

## Improving student learning outcomes in the material of heat and its transfer through the social technology science model with a constructivist approach

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### Abstract

Based on observations at the School and Center - Janodaya Vidhyalaya, Madanapalli, data was obtained that the use of appropriate learning models was not maximized, students still had difficulty understanding the material, lack of cooperation between students and the class seemed crowded. The research design used is classroom action research. The subjects of this study were students of class VII-I School and Center – Janodaya Vidhyalaya, Madanapalli in the even semester of the 2019/2020 academic year. The data taken in this study included attitudes and skill values taken using observation sheets, and knowledge values taken by evaluation questions. The results showed: (1) The results of the attitude assessment in the cycle I amounted to 12.5% in the good category, while in cycle II it was 15.6% very good category, and in cycle III there was 6.3% sufficient category, 65.6% in good category and 28.1% very good category. (2) Learning completeness in the knowledge assessment cycle I was 54.9% of students completed, cycle II was 78.9% of students were complete and in cycle III students completed 84.4% (3) learning completeness in the skills assessment cycle I was 43.75% of students complete, cycle II of 71.9% of students complete and in cycle III of students complete of 81.25%. The data above it clearly shows that the social science technology model with a constructivist approach that has been applied to heat and its transfer material can improve student learning outcomes in class VII-I School and Center – Janodaya Vidhyalaya, Madanapalli.

**Keywords:** *Parenting Role, Character Building, Independent and Discipline.*

### Introduction

Constructivism is a way of learning that emphasizes the role of students in forming their knowledge while the teacher acts more as a facilitator who helps the students' activeness in forming their knowledge. E. Yeger, Robert. (2000) stated that the STM model is a learning model that refers to a constructivism approach. E. Yeger, Robert. (2000) in a theory known as constructivist theories of learning states that students must find and transform complex information on their own, check new information against old rules and revise those rules when they are no longer appropriate (“STEAM Educ.,” 2019; Wolkenhauer & Hooser, 2021). STM is a context-based approach that has a very important role in motivating children, the purpose of the STM approach is to form individuals who are literate in science and technology and have concern for societal and environmental problems (Guyotte, 2020; Thuneberg, Salmi, & Bogner, 2018).

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The term Science Technology Society is translated from English as "Science Technology Society (STS)", which was originally put forward by John Ziman in his book *Teaching and Learning about Science and Society*. Science Technology Society learning means using technology as a link between science and society. the term STM or SATEMAS was first put forward by John Ziman in his book *"Teaching and Learning About Science and Society"*. Ziman tries to reveal that the concepts and processes of science being taught should be relevant to students' daily lives (García-Carmona, 2020; Perignat & Katz-Buonincontro, 2019; Quigley, Herro, & Jamil, 2017).

The science and technology model of society as a change or variation in the delivery of learning, in learning science and technology society is a learning process that can change the way students think, and can know or use the science they get in school in their lives and understand more about what he learned (Suryanto, Degeng, Djatmika, Kuswandi: 2020). According to Afni, N. Kharitil & Abdullah. (2014) states that based on the relationship of mutual influence and dependence between science (science), technology (technology), and society (society), the STM model is learning that refers to a constructivism approach, which is a way of learning that emphasizes students in forming their knowledge while the teacher is a facilitator who assists students in forming the knowledge that is in each of them (Arikunto & Suharsimi: 2010)

According to Bernadete, I.D.R. (2009) the essence of constructivist theory is the idea that students must make the information their own. Knowledge cannot simply be transferred from one person's brain (teacher) to another person's head (student). Students must interpret what has been taught by adjusting to their experiences. Without experience, one cannot form knowledge Suhud, SA (2022). Experience here does not have to be physical experience, but can also be interpreted as cognitive and mental experience. The large number of students who misunderstand what their teacher teaches (misconceptions), indicates that knowledge cannot be simply transferred, but must be constructed or at least interpreted by the students themselves.

Based on the existing theory, it can be concluded that constructivism focuses more on students' existing experiences by constructing their own knowledge through interaction with their environment, experiments and discussions, so that teachers have implemented constructivism in their learning (Lake, Flannery, & Kearns, 2021; Yakman & Lee, 2012). The goal is to train or help each individual to solve each problem on their own. According to Abdullah, D. (2008), the emphasis point of the STM learning pattern is to develop a relationship between students' scientific knowledge and their daily experiences. According to Arniyana, I. (2004), the objectives of STM learning are as follows: (a) provide opportunities for students to compare and contrast science and technology, while appreciating the way science and technology contributes to new knowledge and influences, (b ) provide examples from the past and present regarding the enormous changes in science and technology brought about by society, economic growth, and political processes, (c) provide/offer income global affairs regarding the relationship of science and technology to society, and demonstrating their impact on the development of nations and the earth's ecology

The constructivism approach will make students more active in understanding the material provided, so that students' learning experiences will increase according to what they do in the learning process. The learning process involves various activities and actions that students need to take to obtain a better quality of learning. according to Heath, Phillip; Marker, Gerald et al. (1990). Science teaching with STM learning should contain the following components: (a) existing strategies are used to provide a real understanding of patterns of reasoning and thinking from peers, adults, and experts , (b) skills in testing the validity of arguments and examples that seem to sound like scientific reasoning leading to wrong conclusions, (c) motivating students to explore emotions and values in relation to data with specific evidence , and (d) use of field studies, guest speakers, information media, films, student activities, debates, role playing, and simulations.

Based on the experience of researchers while teaching at the School and Center – Janodaya Vidhyalaya, Madanapalli in odd semesters, science learning in class VII-I has not been achieved optimally. This is caused by several factors. The first factor comes from the teacher himself who has not fully used the learning model that is appropriate to the learning material, the second factor is that in learning science there are still obstacles such as students having difficulty understanding the material being studied and students considering science as a difficult subject because they have to calculate and

memorize. These factors resulted in student learning outcomes not yet reaching the KKM that had been set, namely 75.00 for science subjects. Based on the data obtained, student learning outcomes in odd semesters, only 69.71% of students have completed. While the lowest learning outcomes in learning completeness are class VII-I, namely 65%. By looking at the student learning outcomes data obtained, it can be seen that learning is not optimal.

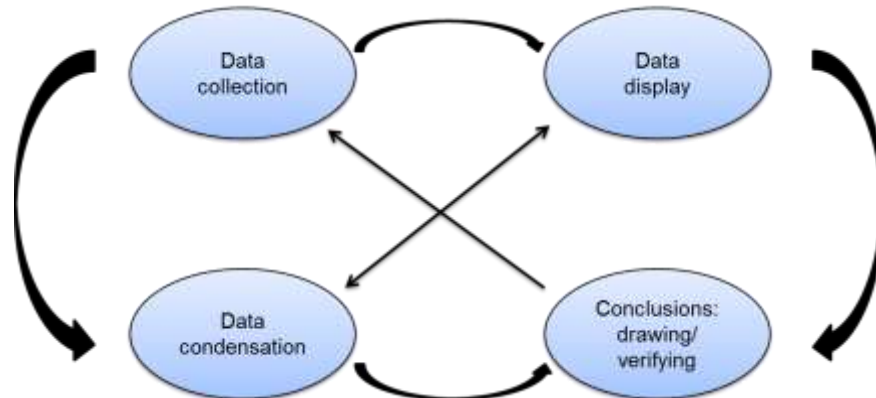
Another factor is that students' ability is still low in expressing opinions and tends to be silent when asked a question, students are also less able to interact with their friends and are less focused on participating in learning, especially learning science. To solve the problems obtained from these several factors, researchers as science subject teachers determine alternative actions that can involve students and improve student learning outcomes (Jariah, Khoiri & Aryanto: 2012). One of the models that is seen as the most conducive is by using the social science technology learning model with a constructivism approach, this is because to teach heat and its transfer material, students must be able to understand and understand the material so they can distinguish how heat affects temperature, heat can be change the state of matter, and how heat is transferred. Heat is something that cannot be separated from life, so it is hoped that after studying heat students will not only understand the material but also be able to use it in their lives. The advantage of the social science technology model with a constructivist approach is that there is interaction between students in sharing their knowledge, namely sharing experiences that have been experienced, and encouraging students to respect the opinions of others. The teacher's role is only as a facilitator who directs students towards learning goals. Therefore, there is a need for innovation in the use of learning approaches, so as to make students active and creative in participating in learning. Teaching and learning activities using the Science Technology Community (STM) learning model can provoke students to be more active, creative and foster an attitude of mutual cooperation with group mates, so that they can trigger good interactions between students, teachers and with the media used. Learning is a process of changing behavior based on experience, either intentionally or unintentionally and takes place over a certain period of time. Learning and learning are components that cannot be separated anymore, can be illustrated as a system which requires an input as a basis in the teaching and learning process that produces outputs with certain competencies (Malik 2014). Learning outcomes are important indicators in learning. Nana Sudjana (2006) defines student learning outcomes in essence is a change in behavior as a result of learning. Learning outcomes in a broader sense include cognitive, affective and psychomotor. Based on the identification of the problems described above, the problems that are being studied in this research are: Can the Constructivist Approach Science Technology Community (STM) model improve student learning outcomes in the subject of heat and its transfer in class VII-I School and Center - Janodaya Vidhyalaya, Madanapalli?

The goal to be achieved in this study is to improve student learning outcomes in the material of heat and displacement in class VII-I School and Center - Janodaya Vidhyalaya, Madanapalli through the Model Science Technology Society (STM) constructivism approach. The results of this PTK are expected to provide benefits for students, teachers and schools, especially in science learning. The benefits of this research are increasing motivation, training students to be active in learning, asking questions in discussions with groups and respecting the opinions of others and can improve student learning outcomes on heat and displacement material as expected.

## **Methods**

This study uses a qualitative approach. This research is descriptive because it conducts research by describing the data collected with words or pictures, not numbers. The presence of researchers here is collaborative and participatory. The subjects in this study were administrators, ustad/ustadzah and students of Al Mawaddah Islamic Boarding School Coper Ponorogo. The selection of subjects is made randomly and who has the ability in the problem being studied. Data collection was carried out in three stages, interviews, observation and documentation, with data categories divided into primary and secondary. The preliminary data in this study were obtained directly from the subjects selected above,

while the secondary data or supporting data in books, magazines, journals, and archives related to the object of study. The data analysis model in this study follows the concept given by Miles Huberman. The validity of the data in this study was determined by using the credibility criteria. To obtain relevant data, the researcher checked the validity of the research data using Extended Observation, Persistence of Observation, and Triangulation (Bandura, 1982; Glassman, Kuznetcova, Peri, & Kim, 2021).



**Picture 1.** Huberman Miles research flowchart

## **Results**

### ***Santri Caregivers in Forming Independent and Disciplined Characters***

Based on the research that the researchers did, the role of the caregiver is vital in shaping the independent and disciplined character of the students at the Al Mawaddah Islamic Boarding School Coper Ponorogo. This case explains the importance of a caregiver providing instructions or character building for students in Islamic boarding schools. As for the things that caregivers do in shaping students' character, there are several ways, through daily activities and additional activities at the boarding house. The following are the results of an interview about the meaning of independence and discipline that the researcher conducted with one of the clerics at the Al Mawaddah Islamic Boarding School Coper Ponorogo:

“Independence at the cottage is when we can manage time and can balance all the activities in the lodge, both daily activities and extracurricular activities and events. Discipline at the boarding house can obey the rules and avoid violations and, if punished, run according to the instructor from the caregiver.” (Ustadzah A, 2020).

In addition, the notion of independence and discipline was also added by Mrs Susi Susilowati as follows:

"Independence and discipline are the characteristics of the santri that must be embedded in the cottage. Independence starts from a daily activity that supports the activeness of students to build new characters. An independent character, students, do something without being assisted by other people under the guidance of caregivers. Being independent here is a form of student maturity when they are teenagers. Independent, which makes students aware of living alone without the closest people or parents. Discipline here is about obeying the rules that exist in the cottage. The rules that we make are for the good of the students so that the students can understand all the existing rules.” (Susilowati, 2020).

From the interviews above, the researcher concludes that independence is when female students can manage themselves and balance the various activities in the cottage, both daily and extracurricular activities. At the same time, discipline can be marked by complying with all the rules in the boarding school and being willing to accept the consequences that are given when the female student violates the existing laws at the boarding school by applicable regulations. Before forming the character of a santri,

the caregiver must be able to understand in advance how the character of the santri is, this is proven by the following interview results:

"Understanding the character of our students is educating since the acceptance of new students, in the registration of new students, of course, must comply with the existing procedures at the lodge. You can see the existing regulations and have become an example of student discipline. The two new students must comply with the existing rules and regulations at the lodge, and if they violate them, there will be punished according to their mistake. Now from that, it can be seen that with the independent character and discipline of students who are followed by all students, of course, all students must know and understand a character, what they do is their new character which they will do while in the lodge because the character of each student is not only developed in the lodge. however, wherever, since the boarding school is more strict because we are far from parents, the character of a santri must be formed with activities that support them so that they can live independently and disciplined without parents." (Ustadzah B, 2020). In addition, the results of the study are also strengthened by the results of interviews as follows: "Before the students enter the lodge, we have given direction to the santri and also the guardians of the students if all the daily schedules of the students and the types of violations have been listed, so all students must understand all the rules and regulations that exist in the lodge, so if one day there is a student violation must bear all the existing punishments, of course, the punishment will more deter the students because of their mistakes and punishments they will realize how important it is to obey the rules that have nothing to lose." (Ustadzah C, 2020).

Based on the description above, the researcher concludes that understanding students' character has been carried out starting from the beginning of the acceptance of new students. The rules that must be obeyed have been listed from the start. The students must also understand the accept the consequences if they violate the laws. Since the students are far from their parents, character building is carried out by providing various activities that support the students to live independently and be disciplined without their parents. If students make mistakes or violate the rules, they will be punished according to their actions. This is supported by the results of interviews as follows:

"The type of punishment depends on the student's violation. If it is a light violation, we will punish the student according to his mistake, and if it is severe, then the punishment is also by his mistake." (Ustadzah B, 2020).

From the description above, it can be concluded that the punishment given when students make mistakes depends on what mistakes they have made. If the mistake made by the student is a minor one, then the sentence given is also light. On the other hand, if the mistake is severe, the punishment will also be heavy. The activities of students in Islamic boarding schools can be said to be solid, not only daily activities, but also extracurricular activities that can support students in developing their talents and interests. This can be proven by the results of interviews as follows:

"1) Morning: Fajr Prayer, Mukhadatsah, Cleaning, Eating, Preparation for school. 2) Afternoon: Dhuhur Prayer, Rest, Lunch, Afternoon School, Asr Prayer, Community Service, Preparation for Maghrib Prayer. 3) Night: Maghrib Prayer, Ngaji, Isha Prayer, Dinner, Study, Mukhadatsah, Absence, Night Sleep. 4) Extracurricular Activities: Wednesday afternoon and evening: Mukhadatoh, Thursday Afternoon: Scouts, Friday: holiday (SPORT). Other activities carried out every year are: Khutbatul 'arsyi = introduction of new students. And a happy stage for the work of 6th-grade students who will soon graduate." (Ustadzah D, 2020).

In addition, the results of the study are also strengthened by the results of interviews as follows: "There are a lot of activities at the lodge. The daily activities in the lodge starting from dawn, namely congregational prayer, Koran, and mukhadatsah, are goals so that students learn the discipline to wake up by providing positive work to learn to be even better. And can fight sleepiness with things that make students able to learn independently. After that, the community

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service cleans up before school preparation and after-school activities, namely extracurricular activities such as scouts and speeches. This activity is very positive to train the students' mentality and develop the character of the students who previously did not dare to become more confident in front of many people. This activity has a very positive impact. Even students can bring out talents that they previously could not achieve until they finally achieve them with their work. Inside the cottage also has activities for students from grade 5 to grade 6, namely their organization. They have their respective parts in managing the task. There they get a great trust from each of their events which will develop and be assisted by caregivers. The pinnacle of students' independence is that they work with their team to form success for students at the boarding school. Each section has a job that they will distribute to the students. After that, the last success of the students arrived, namely in the teaching exam. Here students will learn to teach and be accompanied by several friends and caregivers. This is the last activity of the santri they have achieved after their struggle while at the point of their success." (Ustadzah A, 2020).

From the interviews that the researchers conducted above, the researchers concluded that there were many activities in the cottage. These activities start from waking up, namely praying in congregation, reciting the Koran and mukhadatsah. This is done so that students can learn the discipline to wake up on time by providing positive activities to become even better. In addition to mandatory activities, there are also extracurricular activities that students can participate in, namely scouts and mukhadara which aim to develop their potential and help students achieve success.

The formation of students' character is carried out through all activities in the cottage. The following interview results prove this:

"The formation of the students' character through all the activities in the cottage. Both daily activities and extracurricular activities. This activity is carried out every day so that students are also accustomed to their daily activities. Extracurricular at the boarding school is an activity that supports students and trains students' mentality so that students don't get bored with daily activities and can develop students' talents." (Ustadzah C, 2020).

Based on the interviews above, the researchers concluded that the formation of students' character in the boarding school was carried out through all activities in the cottage, including extracurricular activities. It aims to train students to get used to the activities carried out every day. Extracurricular is held to develop the potential that exists in students besides that so that students do not get bored with the activities in the cottage. If students are bored with exercises at the house, the caregivers can make the students feel at home in the house. This is reinforced by the results of interviews as follows:

"It can be seen from the family background or the problems faced by every student in the boarding school, of course, there are not a few students who do not feel at home in the boarding house, for that usually every certain day we will give advice or routine advice to improve students' understanding of life, the title of which we will discuss every day. Different times and if there is a student who wants to confide in the caregiver, they will be given time to come to the parenting office according to their free time. So if there are any problems, both inside and outside the cottage, we will do our best to help ease the burden on students. For all the existing activities, we give the students the best so that the students feel at home in the lodge." (Ustadzah D, 2020).

Based on the description above, it can be concluded that if there are students who do not feel at home in the cottage, the caregivers overcome them by giving routine advice so that students can understand life. In addition, the titles given are also different, so it doesn't seem monotonous and will excite the students again. Caregivers also accept if there are students who want to talk or vent about their problems and try to provide advice and help ease the burden experienced by students. Caregivers try to give the best to their students.

***Supporting and Inhibiting Factors in Building Independent and Disciplined Character***

Informing students' independent character and discipline at Al Mawaddah Islamic Boarding School Coper Ponorogo, there are supporting factors and obstacles in carrying out the process. This is proven by the results of interviews as follows:

"The supporting factor is that students can carry out activities and rules well, supported by the presence of their peers to increase students' enthusiasm. The inhibiting factor is when students who do not feel at home in a boarding house are difficult to build their character because they are still adapting to a new atmosphere with a new life." (Ustadzah A, 2020).

In addition, the results of the study are also strengthened by the results of interviews about the difficulties and conveniences in forming independent and disciplined characters as follows:

"The difficulty when guiding students who have the most different characters among others, because the nature and character of students are not all the same, maybe more to the strong direction to build their character, if it can't be built then only an activity that exists to build character, because sometimes It's hard even though you've been given as many directions as possible, but only a few are difficult to manage because a character that is difficult to build will create a character that he will build. So the students themselves will gradually understand and build their character. It's easy when advising students who immediately understand all of our directions." (Ustadzah B, 2020).

Based on the description above, it can be concluded that there are also supporting and inhibiting factors in establishing the independent character and discipline of students at the boarding school. The supporting elements are colleagues who can increase the students' enthusiasm in carrying out the activities carried out. In addition, the inhibiting factor experienced is that students who do not feel at home in a boarding house are challenging to build their character because they are still adapting to a new atmosphere with a new life. Difficulties and conveniences are also inseparable from forming independent and disciplined characters that are carried out. The dilemma faced is guiding students who have the most different feelings than their friends. While the convenience is when the caregiver gives advice, and the students can immediately understand all the directions given.

**Discussion**

As stated in the previous discussion and based on the theory put forward as well as differences with other relevant studies, the purpose of this study is to determine the role of parenting in shaping the independent character and discipline of students at the Al Mawaddah Coper Islamic Boarding School, Ponorogo, as well as to determine the supporting and inhibiting factors in forming independent character and discipline of students at Al Mawaddah Islamic Boarding School Coper Ponorogo. In this chapter, the researcher analyzes it according to the method used, using the descriptive analysis method.

***The Role of Caregivers in Forming Independent and Disciplined Characters***

Based on the results of interviews, observations, and documentation that researchers have carried out, the role of caregivers in shaping the independent character and discipline of students at Pondok Pesantren Al Mawaddah Coper Ponorogo is that caregivers play a vital role by trying to give the best to their students and also caregivers can become friends when students have personal problems by telling the issue to the caregiver. At the same time, the supporting and inhibiting factors in forming students' independent character and discipline at the Al Mawaddah Islamic Boarding School Coper Ponorogo is the presence of colleagues who can increase the students' enthusiasm in carrying out the activities carried out. In addition, the inhibiting factor experienced is that students who do not feel at home in a boarding house are challenging to build their character because they are still adapting to a new atmosphere with a new life. Caregivers have the meaning of accepting, caring for, nurturing, protecting, providing stimulation and affection, and good parenting patterns (Hidayah, 2009). Islamic

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boarding school caregivers must have specific personal quality standards, including responsibility, authority, independence, and discipline (Djamarah, 2002). So it can be concluded that The caregiver is a teacher, *ustad* and *ustadzah* who has the task of receiving, caring for, and providing care and affection and good parenting for all Islamic boarding schools programs and guide students in studying.

The character can be interpreted as a way of thinking and behaviour unique to living and working together, both within the family, community, nation and state. Therefore, the character can be considered a value of human behaviour related to God Almighty, oneself, fellow human beings, the environment, and nationality, manifested in thoughts, attitudes, feelings, words, and actions based on religious norms, laws, and regulations. Manners, culture, customs, and aesthetics. Thus, the character is behaviour that appears in everyday life, both in attitude and action (Meanwell & Kleiner, 2014; van Merriënboer, 2013). Independent, namely attitudes and behaviours that are not easy to depend on others in completing tasks. However, that does not mean that you do not have concern and do not relate to other people. It would be better if it were developed on the basis of deep concern for others (Naim, 2012). Independence is an attempt to break away from parents and the individual's ability to manage himself and be responsible for what he does. Characterized by not depending on the emotional support of others, being able to make decisions independently and consequently to those decisions, and having a set of principles about right and wrong, important is not essential.

Discipline is to train through teaching or training. Discipline is closely related to the training process of those who provide direction and guidance in teaching activities (Khalsa, 2007). Discipline can emerge as a form of our efforts to improve ourselves as individuals who obey the applicable rules. Discipline is compliance with regulations or subject to supervision and control. Discipline also really refers to the learning process. Because it is always associated with the context of the relationship between students and teachers and the environment that accompanies it, such as regulations, learning objectives and ability development and students through teacher guidance (Attard, Mountain, & Romano, 2016; Gore, Miller, Fray, Harris, & Prieto, 2021). Based on the opinion above, the researcher concludes that caregivers in shaping the independent character and discipline of students at the Al Mawaddah Coper Islamic Boarding School in Ponorogo are significant by trying to give the best to their students and also caregivers can become friends when students have personal problems by telling the issue to the caregivers.

The formation of independent and disciplined character has been carried out starting from the beginning of the acceptance of new students. The rules that must be obeyed have been listed from the start. The students must also understand the accept the consequences if they violate the laws. Since the students are far from their parents, character building is carried out by providing various activities that support the students to live independently and be disciplined without their parents. If students make mistakes or violate the rules, they will be punished according to their actions. The punishment given to students who make mistakes or break the rules is adjusted to the violations or errors made. If the mistake made is a minor one, then the punishment is also light.

On the other hand, the punishment is also severe if the mistake is heavy. Discipline is learning not to repeat it and being more disciplined towards the existing rules. Students will prefer to obey the rules because the punishment they have experienced will make them deter and will not repeat the mistake. The formation of independent and disciplined character provides many positive activities in the cottage. Starting from waking up, namely the morning prayer in congregation, the Koran, and *muhadatsah*, students can learn independently and be disciplined when they wake up by providing positive activities. Before going to school, the students are also given exercises in cleaning or community service. In addition, the lodge also has extracurriculars that can be used to train and develop the talents and interests of the students.

The extracurricular activities at Al Mawaddah Islamic Boarding School Coper Ponorogo are scouts and speeches. These activities can positively influence students in mental training and develop

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the character of students who used to be shy, inferior, and don't dare, now become more confident in front of many people. In addition, students who already have talent from the start can be honed and developed through extracurricular activities at the cottage. Al Mawaddah Islamic Boarding School Coper Ponorogo also has its organization for students from grade 5 to grade 6. The organization involves students as administrators because students are given the task of managing their organization. They get a great trust every time there is an event and will be assisted by the caregivers. This is the culmination of the independence of the santri, namely, they can work together with their team to achieve the goals of success at the boarding school.

In this organization, the activities of the students become dense so that they have to manage the tasks at school and the organised mandates. When they are old students, the students' character will be promoted to become more active and have more numerous activities because the longer the change like the students will increase according to their age. Therefore, the purpose of the lodge is for the development and formation of good character, and the santri will continue to be infected as long as what is done at the lodge bears positive results. It is the same with students who will gradually become caregivers because students who have been in boarding schools for a long time will one day be promoted and will have higher experience. The goal is to train mentally better and get used to new things.

Students' activities are very dense in the cottage, both daily and extracurricular activities. Daily activities are carried out starting after dawn until late at night. Through these activities, students begin to get used to busyness, and behind this busyness leads to the independence of students who will run on their own. Even students have talent and interest in these activities because these activities produce results where students will feel happy and proud. The cohesiveness of fellow students through activities is also a point where living with character must prevent students from being selfish. In working together, students learn to do an activity between teams to create a positive sense of togetherness.

The activity that is considered the last success is the teaching exam. In this case, students will learn to teach, accompanied by caregivers and some friends. This is the last activity of the students that they have achieved after their struggle while at the Pondok. Teaching and learning activities can train students to become teachers. This activity can also teach a santri mentally because many people also feel insecure when in front of many people. Through positive and solid activities in the cottage, it is hoped that students can form an independent and disciplined character which is one of the goals at the Al Mawaddah Coper Islamic Boarding School in Ponorogo. These activities are indeed given to help students live a better life.

In addition to providing positive activities, the role of caregivers in forming independent and disciplined characters is carried out by being a place for students to tell stories when they have problems in their lives. Students who have issues, whether problems at the cottage or situations outside the house, can mean the caregivers. If the students are bored at the place, the caregivers also try to give directions or advice to the students regularly to understand life. In addition, the titles given are also different, so it does not seem monotonous, which will make the students even more bored but will make the students excited again. Caregivers try to provide solutions and help overcome the problems faced by the students. Caregivers try to give the best to their students. What is involved in the cottage, of course, the goal is one, namely success. Caregivers are the second point that plays a vital role in students. In the hut, the caregivers have their respective duties. The departments of teaching, psychology, health, etc., departments have all been divided equally. Caregivers here explain and guide all activities in the lodge which will involve all students. With the aim of all students must be able to do these activities well.

This goal leads to the formation of students' character, both new and old, who will get used to doing it. Caregivers will also guide students in both joy and sorrow. In the activities, not everything goes smoothly because the students' character is not all the same. Some are different; therefore, a regulation was created to urge the students to be able to carry out activities in a disciplined manner and obey the rules that exist in the cottage. The goal is to make the students' personalities even better to learn to be

independent and disciplined gradually. Then trust will arise in the caregiver. Therefore, the caregiver is an essential point for the students for character building. All the characters formed by the caregiver are packaged into activities whose goals can lead to positive things.

Caregivers can be said to be second parents in the cottage. As parents in the boarding school, caregivers also play an essential role in shaping the independent and disciplined character of the students in the boarding school. Regarding the distance between the students and their parents, the caregivers educate and guide the students to become better students. They can lead the students to succeed in the future. In the process of forming the independent character and discipline of students at Al Mawaddah Islamic Boarding School Coper Ponorogo, of course, there are supporting and inhibiting factors. The factors are as follows:

*First*, the supporting factor in forming the independent character and discipline of students at the Al Mawaddah Coper Islamic Boarding School in Ponorogo is the presence of colleagues who can increase the students' enthusiasm in carrying out the activities carried out. The students will be excited to do things in the cottage with their friends. They will have fun with their friends even though the activities in the house are pretty busy. However, time will feel faster when doing activities that are done together. This is a supporting factor in shaping the independent and disciplined character of the students at the boarding school.

*Second*, the inhibiting factor. The inhibiting factor in forming students' independent and disciplined character at the Al Mawaddah Coper Islamic Boarding School in Ponorogo is that students who do not feel at home are difficult to build their character because they are still adapting to a new atmosphere with a new life. However, the caregivers try to overcome these obstacles by providing direction and motivation to the students to feel at home in the cottage.

Difficulties and conveniences are also inseparable from forming independent and disciplined characters that are carried out. The problem faced is guiding students who have the most different feelings than their friends. The texture and nature of the students, of course, differ from one student to another. These difficulties are overcome by providing strong direction to build his character. Although the caregivers have given maximum exposure, it cannot be denied that the nature of the students is difficult to build. Only an activity can create the character if the surface can no longer be made. The activities provided will make students whose character is complex to build over time develop their character through themselves, of course, cannot be separated from the guidance and supervision of the caregivers.

While the ease in forming an independent and disciplined character is when the caregiver gives advice, and the students can immediately understand all the directions given. Students who quickly understand the rules given by the caregivers certainly make it easy to form independent and disciplined characters in the cottage. This facility can be used as a supporter in achieving the goal of the cottage, which is to form the independent character and discipline of students at the Al Mawaddah Islamic Boarding School Coper Ponorogo.

## **Conclusions**

Caregivers in shaping students' independent character and discipline at the Al Mawaddah Coper Islamic Boarding School Ponorogo are significant in trying to give the best to their students by providing positive activities, both mandatory and extracurricular activities. Personal problems or problems in the cottage tell the caregiver about the issue. Based on the study results, it is hoped that this research can be used as a reference in research on the role of caregivers in forming independent and disciplined characters.

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