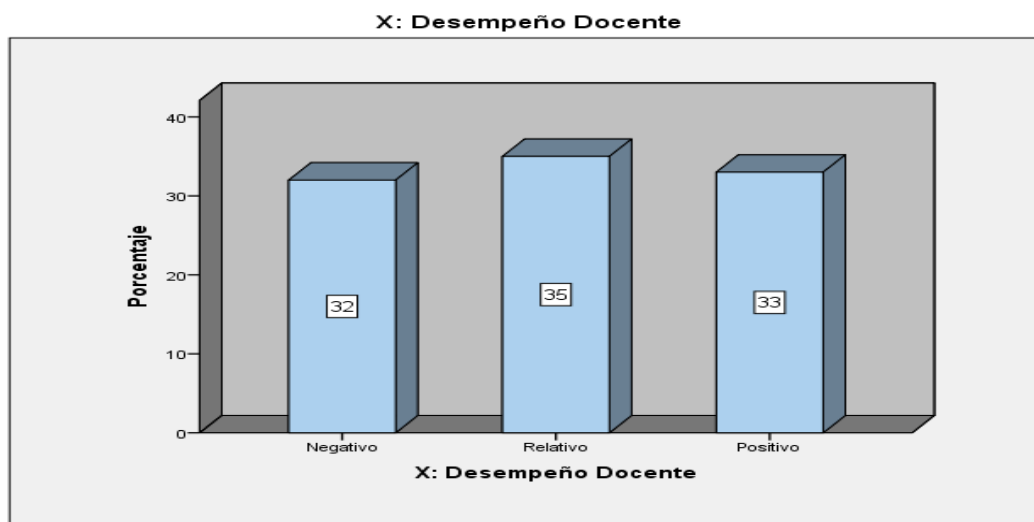


Figure No. 02 Teaching Performance according to Doctoral Students in Educational Sciences at the EPG-UNE

In table No. 2 it can be seen that doctoral students who perceive teaching performance as positive represent 33%; On the other hand, 35% of the students rate this performance as relative and 32% rate it as negative; It follows that there is a third of doctoral students who perceive teaching performance as negative; the other third being at a relative level; Therefore, taking into account this, said performance must be improved in order not to fall back into the negative perception of the students; as well as in the conformity of an action seen as relative.

Table No. 03 Distribution of the perception of Doctoral Students in Educational Sciences about Research at the EPG UNE

Level	Frequency	Percentage	accumulated Percentage
Negative	48	48,0	48,0
Relative	29	29,0	77,0
Positive	23	23,0	100,0
Total	100	100,0	

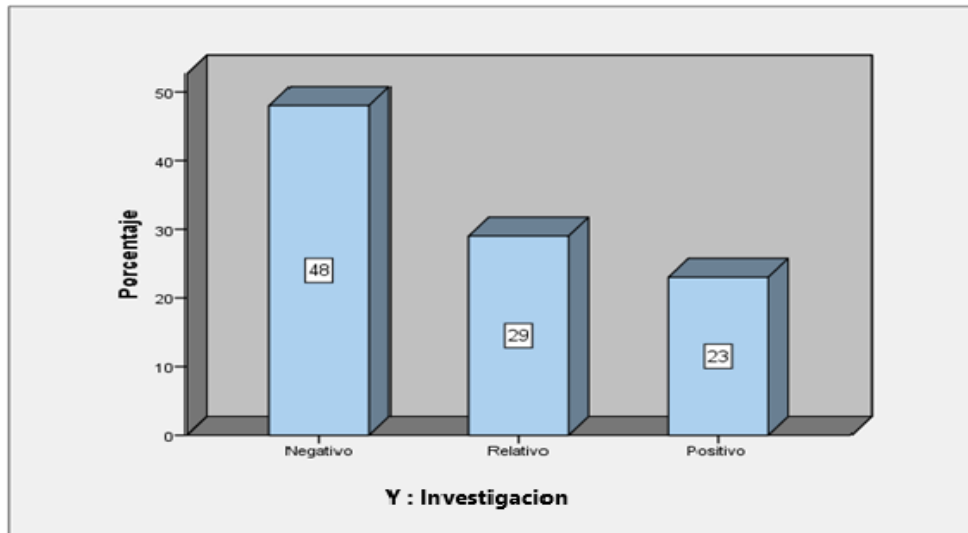


Figure No. 03 Research according to Doctoral Students in Educational Sciences at the EPG UNE

Based on the analysis carried out, the frequency and percentage corresponding to each level defined for the research variable were obtained, and it can be seen that 23% of doctoral students evaluate research as positive, while 29% of students have a relative perception of the same and 48% of said doctoral students classify research at the EPG UNE as negative; From which it follows that it is necessary to improve its approach to transform the negative student perception regarding the level of research offered in the Doctorate in Educational Sciences at the UNE.

General hypothesis testing.

General Hypothesis:

H0. Teaching performance is not associated with research according to the students of the Doctorate in Educational Sciences of the EPG UNE-Lima, 2022.

H1. Teaching performance is associated with research according to students of the Doctorate in Educational Sciences from the EPG UNE-Lima, 2022.

Choice of significance level: $\alpha = 0.05$

Decision rule: If $p < 0.05$ then the null hypothesis is rejected

Table No. 04 Contingency Table – General Hypothesis

				Y: Investigation			% Total
				Negative	Relative	Positive	
X: teaching performance	Negative	Count	27	5	0	32	
		Frequency expected	15,4	9,3	7,4	32,0	
	Relative	Count	19	14	2	35	
		Frequency esperada	16,8	10,2	8,1	35,0	
	Positive	Recuento	2	10	21	33	
		Frequency expected	15,8	9,6	7,6	33,0	

Total	Count	48	29	23	100
	Frequency expected	48,0	29,0	23,0	100,0

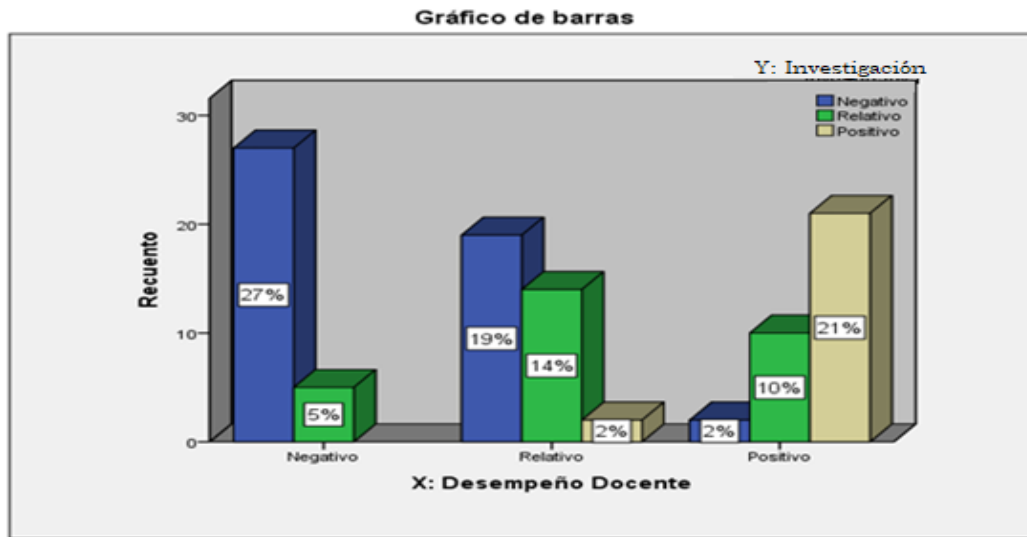


Figure No. 04 Teaching performance and research

It can be seen from table No. 04 complemented with figure No. 04 that, of the 33 respondents who perceive positive teaching performance, 21 perceive positive research; Likewise, of the 35 doctoral students who perceive a relative teaching performance, 14 consider that research is carried out in a relative manner, while of the 32 students who perceive a negative or poor teaching performance, 27 agree that the research is negative.

Table No. 05 Chi square test

Chi-square tests			
	worth	gl	p-worth
Chi squared	60.255	4	0.000
No. of valid cases	100		

From this table, it is evident that the significance value is 0.000, being less than 0.05, therefore, the null hypothesis is rejected with a reliability level of 95% and significance of 5%; Therefore, Teaching Performance is associated (significantly related) with Research according to the students of the Doctorate in Educational Sciences at the EPG-UNE.

Table No. 06 Gamma coefficient for testing General Hypothesis

	Worth	p- worth
Ordinal by ordinal Gamma	0.870	0.000
No. of valid cases	100	

The critical level (p-value) allows us to decide regarding the independence hypothesis. While this critical level is less than 0.05, it can be stated that the Teaching Performance and Research variables are associated; and since the value of Gamma is 0.870, there is a positive association; It can be concluded, interpreting that the doctoral students who indicated a positive teaching performance also described the research as positive, while those who indicated a negative teaching performance also described the research as negative, this can be seen in figure No. 04.

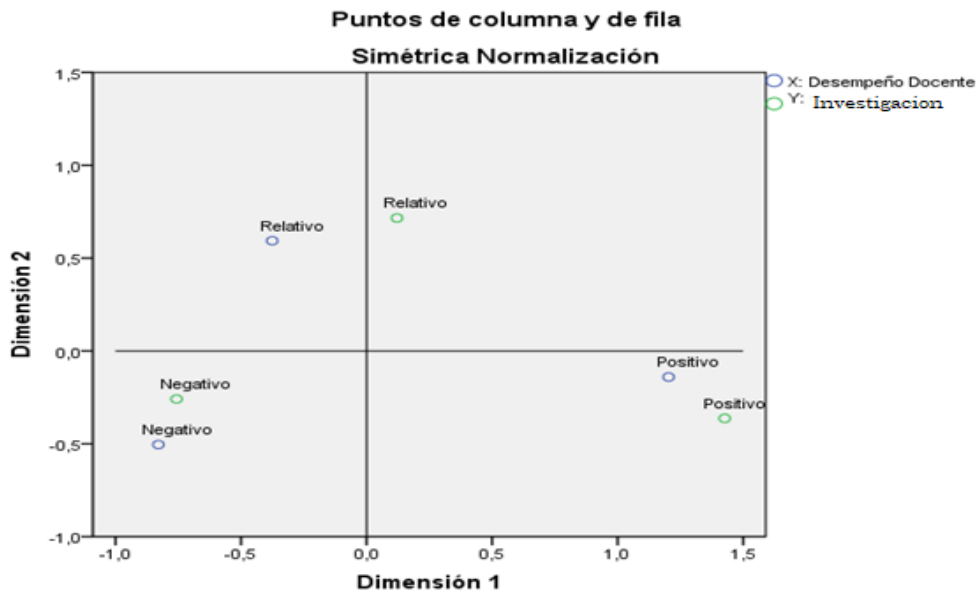


Figure No. 05. Bispatial Scatter Diagram around the correspondence analysis of both variables

4. Discussion

According to the statistical treatment carried out and having obtained as a result with a reliability of 95% and a significance level of 5% that both variables addressed are directly and positively associated with an association level of 0.870; indicating a high degree of association; which implies that the better the teaching performance, the better the research in doctoral students will be; In particular, these results agree with those obtained by Revilla (2021), who stated the existence of a significant link between both variables studied, which means that the better the performance of the teachers, the better the educational performance of the students of research courses. For their part, Guizado, Valenzuela and Vallejo (2020) stated that a significant link was observed between both variables, concluding that when teachers perform well, students perform well academically.

Under the same methodology, it was also demonstrated that the academic dimension of teaching performance is moderately associated with Research according to the students of the Doctorate in Educational Sciences of the EPG UNE-Lima, 2022; while a Gamma coefficient of 0.542 was obtained, whose significance level was 5%, where the p-value (observed critical value) of the chi square is equal to 0.002, said association being significant.

Likewise, a similar finding was evident in the research by Yslado, Ramírez and Espinoza (2020), where they stated that university teachers have significant degrees of burnout syndrome due to teaching and research, unlike the other university evaluated. Soria, Ortega and Ortega (2020) conclude that there is a high level of link between the

performance of educators and student learning, so it can be said that teacher performance positively influences learning. of his students.

Likewise, a Chi square p-value of 0.000 has been obtained, less than 0.05, which implies a significant association, determining with a 5% significance that the responsibility dimension is significantly associated with research, this association being medium grade with a Gamma Coefficient of 0.689. Similar findings have been evidenced in the studies by Casimiro, Casimiro and Casimiro (2020), where the authors stated that this review confirmed that the themes of teaching and learning techniques are preserved; However, there is little impact on the theses and students prefer to publish their work as books, which is why the study houses are required to provide a better, adequate and quality educational service. On the other hand, Gómez (2020) argued that there is a low positive relationship between the two variables, so we can say that in virtual education there is a positive effect of teachers' performance on the academic performance of the students of the administration and accounting careers.

It was also established that the Scientific - Technological Domain dimension is associated with research with a coefficient of Gamma 0.542, corresponding to a moderate association. These results are consistent with the studies by Aliaga and Luna (2020), where the authors stated that research Applied from socio-formation, it must be applied in practice, obeying the cognitive processes and how conscious they are, co-creating and modifying reality through understanding, seeking solutions to the problems that arise.

On the other hand, Mendoza (2019) concluded that a moderate and direct significant link was observed between teachers' performance in the science course with the formation of scientific skills in students. Finally, it was possible to verify that the dimension Interpersonal relations and training in ethical values is associated with research (second variable), according to the Gamma coefficient 0.882, allowing for a strong positive association.

In this regard, similar findings have been evidenced in the studies by Barbachán, Pareja, Rojas and Castro (2020), concluding that a significant positive and moderate association was found between both variables presented; being that what they want to tell us is that, the better the performance of the teachers, the better the research competencies of the evaluated students will be. Finally, what was stated by Paredes (2018) correlates with our study, stating that the performance of teachers has a significant and direct consequence on student satisfaction in the research subjects of students in the Administration major; That is to say, the better the level of performance of the teachers, the better the level of research, with a direct positive association between both variables.

5. Conclusions

The data obtained in our study reflect with a reliability of 95% and a significance level of 5% that teaching performance is directly associated with research according to the students of the Doctorate in Educational Sciences at the EPG-UNE. The level of association that exists is 0.870, which indicates a high degree of association and means that the better the teaching performance, the higher the level of student research.

Likewise, the academic dimension of teaching performance is associated with research according to the students of the Doctorate in Educational Sciences at the EPG-UNE; where it was determined that the association is of medium degree with a Gamma coefficient of 0.542 and with a significance level of 5%, where the p-value (observed critical value) of chi square is equal to 0.002, therefore, This association is also significant.

There is sufficient statistical evidence to affirm that the responsibility dimension is significantly associated with research according to the students of the Doctorate in

Educational Sciences at the EPG-UNE; Meanwhile, a Chi square p-value of 0.000 has been obtained, rejecting the null hypothesis and accepting the alternative hypothesis, having obtained a Gamma coefficient of 0.689, which symbolizes a medium or moderate degree of existing association.

On the other hand, the Scientific-Technological Domain dimension is significantly associated with research according to the students of the Doctorate in Educational Sciences at the EPG-UNE. In this regard, said association is of medium degree, since it has a Gamma coefficient of 0.542; It is also significant, given that it has a chi square p-value = 0.002 (less than 0.05), being highly significant; Therefore, the null hypothesis was rejected, thus verifying the existence of a significant association.

Finally, regarding the dimension Interpersonal relations and training in ethical values, it is significantly associated with research according to the students of the Doctorate in Educational Sciences at the EPG-UNE; This, according to the Gamma coefficient of 0.882, having obtained a high degree of association; Likewise, according to the chi square of significance with a p-value of 0.000 (less than 0.05), where a high significance is observed, which generated the rejection of the null hypothesis and the acceptance of the alternative hypothesis where the existence of significant association.

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