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## **Identification of Readiness to Participate in The Teacher Professional Program Chemistry Education Students**

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**Abstract:** This research aims to find out how prepared Malikussaleh University Chemistry Education students are in participating in the Professional Teacher Program (PPG) in order to become professional teachers. The type of research used in this research is quantitative descriptive. The subjects of this research were 29 alumni of Chemistry Education students at Malikussaleh University class 2015-2019, with techniques is probability sampling. Meanwhile, the object studied is readiness to take part in PPG with the six aspects reviewed, including: health aspects, interest aspects, motivation aspects, family environment aspects, socio-economic aspects and campus environmental aspects. The data collection technique in this research uses an instrument in the form of a questionnaire. Data analysis techniques use descriptive statistics with the help of applications *Microsoft Excel*. And the results obtained from research on readiness to participate in PPG are that the health aspect has a percentage of 89% (very good), then the interest aspect has a percentage of 73% (good), then there is the motivation aspect which has a percentage of 53% (fair), then the family environment aspect which has a percentage of 77% (good), then the socio-economic aspect which has a percentage of 70% (good), and finally the campus environmental aspect which has a percentage of 68% (good). Based on the research results, it can be concluded that readiness to take part in the Professional Teacher Program is to become a professional teacher in the good category with an average percentage of these six aspects of 72%.

**Keywords:** Chemistry Education, Malikussaleh University, PPG, Professional Teacher.

## **INTRODUCTION**

The teaching profession is a very important profession in the development of education in a country. High quality education depends on the presence of quality teachers, namely teachers who are professional, successful and dignified (Fasli, 2007; Ginting et al., 2020). Therefore, quality educational systems and practices are very necessary, as is the existence of skilled educators. Professional teachers are teachers who have skills that are very necessary to manage, guide, direct, train, assess and evaluate individuals who have been taught in educational units (Alexandro et al., 2021; Pasaribu et al., 2023).

To become a professional teacher, adequate preparation and qualifications are required. Many countries, including Indonesia, have Teacher Professional Programs (PPG)

specifically designed for students who are interested in becoming teachers. However, before participating in the program, students need to know their readiness to face the challenges and demands that exist in the teaching profession. The preparation of teachers as a profession is stated in Government Regulation Number 19 of 2017 concerning Amendments to Government Regulation Number 74 of 2008 concerning Teachers. In addition to teachers having to have a bachelor's degree qualification, teachers must have a professional teaching certificate obtained through professional education. The Teacher Professional Program (PPG) is an educational program organized to prepare undergraduate education graduates and non-education undergraduate/D-IV graduates who have the talent and interest to become teachers in managing teacher competency as a whole in accordance with national training standards to

obtain certification as a professional education trainer for children. early childhood, basic education, and secondary education (Ristekdikti, 2018).

The Teacher Professional Program (PPG) has objectives in accordance with the Regulation of the Minister of Education and Culture of the Republic of Indonesia No. 87 of 2013 in article 2, namely: (a). to produce prospective teachers who have competence in planning, implementing and assessing learning; (b). Follow up on assessment results by providing guidance and training for students; and (c). able to conduct research and develop professionalism on an ongoing basis. The PPG program is divided into 2 types based on the target group, namely: (1) Pre-Service PPG, Pre-Service PPG is a program intended for prospective teachers who have fulfilled the S-1/D-IV academic qualification requirements and will apply to become teachers. This means that this program is specifically for students who have just graduated from S-1/D-IV and have not yet become teachers, (2) In-service PPG, this program is intended for in-service teachers. In-service teachers are civil servant (PNS) teachers or non-PNS teachers who already teach in educational units that already have a work agreement or cooperation agreement (Pangestika & Alfarisa, 2015). The PPG program provides deeper learning and experience to become a professional teacher. The PPG program should be followed by education graduates because through the PPG program education graduates can obtain an educator certificate (Kisriyanto & Corry, 2018).

PPG must be pursued for 1 year after a prospective teacher graduates from a bachelor of education or non-graduate education program (Daud et al., 2022). PPG itself shows the good and bad sides for students. Some groups support the creation of PPG, but quite a few are against the existence of the PPG program. Many of them still doubt that implementing PPG can improve the professionalism and quality of prospective teachers. As explained by Indriyani, et al., (2015) in their research, 48.23% of students were unsure about how they assessed PPG. They doubt the potential of the PPG program to improve the professionalism and quality of prospective teachers. Additionally, they believe that a Bachelor of Education is sufficient to qualify as a professional teacher. Therefore, some education students are reluctant to support this program. This shows that the majority of education

students are not ready to take part in the Teacher Professional Education (PPG) program.

Readiness refers to the condition or state of a person who has prepared himself physically, mentally or emotionally to face something. Readiness is a condition that gives certainty to someone to respond to an event in a certain way (Slameto, 2010). Readiness to become a teacher is a condition or preparation that includes various aspects needed to carry out the roles and responsibilities of a teacher effectively. Students' readiness to become professional teachers must be emphasized more. This aims to reduce the lack of knowledge about the PPG (Sukmawati, 2019).

The readiness of students to become professional teacher candidates is a condition where students have sufficient abilities both physically, mentally and in business knowledge to fulfill all the requirements that must be met to be able to take part in the teaching profession program. If the students' desires and circumstances are appropriate, they are designed to become professional teachers (Septiani & Widiyanto, 2021). Readiness to become a professional teacher is influenced by several factors, namely internal and external factors. Where internal factors include interest, knowledge, motivation and skills, and external factors which are influenced by various environments (family, friends and school), social and economic aspects.

## METHODS

The type of research used is quantitative descriptive research. This research was carried out at the Chemistry Education Study Program at Malikussaleh University. The population in the study were alumni of chemistry education students. The sampling technique used in this research is *probability sampling*. *Probability sampling* is a sampling technique that provides equal opportunities or opportunities for each element or member of the population to be selected as a sample (Sugiyono, 2017). Types of techniques *probability* The sampling used in this research is *stratified random sampling*.

The sample was taken from alumni from the 2015-2019 class. The data collection technique in this research uses a questionnaire instrument. The aspects measured include health aspects with indicators of physical condition. Interest aspect with indicators of feelings of enjoyment towards professional teacher

education (PPG), feelings of interest in becoming a professional teacher, and desire to take part in PPG. Motivational aspect with indicators of encouragement to follow PPG. Aspects of the family environment with indicators of parental attention. Socioeconomic aspects with indicators of material adequacy, parental income, and scholarships. Aspects of the campus environment with indicators of peer interaction in the campus environment.

Presented are 25 statements in the form of a likert scale. Data analysis using application assistance *Microsoft Excel*. The frequency of each respondent's answer choice from the data obtained was calculated using the equation  $P = \frac{F}{N} \times 100\%$  (Priyono, 2016). Then the results obtained are analyzed at the data processing results stage. After obtaining the percentage, the questionnaire results are based on a scalelikert These are grouped according to categories, namely:

**Table 1:** Categories Based on Percentage

No.	Percentage	Category
1.	81 - 100%	Very Good
2.	61 - 80%	Good
3.	41 - 60%	Fair
4.	31 - 40%	Less
5.	0 - 30%	Very Less

## FINDINGS AND DISCUSSION

The following is a summary of the results of questionnaire data analysis on readiness to take part in the Teacher Professional Education (PPG) program. The data in table 2 is presented for each aspect consisting of several indicators including, namely, physical condition, feelings of enjoyment towards professional teacher education, feelings of interest in becoming a professional teacher, desire to take part in PPG, encouragement to take part in PPG, parental attention, material adequacy, people's income parents, scholarships, peer interactions in the campus environment.

Based on the results of research on Chemistry Education students at Malikussaleh University, it shows that the students' readiness in taking PPG is in the good category, with an average score of 72%. Students' readiness to take part in the PPG program can be seen from several aspects that we have created, namely: 1) Health, 2) Interests, 3) Motivation, 4) Family Environment, 5) Socioeconomic, 6) School Environment. An explanation of each aspect of readiness to participate in the PPG program is explained as follows.

**Table 2.** Health Aspects Questionnaire Results

Indicator	Statements	Average score	Percentage	Category
Physical Condition	There are no physical disorders that hinder me during my education	4.38	88%	Very Good
	I always maintain my body's health so that I can take part in PPG in the future	4.55	91%	Very Good
Total per-aspect		8.93	89%	Very Good

**Table 3.** Interest Aspects Questionnaire Results

Indicators	Statements	Average score	Percentage	Category
Feeling happy towards PPG program	I'm glad there is a PPG program for become a professional teacher	4.62	92%	Very Good
Interest becomes teacher professional	I'm interested in the PPG program because it can improve the quality of prospective teachers.	4.66	93%	Very Good
	I'm interested in joining PPG because I will get teacher certification benefits.	4.41	88%	Very Good
	I am interested in joining PPG because I will get an additional title, namely <u>Gr</u>	4.31	86%	Very Good
	I'm not interested in joining PPG because the cost of education is expensive	1.97	39%	Less
	more interested in continuing my studiesS2 instead of following PPG	3.00	60%	Fair

Desire to follow PPG	I want to become a professional teacher but don't want to join PPG	2.00	40%	Less
	I want to follow PPG because he opportunity to become an ASN is greater	4.14	83%	Very Good
Total per aspect		29.11	73%	Good

**Table 4.** Motivation Questionnaire Results

Indicator	Statements	Average score	Percentage	Category
Encouragement to follow PPG	I will take PPG after graduating from bachelor's degree	4.07	81%	Very Good
	I don't want to join the PPG program because it could be a waste of time	1.24	25%	Very Less
Total Per – aspect		5.31	53%	Fair

**Table 5.** Results of the Family Environment Aspects Questionnaire

Indicator	Statements	Average score	Percentage	Category
Parents attention	My parents always motivated me to take part in PPG	3.83	77%	Good
Total Per – aspect		3.83	77%	Good

**Table 6.** Socioeconomic Aspects Questionnaire

Indicators	Statements	Average score	Percentage	Category
Material sufficiency	Financial support from parents can increase readiness to become professional teachers through the PPG program	3.69	74%	Good
	My parents are trying to cover my educational costs, including if I take PPG	3.76	75%	Good
Parental income	My parents always give me pocket money every month	3.17	63%	Good
	My parents' income can meet the family's basic needs	3.10	62%	Good
	My parents' income can meet the family's tertiary needs	2.86	57%	Fair
	My parents' income is said to be sufficient to meet my educational needs, including if I take PPG	2.86	57%	Fair
	My parents' low income meant that I was not prepared to take part in PPG.	2.72	54%	Fair
Scholarship	Having a PPG scholarship can be a motivation for me to study harder	4.72	94%	Very Good
	Having a PPG scholarship can ease my financial burden in completing PPG	4.69	94%	Very Good
Total Per-Aspect		31.57	70%	Good

**Table 7.** Campus Environmental Aspects

Indicators	Statements	Average score	Percentage	Category
Peer interaction in the campus environment	I once discussed the PPG program with my friend	4.66	93%	Very Good
	I once discussed the PPG program with students who were taking PPG	3.90	78%	Good
	I never discussed the PPG program with any of my friends	1.69	34%	Fair
Total Per-Aspect		10.25	68%	Good

Table 2 shows the level of readiness in participating in the PPG regarding health aspects, measured by providing 2 statement items representing 1 indicator. The results of item 1 were

in the very good category and item 2 was very good. Overall, the health aspect has an average score of 8.93 with a percentage value of 89%. So this aspect is categorized as very good.

Assessment of the health aspects of the results shows that respondents have very good preparedness for the indicators physical condition. This is because students do not have physical disorders that could hinder their preparation. Physical condition is a very important thing to pay attention to. According to (Aini et al., 2023) someone who wants to achieve something will prepare everything and maintain their health. Things you can do to maintain good health are by maintaining your diet, exercising, getting enough rest, dividing your time between studying, organizing and playing.

Table 3. Shows the level of readiness in participating in PPG regarding aspects of interest measured using 8 items and 3 indicators. The results of items 3, 4, 5, 6, and 10 obtained the very good category. Items 7 and 9 received the poor category. Meanwhile, item 8 received the sufficient category. It can be seen overall that the interest aspect has an average score of 29.11 with a percentage value of 73% so this aspect is categorized as good.

In the interest aspect, the results show that respondents have good readiness. The interest they have in participating in the PPG program is good. This is caused by a feeling of joy, curiosity, and interest in becoming a professional teacher by participating in the PPG program. Chemistry education students are interested in the PPG program. It can be seen that attraction cannot be separated from interest. Interest in becoming a professional teacher through the PPG program factor is that the PPG program can improve the quality of teachers in accordance with current developments and improve human resources (Zulfitri et al., 2019). Another factor is the teacher certification allowance. Teachers who already have educator certification will receive a professional teacher allowance of once their basic salary every month (Muamar & Srifariyati, 2017). Teachers who have taken part in the PPG program will receive a title, namely Gr. Someone who is interested in taking part in the PPG program will certainly study seriously and develop the skills they have to fulfill the competencies that must be possessed by professional teachers. This is in accordance with the results of research conducted by Sugiharto (2019) where students' perceptions of the PPG program have a positive and significant

effect on their interest in becoming teachers. Table 4. Shows the level of readiness in participating in PPG regarding motivational aspects measured using 2 items. The results of item 11 obtained a very good category. Meanwhile, item 12 received the very poor category. It can be seen overall that the motivation aspect has an average score of 5.31 with a percentage value of 53% so this aspect is categorized as sufficient. The motivation aspect shows that respondents have very good motivation to take part in the PPG program. A very good motivation for chemistry education students to take part in the PPG program is encouragement from oneself or close people to make him a professional teacher.

Table 5. Shows the level of readiness in participating in PPG regarding aspects of the family environment measured using 1 item. The results of item 13 obtained a good category. It can be seen overall that the family environment aspect has an average score average 3.83 with a percentage value of 77% so this aspect is categorized as good. The family environment aspect shows that the respondent is in a family environment and receives support to take part in the PPG program the good one. Meeting student needs is a very good factor. Fulfillment of needs will influence a person's readiness. One of the factors that influence the unfulfillment of a person's needs is economic factors. The PPG program, whether position or pre-service, is funded by the government but only costs tuition for two semesters. Living costs, transportation and other costs will be borne by the students themselves.

Table 6. Shows the level of readiness in participating in PPG regarding socio-economic aspects measured using 9 statement items and 3 indicator items. The results obtained on items 14, 15, 16, and 17 were in the good category. On items 18, 19, and 20, you get enough items. Meanwhile, items 21 and 22 received the very good category. It can be seen overall that the socio-economic aspect has an average score of 31.57 with a percentage value of 70% so this aspect is categorized as good.

In the socio-economic aspect, it shows that readiness to take part in the teacher professional education program produces good results. The results of the research show that part of the income of chemistry education students' parents will influence students' readiness to take PPG. So, for parents with low incomes, some students' readiness to take PPG is low, conversely, parents

with high incomes also partly influence the high level of students' readiness to take PPG. So the existence of the PPG scholarship really supports students' readiness to take part in PPG because can be a motivation for students to study harder and can reduce the burden on students' costs in completing PPG.

Professional Teacher Education (PPG) requires quite a lot of money. The high cost of the PPG program is one of the many factors that influence students' readiness to take PPG. Therefore, financial support from parents is a very important thing that can influence students to take part in PPG. Cost support from parents will not be separated from the parents' own income. Education costs can be a problem for parents with low incomes (Aini et al., 2023). This is relevant to Pratiwi's (2018) research which explains that high parental income does not necessarily cause students' interest in participating in PPG to be high, and vice versa so that students who are interested in participating in PPG do not necessarily have to be based on their parents' high income (Aini et al., 2023).

Table 7. Shows the level of readiness in participating in PPG regarding campus environmental aspects measured using 3 items. The results obtained for item 23 were in the very good category. Item 24 received a good category. Meanwhile, item 25 received the poor category. It can be seen overall that the environmental aspect of the campus has an average score of 10.25 with a percentage value of 68% so this aspect is categorized as good.

The economic aspect shows that students are in a good campus environment. This can be seen from the research results where students discussing the PPG program with their friends reached 93% in the very good category, while students who discussed the PPG program with students taking PPG reached 78% in the good category. Most of the Chemistry Education students at Malikussaleh University have discussed the PPG program. However, to increase students' knowledge, the role of the university is needed to provide information related to the PPG program. Peers can have both positive and negative influences (Aini et al., 2023). Based on the description above, it can be seen that the health aspect is the aspect that has the highest percentage of scores, followed by the family environment aspect, the interest aspect, the socio-economic aspect, the campus environment aspect, and the motivation aspect.

## CONCLUSION

Based on data obtained from research results, it shows that the health aspect has a percentage of 89% (very good), then the interest aspect has a percentage of 73% (good), then there is the motivation aspect which has a percentage of 53% (fair), then the family environment that has the percentage is 77% (good), then the socio-economic aspect which has a percentage of 70% (good), and finally the campus environmental aspect which has a percentage of 68% (good). In this case, it can be concluded that the response from all alumni of Chemistry Education students at Malikussaleh University is that they are ready to take part in the Professional Teacher Program to become professional, successful and dignified teachers, in the good category with an average percentage of the six aspects of 72%.

The suggestions that researchers can give are: 1) Before taking PPG, students can take additional teaching skills training, this training can help students become more prepared and confident in teaching. 2) to increase students' readiness to take part in PPG, the campus can hold outreach or seminars about the program. 3) as prospective education graduates, students should have a great plan and readiness to take part in the PPG program to improve their professionalism as prospective educators.

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