

Exploring Motivation and Challenges: Online Professional Teacher Education (PPG) for Pre-Elderly Students in Indonesia

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ABSTRACT

Limited technological mastery challenges pre-elderly students participating in online Teacher Professional Education (PPG) programs. This study explores their motivation and obstacles through a mixed research approach. Four key motivational factors were identified: intrinsic, career, social, and economic. These factors drive their decision to pursue further education in teaching. However, technological and digital skill limitations remain significant barriers. Institutional support addresses these challenges such as specialized digital training and mentoring. Such initiatives help students critically reflect on their limitations and shift their perspectives on online learning. Aligning with Jack Mezirow's transformative learning theory, this process emphasizes critical reflection to overcome obstacles and foster perspective changes. Ultimately, this approach enables pre-elderly students to effectively achieve their learning goals, enhancing their contributions to academic and professional communities.

Keywords:

Motivation; Challenges; Online Professional Teacher Education; Pre-Elderly Students.

ABSTRAK

Penguasaan teknologi yang terbatas menjadi tantangan bagi siswa pralansia dalam mengikuti program Pendidikan Profesi Guru (PPG) daring. Studi ini mengeksplorasi motivasi dan hambatan mereka melalui pendekatan penelitian campuran. Empat faktor motivasi utama diidentifikasi: intrinsik, karier, sosial, dan ekonomi. Faktor-faktor ini mendorong keputusan mereka untuk melanjutkan pendidikan di bidang pengajaran. Namun, keterbatasan keterampilan teknologi dan digital tetap menjadi hambatan yang signifikan.

Dukungan institusional, seperti pelatihan dan pendampingan digital khusus, sangat penting dalam mengatasi tantangan ini. Inisiatif semacam itu membantu siswa merefleksikan secara kritis keterbatasan mereka dan mengubah perspektif mereka tentang pembelajaran daring. Selaras dengan teori pembelajaran transformatif Jack Mezirow, proses ini menekankan refleksi kritis untuk mengatasi hambatan dan mendorong perubahan perspektif. Pada akhirnya, pendekatan ini memungkinkan siswa pra-lansia untuk mencapai tujuan pembelajaran mereka secara efektif, meningkatkan kontribusi mereka terhadap komunitas akademis dan profesional.

Kata kunci:

Motivasi; Tantangan; Pendidikan Guru Profesional Daring; Siswa Pra-Lansia; Indonesia.

1. Introduction

The implementation of online Teacher Professional Education (PPG) shows various challenges that can potentially hinder the achievement of program objectives, especially for pre-elderly students. Data from 2021 revealed that the graduation rate of the first batch only reached 57.66%, while the second batch reached 77.46%, with a national average of 67.56%. This low graduation rate indicates a systemic problem in implementing online PPG. This learning model reduces the intensity of direct interaction between PPG participants and education practitioners, which is essential in building practical skills. In addition, Yusuf (2020) highlighted that the absence of direct interaction with mentors is also a significant obstacle to experiential learning. Hermanto and Srimulyani (2021) added that the lack of direct supervision of the learning process results in less stringent assessment standards, so prospective teachers' abilities are not evaluated comprehensively. Furthermore, the analysis of Basar et al. (2021) emphasized that online methods often do not consider the special needs of pre-elderly students, who require a more personalized learning approach and additional support to deal with technological challenges. Chang et al. (2024) reinforce this view by highlighting the importance of intensive mentoring, especially for participants over 50 who may face difficulties adapting to digital platforms. To address these challenges, more inclusive policies, a participant-focused approach, and stricter monitoring and evaluation are needed to ensure the success of online PPG programs.

The proliferation of online learning has attracted the interest of researchers to investigate further. Holmes Brian, for example, highlighted that online learning has become a necessity to enhance continuous professional development for teachers in Switzerland (Holmes, 2013). In addition, Vanoostveen, Roland, François Desjardins, and Shawn Bullock contributed by explaining how online learning environments can promote the professional development of Finnish teacher students to collaborate actively (vanOostveen et al., 2019). Contrary to Vanoostveen, Liu, Wei, Ronald L. Carr, and Johannes Strobel, through their research, proved that teacher professional development through online learning communities adversely affects the cognitive abilities of students in developing countries (Liu et al., 2009). These studies have provided valuable insights into the development of

online learning, but research that specifically explores the motivations and challenges of implementing online teacher professional education for pre-service students is still rare. This is important to ensure equal access to online learning.

This study explores the factors influencing pre-elderly students' motivation to participate in online teacher education and identifies the challenges they face during the learning process. The study was conducted at the LPTK UIN Walisongo Semarang because the institution's academic environment facilitates online teacher education and has a significant population of pre-elderly students. The focus of this study is to address three issues: First, to identify the factors that influence pre-elderly students' motivation to pursue teacher professional education at Walisongo State Islamic University Semarang. Second, to analyze the challenges pre-elderly students face in undergoing teacher professional education at the institution. Third, to evaluate the relationship between motivation and challenges, pre-elderly students face with their learning outcomes and readiness to become professional teachers after completing their education at Walisongo State Islamic University Semarang.

This research is crucial to understanding the learning dynamics of older adults better. Considering Robert Peck's theory of the stages of psychosocial development, understanding the conflict between productivity and stagnation faced by pre-elderly people (aged 50-65 years) is key. They are at this stage reflecting on their life achievements and considering the legacy they leave behind, so their motivation to pursue new education may be influenced by the extent to which they feel the experience meets their psychosocial developmental needs. Challenges pre-elderly students face during the online learning process may include adapting to new technologies, attending to physical health and mental well-being, and adapting their learning style to an online platform that may differ from previous experiences. By understanding these dynamics, more effective and inclusive learning strategies can be developed for pre-elderly students pursuing online teacher education.

2. Methods

2.1. Research Design

Research that explores motivations and challenges in online professional teacher education (PPG) for pre-elderly students in Indonesia needs to use a mixed methods approach, which combines a qualitative approach with phenomenology and quantitative data, to gain a deep and comprehensive understanding. The phenomenological approach to qualitative data is very relevant because it provides space for researchers to explore students' subjective experiences in depth, including their unique challenges and motivations in participating in online PPG (Ponce & Pagán-Maldonado, 2015). This method allows researchers to explore the meanings attached to these experiences, such as how pre-elderly students adapt to technology, deal with time constraints, or find motivation to learn (Ponce & Pagán-Maldonado, 2015). Meanwhile, the use of quantitative data provides a more objective structure to validate qualitative findings, as well as allowing for broader pattern analysis, such as the distribution of motivations and challenges by age, educational background, or geographic region (Febriani, 2022). This combination of methods enriches the analysis with subjective and objective perspectives and helps researchers produce more relevant evidence-based recommendations. With

this approach, researchers can capture the complexity of online PPG education for pre-elderly groups, who often have different needs and challenges than other age groups. This is an important foundation for understanding how online education can be more inclusive and support the professional development of pre-elderly students in Indonesia.

2.2 Population and Sample

The fulfillment of qualitative data for in-depth interviews with seven informants aged 55-60 with the initials N1-N7 was used to explore their personal experiences, motivations, and obstacles during the online learning process. To maintain confidentiality and research ethics, all informants were guaranteed anonymity. In the quantitative aspect, this study also involved 50 PPG students to obtain data that could be measured and analyzed statistically, strengthening the findings from a broader perspective. This combined approach increases the data's validity and ensures that every dimension of the participants' experiences, individually and collectively, is fully accommodated, as Raskind (2019) suggested. This study provides a comprehensive picture of how the pre-elderly group adopts online learning and the challenges and opportunities they face in the PPG context.

Table 1. Population and Sample Research

No	Gender	Code	Date of Birth	Place of Duty	Origin Province
1	N1	L	15-04-1974	MI Gunung WIJIL	Central Java
2	N2	L	7/9/1968	MI Al Islah Tengguli	Central Java
3	N3	L	13-05-1970	MI Nashrul Fajar	Central Java
4	N4	P	13-06-1970	RAS Hidayatul Islam Bendo	Central Java
5	N5	L	8/5/1968	MIS Al Fatah Muhajirun Negara Ratu	Lampung
6	N6	P	6/6/1974	MIN 1 Lampung Selatan	Lampung
7	N7	L	27-01-1970	MIS Raudlatul Ulum	East Java

2.3 Data Collection

Qualitative data in this study were collected using three main methods: participant observation, in-depth interviews, and document searches. Participant observation was conducted to provide a direct understanding of the learning atmosphere in the online teacher professional education (PPG) environment so that researchers could observe participants' interactions with the materials and technology used. This method provided in-depth insights into classroom dynamics, technical challenges, and student participation patterns. In-depth interviews allowed informants to convey their subjective views without limitations, providing rich and diverse data. In addition, document searches supported data validation through the analysis of participant lists classified as pre-elderly, facilitating the mapping of the specific needs of this group (Rice et al., 2014). Meanwhile, the fulfillment of quantitative data involved a survey (Rice et al., 2014).

2.4 Data Validation

Quantitative data validity is carried out through a series of systematic procedures to ensure the reliability and accuracy of research findings. One of the main methods is content validity, which involves assessing whether the research instrument covers all aspects relevant to the measured concept. This validity can be confirmed through expert testing or expert assessment, which provides input regarding the suitability of the indicators to the variables being studied. In addition, construct validity ensures that the measuring instrument truly reflects the theoretical concepts that are the focus of the research, often tested through exploratory factor analysis. Statistical tests in item-total correlation and internal reliability are applied to measure consistency between items in quantitative instruments. In the context of research at Walisongo State Islamic University, Semarang, quantitative data validity evaluates online teacher education programs' effectiveness and relevance in improving 21st-century skills. Data collected through structured surveys from students were statistically processed to identify significant patterns and relationships, strengthening the generalizability of the findings (Talbot, 1992). This study provides a strong foundation for developing more inclusive and evidence-based learning policies and practices by combining qualitative data validity through source triangulation and quantitative validity through statistical analysis. Thorough validation ensures that the research results are not only accurate but also relevant in supporting the improvement of the quality of education in Islamic institutions (Zhou, 2019).

2.5 Data Analysis

The data analysis technique in the study entitled *Exploring Motivation and Challenges: Online Professional Teacher Education (PPG) for Pre-Elderly Students in Indonesia* uses an inductive approach. This approach aims to explore patterns and themes that emerge naturally from the data without imposing initial assumptions, thus producing a deep understanding of the participants' experiences. The analysis process begins with the transcription of raw data, followed by repeated readings to understand the context and narratives expressed. Next, the data is divided into meaningful units relevant to the research objectives. These units are then coded using qualitative data analysis software or manually to identify recurring categories. This step allows the researcher to group the data into key themes reflecting the motivations and challenges of pre-elderly students participating in online PPG. These findings are then compared with existing literature to ensure their relevance and theoretical contribution. Using an inductive approach also allows for exploring unique perspectives, such as age, technology, and intrinsic motivation, often not captured in deductive research. Furthermore, this method creates flexibility in the analysis, allowing the researcher to adjust the focus based on new information that emerges during the research process. As a result, this study can provide new insights into how pre-elderly students navigate technical, pedagogical, and psychological challenges in online learning while uncovering effective strategies to support their success. Thus, inductive analysis plays a critical role in generating authentic and contextual findings (LeCompte & Schensul, 2012).

3. Results and Discussion

3.1 Results

This study found four motivations that encourage pre-elderly students to remain in the teacher professional education program. First, intrinsic motivation involves the desire for self-development and improved professional competence. The pre-service students felt the program provided opportunities to learn new things and hone their teaching skills. Second, career motivation focuses on opportunities for career advancement and job stability. They see this program as a way to obtain a recognized certification and hopefully improve their future job prospects. Third, social motivations include the drive to contribute positively to society through education. Many feel called to contribute to educating the younger generation and improving the quality of education in their neighborhoods. Fourth, economic motivation relates to the expectation of improved financial well-being. They hope that by completing the program, they can obtain higher salaries and better economic welfare. These four motivations complement each other and provide a comprehensive picture of why pre-service students choose to continue their education in the teaching profession.

In addition, this study confirmed that pre-elderly students face significant challenges during the online learning process. One of them is limited technology and digital skills, which can make it difficult for them to access materials or participate in online activities. In addition, the barrier of understanding the material independently without direct guidance from the instructor is also a challenge. Other factors affecting motivation include physical and mental health, where declining health conditions can reduce energy and focus for online learning. However, with the right support from educational institutions and online learning communities, as well as the awareness to continuously improve digital skills, older students can overcome these challenges and achieve their learning goals effectively. Specialized digital training for pre-elderly students, mentoring programs, and adjusting learning materials to be more user-friendly can help reduce their difficulties. With these combined efforts, older students have a better chance of succeeding in online learning, improving the quality of their education, and continuing to contribute to their academic and professional communities actively.

The informants admitted that intrinsic motivation was the main factor that encouraged the pre-service students to join the professional teacher education program. "I feel that learning to be a teacher is a never-ending journey, and this gives me the satisfaction of continuing to develop myself," said Informant N1. Pre-service students felt that the professional teacher education program provided a valuable opportunity to learn new things and hone their teaching skills. "I want to continue to deepen my knowledge in education so that I can provide the best for students," said Informant N4. In addition, they are also motivated by the desire to stay relevant and up-to-date with the latest developments in education. "The world of education is constantly evolving, and I want to be part of the positive changes in education," said Informant N7. The desire to positively impact the younger generation is also a strong motivator. "Being a teacher is a calling for me; I want to guide and inspire the younger generation to reach their full potential," added Informant N1. By joining this program, they hope to become more competent professionals ready to face challenges in the ever-evolving world of education. "I believe that with a good education, I can be a more effective contributor in advancing the world of education," said Informant N4.

Therefore, intrinsic motivation plays a key role in the decision of pre-elderly students to continue their education in this field. This is supported by the survey results below Table 2.

Table 2. Survey of intrinsic motivation of pre-elderly students in participating in PPG

No	Question	N	Mean	Standard Deviation
1	How much do you want to develop yourself through this PPG program?	50	3.81	0.792
2	Do you feel the PPG program provides a good opportunity to learn new things?	50	3.70	0.941
3	How has the PPG program helped you improve your teaching skills?	50	3.64	0.701
4	How important is it for you to hone your professional competencies through this program?	50	3.59	0.901
5	Do you feel motivated to join the PPG program to improve yourself?	50	3.91	0.810
6	To what extent does the PPG program encourage you to reach your full potential in education?	50	3.92	0.827
7	How do you feel about learning teaching skills through the PPG program?	50	3.63	0.846
8	Do you feel the PPG program provided a valuable learning experience for your professional development?	50	3.94	0.792
9	How much did the PPG program influence your confidence in teaching?	50	3.97	0.871
10	How satisfied are you with the opportunities to develop your teaching skills provided by the PPG program?	50	3.58	0.710

Table 2 shows the survey results on pre-elderly students' intrinsic motivation to join the Professional Teacher Education Program (PPG). The survey involved 50 respondents and included ten main questions. The mean scores given by respondents ranged from 3.58 to 3.97, with the standard deviation indicating the degree of variation in answers between 0.701 and 0.941. The question with the highest mean was about the effect of the PPG program on confidence in teaching (mean 3.97), followed by satisfaction with learning experiences valuable for professional development (mean 3.94) and encouragement to reach full potential in education (mean 3.92). In contrast, the question of satisfaction with opportunities to develop teaching skills received the lowest mean score (mean 3.58). The highest standard deviation was recorded for the question on opportunities to learn new things (0.941), indicating greater variation in opinions among respondents. Overall, the results of this survey illustrate that pre-service students feel sufficiently motivated to join the PPG, with the majority of respondents giving positive assessments of the various aspects of the program that support their personal development and professional skills.

Meanwhile, informant N3 said that she was attracted to the teacher professional education program due to strong career motivations, especially about opportunities for career advancement and job stability. She saw the program as an entry point to obtain a widely recognized certification, which she believed would improve their future job prospects. In this context, the need for career stability and certainty is the main factor motivating them to pursue further education in the teaching profession. In addition, informant N3 said that this education program is an investment in their future, as these

pre-elderly students hope to improve their skills and knowledge and expand their job opportunities in the field of education. She placed great importance on this aspect, with career motivations oriented towards improving professionalism and career stability being the main drivers for their participation in the teacher professional education program.

"Professional teacher education is the gateway to certification. This can improve our future job prospects. I need career stability and certainty to pursue further education in the teaching profession. Besides, this program is an investment in the future and expanding job opportunities in better education."

N3's statement aligns with the survey results, which show a strong motivation related to career improvement. The Table 3. below shows the survey results of pre-service teachers' motivation in choosing a teacher professional education program for a better career.

Table 3. Survey of career motivation of pre-elderly students participating in PPG

No	Question	N	Mean	Standard Deviation
1	How much do you believe the PPG program can increase your chances of career advancement?	50	3.81	0.901
2	To what extent can the PPG program provide future job stability?	50	3.79	0.752
3	How important is obtaining a recognized certification through the PPG program to you?	50	3.81	1.01
4	To what extent do you feel the PPG program will help improve your job prospects?	50	3.52	0.945
5	How much do you believe certifications from the PPG program will be valued in the job market?	50	3.67	0.746
6	To what extent do you believe the PPG program will help you achieve your career goals?	50	3.84	0.896
7	How much do you feel the PPG program will enable you to compete better in the job market?	50	3.47	0.727
8	How important is it for you to improve your skills through the PPG program?	50	3.78	0.925
9	To what extent do you believe the PPG program will provide new insights into your field?	50	3.82	0.893
10	How much will the PPG program help expand your professional network?	50	3.89	0.761

Table 3. presents the results of a survey of 50 pre-elderly students regarding their motivation to join the Professional Teacher Education Program (PPG). The survey consisted of 10 questions with means and standard deviations measuring different aspects of career motivation. The questions assessed students' beliefs in increased career opportunities (mean 3.81, SD 0.901), future job stability (mean 3.79, SD 0.752), importance of recognized certification (mean 3.81, SD 1.01), improved job prospects (mean 3.52, SD 0.945), job market appreciation of certification (mean 3.67, SD 0.746), achievement of career goals (mean 3.84, SD 0.896), ability to compete in the job market (mean 3.47, SD 0.727), improvement of skills (mean 3.78, SD 0.925), new insights in their field (mean 3.82, SD 0.893), and expansion of professional network (mean 3.89, SD 0.761). The survey results show that students have high confidence in the benefits of PPG, especially in expanding professional networks

and helping to achieve career goals, with the highest mean scores of 3.89 and 3.84, respectively. However, the prospect of increased employment and ability to compete in the job market received the lowest mean scores, 3.52 and 3.47, respectively, suggesting areas that may need further attention in the PPG program.

On the other hand, informant N2 stated, "I feel called to play a role in developing the potential of the younger generation and improving the standard of education around us." Informant N6 adds, "A sense of responsibility towards shaping the future together motivates us to take on the role of educators." According to Informant N1, "Through our dedication to this social mission, we not only strive to achieve personal success but also to create a sustainable impact in advancing the field of education." The social motivation they share is the drive to contribute positively to society through education and the desire to see positive societal changes. With strong determination, they champion the teacher professional education program to achieve this goal and create a wider impact in advancing the field of education.

Table 4. Survey of Pre-Elderly Students' Social Motivation in Joining The PPG Program

No	Question	N	Mean	Standard Deviation
1	How important do you think the role of a teacher's professional education is in positively contributing to society?	50	3.91	0.821
2	Do you feel that teaching professional education increases your social responsibility to contribute to improving community education?	50	3.79	0.752
3	To what extent do you feel motivated to be an agent of change in the field of education?	50	3.41	1.010
4	Do you feel that teacher education is key in combating social inequalities?	50	3.92	0.699
5	How much do you feel that teacher education can positively change a person's life?	50	3.87	0.821
6	Do you feel that becoming a professional teacher is an effective way to contribute to society?	50	3.91	0.760
7	To what extent do you feel driven by the desire to empower the younger generation through teacher education?	50	3.55	1.27
8	Do you feel that having better access to professional teacher education will bring about positive social change?	50	3.68	1.025
9	How much do you feel that teacher education can be a tool to reduce social inequalities?	50	3.97	0.671
10	Do you feel morally obligated to share your knowledge with society through teacher education?	50	3.62	1.12

Table 4 displays the survey results on pre-elderly students' social motivation toward the Professional Teacher Education Program (PPG). The data consisted of ten questions highlighting their perceptions of the role of teachers in society. The mean average for each question ranged from 3.41 to 3.97, with standard deviations varying from 0.671 to 1.27. The survey results show that respondents tend to perceive the role of teacher professional education as a significant agent of social change, believing that teacher education can reduce social inequalities, positively contribute to

society, and increase social responsibility in advancing education. Although some variation in perceptions was seen, the data overall showed strong support for the role of teachers in advancing society and positively changing individual lives.

Informant N5 said that among the other factors that encourage pre-elderly students to join the teacher professional education program is economic motivation, closely related to aspirations to improve financial well-being. These students have a strong expectation that by completing the program, they will be able to increase their income and achieve greater economic stability in the future. The belief that becoming a teacher can provide greater financial rewards is a key driver for them to pursue education in this field. In this context, teacher education programs are perceived as a means to acquire new skills and knowledge and as a step towards improving their financial situation. N5 acknowledged that the desire to achieve greater economic stability is a strong motivational trigger for pre-elderly students to pursue the teaching profession, with the hope that this investment in education will bring long-term benefits to their lives financially.

"Economic motivation is one of the main factors driving us to join the teacher professional education program. They hope that by completing this program, they can increase their income and achieve greater economic stability. The desire to achieve financial well-being is their main driver in pursuing this education."

In confirming N5's argument, the survey results below explain that economic motivation is integral for older students to join the PPG program. The Table 5. below shows the level of economic motivation taken from the survey data.

Table 5. Survey of Economic Motivation of Pre-Elderly Students in Participating in PPG

No	Question	N	Mean	Standard Deviation
1.	How much do you feel the economic improvement will improve your financial well-being?	50	3.76	0.934
2.	Do you expect that joining the PPG program will bring economic improvements for you?	50	4.00	0.602
3.	How do you see the link between economic improvement and improved financial well-being?	50	3.98	0.882
4.	Do you expect the PPG program to help increase your income?	50	3.99	0.700
5.	How much do you believe an improved economy will improve your financial situation?	50	3.82	0.942
6.	Do you believe that improving your qualifications through the PPG program will bring financial benefits?	50	4.00	0.692
7.	Do you have specific plans to use the increased income from the PPG program?	50	3.81	0.784
8.	How do you estimate the impact of economic improvement on your daily life?	50	3.92	0.639
9.	Do you feel that the improved economy will give you greater financial freedom?	50	3.90	0.810
10.	How confident are you that the PPG program can help you achieve your financial goals?	50	3.94	0.70

Table 5 displays the survey results of pre-elderly students' economic motivations for participation in the Professional Teacher Education Program (PPG). In this survey, 50 respondents were interrogated using ten questions relating to their perception of the relationship between PPG and personal economic improvement. The mean and standard deviation of their responses to each question were also recorded. The key findings from this table illustrate that most respondents had high expectations concerning the potential economic improvements that could be gained through PPG, with mean scores above 3.75 for almost all questions. This indicates a strong belief that the PPG program will bring significant financial benefits and a positive perception of the link between economic improvement and personal financial well-being. The relatively low standard deviations indicate high consistency in respondents' responses to these questions. Thus, this table clearly shows economic motivation as an important factor in pre-service students' participation in PPG.

In addition to the above, pre-elderly students' participation in online teacher education is driven by several key factors. N4 stated, "We strongly desire to improve our skills and knowledge, which is essential in the digital age and modern education." In addition, many of them are preparing to transition to a new career that is more fulfilling or relevant to their interests. As N5 explained, "There is an aspiration for continuous personal and career development." The desire for recognition or improved social status also plays a significant role. N1 added, "Professional certification and academic achievement provide a sense of accomplishment and pride." The combination of these factors reflects that pre-service students' motivation for online teacher education is based on practical needs and deeper personal aspirations, such as self-improvement and social recognition. These findings are important in developing online education programs to provide optimal support for pre-service students with diverse motivations.

Pre-elderly students face significant challenges during online learning, mainly due to limited technology and digital skills. Many students in this age group do not have adequate access to the necessary technological devices or a stable internet connection, which results in them struggling to access learning materials or participate in online activities effectively. As informant N2 said, "I often have difficulty accessing materials because the internet connection at home is unstable." In addition, limited digital skills are a major barrier as they may not be familiar with the digital platforms and tools used in online learning. Informant N3 revealed, "I am not very familiar with online learning applications, so it takes longer to understand how they work." These difficulties are compounded by the lack of adequate technical support and resources to help them overcome these obstacles. As a result, pre-elderly students often feel left behind compared to their younger, more tech-savvy peers. "I feel left behind because young people adapt to technology faster," said informant N4. These challenges call for more inclusive strategies and specialized support designed to improve digital skills and technology access for older students to ensure they can fully participate in online learning environments and achieve optimal learning outcomes. As such, educational institutions need to consider the specific needs of older students in planning and implementing online learning programs.

Informant N2 said that he faced various challenges in the learning process, especially related to understanding the material independently without direct guidance from the teacher. These challenges are exacerbated by physical and mental health factors affecting their learning motivation. Pre-elderly students often experience declining health conditions as they age, which can negatively impact their

energy and focus for online learning. She admitted that health issues such as visual, hearing, and mobility impairments, as well as mental conditions such as anxiety and depression, exacerbate their difficulties in absorbing and understanding the material. In addition, N3 feels that the technology used in online learning can be a barrier for those less familiar with digital devices. These difficulties point to the need for more inclusive approaches, and additional support to help older students overcome barriers to online learning, including the development of more accessible materials and the provision of adequate technical assistance. Support from teachers and educational institutions is essential to ensure that older students remain motivated and keep up with their academic progress despite their challenges.

"Pre-elderly students face various challenges in the learning process, especially related to understanding the material independently without direct guidance from the instructor. These challenges are exacerbated by physical and mental health factors affecting their learning motivation. Health issues such as visual, hearing, and mobility impairments, as well as mental conditions such as anxiety and depression, further exacerbate their difficulties in absorbing and understanding the material. In addition, the technology used in online learning can be a barrier for those less familiar with digital devices."

At the end of the discussion session, informants claimed to receive adequate support from educational institutions and online learning communities and have the awareness to continuously improve their digital skills, overcome various challenges faced in the learning process, and achieve their academic goals effectively. Support from educational institutions includes access to necessary resources, academic guidance, and other support services designed to meet the specific needs of pre-elderly students. Informant N1 stated, "Access to appropriate resources helps navigate academic challenges." In addition, online learning communities provide a platform for sharing knowledge, experiences, and motivation among fellow students. According to N2, "Online communities provide much-needed morale boost and sense of community." Awareness of the importance of digital skills also plays a crucial role, as these skills help older students access, understand, and use the technology required for online learning. N3 adds, "Digital skills are key to success in the modern learning era." With this combination of support, older students can more easily navigate learning environments that may be unfamiliar to them and focus more on achieving their academic goals. As N4 said, "With the right support, we can achieve our academic goals more confidently," resulting in a more fulfilling and sustainable learning experience.

3.2 Discussion

This study found that four main motivations encourage pre-elderly students to join the teacher professional education program. First, intrinsic motivation is related to the desire for self-development and improved professional competence. The pre-service students felt that the program allowed them to learn new things and hone their teaching skills (Tang et al., 2020). Second, career motivation focuses on opportunities for career advancement and job stability. They viewed the program as a means to obtain a recognized certification, which they hoped would improve their future job prospects. Third, social motivation includes the drive to contribute positively to society through education. Many feel compelled to contribute to educating the younger generation and improving the quality of education in their communities (Wlodkowski & Ginsberg, 2017). Fourth, economic

motivations are associated with the hope of improved financial well-being. They hope that by completing the program, they can obtain higher salaries and better economic well-being (Vlaev & Elliott, 2014). These four motivations complement each other and provide a comprehensive picture of why pre-service students choose to pursue teaching as a profession.

The results of this study have strong relevance to the Self-Determination Theory (SDT) proposed by Edward Deci and Richard Ryan. SDT emphasizes the importance of three basic psychological needs: autonomy, competence, and social relatedness in motivating individuals (Ryan & Vansteenkiste, 2023). In the context of this study, the pre-elderly students' intrinsic motivation for self-development and improvement of professional competence reflects the need for competence, where they strive to learn new things and hone their skills (Deci & Ryan, 2004). Career and economic motivation indicate the need for autonomy, where they seek job stability and improved financial well-being through this educational program. Meanwhile, the social motivation that drives them to contribute positively to society through education reflects the need for social connectedness, indicating their desire to play a role in educating the younger generation and improving the quality of education in their communities (Leeper, 1935). Thus, SDT theory provides a strong framework for understanding the various motivations that drive pre-service students to join teacher education programs.

The findings in this study are in line with Lamb and Wyatt's (2019) research highlighting the importance of teacher motivation in education, as well as Yuan and Zhang's (2017) Research shows motivational changes in prospective teachers in China related to their initial education. In addition, research by Tang et al. (2014) And Cherubini et al. (2002) Also, emphasizes motivational shifts in the context of teacher education and professional development. While their studies show that the purpose of teacher professional education is often misinterpreted as an effort to obtain certification benefits, this study shows that pre-service students are still strongly motivated to improve their scientific capacity to provide quality learning services. This contradicts the findings of Tang et al. (2014) And Cherubini et al. (2002) and Hoel and Dahl's (2019) Analysis shows that older students are less eager to learn online learning. This study proves that they can adapt well. In addition, who discussed student motivation in the context of teaching evaluation and the drive to improve education quality, including the social motivation raised in this study? This study provides a broader perspective on the factors that influence motivation in education by adding the dimensions of age and economic well-being of students as important variables that influence their motivation in the teaching and learning process.

While there is evidence that pre-service students are eager and motivated to join the PPG program, this study reveals their challenges. Referring to Jack Mezirow's learning transformation theory, which emphasizes the importance of critical reflection and perspective change in adult learning, this study shows that pre-service students experience significant difficulties in online learning, such as limited technology and digital skills (Mezirow, 2018). This is in line with Mezirow's view that adult learning often begins with situations that disrupt comfort and challenge old assumptions (Eschenbacher & Fleming, 2020). With the right support from educational institutions, specialized digital training, and mentoring programs, pre-adult students can experience critical reflection on their limitations, develop new skills, and change the way they view online learning

(Kokkos, 2020). This reflects the perspective transformation process proposed by Mezirow, where individuals not only learn new information but also change the way they understand and interact with the world (Mezirow, 1994). As such, they can effectively achieve their learning goals and continue contributing to the academic and professional communities.

In addressing the challenges older students face in online learning, the government and universities in Indonesia need to take steps based on Jack Mezirow's learning transformation theory. The introduction of stronger support from educational institutions, specialized training in digital, and mentoring programs will be key in helping older students overcome the limitations of technology and digital skills they face (Fleming, 2022). In the context of Mezirow's theory, these challenges create a disorienting dilemma that can encourage critical reflection. By facilitating the process, pre-elderly students can experience a perspective transformation that allows them to expand their understanding of online learning and develop new skills (Sifakis & Kordia, 2020). Through this approach, they can effectively achieve their learning goals and continue to contribute to the academic and professional community, reflecting the essence of the concept of learning transformation championed by Mezirow.

4. Conclusion

This study revealed that four main motivations encourage pre-elderly students to remain in the teacher professional education program: intrinsic, career, social, and economic motivations. Intrinsic motivation relates to self-development and improving professional competence, while career motivation focuses on career advancement opportunities and job stability. Social motivation is driven by the desire to contribute positively to society, and economic motivation is related to the expectation of improved financial well-being. In addition, this study found that pre-elderly students face significant challenges during online learning, such as limited technology and digital skills and difficulty understanding the material independently. Physical and mental health factors also affect their motivation and ability to learn. However, older students can overcome these challenges with the support of educational institutions and online learning communities, as well as appropriate digital training and mentoring programs. Adjusting learning materials to be more user-friendly will also help. Through a combination of efforts, older students can improve their education quality and continue to actively contribute to their academic and professional communities.

While this study successfully found unique challenges and motivations for PPG students in participating in online courses, it has limited sample coverage, which may not fully represent the diversity of experiences of pre-service students in different educational institutions. The limited sample may lead to less accurate generalization of the results, especially if there are significant variations in technology access and institutional support across regions. In addition, the data collection methods, such as surveys or interviews, may not be in-depth enough to explore more complex and personalized aspects of motivation and challenges. Future research should include a broader and more diverse sample to increase the external validity of the findings. Researchers should also consider a mixed methods approach by combining quantitative and qualitative to gain a deeper understanding of motivation and barriers. In addition, future research could focus on developing and evaluating specific interventions, such as digital training programs and mental health support, to see their effectiveness in improving the learning experience of pre-elderly students. Thus, the research

results can provide more comprehensive recommendations for educational institutions to support pre-elderly students.

5. References

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