

Article

Job Satisfaction and Teacher Education: Correlational Study in Postgraduate Graduates in Education

Carlos Alfredo Pérez Fuentes ¹, Annie Julieth Alvarez Maestre ^{2,*} , Angela María Cardona Rivas ³,
Andrea Johanna Aguilar Barreto ³ and Ruth Katherine Sanabria Alarcón ⁴

¹ Doctorado en Educación y Estudios Sociales Facultad de Educación y Ciencias Sociales, Tecnológico de Antioquia Institución Universitaria, Medellín 050034, Colombia

² Psychology Department, Tecnológico de Antioquia Institución Universitaria, Medellín 050034, Colombia

³ Facultad de Educación y Ciencias Sociales, Tecnológico de Antioquia Institución Universitaria, Medellín 050034, Colombia

⁴ Health Sciences, UCAM-Universidad Católica San Antonio de Murcia, 30107 Murcia, Spain

* Correspondence: annie.alvarez@tdea.edu.co

Abstract: Teacher education is recognized as the process of improving teaching practices. During their postgraduate studies, aspiring teachers are encouraged to improve both their teaching practice and their working conditions. Therefore, an expectation for their Masters' degrees is that upon graduation, they can achieve job satisfaction. This study had a quantitative approach with a cross-sectional and correlational non-experimental research design. Its objective was to analyze the level of job satisfaction of working teachers after graduating with a Master's degree in Education, and with this, to correlate sociodemographic variables with the level of job satisfaction. As an information-collection technique, the Job Satisfaction Scale for Teachers (ESLA) was used, which has reliability for internal consistency of 0.88 in Cronbach's alpha. The results show that teachers graduating with a Master's degree in Education score significant levels of job satisfaction, ranging between high and moderate, confirming that, as in other studies, with greater possibilities of qualification and teacher preparation, job satisfaction is maintained or generated. The statistical hypothesis testing method of inferential statistics confirmed that moderate and high levels of job satisfaction can be maintained in working teachers after graduating from postgraduate training, without implying relationships with gender, the type of hiring, doctoral degrees, type of contracts or the type of educational institution where they work.

Keywords: job satisfaction; teacher education; teacher training



Citation: Pérez Fuentes, C.A.; Alvarez Maestre, A.J.; Cardona Rivas, A.M.; Aguilar Barreto, A.J.; Sanabria Alarcón, R.K. Job Satisfaction and Teacher Education: Correlational Study in Postgraduate Graduates in Education. *Educ. Sci.* **2023**, *13*, 198. <https://doi.org/10.3390/educsci13020198>

Academic Editors: Orit Avidov-Ungar, Sara Zamir and James Albright

Received: 26 November 2022

Revised: 28 January 2023

Accepted: 9 February 2023

Published: 13 February 2023



Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

1.1. Teacher Training and Job Satisfaction

Currently, the role of education as a transforming process of society is widely recognized. A fundamental part of the educational process is the teacher, who acts as a mediator between students and learning [1]. From the understanding of the relevance of the role of the teacher in society, it is necessary to resume processes such as teacher qualification, since permanent teacher training will contribute to the continuous improvement of education [2,3]. Teacher training is associated with educational quality conditions and the strengthening of teaching–learning strategies in different educational contexts [4]. Teacher training contributes to identifying the level of preparation of teachers; with this, it is possible to reassign positions and work roles according to profiles and generate promotions or design qualification programs for emerging needs [5].

Professional development or teacher training is understood as an essential process in pedagogical practice. Teacher training is conceived as the constant updating of skills, competencies, knowledge and strategies that facilitate the ideal performance in education [5,6].

Research has identified factors that motivate or encourage teachers to develop teacher training processes. In this regard, the studies mention both intrinsic and extrinsic factors [7,8]. In the extrinsic dimension, rewards or incentives, the usefulness of knowledge for daily practice, work or social pressure and obtaining better jobs are recognized as factors that motivate the continuing education of teachers. Regarding the intrinsic dimension, factors that encourage teachers to continue training include increasing teaching experience and knowledge, self-efficacy, self-concept and self-realization [9,10].

Associated with the process of professional development in teachers, the issue of job satisfaction is added, which is understood as the degree of conformity of the employee concerning their environment and working conditions [11]. It will be a priority to address factors that promote job satisfaction, since this is considered a protective factor to prevent abandonment and job stress [12,13].

Other studies have been able to identify which factors, such as physical and emotional exhaustion, reduced motivation and poor working conditions, are associated with low levels of job satisfaction [11,14]. Additionally, the work environment, disciplinary climate and student performance are mentioned as determining factors of job satisfaction. It has been identified that the socioeconomic level affects the level of job satisfaction of teachers [15]. Given the above, continuous training of the teacher can contribute to the improvement of their socioemotional and working conditions, which allows them to have coping strategies for the various demands of the profession [16,17].

This study investigates the fulfillment of the expectations of working teachers, after graduating with a postgraduate degree in Education. We address the idea that not only does their interest in their qualification lie in increasing their teaching skills; there is also a search for increased job satisfaction [18–20]. This motivated the following investigating into the level of job satisfaction of graduates with a Master's Degree in Education.

1.2. Theoretical Background

Studies have shown the articulation between teaching quality and teacher qualification levels, reiterating their essential role in the quality of education as a human right [21,22]. Similarly, research suggests teacher training proposals relevant to the current demands of society and the emerging challenges of quality education [23,24]. There are also contributions to the discovery of a directly proportional relationship between teacher qualification and student academic performance; that is, the higher the level of teacher training, the higher the result in student grades [25–27].

Additionally, results on the relationship between the teacher's academic level and their job satisfaction have been confirmed, establishing that teachers with postgraduate qualifications (Master's and/or Doctorate) were more satisfied compared to teachers with only undergraduate training [28–31]. A previous study associated with this research, which explores the transformations achieved by teachers after completing postgraduate studies, identified that the principal motivation to study a Master's degree was the improvement of working conditions, which would lead to job satisfaction [32].

2. Materials and Methods

The research method is quantitative, with a cross-sectional and correlational non-experimental research design [33]. As an information collection technique, the Job Satisfaction Scale for Teachers [ESLA] was used, composed of two factors (extrinsic and intrinsic), four dimensions (task/organizational partner and motivation/self-realization) and 33 items (Table 1). It has internal consistency reliability in Cronbach's alpha of 0.88 [34].

Complete Contextualization of the Sample Collected

The population of this study corresponded to the first promotion of graduates of a Master's degree in Education—precisely 15 teachers. A simple random probabilistic sampling was applied to it, assigning a confidence level of 95% and a margin of error of 5%, establishing a sample of 15 subjects. The analysis method used was inferential statistics by

the Statistical Package for the Social Sciences (SPSS). The subjects presented both genders, between the ages of 30 and 60 years of age and between 7 and 30 years of experience. The teachers worked in private and public institutions, from elementary grades to higher education (Table 2).

Table 1. Example of some items of the Job Satisfaction Scale for Teachers [ESLA].

Item	Factor
The working day is so long that it does not allow me to dedicate myself to anything else.	Task Dimension [Extrinsic]
Superiors frequently consult me about the execution of my tasks.	Socio-organizational dimension [Extrinsic]
The only thing I expect from my job is to achieve a stable economic situation.	Motivational Dimension [Intrinsic]
I always knew that my true calling was to teach.	Self-Actualization Dimension [Intrinsic]

Table 2. Variable definition and operationalization table.

Table of Definition and Operationalization of Variables				
Variable	Guy	Classification		Item
Job satisfaction level	Qualitative	Ordinal	Polytomous	1: Low 2: moderate 3: High
Graduate gender	Qualitative	Nominal	Dichotomous	1: Female 2: Male
Nature of the institution	Qualitative	Nominal	Dichotomous	1: Public 2: Private
Type of appointment or contract	Qualitative	Nominal	Polytomous	1: owned 2: half time 3: Provisional 4: Fixed Term
Teaching degrees	Qualitative	Ordinal	Polytomous	1: Preschool 2: Primary 3: Secondary 4: Special Integrated Teaching Cycles. 5: University

Shapiro–Wilk’s normality test was used, which found that the p -value = 0.001 < α = 0.05. Then, the variables did not come from a normal distribution, which was necessary for the development of non-parametric tests.

For this purpose, the following hypotheses were proposed:

- There is a significant relationship between teaching degrees and the level of job satisfaction of graduates of a Master’s degree in Education;
- There is a significant relationship between gender and the level of job satisfaction of graduates of a Master’s degree in Education;
- There is a significant relationship between doctoral training and the level of job satisfaction of graduates of a Master’s degree in Education;
- There is a significant relationship between the nature of the work institution and the level of job satisfaction of graduates of a Master’s degree in Education;
- There is a significant relationship between the type of appointment or contract and the level of job satisfaction of graduates of a Master’s degree in Education.

Research questions:

- What is the level of job satisfaction of working teachers after graduating with a postgraduate degree in Education?

- How is the level of job satisfaction of working teachers who graduated with a postgraduate degree in Education related to gender, degree of education, doctoral training, type of contract and type of educational institution where they work?
- How is graduating with a postgraduate degree in Education related to the level of job satisfaction of working teachers?

3. Results

The descriptive statistics of the study are listed below, presenting the characteristics of the sample (Table 3).

Table 3. Sociodemographic data of the sample.

Characteristics	Percentage
Gender	
Female	67%
Male	33%
Doctoral training	
Yes	20%
Not	80%
Type of Educational Institution	
Private	73%
Public	27%
Type of contract	
Indefinite term	60%
Fixed term	27%
Provisional	7%
Part-time	6%
Grades taught	
Primary	34%
Secondary	33%
Preschool	13%
University	13%
CLEI	7%
Years of experience	between 7 and 30 years

What is the level of job satisfaction of working teachers after graduating with a postgraduate degree in Education? (Figure 1).

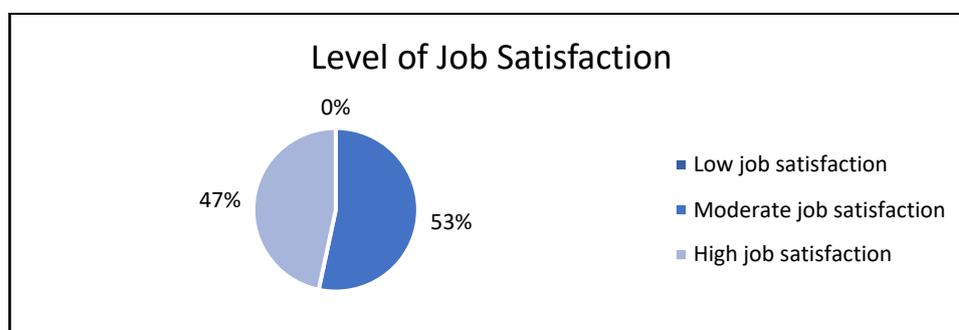


Figure 1. Level of job satisfaction. **Note:** The information from the Job Satisfaction for Teachers instrument obtained by the subjects is presented: 0% low job satisfaction; 47% moderate job satisfaction; 53% high job satisfaction.

How is the level of job satisfaction of working teachers who graduated with a post-graduate degree in Education related to gender, degree of education, doctoral studies, type of contract and type of educational institution where they work?

The results of the inferential statistics focused on the correlation of sociodemographic variables with the level of job satisfaction are presented.

1. *Relationship between teaching degrees and the level of job satisfaction of graduates with a Master’s degree in Education.*

The present inferential statistical analysis sought to answer the question: Is the success of a teaching graduate with a Master’s degree in Education significantly related to the level of job satisfaction? (Table 4).

H1: *There is a significant relationship between teaching degrees and the level of job satisfaction of graduates with a Master’s degree in Education.*

H0: *There is no significant relationship between teaching degrees and the level of job satisfaction of graduates with a Master’s degree in Education.*

H2: *There is a relationship between teaching degrees and the level of job satisfaction of graduates with a Master’s degree in Education, but it is not significant.*

Table 4. Cross table of the relationship between the variable “teaching degrees” and “levels of job satisfaction”.

Cross Table Grades Taught * Level of Job Satisfaction					
		Job Satisfaction Level			
		Moderate	Elevated	Total	
Grades taught	Preschool	Count	1	1	two
		% within Teaching degrees	50.0%	50.0%	100.0%
		% within Level of job satisfaction	14.3%	12.5%	13.3%
	Primary	Count	two	3	5
		% within Teaching degrees	40.0%	60.0%	100.0%
		% within Level of job satisfaction	28.6%	37.5%	33.3%
	Secondary	Count	4	1	5
		% within Teaching degrees	80.0%	20.0%	100.0%
		% within Level of job satisfaction	57.1%	12.5%	33.3%
	Special Integrated Teaching Cycles	Count	0	1	1
		% within Teaching degrees	0.0%	100.0%	100.0%
		% within Level of job satisfaction	0.0%	12.5%	6.7%
	Academic	Count	0	two	two
		% within Teaching degrees	0.0%	100.0%	100.0%
		% within Level of job satisfaction	0.0%	25.0%	13.3%
	Total	Count	7	8	15
		% within Teaching degrees	46.7%	53.3%	100.0%
		% within Level of job satisfaction	100.0%	100.0%	100.0%

Is there a correlation between the ordinal variables “teaching degrees” and “level of job satisfaction”? Understanding that the correlated type of variables is ordinal, non-parametric tests and the Spearman’s rho coefficients test were applied because they measures variables at the ordinal level (Table 5).

Table 5. Spearman’s Rho coefficient.

		Correlations		
			Grades Taught	Job Satisfaction Level
Spearman’s rho	Teaching degrees	Correlation coefficient	1.000	0.145
		Next (two-sided)		0.607
		N	15	15
	Job satisfaction level	Correlation coefficient	0.145	1.000
		Next (two-sided)	0.607	
		N	15	15

Through this analysis, it can be seen that there is a slight correlation between the variables; the correlation coefficient is close to the “perfect positive correlation”, $CC = 0.145 < 1$. In turn, the correlation is not “significant” because the p -value = $0.607 > \alpha = 0.05$.

3.1. Statistical Decision

Conclusion: There is a slight correlation of 0.145 and it is not significant between teaching degrees and the level of job satisfaction of graduates with a Master’s degree in Education.

Criterion to decide: Because p -value $> \alpha$, the correlational and null hypotheses are rejected. Therefore, H_2 is accepted: There is a relationship between teaching degrees and the level of job satisfaction of graduates with a Master’s degree in Education, but it is not significant.

2. Relationship between gender and the level of job satisfaction of graduates with a Master’s degree in Education.

This inferential statistical analysis aims to answer the question: Is the gender of Master’s degree graduates in Education significantly related to the level of job satisfaction? (Tables 6–8)

H1: There is a significant relationship between gender and the level of job satisfaction of graduates with a Master’s degree in Education.

H0: There is no significant relationship between gender and the level of job satisfaction of graduates with a Master’s degree in Education.

Table 6. Cross table between “levels of satisfaction” and “gender of the graduate”.

		Graduate Gender			Total
		Feminine	Male		
Job satisfaction level	moderate	Count	4	3	7
		expected count	4.7	23	7.0
	elevated	Count	6	2	8
		expected count	5.3	2.7	8.0
Total	Count	10	5	15	
	expected count	10.0	5.0	15.0	

Taking into account that more than 20% of the cells present an expected slope less than or equal to 5, Fisher’s exact test was used for this analysis.

Table 7. Cross table between “levels of satisfaction” and “gender of the graduate”.

	Chi-Square Tests				
	Worth	gl	Asymptotic Significance (Bilateral)	Exact Significance (Bilateral)	Exact Significance (One-Sided)
Pearson chi-square	0.536	1	0.464		
Continuity correction ^b	0.033	1	0.855		
Likelihood ratio	0.537	1	0.464		
Fisher exact test				0.608	0.427
Linear by Linear Association	0.500	1	0.480		
N of valid cases	15				

Three cells (75.0%) have expected a count of less than 5. The minimum expected count is 2.33. ^b It has only been calculated for a 2×2 table.

Understanding that the “bilateral significance” in Fischer’s exact test is 0.608, it is evident that there is no correlation between the variables “gender” and “levels of job satisfaction”. In addition to this, Cramer’s V coefficient is presented to identify the degree of intensity between the mentioned variables.

Table 8. Cross table between “levels of satisfaction” and “gender of the graduate”.

	Symmetric Measurements		
	Worth	Approximate Significance	
Rated by Rated	phi	−0.189	0.464
	V for Cramer	0.189	0.464
N of valid cases	15		

3.2. Statistical Decision

Conclusion: When applying Fisher’s exact test, it is evident that there is no significant correlation between the variables, as it is evident that $p\text{-value} = 0.608 > \alpha = 0.05$. In addition, a “low” level of intensity is evidenced between these variables because the value of Cramer’s V coefficient = 0.189, which is far from 1.

Criterion to decide: $p\text{-value} > \alpha$, the correlational hypothesis is rejected and the null hypothesis is accepted: H_0 : There is no significant relationship between gender and job satisfaction levels of Master’s degree graduates in Education.

3. Relationship between doctoral training and the level of job satisfaction of graduates with a Master’s degree in Education.

This inferential statistical analysis aims to answer the question: Is the doctoral training of Master’s degree in Education graduates significantly related to the level of job satisfaction? (Tables 9–11).

H1: There is a significant relationship between doctoral training and the level of job satisfaction of graduates with a Master’s degree in Education.

H0: There is no significant relationship between doctoral training and the level of job satisfaction of graduates with a Master’s degree in Education.

Taking into account that more than 20% of the cells present an expected score less than or equal to 5, Fisher’s exact test is applied for this analysis.

Table 9. Cross table between “levels of satisfaction” and “doctoral training”.

Cross Table Level of Job Satisfaction * Doctoral Training					
		Doctoral Training			Total
		Yes	Nope		
Job satisfaction level	moderate	Count	2	5	7
		expected count	1.4	5.6	7.0
	elevated	Count	1	7	8
		expected count	1.6	6.4	8.0
Total	Count	3	12	15	
	expected count	3.0	12.0	15.0	

Table 10. Cross table between “levels of satisfaction” and “doctoral training”.

Chi-Square Tests					
	Worth	df	Asymptotic Significance (Bilateral)	Exact Significance (Bilateral)	Exact Significance (One-Sided)
Pearson chi-square	0.603	1	0.438		
Continuity correction ^b	0.017	1	0.897		
Likelihood ratio	0.608	1	0.436		
Fisher exact test				0.569	0.446
Linear by Linear Association	0.562	1	0.453		
N of valid cases	15				

Two cells (50.0%) have expected a count of less than 5. The minimum expected count is 1.40. ^b It has only been calculated for a 2 × 2 table.

Understanding that the “bilateral significance” in Fischer’s exact test is 0.569, it is evident that there is no correlation between the variables “doctoral training” and “levels of job satisfaction”. In addition to this, Cramer’s V coefficient will be presented in order to identify the degree of intensity between the mentioned variables (Table 11).

Table 11. Cross table between “levels of satisfaction” and “doctoral training”.

Symmetric Measurements			
		Worth	Approximate Significance
Rated by Rated	phi	−0.200	0.438
	V for Cramer	0.200	0.438
N of valid cases		15	

3.3. Statistical Decision

Conclusion: When applying Fisher’s exact test, it is evident that there is no significant correlation between the variables, as it is evident that $p\text{-value} = 0.569 > \alpha = 0.05$. In addition, a “low” level of intensity is evidenced between these variables because the value of Cramer’s V coefficient = 0.200, which is far from 1.

Criterion to decide: $p\text{-value} > \alpha$, the correlational hypothesis is rejected and the null hypothesis is accepted: H0: There is no significant relationship between doctoral training and the level of job satisfaction of graduates with a Master’s degree in Education.

4. *Relationship between the nature of the institution and the level of job satisfaction of graduates with a Master's degree in Education.*

This inferential statistical analysis aims to answer the question: Is the nature of the institution of Master's degree graduates in Education significantly related to the level of job satisfaction? (Tables 12 and 13)

H1: *There is a significant relationship between the nature of the institution and the level of job satisfaction of graduates with a Master's degree in Education.*

H0: *There is no significant relationship between the nature of the institution and the level of job satisfaction of graduates with a Master's degree in Education.*

Table 12. Cross table between "levels of satisfaction" and "nature of the institution".

Cross Table Level of Job Satisfaction * Nature of the Institution					
			Nature of the Institution		TOTAL
			Public	Private	
Job satisfaction level	moderate	Count	6	1	7
		expected count	5.1	1.9	7.0
	elevated	Count	5	3	8
		expected count	5.9	2.1	8.0
Total	Count	11	4	15	
	expected count	11.0	4.0	15.0	

Taking into account that more than 20% of the cells present an expected score less than or equal to 5, Fisher's exact test is applied for this analysis.

Table 13. Cross table between "levels of satisfaction" and "nature of the institution".

Chi-Square Tests					
	Worth	df	Asymptotic Significance (Bilateral)	Exact Significance (Bilateral)	Exact Significance (One-Sided)
Pearson chi-square	1.029	1	0.310		
Continuity correction ^b	0.184	1	0.668		
likelihood ratio	1.071	1	0.301		
Fisher exact test				0.569	0.338
Linear by Linear Association	0.960	1	0.327		
N of valid cases	15				

Two cells (50.0%) have expected a count of less than 5. The minimum expected count is 1.87. ^b It has only been calculated for a 2 × 2 table.

Understanding that the "bilateral significance" in Fischer's exact test is 0.569, it is evident that there is no correlation between the variables "nature of the institution" and "levels of job satisfaction". In addition to this, Cramer's V coefficient is presented with the purpose of identifying the degree of intensity between the mentioned variables.

5. *Relationship between the type of appointment or contract and the level of job satisfaction of graduates with a Master's degree in Education.*

This inferential statistical analysis aims to answer the question: Is the type of appointment or contract of graduates with a Master's degree in Education significantly related to the level of job satisfaction? (Tables 14 and 15)

H1: There is a significant relationship between the type of appointment or contract and the level of job satisfaction of graduates with a Master’s degree in Education.

H0: There is no significant relationship between the type of appointment or contract and the level of job satisfaction of graduates with a Master’s degree in Education.

Table 14. Cross table between “the type of appointment or contract” and “levels of satisfaction”.

		Cross Table				Total	
		Type of Appointment or Contract					
			In the Propriety	Halftime	Provisional	Fixed Term	
Job satisfaction level	moderate	Count	6	0	0	1	7
		expected count	4.2	0.5	0.5	1.9	7.0
	elevated	Count	3	1	1	3	8
		expected count	4.8	0.5	0.5	2.1	8.0
Total		Count	9	1	1	4	15
		expected count	9.0	1.0	1.0	4.0	15.0

Table 15. Cross table between “type of appointment or contract” and “levels of satisfaction”.

	Chi-Square Tests		
	Worth	gl	Asymptotic Significance (Bilateral)
Pearson chi-square	3.951	3	0.267
likelihood ratio	4.772	3	0.189
Linear by Linear Association	2.308	1	0.129
N of valid cases	15		

Eight cells (100.0%) have expected a count less than 5. The minimum expected count is 0.47.

Understanding that the “bilateral significance” in Pearson’s chi-square test is 0.267, it is evident that there is no correlation between the variables “type of appointment or contract” and “levels of job satisfaction”. In addition to this, Cramer’s V coefficient is presented with the purpose of identifying the degree of intensity between the mentioned variables (Table 16).

Table 16. Cross table between “type of appointment or contract” and “nature of the institution”.

		Symmetric Measurements	
		Worth	Approximate Significance
Rated by Rated	phi	0.513	0.267
	V for Cramer	0.513	0.267
N of valid cases		15	

3.4. Statistical Decision

Conclusion: Against the application of Pearson’s chi-square test, it is evident that there is no significant correlation between the variables, showing that $p\text{-value} = 0.267 > \alpha = 0.05$. In addition, a “low” level of intensity is evidenced between these variables because the value of Cramer’s V coefficient = 0.267, which is far from 1.

Criterion to decide: $p\text{-value} > \alpha$, the correlational hypothesis is rejected and the null hypothesis is accepted: H0: There is no significant relationship between the type

of appointment or contract and the level of job satisfaction of graduates with a Master's degree in Education.

4. Discussion

This study was able to determine that there is a considerable level of job satisfaction among teachers who graduated with a Master's degree in Education. The review of both variables (job satisfaction and postgraduate graduation) addresses the motivations of teachers to enter postgraduate study: in addition to obtaining a qualification in their pedagogical practice, graduates are motivated to improve their working conditions and the level of job satisfaction [32,35–37].

Of the subjects evaluated, 47% scored at a moderate level and 53% scored at a high level; no graduate teachers participating in the study with low levels of job satisfaction are reported. This confirms that, with greater possibilities of qualification and teacher preparation, job satisfaction is maintained or generated [6,38–40].

This study found different results from those obtained by Méndez [41], where it is evident that there is no significant relationship between the type of appointment or contract and the levels of job satisfaction of a Master's degree in education graduates. The above implies that, regardless of the type of contract, job satisfaction is generated after postgraduate study.

With regard to the degree of which the postgraduate teacher teaches, it is identified that there is a correlation between this and the level of job satisfaction. These results are similar to those obtained in other studies, which have detected that teachers who teach courses in early childhood education have higher levels of job satisfaction [41,42].

Studies have corroborated the relationship between job satisfaction, gender and the type of hiring, finding that teachers with a female gender and with a full-time contract show high levels of job satisfaction [14,43]. In contrast, the results of this study establish that there is no relationship between gender or the type of contract in teachers who graduated with a postgraduate degree in Education, showing that whether female or male, or in full-time or provisional contracts, the subjects score at moderate and high levels of job satisfaction.

When investigating the relationship between job satisfaction and the next level of qualification (Doctorate), it is identified in this study that there is no correlation between them. These results are similar to those obtained in other studies, where they confirm that job satisfaction interacts in the same way with teachers who have started their doctoral training as those who have completed their Master's degree [44]. However, this disagrees with the findings of other studies, which have confirmed that teachers with doctoral training register higher levels of satisfaction than teachers with only Bachelor's degrees [45].

Regarding job satisfaction and the nature of the institution where teachers work, studies have found that there is no significant difference in job satisfaction between public and private school teachers [46–48]. These results are similar to those obtained in this study, which implies that the level of job satisfaction is unrelated to the private or public context of the work entity.

5. Conclusions

This study was able to determine that there is a considerable level of job satisfaction in teachers who graduated with a Master's degree in Education, presenting a minimal possibility of a low level of job satisfaction after graduating with postgraduate education. We confirm that, as in other investigations, with greater possibilities of qualification and teacher preparation, job satisfaction is maintained or generated.

Graduates with a Master's degree in Education who present higher levels of job satisfaction are characterized by belonging to the female gender, not having begun doctoral training, working in a public educational institution with an indefinite term contract and teaching primary school grades.

Graduates with a Master's degree in Education who present moderately low levels of job satisfaction are characterized by belonging to the male gender, not having begun

doctoral training, working in a public educational institution with indefinite term contract and teaching secondary school grades.

Based on the analysis carried out, it was possible to show that there is no correspondence between the variables of gender, doctoral training, nature of the institution, type of appointment or contract and the level of job satisfaction of the graduates with a Master's degree in Education. However, there is evidence of correspondence between the variable teaching degrees and the level of satisfaction of graduates with a Master's degree in Education.

The results of the study showed that moderate and high levels of job satisfaction associated with graduating from postgraduate training can be maintained, without these implying associations with gender, type of contract, the start of doctoral training, type of contract or nature of the job institution.

The results found contribute to studies that seek to deepen the analysis of factors that interact with the job satisfaction of teachers, specifically those who invest resources into postgraduate training as a strategy to improve their working conditions and quality of life.

6. Limitations

The study developed the provided information on a specific sample of participants in a postgraduate training program, allowing us to recognize the achievements obtained in the training process of employed teachers after graduating with a Master's degree in Education. However, we acknowledge two methodological limitations: (1) the small sample of only 15 participants was determined by the participants' relevance to the study and by the requirement to assess the impact of the training program; (2) the linkage of other mediatable and scientifically associated variables with job satisfaction, such as job stress, leadership, work context or other relevant psychological constructs. It is expected that these limitations can encourage the development of other studies analyze of the contribution of continuous teacher training and continuous training as a protective factor against risk factors, such as desertion and burnout syndrome among others, that affect the mental and physical health of employees in the education sector.

Author Contributions: Conceptualization, A.J.A.M. and A.M.C.R.; methodology, C.A.P.F.; formal analysis, C.A.P.F.; investigation, A.J.A.M. and A.M.C.R.; resources, A.J.A.B. and R.K.S.A.; writing—original draft preparation, A.J.A.M., A.J.A.B. and A.M.C.R.; writing—review and editing, A.J.A.B. and R.K.S.A. All authors have read and agreed to the published version of the manuscript.

Funding: This research was funded by Tecnológico De Antioquia Institución Universitaria, grant number 206001247 and the APC was funded by authors.

Institutional Review Board Statement: The study was conducted in accordance with the guidelines, and approved by the Bio-ethics Committee or of Tecnológico de Antioquia Institución Universitaria (approval no. 2022/01).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The data presented in this study are available on request from the corresponding author.

Conflicts of Interest: The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses or interpretation of data; in the writing of the manuscript; or in the decision to publish the results.

References

1. Osorio, R.M.B. Critical views of the appropriation of reflective practice in teacher training. A literature review. *Educ. Rev. Investig. Meet. Inst. Cienc. Educ.* **2021**, *2*, 104–132.
2. Chaves, J.A.N.; Chacón, O.M. A new perspective on teacher training. *Rev. Univ. Soc.* **2016**, *8*, 14–21.
3. Avellaneda, M.; Porras, A.P.A.; Quiroga, J.D. Teacher training in Science and Technology from an alternative education scenario. *Sci. Educ.* **2022**, *6*, 31–39.
4. López, M.; Herrera, M.; Apolo, D. Quality education and pandemic: Challenges, experiences and proposals from students in teacher training in Ecuador. *Free Text.* **2022**, *14*. [[CrossRef](#)]

5. Salazar-Gómez, E.; Tobón, S. Análisis documental del proceso de formación docente acorde con la sociedad del conocimiento. *Rev. Espac.* **2018**, *39*, 17.
6. Quintero, M.C.C.; Ordoñez, E.J. Formación del profesorado en Latinoamérica. *Rev. Cienc. Soc.* **2021**, *27*, 284–295.
7. Ryan, R.M.; Deci, E.L. *Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness*; Guilford Publications: New York, NY, USA, 2017.
8. Pauwels, K.; Loon, H.V.; Tanghe, E.; Schelfhout, W. Motives of student teachers in academic teacher education for secondary education: Research in Flanders [Belgium] on the motivation to become and to remain a teacher. *Educ. Sci.* **2022**, *12*, 724. [[CrossRef](#)]
9. Zhang, X.; Admiraal, W.; Saab, N. Teachers' motivation to participate in continuous professional development: Relationship with factors at the personal and school level. *J. Educ. Teach.* **2021**, *47*, 714–731. [[CrossRef](#)]
10. Ovesni, K.; Hebib, E.; Radović, V. Continuing Professional Development of Teachers: Interplay of the School Management, School Climate, Motivation, and Incentives. *Nastava Vasp.* **2019**, *68*, 159–177. [[CrossRef](#)]
11. Madigan, D.J.; Kim, L.E. Towards an understanding of teacher attrition: A meta-analysis of burnout, job satisfaction, and teachers' intentions to quit. *Teach. Teach. Educ.* **2021**, *105*, 103425. [[CrossRef](#)]
12. Alvarez-Maestre, A.J. Effective vocational guidance as a protective factor in the development of vocational distress. *Gac. Med. Caracas* **2020**, *128*, 393–404. [[CrossRef](#)]
13. Dicke, T.; Marsh, H.W.; Parker, P.D.; Guo, J.; Riley, P.; Waldeyer, J. Job satisfaction of teachers and their principals in relation to climate and student achievement. *J. Educ. Psychol.* **2020**, *112*, 1061. [[CrossRef](#)]
14. Toropova, A.; Myrberg, E.; Johansson, S. Teacher job satisfaction: The importance of school working conditions and teacher characteristics. *Educ. Rev.* **2021**, *73*, 71–97. [[CrossRef](#)]
15. Jiang, Y.; Li, P.; Wang, J.; Li, H. Relationships between kindergarten teachers' empowerment, job satisfaction, and organizational climate: A Chinese model. *J. Res. Child. Educ.* **2019**, *33*, 257–270. [[CrossRef](#)]
16. Elrayah, M. Improving teaching professionals' satisfaction through the development of self-efficacy, engagement, and stress control: A cross-sectional study. *Educ. Sci. Theory Pract.* **2022**, *22*, 1–12.
17. Lopes, J.L.; Oliveira, C.R. Inclusive education in Portugal: Teachers' professional development, working conditions, and instructional effectiveness. *Educ. Sci.* **2021**, *11*, 169. [[CrossRef](#)]
18. Chálela Naffah, S.; Valencia Arias, A.; Arango Botero, D. Motivations of university students to continue their academic training in postgraduate programs. *Rev. Lasallista Investig.* **2017**, *14*, 160–170.
19. Contreras Gutierrez, O.; Urrutia Aguilar, M.E. Importance of a postgraduate program in its graduates. *Rev. Iberoam Educ.* **2017**, *74*, 59–74.
20. Alegre, À.; Pérez, A. *Reports on the Labor Insertion of Graduate Graduates*; University of Barcelona. Student Observatory: Barcelona, Spain, 2019.
21. Notary Hervis, E. Teacher performance as a factor associated with educational quality in Latin America. *Rev. Educ.* **2018**, *42*, 717–739.
22. Pharis, T.J.; Wu, E.; Sullivan, S.; Moore, L. Improving teacher quality: Professional development implications from teacher professional growth and effectiveness system implementation in rural Kentucky high schools. *Educ. Res. Q.* **2019**, *42*, 29–48.
23. Holes, J.A.D.; Sánchez, M.J.S.; Rodríguez, M.E.A.; Polo, K.E.L.; Castro, J.A.R.; Navarro, E.R. Teacher training and educational quality in times of COVID-19. *Sci. Rev. Cult. Comun. Y Desarro.* **2020**, *5*, 84–89.
24. del Pilar Horna Merino, A.M. Program based on the critical reflective approach to improve teaching performance at the primary level—Antenor Sánchez educational institution 2019. *Cienc. Lat. Rev. Cient. Multidiscip.* **2022**, *6*, 2711–2730.
25. Quiroz Pacheco, C.; Franco García, D. Relationship between teacher training and the academic performance of university students. *Education* **2019**, *28*, 166–181.
26. Canales, A.; Maldonado, L. Teacher quality and student achievement in Chile: Linking teachers' contribution and observable characteristics. *Int. J. Educ. Dev.* **2018**, *60*, 33–50. [[CrossRef](#)]
27. Burroughs, N.; Gardner, J.; Lee, Y.; Guo, S.; Touitou, I.; Jansen, K.; Schmidt, W. A Review of the Literature on Teacher Effectiveness and Student Outcomes. In *Teaching for Excellence and Equity*; Springer: Cham, Switzerland, 2019; pp. 7–17. Available online: <https://www.semanticscholar.org/paper/A-Review-of-the-Literature-on-Teacher-Effectiveness-Burroughs-Gardner/ee20a5dda22a76eb6e1391068cfb018c5f1bb22f> (accessed on 20 June 2022).
28. Bedoya Marrugo, E.A.; Carrillo Landazabal, M.S.; Severiche Sierra, C.A.; Espinosa Fuentes, E.A. Factors associated with job satisfaction in teachers of a higher education institution in the Colombian Caribbean. *Rev. Space* **2018**, *39*, 1–14.
29. Ismayilova, K.; Klassen, R.M. Research and teaching self-efficacy of university faculty: Relations with job satisfaction. *Int. J. Educ. Res.* **2019**, *98*, 55–66. [[CrossRef](#)]
30. Brayer, A.; Marcinowicz, L. Job satisfaction of nurses with master of nursing degrees in Poland: Quantitative and qualitative analysis. *BMC Health Serv. Res.* **2018**, *18*, 1–7. [[CrossRef](#)]
31. Reyes, J.G.D.; Ramirez, M.M.O. A study of the relationship between school capital, employment status and the opinion of postgraduate graduates: The case of the Universidad Veracruzana. *Rev. Lat. Políticas Adm. Educ.* **2021**, *15*, 117–129.

32. Álvarez Maestre, A.; Rivas, A.M.C.; Fuentes, C.A.P.; Arenas, N.A.G. Transformations in the Professional Praxis Developed by Graduates of the Master's Degree in Education of the TdeA. In *The challenges of education in Latin America*; CIMTED Corporation: Guatapé, Colombia, 2022; pp. 21–37. Available online: <https://editorialcimted.com/wp-content/uploads/2022/07/Los-retos-de-la-educación-en-tiempos-de-pandemia.pdf> (accessed on 20 June 2022).
33. Creswell, J.W.; Creswell, J.D. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*; Sage Publications: Thousand Oaks, CA, USA, 2017.
34. Golds, L.B.; Main, M.V. ESLA-education: A scale to assess teacher job satisfaction. *RIEE Rev. Int. Estud. Educ.* **2004**, *4*, 20–34.
35. Mora-Solano, S. *A Doctorate to Sweep the Room: Professional Trajectories and Future Expectations of Teachers Linked to Decree 1278 of 2002 in Bogotá DC*; Editorial University of Rosario: Bogotá, Colombia, 2021.
36. Ion, G.; Iucu, R. The impact of postgraduate studies on the teachers' practice. *Eur. J. Teach. Educ.* **2016**, *39*, 602–615. [[CrossRef](#)]
37. García-Poyato Falcón, J.; Cordero Arroyo, G.; Torres Hernández, R.M. Motivations to enter teacher training. Review of empirical studies published in the 21st century. *Perspect. Educ.* **2018**, *57*, 51–72.
38. Shaikat, S.; Vishnumolakala, V.R.; Al Bustami, G. The impact of teachers' characteristics on their self-efficacy and job satisfaction: A perspective from teachers engaging students with disabilities. *J. Res. Spec. Educ. Needs* **2019**, *19*, 68–76. [[CrossRef](#)]
39. Sahito, Z.; Vaisanen, P. A literature review on teachers' job satisfaction in developing countries: Recommendations and solutions for the enhancement of the job. *Rev. Educ.* **2020**, *8*, 3–34. [[CrossRef](#)]
40. Rebolledo, A.H. La profesionalización del docente a través de los estudios de posgrado: El caso de la Maestría en Docencia del Instituto de Educación Superior del Magisterio (IESMA). *Perspect. Docentes* **2020**, *73*, 49–58.
41. Méndez, T.M.; Mármol, A.G.; Martínez, B.J.S.A. Satisfacción laboral en los docentes de educación infantil, primaria y secundaria. *Gest. Educ.* **2017**, *7*, 161–177.
42. Álvarez, M.G. Satisfacción laboral del profesorado no universitario según titularidad del centro. *Estud. Propues. Socioeduc.* **2020**, *58*, 157–182.
43. Topchyan, R.; Woehler, C. Do teacher status, gender, and years of teaching experience impact job satisfaction and work engagement? *Educ. Urban Soc.* **2021**, *53*, 119–145. [[CrossRef](#)]
44. Orozco Inca, E.E.; Guerra Orozco, S.E.; Guerra Bretaña, R.M. *Formación de Posgrado y Satisfacción Laboral en Institutos Superiores Tecnológicos de Riobamba, Ecuador*; Pulso: Riobamba, Ecuador, 2021.
45. Chakraborty, M.; Ayoub Kuchy, S. Impact of teachers' qualification and experience on their job satisfaction. *Indian J. Adult Educ.* **2021**, *82*, 159–170.
46. Dahler-Larsen, P.; Foged, S.K. Job satisfaction in public and private schools: Competition is key. *Soc. Policy Adm.* **2018**, *52*, 1084–1105. [[CrossRef](#)]
47. Akhtar, S.N.; Hashmi, M.A.; Naqvi, S.I.H. A comparative study of job satisfaction in public and private school teachers at secondary level. *Procedia-Soc. Behav. Sci.* **2010**, *2*, 4222–4228. [[CrossRef](#)]
48. Bahadur, A.G.; Shakil, J. An Analysis of Job Satisfaction Determinants of Educators in Low-Performing Schools in Mauritius: A Comparative Study of Private and State Secondary Schools. *J. Educ.* **2021**. [[CrossRef](#)]

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.