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# Effectiveness of Behavior Modification Through Token Economy Techniques to Increase Responsibility in Early Childhood

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#### **Abstract**

This study aims to examine the effectiveness of behavior modification through token economy techniques in increasing responsible behavior in early childhood. This type of research is a quantitative single-case experimental design. The subject in the study is one early childhood children aged 5 years. Data collection techniques used are observation, interviews, and documentation. The validity test in this study uses the validity of expert judgment. Data analysis uses a visual analysis approach. In this study, the A-B-A-B type withdrawal/reversal designs are used, in which the pre-test is carried out at stage A (baseline) and the post-test is carried out at stage B (intervention). The result shows that the use of the token economy technique is effective in increasing responsible behavior in early childhood. This is proved by the results from the baseline 1 (A) and baseline 2 (A) stages the score of child responsibility is from 1.25 to 1.83. This score indicates the low level of responsible behavior shown by the subject. While at the intervention stage 1 (B) and intervention 2 (B) the repeated scores are 4.83 to 5. The score indicates a high intensity of the subject in showing responsible behavior. So, it can be concluded that behavior modification through token economy is effective for increasing responsible behavior in early childhood.

**Keywords:** behavior modification, early childhood, responsibility, token economy

#### Abstrak

Penelitian ini bertujuan untuk menguji efektivitas modifikasi perilaku melalui teknik token ekonomi dalam meningkatkan perilaku bertanggung jawab pada anak usia dini. Jenis penelitian ini adalah kuantitatif dengan desain eksperimen kasus tunggal. Subjek dalam penelitian ini adalah salah satu anak PAUD berusia 5 tahun. Teknik pengumpulan data yang digunakan adalah observasi, wawancara, dan dokumentasi. Uji validitas dalam penelitian ini menggunakan validitas expert judgement. Analisis data menggunakan pendekatan analisis visual. Dalam penelitian ini digunakan desain penarikan/pembalikan tipe A-B-A-B, dimana pre-test dilakukan pada tahap A (baseline) dan post-test dilakukan pada tahap B (intervensi). Hasil penelitian menunjukkan bahwa penggunaan teknik token ekonomi efektif dalam meningkatkan perilaku bertanggung jawab pada anak usia dini. Hal ini dibuktikan dengan hasil dari tahapan baseline 1 (A) dan baseline 2 (A) skor tanggung jawab anak berada pada 1,25 – 1,83. Skor ini menunjukkan rendahnya tingkat perilaku bertanggung jawab yang ditunjukkan oleh subjek. Sedangkan pada intervensi tahap 1 (B) dan intervensi 2 (B) skor ulangan sebesar 4,83 sampai 5. Skor tersebut menunjukkan intensitas subjek yang tinggi dalam menunjukkan perilaku bertanggung jawab. Sehingga dapat disimpulkan bahwa modifikasi perilaku melalui token ekonomi efektif untuk meningkatkan perilaku bertanggung jawab pada anak usia dini.

Kata Kunci: anak usia dini, modifikasi perilaku, tanggung jawab, token ekonomi

#### Introduction

The Covid-19 pandemic has had an impact on limiting social contacts in almost all aspects of life. This is because the spread of the virus that causes Covid-19 (corona virus) can be transmitted through direct physical contact. So that this condition does not allow the implementation of face-to-face learning in all educational institutions, including early childhood education institutions as well as elementary, junior high, high school, and college. Therefore, the policy has been set by the government of the Republic of Indonesia since the beginning of 2020. The learning system that was originally carried out face-to-face is now no longer able to be implemented. So that face-to-face learning activities are transferred to an online learning system. In fact, in teaching and learning activities the teacher has a function as a director and supervisor of the learning process of students. This is intended to support the effectiveness of student learning where teachers can carry out direct instructions and supervision both verbally and non-verbally. So, it is hoped that students can more easily understand teacher instructions, and in the end aspects of development in children become more optimal (Follari, 2015).

Face-to-face learning is needed in learning activities, especially at the early childhood stage. Early childhood development is an important stage because at this time children begin to be sensitive to receive various kinds of stimuli from outside the child (Hapsari, 2016). So that the child is a student who actively explores the world with peers and composes memory about the environment as knowledge. So that children are more busy learning about the natural environment and the social world. Many educators and psychologists argue that early childhood and elementary school children best learn through active teaching methods, direct teaching methods such as games and drama. Giving proper stimulation in early childhood is an important thing to optimize aspects of development in children. Changes in the online learning system certainly have an impact on the learning development of students, including students from an early age.

Wulandari & Purwanta (2020) revealed the results of research on 46 kindergarten teachers in the Surakarta area. The results of his research stated that the online learning system had an impact on the decline in all aspects of early childhood development. The decline in achievement in aspects of early childhood development is due to ineffective learning activities. Parents should be able to play an active role in motivating and assisting children in carrying out learning activities at home. One effort that can be done is to foster a sense of responsibility in children. Responsible behavior is important to teach children from an early age. This is because by having a responsible attitude the child will grow into a person who can be trusted, respected, appreciated, and liked by others. In addition, by being responsible, children will tend to develop a courageous attitude to admit mistakes made and be willing to change with better actions which are the key to success, children are also able to complete tasks well, act more carefully with careful planning and can become a person who stronger and tougher to face the problems that must be solved.

Downshen & Pandeley (2008) stated that children who have a sense of responsibility or self-responsibility will have success in the future. In line with this statement, responsibility is defined as an obligation to do something or behave in a certain way, and is one of the assets in cultural education and national character that must be instilled in children from an early age (Hartari, 2015). From the statements of the experts above, it can be concluded that developing a sense of responsibility in children is important for the success of children in the future. One of the behavior modifications that can be done by parents to develop a sense of responsibility in early childhood when learning online at home is to use the token economic technique.

Erford (2016) argues that the token economy technique is a form of positive reinforcement where tokens will be given to individuals quickly after the desired behavior appears. According to Martin & Joseph (2015), economic tokens have two benefits, namely that they can be given immediately after the desired behavior appears, and exchanged at a later time to get supporting reinforcement. Thus, token can be used as bridges for long delays between the target response and the supporting reinforcer, especially when the reinforcer is difficult or cannot be administered directly following the behavior (Schaefer &

Martin 1969). Furthermore, token paired with many supporting reinforcers can become generalized conditioned reinforcers which therefore no longer depend on certain motivational operations to derive their power. This makes it easier to provide consistent and effective reinforcers when dealing with a group of individuals who clearly differ in their levels of motivation from one another.

Token economy techniques are designed to increase desired behavior and reduce undesired behavior with the use of tokens. After some tokens are collected, they can be exchanged for prizes (reinforce) according to the number of tokens obtained (Hernandez & Reitman, D, 2014); (Lessing & Renee, 2015). Before the pandemic, the same research was carried out by Pujiati & Dahlan (2017) who stated that behavior modification using token economy techniques was effective in increasing responsibility for children. This research was conducted on 42 students from 2 educational institutions, which were carried out in a school environment. Similar research needs to be done in a home environment setting. This is because during the pandemic all children's learning activities are carried out online at their respective homes. In addition, the token economy technique is a behavior modification technique that is quite simple and can be done easily at home.

Based on the explanation above, the researcher is interested in conducting a study with the title "The Effectiveness of Behavior Modification through Economy Token Techniques to Increase Responsibility in Early Childhood". This study aims to examine the effectiveness of token economy behavior modification techniques in increasing responsible behavior in early childhood.

# Literature Review

#### Responsible Behavior

According to the Ministry of National Education (2010), responsibility is the attitude and behavior of a person to carry out his duties and obligations, which they should do, towards themself, society, the environment (nature, social and culture), the state, then The Almighty God. Meanwhile, according to (Cambridge, 2021), responsibility is something that is a duty or obligation to be handled. Another opinion, by Michael Josephson in the Josephson Institute of Ethics (2002) states that there are six pillars of ethical human character, namely trustworthiness, respect, responsibility, fairness, caring, and citizenship. In this discussion, we will specifically discuss responsible behavior. Josephson explains that being responsible is being in charge of one's own choices and life. So, it can be understood that responsibility is a behavior that reflects the fulfillment of duties and obligations for choices and living alone.

Furthermore, Josephson (2002) suggests that ethical people demonstrate responsibility with accountability, the pursuit of excellence, and restraint. Basically, humans demonstrate the ability to respond to expectations. In the aspect of accountability, responsible individuals can consider the possible consequences of their behavior instead of blaming others, such individuals will become leaders by setting an example. Individuals who pursue excellence can be observed from perseverance, persistence, and continuous improvement so that others rely on them in terms of knowledge, ability, or willingness to do tasks safely and effectively because individuals with this aspect tend to be careful, hardworking, and never give up. In the aspect of self-restraint, responsible individuals are willing to postpone gratification for a better future because the individual is aware of his own capacity as it is.

Furthermore, according to Salusky (2014) people who have developed responsibility show behavior that always fulfills their duties and obligations without having to be encouraged from anywhere. Aspects of responsibility according to Josephson (2013) there are 12, including: dare to bear the consequences, practice self-control, make plans and make goals, choose a positive attitude, perform obligations, independent, strive for perfection, be proactive, be diligent, be considerate, set a good example and have moral autonomy. The Ministry of National Education (2012) states that in early childhood education the values that are considered very important to be recognized and applied in character education are the values of responsibility. Another opinion from Lickona (2013) explains that the values of responsibility

are needed to: (1) Develop a healthy spirit; (2) Concern for intrapersonal relationships; (3) Able to be part of a humanist and democratic society; and (4) A fair and peaceful world. Responsibility is an aspect of character education that forms the basis of a school foundation that not only allows, but requires teachers to provide character education to build human beings who are ethically knowledgeable and can position themselves as part of a responsible society.

## Token Economy Technique

Token economy is a form of behavior change designed to increase preferred behavior and reduce disliked behavior by using tokens or coins (Ayllon, 1999). Meanwhile, according to Erford (2016), the token economy technique is a form of positive reinforcement where tokens will be given to individuals quickly after the desired behavior appears. An individual will receive a token immediately after displaying a favorable behavior, otherwise will be deducted a token if displaying an unwelcome behavior. These tokens are collected and then within a certain time can be exchanged for prizes or something that has meaning. In short, token economy is a system of reinforcement for behavior that is managed and changed, a person must be rewarded/given reinforcement to increase or decrease the desired behavior (Garry, 1999). The main goal of the token economy is to increase favorable (good) behavior and reduce disliked behavior (Miltenberger, 2001). According to (Martin & Joseph, 2015) token economic has two benefits, namely that they can be given immediately after the desired behavior appears, and exchanged at a later time to get supporting reinforcement. Thus, tokens can be used as bridges for long delays between the target response and the supporting reinforcer, especially when the reinforcer is difficult or cannot be administered directly following the behavior (Schaefer & Martin, 1969).

According to Fahrudin (2012), six elements need to be present in the implementation of behavior modification using the Token Economy technique, namely;

## 1. Tokens (Coins)

Anything that can be seen and counted can be used as tokens. Tokens should be attractive, easy to implement, and hard to imitate. Generally, some items can be used as tokens such as poker money, stickers, tally points, or play money. Tokens must have no value to them. They had to collect tokens and then exchange them for something of value.

#### 2. Clarity of Defining Targeted Behavior

Individuals involved in the token economy should know clearly what they have to do to earn tokens. Liked and disliked behaviors should be explained in a simple way at the beginning and include specifics. The number of tokens to be awarded or lost for each behavior must also be specific.

## 3. Back-up Reinforcers

Back-up reinforcers are meaningful objects, privileges, or additional activities that can be provided to clients in exchange for their earned tokens. Individuals will be motivated to earn tokens if they know the form of future rewards represented by the tokens they receive. A planned token economy will be good if the use of these reinforcing motifs is chosen by the individual compared to those chosen by social workers or orphanages.

# 4. Token Exchange System

Clients need to know there is a suitable place and time mechanism for them to exchange tokens with these reinforcing motifs. The value of a token of each reinforcing motif is determined by the value of money, demand, or the value of the therapy performed. For example, if the reinforcing motif is expensive or very attractive then the token value should be higher. If the token value is set too low, then individuals are less motivated to earn tokens. And conversely, if the value is set too high, then the individual will feel afraid or doubtful in getting tokens.

# 5. A Data Recording System

Before treatment begins, information (baseline data) on the current behavior of the individual needs to be collected. Behavior changes are then recorded in the daily datasheet. This information is used to measure individual progress and the effectiveness of the token economy. Information regarding the exchange of tokens also needs to be recorded.

# 6. Implementation of Token Economy Consistency by Social Workers

Social worker responsibilities and the provisions of the token economy must be explained in a written manual. Social workers or officers also need to be evaluated at a certain time and allowed to ask questions or have an opinion. In fact, tokens are often given out and in large quantities, but the individual learns for the desired behavior, gradually the chances of getting the tokens to diminish gradually. The number and frequency of token distributions are called a reinforcement schedule.

# **Methods**

The study was conducted on a 5-year-old child in the Seabin Village, Pasuruan City and lasted for 12 days. This study uses a single-case experimental design with a quantitative approach. Single-case experimental design is an evaluation method that can be used to rigorously test the success of an intervention or treatment for a particular case, which may be a person, school or community, and to provide evidence about the effectiveness of an intervention using a relatively small sample (Ryan & Filene, J, 2012). Data collection techniques were carried out through observation, interviews, and documentation. The benchmark for success in this study is the emergence of responsible child behavior which is categorized into 12 aspects of responsibility according to Josephson's theory. Test the validity of this study using expert judgment. Behavior modification techniques carried out in this study used withdrawal/reversal designs of the A-B-A-B type. The design of this study aims to ensure that the changes that occur in the dependent variable are determined by the introduction and termination of the independent variable. In other words, the evidence of the effectiveness of an intervention is determined or dependent on the occurrence of a 'reversal of during the phase of discontinuation of treatment or intervention, as expected by the researcher.

So in the A-B-A-B design there are four measurement phases (Ryan & Filene, 2012): baseline phase (A), intervention phase (B), baseline phase (cessation of intervention) (A), intervention phase (reintroduction of intervention) (B), Target behavior was measured repeatedly (3 times) during the baseline before the intervention was introduced or administered (A); behavior baseline pattern, the intervention was introduced or given and the target behavior that appeared in this phase was also measured repeatedly (3 times, B); in the next phase, the intervention was discontinued but continued measurement (3 times) of the target behavior (A) with the expectation of a reversal of the target behavior to the baseline; and as the last phase, the intervention is introduced or given back and measurements are repeated (3 times) with the expectation that the effects of the treatment that occurred in the previous phase will reappear (B).

Responsibility behavior scores in early childhood were obtained from 12 aspects of responsibility proposed by Josephson (2002). **Table 1.** presents the responsible behavior measurement. The observer gave a score 1 when the behavior was not appeared at all, score 2 when the behavior appeared with compulsion, score 3 when behavior appeared because was told but done happily, score 4 when behavior appeared once, and score 5 when behavior appears more than once.

Table 1. Demographic Variable

No.	Aspect	Indicator	Item
1.	Dare to bear the consequences	Willing to overcome the consequences of problems made by oneself	The child is able to tidy up their own toys The child is willing to put things that have been used in their original places
2.	Practice self-control	Trying to have complete control over myself	The child is able to hold back anger when being bullied by a sibling The child is able to refrain from playing with his cellphone The child is able to resist the urge to buy snacks over and over
3.	Plan and set goals	Can organize planning for own activities	Able to divide time between playing and studying Angry at not being given a cellphone
4.	Chooses a positive attitude	Can show commendable behavior	The child is enthusiastic about doing school
5.	Perform obligations	Able to complete obligations when they are away at home	Doing school assignments without being asked The child does not refuse when their mother asks for help
6.	Independent	Able to meet their own needs	Go to the Koran alone, without being escorted The child can eat alone and bathe by themselves
7.	Strive for perfection	Try to do their best	The child does their homework given by the teacher until finished The child tries not to spill his food or drink
8.	Be proactive	Able to take initiative	The child is getting used to brushing his own teeth without being asked by his mother The child refuses to do things directed by researcher
9.	Be diligent	Able to try wholeheartedly	The child begins to be serious and active when carrying out online learning
10.	Be considerate	Able to understand good and bad behavior	The child wants to admit their mistakes The child cries when reminded of their mistakes
11.	Set a good example	Able to show commendable behavior towards others	The child wants to share games with friends The child wants to share food with friends
12.	Have moral autonomy	Awareness of obligations that must be carried out	The child wants to listen to advice given by parents The child is reluctant to listen to advice from parents

Data processing is carried out by calculating the mean for each aspect in each conditioning stage. Mean is calculated by the following formula ( $Mean = \frac{Total \, number \, of \, data}{Many \, data}$ ). Furthermore, after the data was obtained, the researcher made a data visualization. According to Tableau (2020), data visualization is a graphical or visual display of information and data. In other words, data visualization turns data sets into things that are simpler to display. By using these visual elements, readers will more easily understand outliers and patterns in data. The main approach to data analysis in single-case experimental design research is visual analysis. Single-case experimental design research results are usually presented in the form of a time-series graph. Measures on the horizontal axis usually use real-time units, such as days, weeks, and so on. The actual chronology of the intervals between sessions of this kind can help researchers to evaluate the pattern of consistency between the same phases and the lag time of the emergence (change) of the response after the intervention is given. The phase change or intervention delivery is usually indicated by a vertical line (Krasny-Pacini & Evans, 2018).

According to Alqraini (2017), there are at least six advantages of using visual analysis along with presenting the results in graphic form: (1) plotting - the results of each behavior measurement on the diagram that are carried out immediately after the observation phase allows researchers to evaluate participants' performance on an ongoing basis through visual recordings; (2) the presentation of data in graphs allows researchers to observe a variety of interesting behavior variations; (3) diagrams help researchers find appropriate statistical analyzes to examine changes in behavior that occur; visual analysis of graphic images can be done in a short time and makes it easier for researchers to draw conclusions; in addition, visual analysis is also independent of statistical assumptions; (4) visual analysis is seen as a conservative method in the sense of ensuring care is taken to determine the significance of behavioral changes; changes in behavior are considered statistically significant because they are plotted on a graph that shows the range, variability, trend, and the presence or absence of overlap of the data obtained; (5) visual analysis is seen as effective in showing changes in behavior; and (6) visual analysis also provides an effective source of feedback. The most common types of graphs used are line graphs.

## **Results and Discussion**

There are several behaviors that need to be changed and maintained in responsible behavior research through this token economy. The behavior is taken based on 12 aspects of responsibility (Josephson et. al., 2003). Among the behaviors that want to be changed are the habit of children who always refuse to tidy up their toys, uncontrolled anger emotions, the habit of playing cellphones for a long time, refusing to study, unable to divide time between playing and studying, not wanting to finish school assignments, refusing requests for help from parents, are reluctant to brush their teeth, do not want to admit mistakes, are reluctant to share toys with friends, do not want to listen to parents' advice, do not want to try to recite the Al-Quran smoothly. While there is one behavior that wants to be maintained, namely the behavior of children in going to the mosque independently.

Based on the research conducted, the child's responsibility score at each stage is present in **Figure 1**. Visual analysis of the data obtained as presented in the diagram above shows that there is evidence or evidence that there is a relationship between the dependent variable and the independent variable. That is, there is evidence or evidence that the intervention is effective. According to Ryan and Filene (2012), to obtain evidence of a strong causal relationship between the dependent variable and the independent variable, these two baselines (A) and intervention (B) phases must be repeated and visually analyzed with the same results many times. In line with this, based on the diagram of the research results, there are repeated scores between the baseline 1 (A) and baseline 2 (A) stages. The child responsibility score is 1.25 to 1.83. This score indicates the low level of responsible behavior shown by the subject. While at the intervention stage 1 (B) and intervention 2 (B). The repeated score was 4.83 to 5. The score indicated a high intensity on the subject in showing responsible behavior.

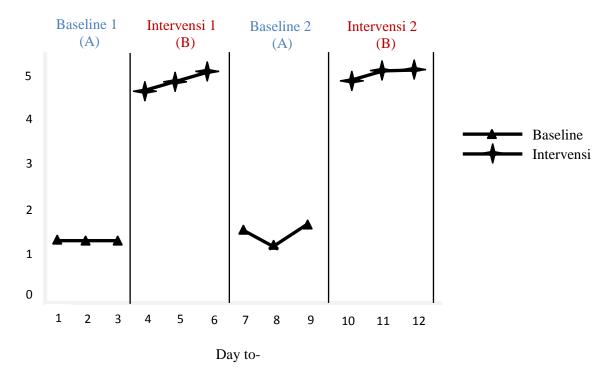


Figure 1. The child's responsibility score at each stage

The high intensity of responsible behavior in children can foster values that are needed by children in their lives, such as: (1) Developing a healthy soul; (2) Concern for intrapersonal relationships; (3) Being able to be part of a humanist and democratic society; and (4) a just and peaceful world (Lickona, 2013). Research by Salusky (2014) also states that people who have developed responsibility show an attitude that always fulfills their duties and obligations without having to be encouraged from anywhere. So, developing responsible behavior in children from an early age is very important to do. On the other hand, an attitude of responsibility that is not instilled in children from an early age can result in the survival of children's lives in the future. As a result of being irresponsible, a person can be ostracized by his social environment, not appreciated by the surrounding community, the environment becomes dirty and uncomfortable because each individual citizen is not responsible for environmental cleanliness, crime often occurs because fellow citizens do not take care of each other, are not considered as residents in the neighborhood.

According to the Ministry of Education and Culture (2016), parents can help develop an attitude of responsibility in children by carrying out various mentoring activities at home, one of which is storytelling. By telling stories, parents can invite children to discuss with their children the values held by these figures. And can invite children to draw conclusions about behaviors that can and should not be imitated. Second, play. When playing with parents, it can lead children to learn to draw conclusions about the behavior that can and should not be imitated. Third, direct practice. In this way, parents can provide some simple tasks that are adapted to the child's age, let children make their own decisions, get children to be on time, train children to complete tasks, support children through difficult times, get used to children accepting consequences and learning from failure, and getting children to avoid looking for a scapegoat/blaming other for the mistakes they have made

# Conclusion

Based on the results of the research that has been done, after participating in the behavior modification program through the token economy technique, there is a difference between the baseline stage and the intervention stage. At baseline 1 (A) and baseline 2 (A) child responsibility scores are between 1.25 and

1.83. This score indicates the low level of responsible behavior shown by the subject. While at the intervention stage 1 (B) and intervention 2 (B) the repeated scores were at 4.83 to 5. The score indicated a high intensity of the subject in showing responsible behavior. So, it can be concluded that behavior modification through the token economy is effective for increasing responsible behavior in early childhood.

This research is expected to be a consideration in making efforts to improve the responsible behavior of early childhood in the home environment. The researcher is also aware of the shortcomings in the implementation of this research. Furthermore, researchers provide suggestions for consideration for improvement in further research. Further research is recommended to increase the duration of time at each stage of token economic conditioning in order to increase the acquisition of field data. In addition, research using several subjects is also recommended so that it can be considered and comparison material so that the results of the research can be more objective and complex.

# References

- Alqraini, F. (2017). Single-case experimental research: A methodology for establishing evidence-based practice in special education. *International Journal for Special Education*, 32(3), 551-566.
- Ananda, R. (2017). Implementasi nilai-nilai moral dan agama pada anak usia dini. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 1(1), 19-31. https://doi.org/10.31004/obsesi.v1i1.28
- Ayllon, T. (1999). How to use token economy and point systems. (2nd ed.). Pro-Ed.
- Aziri, B. (2011). Job satisfaction: A literature review. Management Research and Practice, 3(4), 77-88.
- Cahyati, N. (2018). Penggunaan media audio visual terhadap karakter tanggung jawab anak usia 5-6 tahun. *Jurnal Golden Age Hamzanwadi University*, 2(2), 75-84.
- Cambridge. (2021, May 12). *Responsibility*. https://dictionary.cambridge.org/dictionary/english/responsibility.
- Dowshen, S. M., & Pendley, J. S. (2008). *Disciplining your child*. http://kidshealth.org/parent/emotions/behavior/discipline.html
- Eko, S. (2020, May 3). *Memperkenalkan kembali metode eksperimen dalam kajian komunikasi*. https://ojs.uajy.ac.id/index.php/jik/article/view/239/328.
- Erford, Bradley T., (2016), 40 Teknik yang harus diketahui setiap konselor, terjemah oleh Helly P. Soetjipto & Sri Mulyantini Soetjipto, Pustaka Pelajar.
- Fahrudin, A. (2012). Teknik ekonomi token dalam pengubahan perilaku klien. *Sosio Informa. https://ejournal.kemsos.go.id/index.php/Sosioinforma/article/view/80/48*.
- Follari, L. (2015). Foundations and best practices in early childhood education: History, theories, and approaches to learning. Pearson Higher Education AU.
- Garry, M. (1999). Behavior modification: What it is and how to do it. (6th ed.). Prentice-Hall.
- Hapsari, I. I. (2016). Psikologi perkembangan anak. Indeks.
- Hartari, F. (2015). Meningkatkan disiplin anak melalui permainan memimpin bergilir pada anak kelompok a di RA anak sholeh colomadu karanganyar tahun pelajaran 2013 / 2014, Universitas Muhammadiyah Surakarta.
- Hernandez, M., & Reitman, D. (2014). *Token economy in the classroom* http://www.academia.edu/2466631/Token\_EconomyHarl\_in\_the\_Classroom.
- Josephson, M. (2002). Making ethical decision. Josephson Institute of Ethics.

- Josephson, Michael S., Peter, Val J., Dowd, Tom. (2003). *Menumbuhkan 6 sikap remaja idaman:Panduan bagi orangtua*. Kaifa.
- Josephson, M. (2013). Josephson institute of ethics and character counts www.josephsoninstitute.org
- Kemendiknas. (2012). *Pedoman pendidikan karakter pada pendidikan anak usia dini*. Kementrian Pendidikan Nasional.
- Kemendiknas. (2010). *Pengembangan Pendidikan Budaya dan Karakter Bangsa*. Jakarta: Kementeria Pendidikan Nasional Badan Penelitian dan Pengembangan Pusat Kurikulum.
- Krasny-Pacini A, Evans J. (2018). Single-case experimental designs to assess intervention effectiveness in rehabilitation: A practical guide. *Ann Phys Rehabil Med*, 61(3), 164-179. 10.1016/j.rehab.2017.12.002.
- Kurniati, E. A. (2021). Analisis peran orang tua dalam mendampingi anak di masa. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 5(1), 241-256. https://doi.org/10.31004/obsesi.v5i1.541.
- Latifa, L., & Bariyyah, K. (2020). Efektivitas konseling kelompok teknik token ekonomi untuk meningkatkan sikap tanggung jawab akademik mahasiswa. *Jurnal Inspirasi Pendidikan*, 10(1), 51-56.
- Lessing, A. C., & R. W. (2015). The potential of behaviour management strategies to support learners with attention deficit hyperactivity disorder in the classroom. *Journal Education as Change*, 19(1), 54-77. https://doi.org/10.1080/16823206.2015.1024146
- Lickona, T. (2013). Pendidikan karakter: Panduan lengkap mendidik siswa menjadi pintar dan baik. Nusa Media.
- Schaefer, Halmuth H. & Martin, Patrick L. (1969). Behavioral therapy. McGraw-Hill.
- Martin, G., & Joseph, P. (2015). Modifikasi perilaku: Makna dan penerapannya. Pustaka Pelajar.
- Miller, M. T. (2019). Character education: Managing responsibilities. Chelsea House.
- Miltenberger, R. G. (2001). *Behavior modification: Principles and procedures*. (2nd ed.). Wadsworth/Thomson Learning.
- Munir, A. (2010). Pendidikan karakter: Membangun karakter anak sejak dari rumah. PT Pustaka Insan Madani.
- Noor, M. (2019). Psikologi perkembangan PAUD. CV. Loka Aksara.
- Och, E., & Carolina Izquierdo. (2009). Responsibility in childhood: Three developmental trajectories. *Journal of the Society for Psychological Anthropology*, 37(4), 391-413.
- Pujiati, N. I., & Dahlan, T. H. (2017). Modifikasi perilaku melalui teknik token economy untuk meningkatkan perilaku tanggung jawab anak usia dini, Universitas Muhammadiyah Tasikmalaya.
- Ryan, K., & Filene, J. (2012). Selecting appropriate single-case designs for evaluating MIECHV funden home visiting programs. *Single-case Design Brief*, March, 1-9.
- Salusky, i. e. (2014). How adolescents develop responsibility: What can be learned from youth programs. *Journal of Adolescent Research*, 24(3), 417-430.
- Santrock, J. W. (2011). Life span development. (13 th.). Erlangga. .
- Setiawan, Andre Hody (2020) Visualisasi dan Analisa Data Gross Domestic Product Negara-Negara Anggota G20 Tahun 2010-2018 Menggunakan Metode Visual Data Mining, Universitas Multimedia Nusantara.
- Setyowati, Y. (2012). Pola komunikasi keluarga dan perkembangan emosi anak (studi kasus penerapan pola komunikasi keluarga dan pengaruhnya terhadap perkembangan emosi anak pada keluarga http://jurnal.uajy.ac.id/jik/files/.
- Supratiknya, A. (2020). Desain eksperimental kasus tunggal. Worksop dies fakultas psikologi.

- Utami, F. T., Mulyono, H., & Wahyuning, S. (2019). Penanaman tanggung jawab melalui metode token economy pada anak usia 5-6 tahun. *Jurnal Kumara Cendekia*, 7(2).
- Wulandari, H., & Purwanta, E. (2020). Pencapaian perkembangan anak usia dini di taman kanak-kanak selama pembelajaran daring di masa pandemi covid-19. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 5(1), 452. https://doi.org/10.31004/obsesi.v5i1.626