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Self-regulation and motivation teacher in non-formal education: A systematic literature review

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Abstract: This study aims to analyze the relationship between self-regulation and teaching motivation for educators in non-formal education. Being an educator is a very noble profession, regardless of the burdens and responsibilities held. Teaching is about transferring knowledge to students and transforming knowledge for students. To form a supportive learning environment for students, educators must certainly have aspects of self-regulation and high motivation in the teaching process. These two aspects are important because they are interconnected and affect an educator's teaching and learning process; this is the main focus of this study. The study used the systematic literature review approach with the PRISMA model based on literature relevant to the study's focus. The literature study results provide an idea that self-regulation has an important relationship with increasing educator motivation. Educators with good self-regulation are more motivated in teaching, able to control emotions and pressure, and better able to form a comfortable learning environment. The study's results also found that efforts in developing self-regulation are very important because they are directly related to strengthening the quality of education. The results of this literature review can provide important insights into the aspects that affect educators in teaching, especially in non-formal educational institutions.

Keywords: *Education, Educators, Motivation, Non-formal, Self-regulation.*

1. Introduction

This type of non-formal education has become one of the important alternatives in the world's education system, especially in the context of increasing access to education for groups that cannot receive formal education [1-5]. In the era of globalization marked by the increasing development of science, information technology, and communication, non-formal education offers various forms of learning processes that are flexible and adaptive to the demands of the times [2, 6-8]. According to data published by UNESCO entitled "Global Education Monitoring Report 2020: Inclusion and education: All means all" (2020), the type of non-formal education currently plays a crucial role in meeting the educational needs of people with different backgrounds [9]. Non-formal education, in its aspects of the learning process, includes a wide range of educational programs, such as skills courses, vocational training, and literacy programs, designed to enhance individual knowledge and skills beyond the existing formal education system [10-14].

In Indonesia, non-formal education has great potential to improve the quality of human resources [15-18]. The role of non-formal education for communities contributes significantly to the development of people's skills and knowledge, especially in remote and underserved areas to gain access to proper formal education [19-22]. This shows that non-formal education in Indonesia has an important influence on society amid people's inability to access this type of formal education, as a result of various

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backgrounds that cause it [23-27]. The large contribution of non-formal educational institutions is certainly inseparable from the role of non-formal educators, in this case, 'tutors' in the learning process at these educational institutions.

The role of educators in an educational institution is very important, but it is often filled with challenges [28-32]. 'Tutor' educators in non-formal education are no exception who often face unique challenges, including a lack of resources, limited training, and inadequate institutional support [4, 11, 33-36]. There are quite a lot of challenges and limitations, especially in Indonesia for non-formal education, ranging from the competence of educators, limited financial capabilities of educational institutions, and lack of government attention, this will certainly greatly affect the quality of learning provided by educators [37-42]. Based on this, every challenge and obstacle faced by non-formal educational institutions will certainly also affect educators' quality of educational services in the teaching process.

The quality of education and teaching in non-formal education is greatly influenced by the ability of educators to plan, implement, and evaluate the learning process [4, 28, 43, 44]. Several research results show that teachers who have good self-regulation skills are more effective in managing the classroom and creating a positive learning environment [45-49]. In the context of non-formal education, where learning materials and curricula are more flexible, the ability of 'tutor' educators to self-regulate is becoming increasingly important [3, 50, 51]. Educators who can plan, implement, and evaluate teaching practices will be able to create a more meaningful learning experience for students.

Educator motivation, in this case, tutors also play an important role in determining the quality of non-formal education [4, 52-54]. Basic Needs theory or self-determinant theory emphasizes that intrinsic motivation stems from the need to develop competence, autonomy, and social connectedness [55, 56]. These aspects greatly contribute to the involvement and success of individuals in the learning process [57-59]. In the context of non-formal education, the motivation of tutors as educators can influence how they interact with students and how tutors form a supportive learning environment [10, 60].

Research by Ryan and Deci shows that highly motivated individuals will be more committed to their activities [55, 56]. In the context of the educational process where the educator is the implementer of learning, motivated educators tend to be more committed to teaching and better able to create positive relationships with students [61-65]. This view is especially important especially in non-formal education, social interaction and emotional support by tutors can influence students' motivation to learn. Therefore, understanding the factors that affect the motivation of educators in non-formal education is the key to improving the quality of non-formal education in society.

However, despite its great potential, non-formal education faces significant challenges, especially within the educational institution, related to self-regulation and educator motivation. Self-regulation refers to the ability of individuals to regulate behavior, emotions, and thoughts in achieving certain goals [55, 66]. According to Carver and Scheier [67] self-regulation is very important and significantly influences human life; self-regulation is useful for individuals to be self-regulated, especially in encouraging motivation and performance improvement [67]. In the context of education, especially non-formal education, this ability is very important for educators; with good self-regulation, tutors will strive to establish a conducive and effective learning environment. The second aspect is educator motivation, on the other hand, which plays a role in determining the commitment and dedication of educators to the learning process [62, 68-70]. Research shows that educators' intrinsic motivation can improve the quality of teaching and, in turn, influence student motivation [71-73].

The relationship between self-regulation and motivation is also an important focus in the educational process in non-formal educational institutions. Research shows that self-regulation can affect motivation [74-76]. And high motivation can improve self-regulation abilities [77-79]. In the context of non-formal education, educators who have good self-regulation skills can certainly create a supportive learning environment, this also has an impact on increasing motivation to be involved in the learning process.

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Although much research has been done on self-regulation and motivation in formal education, there is a striking gap in the literature regarding the application of these concepts in non-formal education. Based on the analysis of existing databases, few studies are available on these two aspects in the context of non-formal education. This gap suggests the need for more in-depth research to understand how these factors interact and influence the teaching motivation of educators in the context of non-formal education.

Based on the urgency of this topic and the gaps in the literature, this study aims to explore the role of self-regulation and educator motivation in non-formal education. It will analyze how educators' self-regulation skills can affect the quality of teaching and how educator motivation contributes to student engagement. This literature review is expected to provide a deeper insight into the importance of these two concepts in improving the quality of non-formal education and student learning outcomes through a systematic approach.

Therefore, this research will not only fill the gaps in the literature but also provide practical recommendations for educators and non-formal educational institutions to improve the effectiveness of teaching and learning. This research is expected to significantly contribute to the development of better education policies and be more responsive to the community's needs.

2. Method

This research on applying self-regulation and educator motivation in non-formal education uses a systematic literature review approach. This approach is carried out by conducting a literature review of previous research relevant to the discussion of self-regulation and motivation, especially in the non-formal education process. Systematic literature review (SLR) is a structured and systematic approach to identifying, evaluating, and interpreting all relevant previous research on a particular topic [80-82]. Based on this, SLR is an approach that emphasizes analyzing previous research results relevant to the topic to be studied.

In this regard, SLR in the study uses the PRISMA model. PRISMA is a literature analysis guideline designed to assist SLR researchers in presenting findings transparently and completely [83, 84]. Therefore, the SLR approach with the PRISMA model analyzes the results of previous research related to self-regulation and motivation of educators, especially in non-formal educators; the results of previous research are analyzed specifically in research published in journal articles. The process of analysis or study of the literature is carried out in several stages, namely the planning of the analysis, the implementation of an analysis of the relevant literature, and the writing of the analysis results as a review report on the analyzed literature. The following describes the process of literature analysis carried out:

2.1. Research Strategy

The literature was collected by searching several international article databases, including ScienceDirect, Springer, and the Taylor & Francis database. The search used the term "The role of self-regulation for educators in non-formal education and motivational aspects for educators in non-formal educational institutions." In searching these articles, we limited the literature results to the last ten years, from 2005 to 2025, because non-formal education is undergoing rapid development and transformation in this phase. All the findings of the appropriate article are collected for further analysis.

2.2. Eligibility Criteria and Selection

The search for articles or previous research is carried out in several aspects, including titles, abstracts, and keywords related to 'self-regulation, educators, motivation, and non-formal education to ensure a wide scope of relevant previous studies or studies. To avoid exceptions in previous research, there is no limit to the type of approach or method to previous research determined, and this allows researchers to gain a broader, in-depth view of aspects of self-regulation and motivation for educators in the context of non-formal education.

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To maintain quality and quality findings, we apply several inclusion and exclusion criteria for this study, which include:

Table 1.
Criteria for Inclusion and Exclusion of Literature in Self-Regulation Research and Motivation of Non-Formal Teachers.

Inclusion	Exclusion
Only research articles published in peer-reviewed journals	Research articles are not available in English or Indonesian.
Articles on research results that discuss self-regulation and motivation of educators in the context of non-formal education.	Research articles that do not focus on or examine the context of non-formal education.
Articles published in the period 2005 to 2025.	Unpublished theses, dissertations, and research reports.

2.3. Selection Process

The selection process for articles found in reference databases is carried out in several stages by the PRISMA model Haddaway, et al. [85] the process is carried out as follows:

1. At this stage, 250 articles were identified according to the terms applied from various databases.
2. In the screening process, research articles that do not meet the inclusion and exclusion criteria are sorted and screened after the identification process. Out of 250 articles, 150 were excluded because they were irrelevant to the research topic.
3. The eligibility process for the 100 articles left after the screening process was carried out by reading abstracts and complete texts to ensure conformity with the research criteria. Based on the reading results, as many as 81 articles were excluded again at this stage because they did not meet the criteria.
4. In the inclusion process, the final stage, as many as 19 articles that meet all the inclusion criteria are included in a systematic analysis.

2.4. Data Analysis

Data analysis in the literature review process was done using a qualitative approach. Each article selected according to the inclusion criteria was analyzed to identify key themes related to 'self-regulation and teacher motivation in non-formal education'. The findings obtained from the inclusion criteria articles are categorized into several themes: 1) Self-regulation strategies used by educators, 2) Factors that affect educator motivation, and 3) The impact of self-regulation and motivation on the effectiveness of educators' teaching in non-formal contexts.

2.5. Synthesis of Findings

After the data analysis process was carried out, the findings of each article were synthesized to provide a broader picture of the relationship between self-regulation and educator motivation in the context of non-formal education. This synthesis was carried out taking into account the context, methodology, and results reported in each study. The results of this synthesis are expected to provide deeper insights into self-regulation practices and motivational aspects in non-formal education and can be recommendations for further research.

3. Result

Based on the analysis of articles found in several reputable international journal databases, 19 articles are related to and relevant to the discussion of self-regulation and motivation of educators in non-formal education. Figure 1 shows the process of including and excluding the findings.

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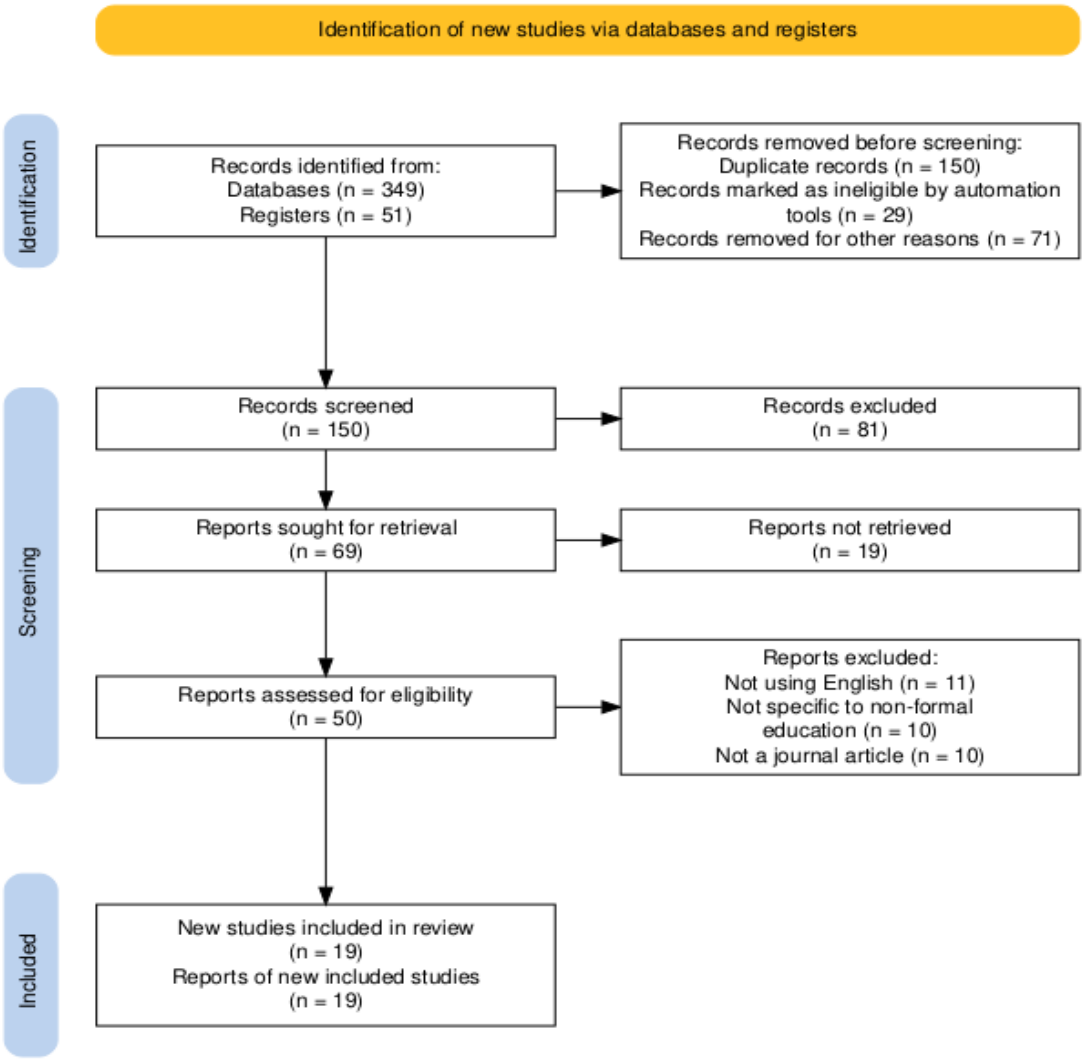

Figure 1.
Results of Inclusion and exclusion of articles in the SLR process.

Of the 19 research articles that have been included in the inclusion criteria and then analyzed systematically, the results of the analysis of the findings and their synthesis are described in the following table:

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Table 2.
Results of Analysis of the Article that is the study.

Article	Findings
1	In-depth self-regulation for educators acts as a bridge that connects self-confidence with educator motivation. Educators can increase motivation to teach and learn by developing good self-regulation skills and shaping a more productive and inspiring student environment. This shows that the development of self-regulation is not only beneficial for educators but also has a broad positive impact in the context of education Ferla, et al. [86].
2	Self-regulation (self-efficacy and self-concept) is the main foundation of students' academic motivation in learning. Teachers as educators must be able to design learning strategies and methods that can actively build self-efficacy and positive self-concept in students so that students' motivation in learning can be spurred naturally. An approach with effective strategies and methods not only improves students' academic achievement but also forms an independent and sustainable learning attitude in students Akomolafe, et al. [87].
3	Self-regulation in the learning process refers to the ability of individuals to regulate thoughts, emotions, and behaviors in the learning process. These aspects include planning learning strategies, setting learning goals, self-evaluation, and seeking help when needed. Motivation in learning is the main driver in increasing understanding of self-regulation. The findings confirm the importance of self-regulation in improving students' motivation and academic achievement. By understanding and applying the concepts of self-regulation and motivation, educators can help students achieve their maximum academic potential Magsino [88].
4	Motivation is a psychological process affecting behavior direction, intensity, and development. In the context of education, educator motivation can affect the way teachers teach and interact with students. Self-regulation is the process of planning, controlling, and evaluating behavior carried out by individuals. In education, self-regulation includes the teacher's self-planning in the teaching and learning process and teaching students how to self-regulate. Good self-regulation can increase teachers' motivation in teaching, which has implications and impacts on improving the quality of teaching and student learning outcomes Pekrun [78].
5	The results of the study show that one of the roles of teachers is to foster an attitude of curiosity and confidence in students through an emphasis on the aspect of self-regulation; this is to increase understanding of the importance of independent learning and increase learning motivation Karlen and Hertel [89].
6	Self-regulation is a key component in an effective learning process, especially in modern education, which is increasingly dependent on the development of information technology. Motivation plays an important role in developing independent learning skills, and technology support can help students organize the monitoring processes. However, challenges in implementing effective self-learning strategies remain and require further attention from educators during the learning process Prasse, et al. [90].
7	The study's results highlight the role of intrinsic motivation aspects, especially in understanding self-regulation among students and teachers in mathematics learning. Teacher interaction enhances intrinsic motivation, which is strongly related to improved self-regulation. More in-depth, the study concludes that fostering motivation is very important and is one of the aspects of improving self-regulation strategies in students and teachers. Another aspect, namely effective and efficient teaching practices, can also improve self-regulation through increased self-motivation Hallarte, et al. [91].
8	Educators have an important role in encouraging and implementing independent learning among students, as student motivation is significantly influenced by teaching practices and the understanding of learning by the students themselves. Efficacy in teachers refers to the ability of teachers to improve professional and pedagogical abilities and competencies, which is important because it affects students' motivation to engage in self-regulation. The relationship between teacher motivation and student motivation for independent learning is very related, and this relationship occurs because of a process that involves direct and indirect paths in the learning process Jud, et al. [92].
9	The findings in this study focus on the importance of self-regulation in increasing students' learning motivation during the learning process. In addition, the findings also emphasized the role of learning goals and emotions in self-regulation, which is related to the formation of motivation in students. The findings suggest that educators are very necessary to promote self-regulation aimed at fostering student motivation in the classroom while learning Vosniadou, et al. [93].
10	The findings explain that self-regulation in the aspect of educators is a personal characteristic that affects the motivation of educators to transfer knowledge and skills in the educational process that adapts to technology. These aspects include the ability to manage emotions and the learning process effectively, which are critical to overcoming barriers to knowledge transfer in learning. Educators with high self-regulation show intrinsic motivation, which leads to a greater willingness to engage and adapt to new technologies and methods in teaching. It is further stated that the interaction between self-regulation and motivation in educators is very significant because highly motivated educators are more persistent in facing challenges, thereby increasing the effectiveness of adopting innovative learning practices Stumbrienė, et al. [94].
11	The findings discuss the relationship between self-regulation and educator motivation, and important findings can be made. First, self-efficacy, or teachers' self-confidence in facing tasks, significantly influences emotional regulation

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	and burnout levels. Teachers with high self-efficacy are better able to regulate emotions and experience lower levels of burnout. This shows that self-efficacy is directly related to motivation; teachers who believe in their abilities are more motivated to face challenges in teaching. Good emotion regulation, which results from high self-efficacy, also increases emotional resilience, so teachers can maintain motivation to teach despite pressure Yang and Du [95].
12	The findings in this study focus on the significant relationship between self-regulated learning (SRL) and educator motivation, where the two reinforce each other. Educators with high motivation are more active in implementing learning strategies and methods supporting SRL. This support includes providing structured feedback, designing self-paced assignments, and utilizing technology adaptation to personalize learning. Educator motivation also plays an important role in the development of a learning environment that supports SRL, where educators use evaluation rubrics to analyze weaknesses in curriculum design and improve support for learners' cognitive settings Radović and Seidel [96].
13	Teachers are tasked with linking students' motivation with students' interests, concentration, and ability to work independently, which aims to highlight the role of self-regulation in the learning process. Educators can monitor student motivation through several media that are considered important to understand the independent learning process by students. The results of the study show that students who make an effort to learn independently in the educational process greatly influence their learning motivation Dülger, et al. [97].
14	Feedback by teachers improves aspects of students' self-learning abilities, leading to the process of fostering motivation and engagement in improving students' academic achievement. Positive feedback from educators can increase students' intrinsic motivation and competency development, so this will deepen their involvement in the educational process. The study's results highlight the role of feedback and interaction between teachers and students, especially in improving self-regulation and learning motivation Tian, et al. [98].
15	The findings explain that self-regulation is closely related to motivation because it actively involves students in managing cognitive, emotional, and behavioral processes to achieve learning goals. Educators have a duty and play an important role, especially in encouraging independent learning, by creating a supportive learning environment that increases students' motivation and independence in learning. Belief in motivation, self-efficacy, and intrinsic value significantly influence the use of self-regulation strategies, which in turn affects academic performance. Educators can apply appropriate strategies in developing self-regulation and motivation, which are geared toward improving learning outcomes Dan, et al. [99].
16	The findings confirm a significant relationship between self-regulation and educator motivation in the context of STEM education. Self-regulation, which includes aspects of teachers' ability to plan, implement, and adjust learning strategies, contributes to increased motivation to teach. When teachers can manage themselves effectively, they feel more confident in facing the existing challenges, increasing their motivation to teach. Conversely, high motivation also encourages teachers to actively implement self-regulation, such as seeking independent learning resources or collaborating with other teachers Chien and Chang [100].
17	The study results explain that self-regulation can improve student learning; this process is carried out by increasing self-efficacy and motivation in learning. This process is carried out with effective briefing and guidance from teachers and peers, especially to strengthen the understanding of self-regulation, which is crucial for developing motivation in the learning process. It was further stated that the results of the study show that motivation is an antecedent form of student involvement, which links self-regulation and motivation in the learning process Fidan [101].
18	The results of this study show that satisfaction with psychological needs increases motivation for independent learning in the online learning process. Teachers as educators can promote independence by clarifying learning objectives and responding to the needs of students, especially in fostering their learning motivation. The findings show that the independence, competence, and connectedness formed by teachers are essential to motivate students in independent learning Hidayatullah and Csíkos [102].
19	Self-regulation is essential for educators because it involves managing emotions, engagement, and dissociation, directly affecting their motivation and professional effectiveness. In addition, a high level of self-efficacy, a component of self-regulation, can increase educators' motivation by fostering confidence in their abilities and competencies to meet professional and pedagogical requirements. Effective self-regulation by educators is useful for navigating challenges and constraints, thereby encouraging professional growth and maintaining motivation in their career development Keller-Schneider [103].

4. Discussion

Based on the findings of the systematic analysis and review of the literature studied, there are two major themes in this study, while the discussion is described in the following two major themes:

4.1. The Role of Self-Regulation for Educators in the Teaching Process in Non-Formal Education

Self-regulation can be defined as the ability of individuals to regulate thoughts, emotions, and behaviors in achieving certain goals [91, 103]. In the context of education, self-regulation in learning is

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closely related to the learning planning process by educators, the ability to control oneself and emotions, self-evaluation, and seeking help to strengthen and develop a more meaningful learning process for students [67, 104]. Self-regulation serves as a bridge that connects self-confidence (self-efficacy) with motivation, which aims to influence the quality of teaching by teachers and learning for students [92, 99]. Findings from Ferla, et al. [86] show that the development of self-regulation is not only beneficial for educators but also has a broad positive impact in the context of learning and education Ferla, et al. [86].

One of the main figures in the development of the concept of self-regulation was Albert Bandura, who introduced the theory of self-efficacy [105]. Bandura argues that an individual's belief in his or her ability to regulate and carry out the actions necessary to achieve the desired outcome is key to self-regulation [106, 107]. This theory emphasizes that individuals who have high self-efficacy tend to be more motivated to face each challenge and will try harder to achieve goals. In addition to Bandura, Zimmerman also contributed significantly to the understanding of self-regulation. Zimmerman developed a self-regulated learning (SRL) model, which includes three main phases: planning, execution, and reflection [108, 109]. This model shows that self-regulation is a dynamic process involving the interaction between cognition, motivation, and behavior.

Self-regulation for educators plays an important role in improving the quality of teaching. Educators who organize themselves well can plan and implement more effective teaching strategies [103, 110]. Educators can set clear and realistic goals and develop teaching methods that suit the needs of students [74]. This is in line with the findings of Akomolafe, et al. [87], which emphasize that educators must be able to design learning strategies and methods that can build self-efficacy and positive self-concept in students Akomolafe, et al. [87].

In the teaching process, educators often face various challenges, including pressures from administration, curriculum demands, and diverse student needs [103, 111]. Self-regulation allows educators to manage emotions and stress that may arise due to existing challenges and constraints [95]. Educators with good self-regulation skills are more resilient and can maintain motivation even when faced with difficult situations. This has implications for the quality of educators' interactions with students, which can increase student motivation and involvement in the learning process [78].

Self-regulation also plays a role in encouraging independent learning among students. Educators who can organize themselves well can design learning experiences that encourage students to take initiative in their learning process. By providing constructive feedback and creating opportunities for students to explore and develop their skills, educators can help students build self-efficacy and intrinsic motivation. Findings from Karlen and Hertel [89] show that educators must foster an attitude of curiosity and confidence in students through an emphasis on the self-regulation aspect [89].

Self-regulation is becoming increasingly important in non-formal education, where structures and resources are often more limited. Educators in non-formal settings must adapt to changing situations and diverse learners' needs. The ability to flexibly plan and adjust teaching strategies has an impact on educators in order to provide relevant and meaningful learning experiences [90]. Self-regulation in non-formal education also contributes to the ability of educators to build strong relationships with learners. Educators who can manage emotions and behaviors can better create a safe learning environment and support increased learning participation. A positive relationship between educators and learners can increase motivation and engagement, as well as create an atmosphere conducive to learning, in line with the view that motivation in teachers affects students' motivation to engage in reinforcement in self-regulation [92].

In today's digital era, self-regulation allows non-formal educators to utilize and adapt technological developments in teaching. Educators with good self-regulation skills can explore and integrate technological tools and resources supporting learning [100]. Therefore, educators' adaptation of technology can create a more interactive and interesting learning experience for students. Self-regulation is a key component in increasing the effectiveness and motivation of educators, both in the context of formal and non-formal education. Educators can improve teaching quality by developing

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these abilities and contribute significantly to increased motivation and student participation. Therefore, non-formal educational institutions must provide the necessary support and training for educators in developing self-regulation to face educational challenges better and create a more productive and inspiring learning environment.

4.2. The relationship between Self Regulation and educator motivation in the teaching process in non-formal education

Self-regulation in the context of non-formal education refers to the ability of educators to self-regulate in planning, implementing, and evaluating the teaching process. Educators who have good self-regulation skills can manage emotions, set clear goals, and adjust teaching strategies according to students' needs [103, 112]. This is especially important in non-formal education, where educators are often on duty and teaching in a less structured and more flexible environment.

Educator motivation plays a crucial role in determining the quality of teaching and student engagement [71]. Motivated educators will be more committed to creating engaging and relevant learning experiences for learners [113]. Self-efficacy, or self-confidence of educators in facing tasks, significantly influences emotions and burnout rates [95]. Educators with high self-efficacy can regulate emotions and experience lower levels of burnout, which is related to motivation to teach.

Self-regulation and educator motivation reinforce each other [74]. Educators who self-regulate well will be more motivated to implement effective teaching strategies and methods. Conversely, high motivation encourages educators to develop self-regulation skills [96]. This shows that highly motivated educators will be more active in implementing learning strategies and methods that support self-regulated learning.

While self-regulation has many benefits, educators in non-formal settings often face challenges. These challenges can include inadequate resources, support, and training. Therefore, educational institutions need to provide the necessary support so that educators can develop their self-regulation skills. This is in line with the view that satisfying the psychological needs of educators can increase motivation for independent learning [102].

Therefore, the relationship between self-regulation and educator motivation in the teaching process in non-formal education is very significant. Educators with good self-regulation skills will be more motivated to create an effective and engaging learning experience for students. By developing self-regulation, educators can not only increase self-motivation but also contribute to increased student motivation. Therefore, educational institutions need to support the development of self-regulation among educators to better face educational challenges and create a more productive and inspiring learning environment.

5. Conclusion

Several important things can be concluded based on the analysis results and the data review in the conclusion. The teaching and learning process for educators, in this case, tutors in non-formal education, is greatly influenced by various factors, such as self-regulation and motivation. Self-regulation is an important aspect that plays a role in educators ' ability to control themselves, especially in arranging the learning process. Self-regulation affects the psychological development of an educator. Good self-regulation by educators will be the main foundation for increasing motivation to teach themselves. Motivation is a reason for behaviour; for educators, the driving force becomes the main foundation in the learning and teaching process. These two aspects do not stand alone; they are interconnected and positively influence the teaching process. They can also be important variables in increasing students' awareness and motivation to learn.

The results of this research can be an important consideration for every party that focuses on developing non-formal educational institutions. The findings can be a basis for each party to emphasize the aspects of self-regulation and increased motivation because these two aspects support forming a safe and comfortable learning environment for every student in non-formal educational institutions. It is

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undeniable that the results of the findings and studies in this study have limitations, both from the results of the analysis, findings and methods used. Therefore, reviewing other relevant methods or approaches can be recommended. This will provide a more complex picture of the relationship between self-regulation and teaching motivation for educators in non-formal educational institutions.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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