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Abstract. Covid-19 conditions that have an impact on the education sector, especially on the non-formal education pathway through the equality education program at the Community Learning Activity Center (PKBM) located in the West Bandung Regency Region. Since this pandemic, the government has made a policy that initially face-to-face learning will switch to an online learning environment. This study aims to describe self-regulated learning strategies and learning outcomes in the Package C equivalence education program during the pandemic. The population is 2469 people studying Package C class 12 in West Bandung Regency and the research sample is 304 people. Data was obtained by distributing questionnaires through Google Form for one month. The statistical method used is quantitative descriptive analysis. The research findings show that: The picture of the learning strategy that emerged is Self-regulated, where students proactively acquire academic skills, such as setting goals, strategies for sorting and moving the learning process independently by setting study schedules, setting learning targets and seeking required information: independently. Learning Outcomes in the Package C Equivalence Program during the Pandemic Period are shown by the attitude of wanting to learn, willingness to work on new assignments, being cooperative in-class activities, being consistent in doing assignments, and accepting corrections if they are not as desired.

Key words: self-regulated learning, equality education, pandemic covid-19


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INTRODUCTION

The world is experiencing a health crisis because Covid-19 has spread globally (Patricia, 2020). More than 4,248,389 have been exposed to the COVID-19 virus and have died as many as 294,046 in 202 countries recorded on May 14, 2020 (WHO, 2020). During the Covid-19 pandemic online learning was widely promoted to replace face-to-face learning (Dong, Cao, & Li, 2020). Online learning can be defined as acquiring knowledge and skills through synchronous and asynchronous learning applications that are written, communicated, active, supported and managed with the use of internet technology (Morrison, 2003). The pandemic has resulted in all students in the world entering an online learning environment from classroom teaching (Patricia, 2020).

During the Covid-19 pandemic, many students never had adequate experience (if any) with online learning and they had to follow through with minimal support (Hussein, Daoud, Alrabaiah, & Badawi, 2020). Online learning is designed so that educators and students can connect in an online virtual classroom without having to be in a room (Fitriana, 2018). Emergency online teaching is an alternative teaching method used to respond to pandemic situations (Wang, Zhang, Zhao, Zhang, & Jiang, 2020).

In Indonesia, there are three educational pathways consisting of formal, non-formal, and informal education channels, as stated in Law Number 20 of 2003 Article 13 Paragraph (1) "Education pathways consist of formal, non-formal and informal education that complement and enrich one’s education. each other". The three educational paths are provided to the community as educational services for them to receive education. Sudjana (2010:21), Non-formal education is an activity carried out outside the school system and systematically carried out independently, with the aim of serving certain students to achieve the learning objectives. The equality education program is one of the non-formal education programs.

Equality is shown for people who cannot receive formal education, where there are factors that influence it, namely dropping out of school, economic factors, and so on. In government regulation no. 3 year 2008 regarding standard of education process fish for equal distribution in package A, package B and package C. Equality education focuses more on independent learning activities, where students are more dominant in learning that is carried out independently (Arbarini, et.al, 2022). Independent learning is a learning approach with the aim that learning citizens are able to act independently, be able to make their own decisions and have responsibility for themselves. Thus, independent learning in equality educa-
tion is a situation that must be achieved optimally (Ridwan, I., & Ida, N., 2022).

Based on statistical data from Diskominfotik, the condition of the COVID-19 pandemic in West Bandung Regency on 27 May 2021 recorded 316 active people, 6779 people recovered and 94 people died. The Association of Indonesian Tours and Travel Agencies (ASITA), regrets the results of the latest evaluation of the level of vigilance issued by the Task Force for the Acceleration of Handling Covid-19 West Java. Because according to the results of the evaluation, West Bandung Regency, which was originally in the blue zone, is now included in the yellow zone group of susceptibility to Covid-19 transmission in the West Java region. Deputy Chairperson of ASITA Budijanto Ardiansyah said his party was surprised by the results of the evaluation of the Covid-19 alert level. In fact, he continued, the tourism sector in West Bandung Regency began to rise again after several months of being closed due to the Covid-19 pandemic. This causes learning in formal and non-formal education to be carried out online.

The impact of the COVID-19 pandemic was also experienced by PKBM in Bandung Regency, especially in the Package C equivalence education program. Residents studying Package C did online learning using digital technology. This is supported by the results of the APJII survey (2018) that 64.8% or 171.17 million people have used the internet out of 264.16 million people. From this data, from all internet users, it is known that Java Province occupies the highest percentage, namely 55.7%. This data is very supportive if it is associated with the current state of the pandemic. The government made a policy that initially face-to-face learning shifted to an online learning environment, in this case including equality education in West Bandung Regency. In West Bandung Regency, there are 45 active PKBMs, while those that provide equality education consist of 38 PKBMs, and all of them organize online learning.

The condition of Package C during the Covid-19 pandemic in West Bandung Regency was that they did online learning. This policy was made by the local government since the pandemic hit every region to break the chain of spreading the Corona virus. Residents studying Package C conduct online learning using their respective technologies via the Whatsapp or Zoom application. Seeing the condition of the economic level of each learning citizen is different, resulting in those who cannot afford an internet package to take online learning. Not only that, some of them don't have technology tools, so they can't take online learning.

Finally, they look for other ways to be able to follow online learning and do the assignments given by the tutor. In this case, students must have online learning readiness to face distance education (Tang et al., 2021). In online learning, learning readiness is an important component because students make the transition from face-to-face learning to online learning (Jamal, 2020). Slameto (2013) revealed that readiness is one of the psychological factors that have an influence on educational goals.

Students' readiness for live online learning is believed to be one of the prerequisites for an effective learning process and educational attainment (Shrestha & Dangol, 2019). Independent learning is one of the factors that affect online learning readiness (Tang et al., 2021). Similarly, in the research of Demir Kaymak & Horzum (2013), they explain the importance of students' readiness to learn online, especially things that affect student learning outcomes and interactions. The results of the study (Nepal & KC, 2020) revealed that students have inadequate knowledge and skills to continue learning without the presence of a teacher, meaning that students in Nepal have less readiness for independent study during the pandemic. In online learning, learning readiness is an important component because students make the transition from classroom learning to online learning (Jamal, 2020). Demir Kaymak & Horzum (2013), explained the importance of students' readiness for online learning, especially those affecting student learning outcomes and interactions.

Based on data from one of the PKBM Bhina Swakarya tutors in West Bandung Regency regarding the value of the Package C equivalence education exam that of the total learning population of 132 people, as many as 15 people did not meet the specified value. Based on the acquisition of learning outcomes for package C during the pandemic, the learning outcomes of learning residents increased. This is also reinforced by the explanation from the tutor that the learning outcomes of the residents studying package C class 12 are said to have increased. According to Oemar Hamalik (2003: 146) there are seven components that influence the (outcome/teaching process, namely: (1) teaching objectives; (2) Students who study; (3) Teachers who teach; (4) teaching methods; (5) teaching aids; (6) Evaluation evaluation; and (7) The teaching situation.

Online learning is carried out in a virtual classroom, namely a learning experience by utilizing internet access and supporting tools such as laptops or smartphones (Zhu & Liu, n.d.). Online learning can be done through platforms to support online learning processes, commonly used platforms such as Whatsapp Group, Google Classroom, Zoom, and so on (Hussein et al., 2020). The school network has affected 1.6 billion students (94% of the world's stu-
dent population) in more than 190 countries (Hussein et al., 2020). In Indonesia, since the pandemic the government has made a policy especially for education that classroom learning is converted to distance learning, meaning students must consider new ways to prepare, organize, and engage to take advantage of a higher level of independence and self-direction (Martin, Stamper, & Flowers, 2020). Since the pandemic that occurred in the world, the learning process had to be done at home. This pandemic incident has been taken seriously by various sectors including in the world of education, learning activities in the classroom have then turned into learning done from home (Sulisworo, Fatimah, Sunaryati, & Sanidi, 2020).

The pandemic has resulted in learning in schools carried out by distance education which has never happened before, namely learning from home (Sun, Tang, & Zuo, 2020). Independent learning as a viable solution to prevent the learning gap from home during the pandemic (Nepal & KC, 2020). Learning done from home causes learning residents to be able to regulate themselves in learning. Learning citizens who can manage themselves in learning well will be responsible for their learning activities (Dunn & Rakes, 2015).

Self-regulation in online learning is the ability to express and monitor one's thoughts, feelings and behavior by using available platforms to achieve learning goals (Sulisworo et al., 2020). Self-regulated learning as a change in the behavior and learning outcomes of learning citizens (Laer & Elen, 2015). For this, learning citizens need to be aware of several strategies and let them decide which works best for them (Nepal & KC, 2020). This means that learning citizens must have the readiness to learn independently or self-regulated learning at home (Nepal & KC, 2020). The learning readiness of learning citizens in online learning can be assessed from the aspect of independent learning abilities (Widodo, Wibowo, & Wagiran, 2020).

The ability of self-regulated learning includes efforts to set goals (planning), self-monitoring (monitoring), self-instruction (controlling), and self-reflection (Barry J Zimmerman & Schunk, 2011). Self-regulated learning can be developed through a development process that arises from guided practice and feedback so that these behaviors will change mental abilities with new skills and habits (Sulisworo et al., 2020). This means that successful self-regulated learning will produce the desired learning behavior.

Self-regulated learning is knowledge about effective learning strategies and how and when to use them. Self-regulated learning is self-regulation of learning in students which has three phases, namely goals, strategic planning, and understanding. Effective learning strategies as well as motivation and persistence to apply these strategies until the task is completed to their satisfaction, they are likely to be effective learners. Self-regulated learning intervenes with students because students can learn to become independent learners.

The phenomenon that occurs in the field is that the residents of Package C study distance learning from home, which causes families to be involved in the online learning process, both in terms of economic support in providing learning facilities and being involved in assisting the learning process. There are parents who have not been able to facilitate online learning, one of the reasons is the unsupportive economic factor. Not only that, they also have difficulty buying internet data packages. Then not only that, parental support in guiding or becoming a learning facilitator cannot be carried out optimally, due to parental education factors. This causes parents of learning residents to be unable to help residents learn to study at home. The role of parents is also important to guide children to learn in achieving learning achievement.

Learning achievement is influenced by student learning behavior, because good learning behavior will produce good learning goals (Panuntun, 2013). The social, family and school environment affect student learning behavior (Powell & Tod, 2004). Especially during the current pandemic, it is very necessary to support the surrounding environment in order to support learning like a family. Relevant to the results of research from (Soffatun'mah & Thomas, 2017) that there is an influence between the family environment and on student learning behavior. Then in line with the results of research (Azizah & Usman, n.d.) that there is a significant influence between the family environment on student learning behavior.

The demands of online learning are also the basis for changing and adjusting learning patterns and learning management that were previously face-to-face into online learning. Online learning management designed by tutors based on the conditions of learning residents in Package C. Effective and efficient online-based learning activities can be done through learning management (Saifulloh & Darwis, 2020). In the emergency period of the COVID-19 pandemic, the position of learning management is very important because it aims to increase the effectiveness of the learning process carried out from home (Saifulloh & Darwis, 2020). In order to facilitate the learning process, it is important to implement learning management according to learning objec-
tives during the current pandemic (Saifulloh & Dawis, 2020). This is in line with the results of research (Sadikin & Hamidah, 2020) that online learning has flexibility in its implementation and encourages independence in learning to be more active in learning.

Based on behavioristic learning theory that learning behavior as a result of learning. Behavioristic learning theory is a process of behavior change as a result of the interaction between stimulus and response that causes learning residents to have new experiences. In this case learning behavior is a change that occurs after the learning process is complete. Behavioristic flow emphasizes the "outcome" rather than the learning process. Behavior is a response to encouragement through human activities (Kuswana, 2014). The same thing was conveyed by Arianto (2015), that learning behavior is a response to changes in learning behavior. Learning behavior can be said as an activity that has not been obtained from understanding, skills, and attitudinal values (Afif & Idris, 2016). It can be summarized that learning behavior is a change in learning behavior that is obtained from personal learning experiences.

Based on the explanation above, the researcher wants to describe learning strategies through Self Regulated Learning in equality education services during the pandemic and learning outcomes in equality education services during the pandemic.

METHODS

Researchers used a descriptive method with a qualitative approach. Sugiyono & Susanto (2015:207), quantitative descriptive analysis technique is data analysis by describing or describing the data that has been collected as it is without intending to make conclusions that apply to the public. Regarding the descriptive research method, it is carried out to determine the value of independent variables, both one or more (independent) variables without making comparisons or connecting between one variable and another (Sugiyono & Susanto, 2015: 7).

In this study, there are three independent variables, namely: learning strategies with indicators: setting goals (planning), self-monitoring (monitoring), self-instruction (controlling), and dependent self-reflection, namely: Achievement of learning outcomes with indicators of competence motivation, attitude towards learning, attention/ persistence, strategy/ flexibility.

The location of the research was in West Bandung Regency, in particular at 38 PKBM institutions that held equivalence education in West Bandung Regency, research within a period of 3 months. For 3 months the researchers distributed a questionnaire containing statements according to the research needs through google forms. The population in this study were residents of Package C learning, especially grade 12 who were active in PKBM in West Bandung Regency. In West Bandung Regency there are 45 active PKBMs, while those that provide equality education consist of 36 PKBMs (Table 4.1). In this study, the intended population was only learning residents in the Package C equivalency education program, especially grade 12. The total population in this study was 2469, and the sample was taken randomly in accordance with predetermined characteristics, namely 304 people.

RESULTS AND DISCUSSION

The factors that influence learning is self-regulated learning (SRL). This can be used to measure how a person plans goals, manages activities and behavior, controls himself to stay in line with goals and also makes reflections on making improvements to achieve goals (Mooij, 2009). Zimmerman (1998), calls self-regulated learning as learning that occurs as part of the influence of students’ self-generated thoughts and behaviors, which are goal-oriented. Self-regulated learning is determined by three important factors, namely aspects of self, behavior and environment.

The interaction of these three factors will form individuals who are able to bring up certain behaviors that lead to good performance (Barry J Zimmerman & Schunk, 2011). They not only apply this behavior in classroom learning, but they can also apply it to online learning (Dunn & Rakes, 2015). Self-regulated learning is a proactive process that students use to acquire academic skills, such as setting goals, sorting and mobilizing strategies, and the effectiveness of one’s self-monitoring, not as a reactive process that occurs in students due to impersonal forces. Self-regulated learning plays an important role in learning because it helps direct students to independent learning, namely managing study schedules, setting learning targets and finding the information needed independently. Students with self-regulated learning are able to manage their own study time, seek information about knowledge and learning materials from various sources, such as utilizing available technology, and if they do not find what they are looking for, school teachers or tutors can be their reference. (Zimmerman, 2008). In the Self-Regulated Learning (SRL) learning strategy, students are expected to be able to master the best ways and conditions for themselves to learn.

Based on the results of data processing, the level of tendency of learning strategies for students in
Package C Class 12 is based on category. The categories include gender, age, and regional origin. The percentage of learning strategies obtained by category. In the gender category, the highest score was obtained by female participants with a percentage of 91.47% with the "very high" criteria, while the lowest was obtained by male participants with a percentage of 87.90% with the "very high" criteria. In the Age Category, the highest score was obtained by participants aged 20-24 years with a percentage of 90.32% with the criteria "very high", while the lowest was obtained by participants aged 30-34 years with a percentage of 87.11% with the criteria "very tall". In the Category of Regional Origin, the highest score was obtained by participants from the Regency of West Bandung with a percentage of 89.80% with the "very high" criteria, while the lowest score was obtained by participants from the Regency of Bandung with a percentage of 84.69%, with the "very high" criteria.

This supports the opinion of Sulisworo et al. (2020), with good self-regulated learning, students can find, select, use information from the internet to solve problems or achieve learning goals. Self-regulated learning abilities include efforts to: 1) set goals (planning), namely where individuals plan their actions with various motivations to achieve goals, 2) self-monitoring (monitoring) and self-instruction (controlling) i.e. in monitoring their performance, students can decide when they may need to change the strategy used, and 3) self-reflection (reflection) i.e. during reflection, students try to understand if the results obtained are not appropriate, manage their emotions from the results of achievement, and otherwise engage in self-evaluation and reflection related to the learning experienced (Barry J Zimmerman & Schunk, 2011).

The result of the calculation of the percentage of the overall learning strategy result is 88.98% with the "very high" criteria and lies in the reflection indicator, meaning that the more learning citizens can reflect on their learning, the more learning citizens can help to develop their self-regulated learning. This is in accordance with the results of research (van den Boom, Paas, & Van Merriënboer, 2007) that the reflection and feedback provided by tutors seems to be a very promising strategy to encourage self-regulated learning for citizens to learn. It was found that the learning citizens had good self-regulated learning strategies, so that data were obtained that their learning strategies were categorized as very good. This supports the opinion of Sulisworo et al. (2020), that in online (virtual) learning, students who have excellent self-regulated learning will be better able to regulate themselves in the face of developments in the existing learning environment that is different from their real world. Students who can manage themselves in learning well will be responsible for their learning activities (Dunn & Rakes, 2015). The ability to manage oneself is one of the important factors in achieving learning goals, including Covid-19 mitigation (Sintema, 2020). In this case, it will have an impact on increasing the learning outcomes of learning citizens.

Based on the findings in the field, it can be concluded that the self-regulated learning strategy is categorized as very good and lies in the reflection indicator, meaning that at this stage individuals are able to reflect on their learning process and receive feedback from their reflection. The reflection stage can encourage independent learning because it is effectively able to provide feedback on the learning process. Reflection makes students aware of their experiences in the learning process. They become aware of what they are doing or should be doing, and of what and how to do next. Therefore, reflection is able to encourage students' ability to self-regulated learning. This can be seen from the reactions of learning residents when learning is complete, they can find, choose, use information from the internet to solve problems or achieve learning goals.

Based on behavioristic learning theory that learning behavior as a result of learning. Behavioristic learning theory is a process of behavior change as a result of the interaction between stimulus and response that causes learning residents to have new experiences. In this case learning behavior is a change that occurs after the learning process is complete. Behavioristic flow emphasizes the "outcome" rather than the learning process. Learning behavior has four dimensions (Schaefer & McDermott, 1999) namely: 1) competency motivation shows how the willingness and determination of a child to handle learning tasks successfully, 2) attitude towards learning represents a child's willingness to be involved in learning activities, 3) attention / persistence is the child's ability to perform tasks, resist distractions, and persist appropriately, and 4) strategy / flexibility that is measuring students' ability to work in different circumstances and to change approach if.

Some of the factors causing the student's learning behavior can be strengthened by: several previous studies that have been carried out. Research conducted by (Nikmah, 2011) provides information that things that affect student learning behavior include character education that is absorbed by students and the influence of the student's family environment. Januar (2013) researched that the factors that influence student learning behavior include internal factors which include physical factors and psychological factors of students, and external factors which include
the family environment, school environment, and community environment. Likewise, the research conducted by Masruroh (2015), which summarizes everything where things that affect student learning behavior are: students’ own learning motivation and the surrounding environment that supports student learning activities.

Research conducted by Sriyono (2005) gave the results that parental care and student learning behavior have a positive relationship with an effective contribution of 75.97% indicating that the parental concern variable has an effect on student learning behavior. Based on the results of research (Aryulia et al., 2021) that there is an influence between learning interest on learning behavior and there is an influence between the school environment on learning behavior. Then the results of research from (Abdullah, 2009) that learning motivation has an effect on learning behavior. In line with the results of research from (Soffatunni’mah & Thomas, 2017) that there is an influence between the family environment and learning motivation on student learning behavior.

In this study, it can be found that the level of tendency of learning outcomes for students in Package C Class 12 can be found by category. The categories include gender / gender, age, and regional origin. Obtaining the percentage of learning outcomes based on categories. In the gender category, the highest score was obtained by female participants with a percentage of 84.85% with the "very high" criteria, while the lowest was obtained by male participants with a percentage of 82.65% with the "very high" criteria. This can be seen from the changes in the behavior of learning residents after the learning process, that female learning residents are more responsive to the learning activities they receive than male learning residents. In the Age Category, the highest score was obtained by participants aged 20-24 years with a percentage of 85.75% with the criteria "very high", while the lowest was obtained by participants aged >40 years with a percentage of 80.86% with the criteria "very high".

This is in accordance with the findings in the field that learning residents in the age range of 20-24 years provide more learning outcomes for the learning activities they receive than learning residents in the age range >40 years. In the Category of Regional Origin, the highest score was obtained by participants from the West Bandung Regency Region with a percentage of 83.91% with the "very high" criteria, while the lowest score was obtained by participants from the Bandung City Region with a percentage of 79.41% with the "very high" criteria. This is in accordance with the findings in the field that the origin of the respondent's area generally comes from the West Bandung Regency area.

The percentage of overall learning outcomes is 82.82% with the criteria "very high" and lies in the attention/persistence indicator, meaning that the more diligent citizens learn in dealing with learning, the higher the learning outcomes they get. Student learning outcomes are influenced by various factors, both from within students and outside students. Factors from within students that can influence outcomes student learning one of which is student learning persistence. Persistence in learning is a student's effort in earnest to get maximum learning outcomes. The purpose of the learning process is to get learning outcomes. There is a diligent effort from students, so students who study diligently can give birth to good achievements (Sardiman, 2014: 86). Students who have a high level of persistence will get high learning outcomes. Because he is always motivated to study hard, be determined and try his best to get maximum results. This has an effect on changes in behavior, knowledge, attitudes and skills that begin to develop.

The finding is that good learning outcomes can be achieved by increasing persistence, because the persistence factor includes items regarding the child's ability to survive when challenged and his attention to relevant environmental characteristics. The persistence dimension is believed to be able to provide good learning outcomes because this dimension consists of individual positive learning behaviors of a student who is never distracted or seeking attention, a student who remains seated in his chair, and a student who is rarely restless or squirming. A student with a positive score on this dimension stays on the task, concentrates on the task over a period of time, produces responses that demonstrate an adequate level of attention, and is a person who cares deeply about academic success and failure.

This can be seen from children's reactions to learning activities that occur, such as: individuals are able to show an attitude of learning desire, willingness to work on new assignments, cooperative in class activities, consistent in doing assignments, and accepting corrections if they are not as desired. The findings are that someone who has good learning behavior tends to get good learning outcomes as well. This can be seen from the results of the acquisition of the test scores of learning residents from one of the PKBM that the test results have not decreased in the academic field.

**CONCLUSION**

The description of the learning strategy that emerged was Self-regulated learning, where students
proactively acquire academic skills, such as setting goals, and strategies for sorting and moving the learning process independently by setting study schedules, setting learning targets and seeking information needed independently. Learning Outcomes in the Package C Equivalence Program during the Pandemic Period are shown by the attitude of wanting to learn, willingness to work on new assignments, being cooperative in-class activities, being consistent in doing assignments, and accepting corrections if they are not as desired.

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