



Motivation, self-efficacy, and perceptions: A comparative study of male and female teacher candidates in Indonesia

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Abstract

One of the components that plays a role in education is the preparation of good teachers. However, research in various countries shows that not all teacher education is successful. There are some teacher candidates who do not succeed in completing their education, and some of those who have completed their education are not all willing to work as teachers. This study seeks to reveal internal factors in pre-service students at Yogyakarta State University in attending education, which include the aspects of motivation, self-efficacy, and perceptions of being a professional teacher. Different backgrounds such as gender among pre-service students in participating in teacher professional education programs in Indonesia will affect their behavior, especially with regard to motivation, self-efficacy, and perceptions as professional teachers. By using standardized instruments, the researcher measured the Indonesian pre-service students' motivation to be a teacher, self-efficacy, and perceptions to serve as a professional teacher. The results showed that there were significant differences between male and female teacher candidates in terms of their motivation to be a teacher, self-efficacy as a teacher, and perceptions of being a teacher. Female students have higher motivation to be a teacher and self-efficacy as well as better perceptions compared to male students, who have lower motivation and self-efficacy as well as poor perceptions. This research provides benefits as a material for consideration in making policies related to teacher education programs. Furthermore, this research can provide mutual insight in the preparation of teacher education, especially in the personal development of prospective teachers.

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Introduction

Providing education for all citizens is the responsibility of the state. This responsibility is manifested in equality and equity. Equality means equal opportunity to get education, while equity means justice in obtaining equal educational opportunities among various groups in society. The Indonesian government has made various efforts to improve the national education, but several educational problems such as problems of access, equity and quality of education still need to be improved.

In Indonesia, teacher educational institutions (LPTK), as the institutions that provide teacher education, prepare their graduates to become professional teachers with strong motivation to be a teacher, high self-efficacy, and correct perception of being a teacher. On gender perspectives, men tend to be more interested in masculine-type careers than female-type careers (Watt, 2016). The studies on student motivation to become teachers in Indonesia show that the most dominant motivation is the social utility value, because teaching is considered a highly skilled career, with a high social status (Suryani et al., 2016).

Research on self-efficacy to become a teacher in various countries has also been conducted. In the United States, the findings show that candidates in a placement year teaching students are more satisfied with their ability to engage students and manage class behavior than their counterparts in traditional one-semester placements (Colson et al., 2018). On the other hand, in Australia, education and training for primary school teachers has no effect on teacher success rates, whereas for prospective teachers of secondary school, education and training increase the overall level of teacher efficacy, but decrease the personal efficacy (Woodcock, 2011). Furthermore, based on gender perspective research, it is possible for boys and girls to show differences in self-efficacy (Pajares, 2002), and it can also affect their efforts in achieving their goals.

On the other hand, based on gender, women's perceptions of the teaching profession are stronger than men's (Permana et al., 2018). In terms of research related to student perceptions, it seems that perception needs to be improved in terms of preparing prospective teachers (Eret-Orhan et al., 2017). Meanwhile, in Singapore, research on teacher perceptions, experiences, and challenges in the use of design thinking in schools shows that teachers perceive design thinking as having the potential to help

students develop the 21st century skills as so important that it requires resources and time to implement these initiatives well (Tan et al., 2017).

However, many countries report high dropout rates for prospective teachers over several years. Even though this is a very important issue, the information or knowledge regarding the factors that will change the teachers' commitment to continuing working as teachers in various fields of the national context is still relatively rare. Therefore, information on the condition of prospective teachers is needed in various internal aspects such as motivation, self-efficacy, and perceptions in terms of gender of the participants of teacher professional education programs in Indonesia. This research responds to a growing problem in the teacher professional education programs in Indonesia, especially at Yogyakarta State University, in order to find an alternative solution.

Literature Review

Students Motivation to Become Teachers

Motivation generally means something that drives individuals to do something, being things that exist within the individual and outside the individual. Related to the current education, it is understood that the demands on teachers and schools are becoming more and more complex. Countries such as Australia, United States, Germany, Norway, United Kingdom, and several European countries, have reported difficulties in recruiting and retaining teachers (Richardson & Watt, 2010). The difficulty in recruiting and retaining teachers is related to the large and varied workload of teachers, salaries that are considered inappropriate/decent, the number of students who interfere with them, and their low professional status. Thus, motivation to be a teacher must be maintained to remain consistent, because good teacher motivation affects his/her performance in teaching (Haruthaithasan, 2018).

Self-Efficacy of Students as Teachers

Self-efficacy is basically the result of a cognitive process in the form of decisions that come from beliefs or expectations about how individuals estimate their ability to carry out certain tasks or actions needed to achieve the desired results (Bandura, 1997). It is explained further that, as a decision, self-efficacy is the result of cognitive, motivational, affective, and

selection processes. Pre-service teacher education programs play an important role in the development of novice teacher self-efficacy and identity as a prospective teacher. However, research on prospective teacher self-confidence and teacher candidate identity construction since entry into teacher training, and the impact of educational programs on developing these attributes is still limited.

Perception of Students as Teachers

Perception is the organization of impressions from mental processes in meaningful forms. In other words, perception is the act of compiling, recognizing, and interpreting sensory information in order to provide an overview and understanding of the environment. In pre-service teacher students, the formation of perceptions about the teaching profession occurs when pre-service students first develop their identity as teachers (Bergmark et al., 2018). Therefore, the teaching strategy carried out by the lecturer, interest / pleasure in work, student interest in learning, and involvement in learning are considered as important parts when forming a pedagogic identity.

Condition and Gender of Teachers in Indonesia

In general, the Indonesian public's perception of the teaching profession is very good; the teacher profession is seen as a noble profession. The teacher profession is the representation of parents' duties, and the school is the second center of education, so that teachers are representatives of responsible parents. Teachers are given high trust by society. This is because teachers are perceived to have qualified resources to make their students have scientific competence, character, and high morals. With these various competencies, the community believes that their children will be successful in the future. Therefore, a teacher is considered to be able to determine the future of their children (Dwijosumarto, 2000).

In the current conditions, the teaching profession, especially in Indonesia, attracts people of different backgrounds, both the gender and the educational background. Furthermore, the number of teachers in Indonesia in the academic year of 2019/2020 reached more than 91 thousand, and around 53 percent of them (48,636) were male teachers (Data Center and Information Technology, n.d). However, based on what is recorded in Higher Education Database (2021), Yogyakarta State University actually has more female

than male students. So, the pre-service teachers from the university are automatically dominated by women. The process they should go through to be a teacher is by completing their study in teacher professional education department within two semester (Educational Development and Quality Assurance Institution, 2018). This condition of background differences will certainly affect students' motivation, self-efficacy and perceptions of being a professional teacher. Therefore, it is important to further examine the policies related to teacher recruitment and retention, particularly in motivation, self-efficacy, and perceptions of being a teacher.

Methodology

This research is quantitative research of the comparative type. This comparative study aimed to compare the psychological aspects of students, namely motivation, self-efficacy and perceptions of being a teacher in terms of the gender of the participants of teacher professional education programs in Indonesia.

Participants

The population of this research was teacher candidates of Yogyakarta State University, Indonesia. The determination of research sample was based on the data on registered students in the odd semester of 2020, showing that there were about 4,000 students, while there were 29,981 teacher candidates in Indonesia. The sample was established using the Cohen, Manion, and Morrison tables, whereby with a population of around 4,000 students at the confidence level of 95 percent with alpha .05, then the number of the sample was 258. However, there were 758 sample students that could be accessed. Their age ranged from 17 to 46 years. Based on gender, the number of the sample of male students was 144 and that of female students was 614. All of them came from various regions across the country, so the distribution of the data would be more representative of Indonesia as a whole.

Data Collection

The data collection in this research used a questionnaire. The data were obtained using the instruments of motivation to become a teacher, as well as self-efficacy and perceptions of being a teacher

that have been adopted from several previous research instruments. The Factors Influencing Teaching Choice (FIT-Choice) Scale was used to collect the data on motivation to become a teacher and perceptions of being a teacher. Meanwhile, the collection of the data on self-efficacy as a teacher used the Ohio State Teacher Efficacy Scale. Testing the validity and reliability of the instrument was carried out by testing the instrument on 30 subjects. The test results obtained a validity number with a critical value of correlation $n = 30$ at the significance level of $5\% = .361$ while the reliability of the instrument can be seen in the alpha value of each instrument.

Data Analysis

The data analysis used the two-way ANOVA analysis technique, by comparing data on motivation, self-efficacy and perceptions of being a teacher among the participants of teacher professional education programs in Indonesia, which was assisted by the SPSS 26.0 program. The analysis was carried out on student data at Yogyakarta State University to find out distinctions in motivation, self-efficacy, and perceptions of being a teacher based on gender. In addition, the regression analysis was also conducted to determine the correlation between self-efficacy as a teacher, perceptions of being a teacher, and motivation to become a teacher.

Results

Motivation to be a Teacher

Based on [Table 1](#), it can be seen that the motivation to become a teacher is mostly owned by female students by 76.39 percent and male students by 23.61 percent. The category of motivation to be

a teacher with the most frequent is high motivation at 36.8 percent. The motivations to become a teacher in terms of gender shows a significant difference. The results of the two-way ANOVA test analysis of the data on motivation to become a teacher are presented in [Table 2](#).

[Table 2](#) shows that the F-count intra A is 15.585 with the p value of .000 proved to be $p < .05$. Thus, it can be concluded that female students have a higher motivation to become teachers than male students do.

Self-Efficacy as a Teacher

Data on the results of self-efficacy as a teacher of the participants of teacher professional education programs in Indonesia based on research categories and groups are presented in [Table 3](#).

Table 1 Motivation to become a teacher based on categorization and research groups

Score Category		Female	Male	Total
Very High	Frek	150	21	171
	%	19.79%	2.77%	22.6%
High	Frek	206	73	279
	%	27.18%	9.63%	36.8%
Sufficient	Frek	163	46	209
	%	21.50%	6.07%	27.6%
Insufficient	Frek	52	29	81
	%	6.8%	3.83%	10.7%
Very insufficient	Frek	8	10	18
	%	1.06%	1.32%	2.4%
Low	Frek	0	0	0
	%	0.0%	0.0%	0.0%
Very Low	Frek	0	0	0
	%	0.0%	0.0%	0.0%
Total	Frek	579	179	758
	%	76.39%	23.61%	100.0%

Table 2 Results of the Two-Way Anova analysis of the data on motivation to become a teacher

Source	Type III Sum of Square	df	Mean Square	F	p	Partial Eta Squared
Corrected Model	27.769 ^a	3	9.256	13.421	.000	0.051
Intercept	10078.592	1	10078.594	14613.633	.000	0.951
A	10.748	1	10.748	15.585	.000	0.020
Error	520.011	754	0.690			
Total	23039.609	758				
Corrected Total	547.780	757				

Notes: ^aR Squared = .051 (Adjusted R Squared = .047).

A (Gender, A1: Female & A2: Male).

Table 3 Self-efficacy as teachers based on category and group

Score Category		Female	Male	Total
Very High	Frek	82	20	102
	%	10.81%	2.64%	13.5%
High	Frek	210	52	262
	%	27.70%	6.86%	34.6%
Sufficient	Frek	193	59	252
	%	25.46%	7.78%	33.2%
Insufficient	Frek	81	37	118
	%	10.67%	4.88%	15.6%
Very insufficient	Frek	13	11	24
	%	1.72%	1.45%	3.2%
Low	Frek	0	0	0
	%	0.0%	0.0%	0.0%
Very Low	Frek	0	0	0
	%	0.0%	0.0%	0.0%
Total	Frek	579	179	758
	%	76.39%	23.61%	100.0%

Based on **Table 3**, it can be seen that high self-efficacy as a teacher is mostly owned by female participants, namely 76.39 percent and male participants at 23.61 percent. The most frequent self-efficacy category as a teacher is the high level of self-efficacy, which is 34.6 percent. There is a significant difference between self-efficacy as a teacher in terms of gender. A significant difference between self-efficacy as a teacher can be obtained by conducting a two-way ANOVA test.

The results of the two-way ANOVA analysis for self-efficacy data as a teacher are presented in **Table 4**. The data obtained shows the information that self-efficacy as a teacher of the women is higher than that of the men. In general, the frequency of self-efficacy among the female participants was higher than that among the male participants, and the F-count between A was 9.288 with the *p* value of .002, which proved to be *p* < .05. Thus, it can be concluded

that there is a significant difference in the self-efficacy between the male and female participants. The following shows the results of the two-way ANOVA test analysis for self-efficacy as a teacher data.

Perception as a Teacher

The data on the self-efficacy to become a teacher of the participants of teacher professional education programs in Indonesia based on research categories and groups are presented in **Table 5** below.

Table 5 shows that a better perception as a teacher is mostly owned by female participants, namely 76.39 percent and male participants by 23.61 percent. The most frequently owned perception category as a teacher is the high category, amounting to 43.9 percent. The results of statistical tests for perception data as a teacher are presented in **Table 6**.

Table 5 Perceptions of being a teacher based on categorization and research groups

Score Category		Female	Male	Total
Very High	Frek	202	34	236
	%	26.65%	4.49%	31.1%
High	Frek	259	74	333
	%	34.17%	9.76%	43.9%
Sufficient	Frek	92	46	138
	%	12.14%	6.07%	18.2%
Insufficient	Frek	26	21	47
	%	3.43%	2.77%	6.2%
Very insufficient	Frek	0	4	4
	%	0%	0.5%	0.5%
Low	Frek	0	0	0
	%	0.0%	0.0%	0.0%
Very Low	Frek	0	0	0
	%	0.0%	0.0%	0.0%
Total	Frek	579	179	758
	%	76.39%	23.61%	100.0%

Table 4 Results of Two-Way Anova analysis on data about self-efficacy as teachers

Source	Type III Sum of Square	df	Mean Square	F	p	Partial Eta Squared
Corrected Model	18.924 ^a	3	6.308	8.895	.000	.034
Intercept	9324.045	1	9324.045	13147.433	.000	.946
A	6.587	1	6.587	9.288	.002	.012
Error	534.730	754	0.709			
Total	21152.855	758				
Corrected Total	553.654	757				

Notes: ^aR Squared = .051 (Adjusted R Squared = .030).

A (Gender, A1: Female & A2: Male).

Table 6 Results of the Two-Way Anova analysis of the perception as a teacher data

Source	Type III Sum of Square	df	Mean Square	F	p	Partial Eta Squared
Corrected Model	38.482 ^a	3	12.827	24.129	.000	0.088
Intercept	11054.711	1	11054.711	20794.692	.000	0.965
A	15.024	1	15.024	28.261	.000	0.036
Error	400.835	754	0.532			
Total	25343.046	758				
Corrected Total	439.317	757				

Notes: ^a R Squared = .051 (Adjusted R Squared = .084).

A (Gender, A1: Female & A2: Male).

Table 6 shows that there is a significant difference between perceptions of being a teacher based on sex. The data presented show that the perception of being a teacher in female participants is better than that of male participants. The F-count intra A is 28.261 with p value .000 proved to be $p < .05$. Based on those data, it can be concluded that female teacher candidates dominate all the result. Female students are proven to have higher motivation and self-efficacy, as well as better perception, than male students.

Discussion

Differences in Motivation as Teachers Viewed from Gender

The motivation to become a teacher or to teach as a profession is multidimensional and complex. This study proves that the motivation to become a teacher between the women and the men of teacher professional education programs in Indonesia shows a significant difference. Female participants have higher motivation than male participants, and also have different priorities with regard to their motivation to choose a job or profession as a teacher. The former shows higher levels of motivation in the enthusiasm, prestige, family and benefit categories, while the latter scored higher on average in the categories including competence, social status, income, community and working with students and youth. The mean scores in several categories are very similar and only two of the observed categories are statistically significantly different. In the first category, family and benefits, female participants scored significantly higher, while in the working with students and adolescent category, male participants scored significantly higher (Tomšik, 2017).

Differences in Self-Efficacy as Teachers in Terms of Gender

Gender has a significant effect on self-efficacy as a teacher. The women have higher efficacy than the men. It is a common practice that parents unconsciously often differentiate between their sons and daughters. This is because there is a fundamental difference between the abilities and competencies possessed by men and those possessed by women. However, women have higher self-efficacy in certain occupations than men (Bandura, 1997). It has been discussed above that the profession as a teacher tends to be feminist. This can affect society's view that teaching work is more suitable for women, so this kind of support has generated positive thoughts that women are more capable of doing work as teachers.

Differences in Perception as Teachers in Terms of Gender

Apart from motivation and self-efficacy, gender also has a significant effect on perceptions of being a teacher. The perception of the female participants is better than that of the males. The same thing was stated by the results of the research that there were differences in students' perceptions of the teaching profession in terms of gender (Herwin, 2011). The views of prospective teachers have the potential to influence future generations through the educational system, regarding the importance of gender roles to overcome inequality and to educate gender-sensitive generations. This can be started with the education of prospective teachers to overcome this gender imbalance.

In the educational field, especially abroad, motivation, self-efficacy, and perception in becoming a teacher are also proven to be higher for female than male students (Jungert et al., 2014; Mills et al., 2007). Thus, motivation, self-efficacy, and perception will also affect young people to choose accountant, finance, and IT-software-based jobs (Anggoro et al., 2020; Dewi, 2020; Purwati & Sari, 2015).

Conclusion and Recommendation

This study concludes that there are differences in motivation to become teachers. The female participants of teacher professional education programs have higher motivation than the male participants. Apart from motivation, there are also differences in self-efficacy in learning. The female participants have higher self-efficacy than the males. There are also differences in the perception of being a teacher in the participants. The female participants have a better perception of being a teacher than the males. In general, the female participants of teacher professional education programs have high motivation and efficacy as well as a better perception of being a teacher.

Based on the findings of this study, there are several suggestions that can be recommended to teacher education institutions as the producers of teachers. There needs to be coaching, maintenance, and improvement of psychological aspects of student teacher candidates. Furthermore, it is also important to be attentive to various student motivations to be a teacher. This is crucial for them to keep persistent and devoted to choose teaching profession as their career in the future. The selection process for teacher candidates should also be focused on various aspects of psychology, including their motivation, self-efficacy, and perception to be a teacher, because those will affect their teacher performance significantly.

Conflict of Interest

The authors declare that there is no a conflict of interest.

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