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Teaching vocation and attitudes towards research in education students

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Abstract---The investigative activity is an inherent part of the pedagogical work. Quality education worldwide, demands to train creative students, with critical thinking, with the ability to observe, analyze and propose solutions to the problems that afflict our society. Objective: To determine the relationship between teaching vocation and attitude towards research in Education students of a National University in Metropolitan Lima 2022. Methodology: The research used the method hypothetical - deductive, with a quantitative approach, non-experimental cross-sectional design and correlational descriptive level. The sample was 110 students from the faculty of education of a national university in metropolitan Lima during the year 2022. For the collection of information, two duly validated instruments were available, one of them called the teacher vocation questionnaire for students (CVD-E), to measure the attitudes towards research variable, the revised version of the scale of attitudes towards research (EACIN) was used. Results : A high positive correlation was found between the variables teaching vocation and attitudes towards research. In the same way, a high positive correlation between the teaching vocation variable and two of the dimensions of the second variable: interest in research and vocation for research. Regarding the third dimension, a moderate positive correlation was found between the teaching vocation variable and research evaluation.

Keywords---investigative skills, research, motivation , professional profile, vocation

Introduction

Globalization demands from the university, the undisputed center of knowledge, a close and indivisible relationship between teaching and research. This transformative duality (Materán and Mendoza, 2018) strengthens the complex work of teachers, towards the development of future researchers, innovators and scientific thinkers in the country. However, various studies show that the necessary importance is not given to research and that university professors are distanced from the research activity, which they should develop by vocation (Alvarado-Peña et al., 2021). At the international level, Sabrin (2018) analyzed the experiences of the European countries with the best performances, among which Germany, Finland and the United Kingdom stand out, finding that they attract the best academics to the teaching career, so their admission filters are very strict. They force students to specialize in at least one academic subject and in the labor field, they offer competitive salaries. With reference to the investigative activity in Latin America, Barón (2019) states that the low number of researchers in Colombia is due to the low investment in research, science and technology compared to other countries, but above all it is due to the lack of development of investigative competences from the first years of educational training, which will later allow, in higher education, to dominate scientific processes with pleasure and motivation. It also maintains that the teacher is responsible for promoting the liking and taste for research from the early training of the student, not as a strict scientific methodological activity, but through the development of basic skills such as observation, analysis, responsibility and comprehension. In this line of ideas, Palacios (2021) in his study determined that 50% of Latin American respondents show a favorable attitude towards research, and that the unfavorable attitude is represented by 41.7%; concludes that "the attitude towards research is benefited thanks to the teaching competence in the training of students, taking the role of mentor based on constant feedback, promoting potentiality and curiosity for research" (p.9). In addition, it recommends strengthening interest in research from the first years of academic training.

In relation to the teaching vocation, Eguren and De Belaunde (2019) highlight that a significant percentage of teachers in the country choose the career for reasons unrelated to the vocation, and that this situation is due to the perception of inequality and reduced opportunities, even more so in the rural sector, which they have from their experience as students, and that despite the efforts of the State to improve the conditions of the teaching career, there is an even greater context that must be addressed to understand the true situation of teachers in the country. On the other hand, Ventura (2020) maintains that, in Peru, teachers do not carry out research work in schools, even less do they participate in events such as congresses, which is reflected in research related to education, these are not carried out by teachers, but by economists, psychologists, among other professionals.

Consequently, this study focuses on determining if there is a relationship between the teaching vocation and the attitude towards research in Education students, since according to the research by Ventura (2020), it is evident that the teacher has disinterest and lack of motivation for the scientific research basically due to

economic, academic and time availability reasons; however, it is also important to know the implication of the vocation in the attitude towards research in the educational field since there is little literature on the matter; In addition, there is a need to obtain more information in relation to professional vocation and interest, since apparently, the value of vocation has been lost over time (Chang, 2018).

Method

Conceptualization of the teaching vocation

Defined in a concrete way by Ossa et al. (2017) the teaching vocation is the personal disposition and interest in the activities of the educational field, an essential competence when graduating from the career. Various authors agree that the approach to the concept has been complex, since the subject is approached from a different perspective and according to the meaning that each one attributes to it (Celis and Sebastián, 2020). For Romero-Ramírez (2020), the teaching vocation is the call to carry out education kindly and humanely, putting the needs of society before personal benefits. Regarding the subjective nature, Sánchez - Suricalday et al. (2021) consider that it is a natural inclination or an attraction to the profession. The vocation is inherent, it makes the teacher enjoy teaching and look for strategies so that their students learn in a more enjoyable way (Montes-Osorio, 2022).

Celis and Sebastián (2020) in their study obtained open information between 2016 and 2017 on what the teaching vocation is for pedagogy students at a Chilean university. The information was grouped into two macrocategories : internal mobilization and external mobilization, since there is no clear and uniform idea regarding its conception.

Importance of the teaching vocation

For Franco et al. (2017) vocation is important because it is the differentiator or unique characteristic that allows the person to influence a group of learners by equipping them with life skills. Precisely, Paulo Freire, one of the best and most outstanding pedagogues of recent years, proposes the transformation of traditional education, which requires critical, free and reflective thinking so that the student discovers, observes and values the world from his own construction (Morales, 2018). The role of the teacher goes beyond the mere action of transmitting content, since he has the opportunity to teach and guide students to think correctly (Malagón and Rincón, 2018). Vocation is one of the motivating factors that will allow achieving this goal, as well as continuing and remaining in the work; without it, says Franco et al. (2017) the person is prone to failure and the abandonment of their internal calling. Sunza et al. (2021) describes that a large part of the students choose teaching for other reasons that are not linked to their vocation. This is due in part to the fact that the processes of admission to university institutions are based on a general academic evaluation that does not consider vocational aspects of the applicants, which affects poor academic performance, dissatisfaction with the career and even the abandonment of studies. superiors. Given this, Korkmaz and Unsal (2020) suggest supporting and

improving the attitudes of teachers regarding their career, in this way preventing them from showing unfavorable attitudes that significantly affect their professionalism and even the prestige of teachers.

Dimensions of the teaching vocation

According to Sunza et al. (2021) the development of the vocation is related to three dimensions: the educational background, the reasons for choosing and the interests; being the latter, the most important since to the extent that they are taken into account, the probability of professional success is greater. For Ossa et al. (2018) the dimensions of the teaching vocation are related to 6 intrinsic aspects: a) Interest in teaching, which is the personal taste for helping others to develop their skills. b) Motivation for academic achievement refers to the interest and satisfaction in learning new things and constantly seeking to improve academically. c) Self-determination, is the ability to decide reflexively based on one's own needs. d) Intrinsic motivation, is the inner satisfaction when carrying out activities related to pedagogy. e) Disciplinary interest, is the inclination for activities related to pedagogy. f) Scale of lies, it is defined as situations of daily life that imply a certain contradiction of the truth. This dimension was considered since there is the possibility of idealized answers in the application of the instrument, for which questions related to naturally improbable behaviors are included and that, if they are constantly chosen as totally in agreement, serve as an indicator of a misleading response.

Conceptualization of attitudes towards research

According to Chara and Olórtégui (2017), the attitude towards research is the inclination influenced by psychological and affective states for or against research and is linked to academic training because it involves reflection and critical analysis. It is the person's position before the investigation (Cruz et al., 2021), which can be rejection, indifference or acceptance, strongly linked to the motivational component (Palacios, 2021). Attitudes can have an impact on the learning of research methodology (Loayza-Rivas, 2021), since they play an essential role within society in relation to the disposition that students show towards science and, in general, towards the new knowledge (Cruz et al., 2021).

Teacher attitudes

According to what Palacios (2021) described, teachers demand to have the necessary skills that include didactics, innovation and motivation; in the same way be the link between student and university to help in the development of attitudes towards research, since the strategies used by teachers are influential and decisive in the development of these skills, characteristics of the knowledge society (Núñez, 2019). In this sense, Olivera (2020) in his study evaluated the development of the investigative capacities of teachers and evidenced the poor training and commitment of teachers. Likewise, Hernández et al. (2021) affirm that the majority of teachers do not apply scientific knowledge in the classroom, due to poor management in research processes.

It is not only required to awaken a positive attitude towards research, but also to develop skills for the search and selection of information, analysis and reflective interpretation (Palacios, 2021). In this sense, a contribution to alleviate this situation is to include in the study plans of the first years of university education, subjects related to research (Olivera, 2020) in this way teachers and students could consider them as core activities and they would give them the required importance (Rubio et al., 2018). In this regard, Barón (2019) considers that, from school, teachers must work through different activities and in a transversal and comprehensive way, the skills and abilities to involve students in the world of research in a pleasant way, becoming necessary to link school and university, and encourage the profile of research professor at all levels (Palencia et al., 2022).

Student Attitudes

In the first years, university students usually show a positive attitude towards research (Barrios and Delgado, 2020), however, as the career advances, this attitude is diminished, either due to lack of time, greater recharge of work in the last years. study cycles, among others (Abad et al., 2021). Despite recognizing that research activities are important for professional training, students show rejection of the preparation of a thesis. In this regard, the syndrome everything but research, in teachers, and everything but thesis in students, clearly denotes the distance from research activities; despite the fact that students consider it important in their training, they prefer to have the option to graduate by other means (Obermeier, 2019).

It is evident that knowing the attitudes that students have about research will not only allow us to know if these are positive, negative, favorable or unfavorable, but also to act on them with an adequate strategy, because it is not possible to speak of competency-based learning if from the beginning, the students' attitude is one of rejection for what they will be taught, and even more so for what will favor their critical thinking, develop their abilities and strengthen their professional training (Ramos and Escobar, 2020).

Dimensions of the variable attitudes towards research

Studies such as those by Abad et al. (2021); Cruz et al. (2012); Paredes and Moreta (2020); Quezada et al. (2019); Chara-Saavedra and Olórtégui-Luna (2018); have evaluated this variable using scales such as eacin proposed in 2016 and that measures 3 dimensions: 1) affective, related to the emotions that the person feels when investigating, 2) cognitive, represented by what the person knows or thinks they know about research, and 3) behavioral, understood as what the person does or can do to investigate. In 2020, with a Colombian sample, a review was carried out on this scale, resulting in a reliable and easy-to-apply instrument made up of three subscales: disinterest, vocation, and research assessment (Aldana et al., 2020). The lack of interest in research is associated with the demotivation that Ventura (2020) tells us about, basically due to three interrelated factors: economic, academic and time aspects. The vocation for research pushes to develop this intellectual work, even being aware that in our country it is not recognized as it should (Ventura, 2020). In the opinion of García (2018) it is the passion for new knowledge, however, to be good researchers, it is

not enough to have a vocation, mastery of certain skills is required. Finally, the assessment of the research, that is, the importance and awareness that they give to this activity, both for their professional and personal development (Cruz et al., 2021).

Method

The research used the method hypothetical - deductive, with a quantitative approach, non-experimental cross-sectional design and correlational descriptive level. The sample was 110 students from the education faculty of a national university in metropolitan Lima during the year 2022.

For the collection of information, two duly validated instruments were available, one of them called the Teaching Vocation Questionnaire for Students (CVD-E) which was born from the need to measure the teaching vocation in a specific and scientific way in Chile. It can be applied to both professionals and pedagogy students at different levels of pedagogical training, since it provides reliable and pertinent information about the vocation, with adequate levels of correlation. It is made up of 37 items, divided into 6 dimensions and structured on a 5-point Likert scale. The reliability obtained is between Cronbach's alpha values of .799 and .660, which indicates that it is a reliable instrument (Ossa et al., 2018). To measure the attitudes towards research variable, the revised version of the scale of attitudes towards research (EACIN) was used, carried out with a Colombian sample. Validated by expert judgment with a Cronbach's alpha of .87, evidence of good internal consistency. It consists of 28 items grouped into 3 dimensions on a 5-option Likert scale (Aldana et al., 2020).

Results

Table 1
Correlation between teaching vocation and attitudes towards research in students

Correlations			teaching vocation	Attitudes towards research
Spearman 's rho	teaching vocation	Correlation coefficient	1,000	.788 **
		Next (2-sided)	.	,000
		N	110	110
	Attitudes towards research	Correlation coefficient	.788 **	1,000
		Next (2-sided)	,000	.
		N	110	155

****.** The correlation is significant at the 0.01 level (bilateral).

Table 1 shows the Spearman's Rho correlation = 0.788 ** considered as a high positive correlation between the variables teaching vocation and attitudes towards research and $\rho = 0.000$ ($\rho < 0.05$).

Table 2
Correlation between teaching vocation and interest in research in students

Correlations			teaching vocation	Interest research	in
Spearman's rho	teaching vocation	Correlation coefficient	1,000	.832 **	
		Next (2-sided)	.	,000	
		N	110	110	
	Interest in research	Correlation coefficient	.832 **	1,000	
		Next (2-sided)	,000	.	
		N	110	110	

** . The correlation is significant at the 0.01 level (bilateral).

Table 2 shows the correlation of Spearman's Rho = 0.832** considered as a high positive correlation between the teaching vocation variable and the interest in research dimension and $\rho = 0.000$ ($\rho < 0.05$).

Table 3
Correlation between the teaching vocation and the vocation for research in students

Correlations			teaching vocation	Vocation research	for
Spearman's rho	teaching vocation	Correlation coefficient	1,000	.726 **	
		Next (2-sided)	.	,000	
		N	110	110	
	Vocation research for	Correlation coefficient	.726 **	1,000	
		Next (2-sided)	,000	.	
		N	110	110	

** . The correlation is significant at the 0.01 level (bilateral).

Table 3 shows the correlation of Spearman's Rho = 0.726** considered as a high positive correlation between the teaching vocation variable and the research vocation dimension and $\rho = 0.000$ ($\rho < 0.05$).

Table 4
Correlation between the teaching vocation and the assessment of research in students

Correlations			teaching vocation	Research assessment
Spearman's rho	teaching vocation	Correlation coefficient	1,000	.416 **
		Next (2-sided)	.	,000
		N	110	110
	Research assessment	Correlation coefficient	.416 **	1,000
		Next (2-sided)	,000	.
		N	110	110

** . The correlation is significant at the 0.01 level (bilateral).

Table 4 shows the correlation of Spearman's Rho = 0.416** considered as a moderate positive correlation between the variable teaching vocation and the research assessment dimension and $p = 0.000$ ($p < 0.05$).

Discussion

Teaching and research form a transformative duality that strengthens the complex work of professionals in pedagogy (Materán and Mendoza, 2018) so that the contribution of this study is to determine the relationship between the teaching vocation and attitudes towards research. in students of the faculty of education of a national university.

The results indicate that there is a high positive correlation between the variables teaching vocation and attitudes towards research, this would be supported by what was described by Ossa et al. (2018) that the teaching vocation develops the motivation for academic achievement, that is, the interest and satisfaction in learning new things and constantly seeking to improve academically. In the same way, the vocation shows disciplinary interest in that it is inclined towards activities related to pedagogy such as research. Malagón and Rincón (2018) refer that for Paulo Freire "research is inherent to teaching practice, that is, only by teaching is research done and while researching is learned how to teach" (p.112). Although it is true, Ventura (2020) shows in his study that teachers have a lack of interest and lack of motivation for scientific research, this would make sense with the approach of Sunza et al. (2021) which show that a large part of the students choose teaching for other reasons that are not linked to their vocation. Consequently, teachers without a vocation show a lack of interest in investigative activities.

Regarding the findings related to teaching vocation and the dimensions of attitudes towards research, a high positive correlation was observed between the teaching vocation variable and interest in research. In the same way, a high positive correlation between the teaching vocation variable and the vocation for research; and moderate positive correlation between the teaching vocation

variable and research evaluation. Although there is no literature that relates the teaching vocation and the dimensions of attitudes towards research, the importance of the results allows us to highlight the ideas of Palencia et al. (2022) who consider it necessary to "redesign initial teacher training plans that overcome existing barriers and the separation between teaching and research" (p. 16). In addition, it becomes necessary to have adequate admission filters, which consider vocational traits in the processes of admission to the education career (Sunza et al., 2021).

The vocation understood as the call, gift or passion, is not only enough (García, 2018). In the case of a vocation for research, it is also required to develop skills for the search and selection of information, analysis and reflective interpretation (Palacios, 2021). Regarding reflective competence, García (2018) emphasizes that it must be deep, since research demands connecting the acquired knowledge and transcending it to discover new knowledge.

Regarding the teaching vocation, although studies show that the majority considers the vocation as a fundamental and necessary element for pedagogical work, and it is even argued that pedagogical training is not transcendental, it is only necessary to have a vocation (Montes-Osorio, 2022); There are contrary opinions, which attribute little or no significance to the vocation in their professional training, so it should be a subject for further study (Celis and Sebastián, 2020).

Conclusions

There is a high positive correlation between the variables teaching vocation and attitudes towards research, this is encouraging, a teacher with a vocation and with favorable attitudes towards research, encourages creativity, critical thinking and the search for new knowledge for a quality transformative education.

Higher education institutions must identify, take advantage of and encourage the positive attitudes that university students can show when they start their pedagogical training and accompany them throughout their professional training, with various investigative activities, hand in hand with research teachers, immersed in constant scientific production. In this way they will be an example and motivation for the students.

Teaching and research maintain an inseparable relationship, the closer, clearer and more concordant this is, the more visible changes will be made throughout the educational system, which is why the need to reformulate the study plans that considers the investigative activity of transversally and encourage scientific production in the various subjects.

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