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# The Effect of Remote Learning, Family Condition, and Mental Resilience on Depression Symptoms of Early Childhood

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#### Abstract

The Covid-19 pandemic that attacked Indonesia and other countries of the world has changed human' way of life. The Covid-19 pandemic greatly influences the field of education, where all learning activities turn to online mode, which results in students' depression symptoms due to their unpreparedness. This study aims to analyze the impact of remote learning, family conditions, and mental resilience on depression symptoms in early childhood. This study used ex-post facto research (measurement after the event) because the research data for both independent variables and dependent variables occurred before this study was held. The study population was 80 children. The data collection method used was a questionnaire developed from the indicators of each variable. The analysis method used multiple regression. The data analysis used correlation and regression techniques, with regression analysis of three predictors and one criterion. The research findings showed that depression symptoms of early childhood are jointly influenced by remote learning, family condition, and mental resilience. However, two variables that do not affect the depression symptoms of early childhood education give more attention to children.

#### **Keywords:**

Child Depression; Mental Resilience; Family Condition; Remote Learning.

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#### **1- Introduction**

The Covid-19 pandemic suffered by Indonesia and other countries of the world had a considerable impact on changing human life [1, 2]. All activities involving large crowds should be temporarily suspended or even stopped. The existence of the Covid-19 pandemic also greatly influences the field of education, where all learning activities must be carried out online and activities such as seminars, workshops, study tours, and other activities must be postponed and even eliminated [3–6]. Changing the learning process from face-to-face to online is one of the best solutions to keep learners from gaining the right to learn. Online learning has resulted in many impacts on learning and has provided learners with opportunities to share opinions and learn more independently without a more flexible time limit and space [7–9]. It requires the ability of educators and learners because it helps to make the learning should also pay attention to the students' financial condition, facilities, and infrastructure conditions of the schools, that support them [11]. The existence of online learning due to the Covid-19 pandemic has not only had a positive but also a negative impact.

The negative effects of information and technological use in the learning process cannot be felt by all students because of a lack of socialization [12]. Many children do not do online learning but do activities other than learning, such as

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playing games, social media, and watching YouTube channels and other activities that indicate addiction to "*gawe*" [13– 15]. Online learning can also interfere with social and emotional development, lack of social interaction, and harm to health and growth [16, 17]. One of the health problems experienced by children is depression symptoms. It is supported by the research which states that the existence of online learning causes an increase in students' excessive stress symptoms [18, 19]. Some children are diagnosed with serious depressive symptoms [20, 21]. Previous data indicates that about one-sixth of all students are depressed, highlighting the need for psychological support services [22]. This condition is also experienced by preschool children, it cannot be denied that children's development aspects will be greatly hampered if children experience social-emotional problems [23].

Currently, many early childhood development has not received proper treatment related to social-emotional problems and depression [20, 24]. If left unchecked, it will harm the child's development. To overcome the above problem, the appropriate solution is needed to overcome this problem by identifying some factors affecting the early childhood depression symptoms.

The previous explanation stated that shifting from face-to-face to an online mode of learning caused unprepared students to experience depression symptoms. Online learning results in an impact on children's psychological state. Online learning is one of the distance learning solutions used amid unexpected school closures [25–27]. Much of early childhood learning has changed from direct learning to online learning [12]. Remote learning can be conducted synchronously or asynchronously, the learning process in this way still provides an opportunity for students and teachers to stay in touch and engage with learning content even though they are studying at home [28]. The change in the learning process has an impact on students, educators, and parents.

Several studies have found that remote learning changes the learning routines, peers and teacher bonding, and children's mental health [29]. It also cause some difficulties for the students to get and learn the learning material easily [30]. The parents' awareness is considered as the factor contributing to the problems impacted by remote learning in this context. Parents pay little attention to the child's learning circumstances and provide less attractive environments. Besides the insignificant teacher's role that leads to uninteresting learning process [31]. Remote learning disrupts the lives of parents and creates anxiety [32]. Inspite of those problems, the existence of remote learning has positive impacts in the terms of independence and flexibility of learning. However, the independence and flexibility cannot decrease the level of anxiety among parents, motivate the students and minimise the depression symptoms of children who are not ready to accept the new learning process.

In dealing with the depression symptoms, the family condition gives great influence to the depression symptoms of the children. As already described before that the covid-19 pandemic gave excessive anxiety to parents and made parents' unpreparedness in the dealing with learning process which eventually will impact the children's mental health. In other words, the learning condition will contribute significant effect to the child's mental health. The family condition is related to the formation of the child's identity [33, 34]. Having a positive family condition will have a positive impact on children's social problems [35, 36].

Besides poor quality of communication in the family, low parents' involvement and frequent conflict will badly impact children [37]. It implies that the family condition will have a significant influence on the development of the children. This condition is supported by the results of research that states that the family environment affects psychosocial development of the children aged 4-6 years [38]. Other research states that the family environment and the parents' role in early childhood development are very influential, especially in the social-emotional development of early childhood [39]. Research states that the family environment has a significant effect on the students' moral development. In other words, the better the family environment the better the moral development of students will be [40].

The child's mental resilience is considered as the other factor contributing to his/her psychological development. Mental resistance is a dynamic psychiatric condition that contains the ability to develop abilities in any given circumstance, whether confronted with distractions and threats from outside the state itself [41, 42]. Mental resilience is shaped by a child's positive personality such as optimism and good problem-solving ability [43]. A person with good mental resilience would take the situation as challenging [44]. One's mental resilience is closely related to the condition of the family [45]. Steps are needed to increase the elements of resilience that protect individuals from psychological pressure [46]. Mental resilience is useful to cultivate persistence, and tenacity, and not easily give up on circumstances. Based on these descriptions, it can be said that the existence of mental resilience will make children able to cultivate persistence and tenacity in the learning process, of course, this condition cannot just grow by itself. It needs support from the entire parties involved. But early childhood requires mental resilience which needs support from parents by spending more time with the family.

The descriptions related to depression in early childhood and some of its effects provide a clear picture that the presence of covid-19 has an impact on depression symptoms of the child as a result of the change in learning from direct learning to distance learning. In addition, the existence of Covid-19 will also affect the readiness of parents and changes in family environment patterns that have an impact on children's daily lives. To see how much influences the previously

described conditions such as remote learning, family condition and mental resilience to the depression symptoms of children, it is necessary to conduct a study aimed at analyzing the influences of remote learning, family condition and mental resilience to the symptoms of early childhood depression. This study has different from other studies, where this study will focus more on depression symptoms in early childhood and the factors that influence them. The factors studied are remote learning, family condition and mental resilience. By knowing how the influences of those three variables can give an idea of how it affects children's depression so that educators or parents can provide a solution or way out to reduce on depression of children.

#### 2- Research Methodology

Research design can be defined as a strategy to configure the research steps to be obtained valid data according to variable characteristics and research goals. This study used ex-post facto research (measurement after the event) because the research data both independent variables and dependent variables occurred before this study was held. The use of an ex-post facto approach is based on two reasons: (1) This study is meant to test whether that's happening in the subject research, and (2) The study aims to investigate whether one or more conditions that have already occurred cause behavioral differences in the subject research. Based on his approach, includes a quantitative approach with correlational causal design because this study tries to identify causal relationships that are due to their weight points on variables that correlate. In general, the whole activity of this study is designed in stages. Starting with a preliminary study step in order to get a preliminary overview of the subject. Then efforts were made to identify the issues under study. To support the preparation of research, the collection of various concepts and theories through literature study and direct observation in the field are done firstly. The next step is to design a questionnaire that will be used to capture data from each respondent. To avoid natural technical errors, as well as completeness in the calculation, the validity and reliability tests are carried out. Then there is an effort to collect preliminary data that is relevant to the problems that are examined. The various data obtained are then identified to sort through truly useful data. The various concepts and theories were collected and then identified the overall variables studied, both independent variables and dependent variables. Below is the illustration of the design of the study that includes the use of double paradigms with 3 independent variables and 1 dependent variable [47]. The relationship between variables can be seen in the constellation presented in Figure 1.

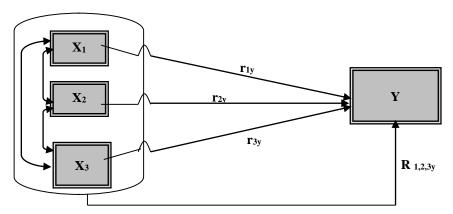


Figure 1. Constellation of Research Variables

The trial was conducted at the kindergarten in Pelangi Mataram City which consists of 4 classes, namely: 2 Kindergarten A classes and 2 Kindergarten B classes with 80 students all togehter. In this study, the selected class to be the research sample is kindergarten A. Before the two classes were selected, an equivalent test was conducted using *one Way-ANOVA* analysis using *SPSS 26.0 for Windows* application. After a population conducting equality test of 80 people, random sampling techniques is the performed to determine the class of samples used. Of the 80 population, Kindergarten A was obtained as a sample of 42 people, this is because students in Kindergarten A are still at a stage of development that is highly dependent on teachers and parents so it is considered necessary to know how the level of child depression due to covid-19. In this study, 4 data are sought according to the variables to be measured, namely remote learning, family condition, child resilience and child's depression symptoms. The data sought were collected with questionnaires. The research questionnaire was used as a guide in exploring student answers. The questionnaire was filled in by the researcher based on the information obtained through communication with the respondent. The questionnaire used in this study is presented in Appendix I.

Questionnaire is delivered to measure remote learning, family condition, mental resilience and depression symptoms, in the form of a Likert model assessment, where each item is equipped with options: very appropriate (SS), appropriate (S), not appropriate (TS), very not appropriate (STS). A questionnaire is developed from the dimensions of each variable measured. The remote learning variable consists of 2 dimensions developed into 4 indicators from these 4 indicators will be developed into 15 statements. The complete remote learning grid is described in Table 1. In testing the validity of the remote learning questionnaire instrument, it is necessary to test the validity of the instrument item, the validity of the

instrument content, and reliability. Testing the validity of the contents of the questionnaire instrument used the CVR formula. CVR results from the calculation of each item of the instrument is 1 and the total number of CVR for all remote learning instrument items obtained by 15 and can be declared valid based on the provisions of validation of each item of the instrument in the CVR formula. Testing the validity of the questionnaire content with the help of SPPS obtained a result of 0.75 and this value is classified as very strong. Reliability testing questionnaire with help of SPSS analysis results obtained with the value of *Cronbach's Alpha* with a value of 0.83 which means that the questionnaire developed is very reliable.

	Table 1. Indicate	or of Remote Learning
No.	Dimensions	Indicator
1	Implementation of learning	Learning with Synchrony
1	Implementation of learning	Learning with asynchronous
2	T	Tools / media used in the learning process
2	Learning facilities	The Internet supports the learning process

The family condition variable consists of three dimensions developed into 8 indicators and are developed into 20 statements. The entire family condition grid is described at Table 2. In testing the validity of the family condition questionnaire instrument, it is necessary to test the validity of the instrument item, the validity of the instrument content, and reliability. Testing the validity of the contents of the questionnaire instrument used the CVR formula. CVR results from the calculation of each item of the instrument is 1 and the total CVR of all items obtained by the family condition instrument 20 can be declared valid based on the provisions of the validation of each item of the instrument in the CVR formula. Testing the validity of the contents of the questionnaire with the help of SPPS obtained a result of 0.85 and this value is classified as very strong. Reliability testing questionnaire with the help of SPSS analysis results obtained with the value of *Cronbach's Alpha* with a value of 0.87 which means that the questionnaire developed is very reliable.

No.	Dimensions	Indicator
		Giving awards
1		Giving Punishment
1	Parents' attention	Providing Guidance
		Fulfilling learning needs
2	Family atmosphere	Harmonious relationship atmosphere/situation and condition
		Compactness
3	Relations between families	Openness
		Conflict

Table 2. Indicator	• of Family	Condition
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The mental resilience variable consists of 3 dimensions developed into 9 indicators which are developed into 20 statements. The full mental resilience grid is described in Table 3. In testing the validity of the questionnaire instrument mental resilience, items content validity, instrument content, and reliability needs to be carried out. Testing the content validity of the questionnaire instrument used the CVR formula. The CVR of each item of the instrument is 1 and the total CVR of all items of the family climate instrument is 20 and can be declared valid based on the validation provisions of each item of the instrument in the CVR formula. Testing the validity of the questionnaire with the help of SPPS obtained results of 0.78 and this value is classified as very strong. Reliability testing with the help of SPSS analysis results obtained with the value of *Cronbach's Alpha* with a value of 0.83 which means that the questionnaire is constructed very reliably.

No.	Dimensions	Indicator
		Self - control
1	Tenacity	Be confident and self-motivated
		Empathy
		Always wanted to try
2	Not easy to give up	Not afraid of failure
		Always trying
		Not easy to give up
3	Persistence	Not easily discouraged
		Not easily influenced

## Table 3. Indicators of Child Mental Resilience

The depression symptom variable consists of 7 indicators which are developed into 15 statements. The depression symptoms grid is described in Table 4. In the questionnaire validity test, the depression symptoms need to be tested on the validity of the items of the instrument, the validity of the instrument contents, and reliability. Testing the validity of the contents of the questionnaire instrument used the CVR formula. The CVR of each item of the instrument is 1 and the total CVR of all items of the family climate instrument is 15 and can be declared valid based on the validation provisions of each item of the instrument in the CVR formula. Testing the validity of the contents of the questionnaire with the help of SPPS obtained results of 0.87 and this value is classified as very strong. Questionnaire reliability testing with the help of SPSS analysis results obtained with the value of *Cronbach's Alpha* with a value of 0.78 which means that the questionnaire is constructed very reliably.

No.	Indicators	State	ements
INO.	Indicators	Positive	Negative
1	Lonely	1	1
2	Stay away from his friends	1	1
3	Fussy or irritable	1	1
4	Always Crying	1	1
5	Difficult to communicate	2	1
6	Loss of appetite	1	1
7	Sleep disorders	1	1

Table 4. Depression Symptoms Child Indicato	Table 4.	Depression	n Symptoms	Child	Indicator
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Data analysis is the process of simplifying data in a form that is easier to understand and interpret using statistics. Based on the research objectives stated above, namely analyzing the influences of remote learning, family condition and mental resilience on depression symptoms of early childhood, the data analysis used is correlation and regression techniques with regression analysis of three predictors and one the criterium. The first predictor variable is remote learning (X1), family condition predictor variable (X2), mental resilience predictor variable (X3), and a criterion variable on depression symptoms of early childhood (Y). The steps taken in the data analysis are as follows, (1) description of the data, (2) test the prerequisites of the analysis, and (3) test the hypothesis. The collected data are then described. Descriptive analysis is done to be able to describe clearly all the variables of the study. The descriptive analysis in question as the average score (M), the highest score, the lowest score, range, and standard deviation. While the prerequisite tests performed are the normality test, linearity test, multicollinearity test, heteroskedasticity test, and autocorrelation test. For the hypothesis test using a correlation test / multiple regression with the help of SPSS 26.0 *for Windows* 

#### **3- Results and Discussion**

#### 3-1- Results

The results showed an overview of the characteristics of the distribution of scores of each variable measured, such as the average value, standard deviation, minimum score, maximum score, and range. They are presented in Table 5. After the descriptive analysis is done, the next stage is a precondition analysis for the multiple regression test. The first precondition test was the *Kolmogorov-Smirnov* normality test. The results of the analysis showed that all data came from a group of normally distributed data, this can be indicated by the Sig. value > 0,05. Where is the Sig value. for remote learning of 0.20, the value of Sig. The family condition of 0.13, Sig value. Mental resilience of 0.20 and Sig value. for depression symptoms by 0.20. After the normality test is carried out the next pre-requisite test is a variable linearity test, the analysis showed that there is a linear relationship between the variables of remote learning, family condition, mental resilience, and depression symptoms of children seen from the value of *deviation from linearity* > 0.05. See Table 6.

 Table 5. The Descriptive Analysis of Remote Learning Variables, Family Condition, Mental Resilience, and Depression

 Symptoms of Children Results

	Remote learning	Family Condition	Mental Resilience	Depression Symptoms
Mean	77.05	77.60	76.67	76.74
Std. Deviation	7.12	7.79	7.68	8.00
Range	25.00	30.00	27.00	39.00
Minimum	65.00	60.00	63.00	50.00
Maximum	90.00	90.00	90.00	89.00

			Sum of Squares	df	F	р
		(Combined)		19	1.36	0.243
X <sub>1</sub> Y	Between Groups Linearity Deviation from Linearity		694.55	1	12.67	0.00
			721.17	18	0.731	0.748
	Within Groups		1206.167	22		
		Total	2622.119 41			
X <sub>2</sub> Y		(Combined)	1492.35	17	1.87	0.079
	Between Groups	Linearity	949.37	1	20.17	0.00
	Deviation from Linearity		542.98	16	0.72	0.75
	Within Groups		1129.77	24		
	Total		2622.12	41		
		(Combined)	1772.40	20	0.85	0.64
	Between Groups	Linearity	398.71	1	5.78	0.03
$X_3Y$	Deviation from Linearity		773.693	19	0.59	0.87
	Within Groups		1449.72	21		
		Total	2622.12	41		

Table 6. Linearity summary

The next prerequisite test to be performed is the multicollinearity test, the analysis showed that the VIF value is less than 10 and the tolerance value is more than 0.01 for all variables so it can be concluded that there is no multicollinearity problem. After the multicollinearity test, the heteroscedasticity prerequisite test is continued. The analysis showed the value of GIS. >0.05 this means that there are no symptoms of heteroskedasticity in all variables analyzed. The last prerequisite test that must be met is the autocorrelation Test with Durbin-Watson, the analysis showed no autocorrelation problem seen from the value of Durbin-Watson 1.77 > from the value of DU 1.66. After all, conditions are met hypothesis testing can be continued. Hypothesis test results are presented in Tables 7 and 8.

	Model	Sum of Squares	df	Mean Square	F	Sig.
	Regression	1050.727	3	350.242	8.470	$0.000^{b}$
1	Residual	1571.392	38	41.352		
	Total	2622.119	41			

Table 8 The Decults of Coefficients Analysis

Table 6. The Results of Coefficients Analysis						
Model	Unstandardized Coefficients Standardized Coefficients		4	Sia		
widdei	В	Std. Error	Beta	ι	Sig.	
(Constant)	19.10	12.50		1.53	0.14	
Remote learning	0.27	0.18	0.24	1.55	0.13	
Family condition	0.47	0.18	0.45	2.54	0.02	
Mental Resilience	0.01	0.17	0.01	0.05	0.96	

# The results of the summary analysis showed that remote learning, family condition, and mental resilience effect of 40.1% and 59.9% are influenced by variables outside the regression equation, this condition is also supported by the results of ANOVA analysis where the results of the analysis showed the value of Sig <0.05 this means that there are a simultaneous influence of remote learning variables, family condition and mental resilience on depression symptoms of the child. Hypothesis test results also show that the first finding, based on the results of regression analysis, listed in Table 8 shows that there are no influences of remote learning on depression symptoms of children, this is indicated by the value of Sig. 0.13 > 0.05. The second finding, the results of regression analysis, listed in Table 8 shows that there is an influence of family condition on depression symptoms of the child, this is indicated by the value of Sig. 0.02 < 0.05. The third finding, the results of regression analysis, listed in Table 8 shows that there are no influences of mental resilience of the child, this is indicated by the value of Sig. 0.02 < 0.05. The third finding, the results of regression analysis, listed in Table 8 shows that there are no influences of mental resilience on depression symptoms of the child, this is indicated by the value of Sig. 0.02 < 0.05.

#### 3-2- Discussion

The findings indicate that simultaneously remote learning, family condition, and emotional resilience significantly affect the children's depression symptoms. The results of this study describes that early childhood depression symptoms will increase due to the factors of remote learning, family condition, and mental resilience. In this case, these factors are interconnected with each other, where the presence of covid-19 makes learning that should be done directly must turn into online learning or the remote learning. Remote learning is one of the distance learning solutions used during unexpected school closures [25–27]. Much early childhood learning is changed from direct learning to remote learning [12]. Remote learning is currently used both synchronously and asynchronously, the learning process in this way still provides an opportunity for students and teachers to stay in touch and engage with learning content even though they are studying at home [28]. In the process of remote learning, a good facility is needed to support the learning process.

The facilities are components that come with production products as tools of study, and buildings and sets of materials serve as useful infrastructure for the educational process. The role of utilizing facilities in teaching activities is vital, for the use of learning facilities includes all the tools that support students learning activities [48]. Especially at this time, remote learning processes urgently require such services as smartphones, laptops, or tablets that can be used to access information [49]. The existence of complete and adequate learning facilities is one of the factors in the quality of effective school performance. Based on these descriptions, it can be said that the existence of adequate facilities, will greatly affect the learning process. In addition to the facilities skills and mastery of technology are needed in remote learning. This is supported by the statement that remote learning needs the ability of educators and learners because the ability to use technology will greatly help make the learning atmosphere more conducive, so that good social interaction is formed [10]. The existence of remote learning also affects the lives of parents.

The existence of remote learning will have an impact on families who have children with strong motivation to have education especially in early childhood. The readiness of parents in remote learning will make children, especially in early childhood, able to learn comfortably. However, the unpreparedness of parents with this condition will have an impact on increasing parental stress. This statement is supported by a statement stating that as a result of the lack of readiness of parents in the face of the distance learning process, parents experience anxiety about the learning process and results of their children [50]. High parental anxiety will have an impact on children's anxiety as well, where parents who are not ready to face remote learning will certainly force children to learn the hard way which will certainly make children afraid and anxious excessively. This is following the statement of anxiety in children is still caused by the wrong direction of parenting done by parents such as parents still do the hard way, yelling, forcing, and even hitting if their children don't want to obey the will of their parents in terms of learning until their children crying [51]. This condition will certainly have a bad impact on the mental resilience of children, especially in early childhood. Children will lose their mental resilience if the family condition doesn't fortify them well, given that the support of good parents will foster good mental resilience as well. This condition is certainly reversed if the family condition doesn't support this development, especially during a pandemic where children are more with their parents than with teachers. Mental resilience of children is very important for children because good mental resilience will prevent depression symptoms in children.

The descriptions give an idea that the three factors together significantly effect on the early childhood depression symptoms. Depression in children is very often found with different symptoms [52]. Depression is defined as a disease when it interferes with a child's activities [53]. Children who experience depression have symptoms such as never feeling satisfied, feeling tired of life, always feeling hopeless, being silent for a long time and not wanting to talk, feeling sad that they are seized by fear and anxiety, consciousness becomes blurred, and their minds become mixed up, and don't recognize taboos and prohibitions [54]. Depression in children is strongly affected by the parents' circumstances [55]. This condition follows the results of studies showing that the family condition is one of the factors that greatly affect the level of depression symptoms in children. The existence of a positive family environment will have a positive impact on children's social problems [35-37]. So, it can be said that the family situation will have a significant influence on the development of the children. This condition follows the results of research that stated that the family environment affects psychosocial development in children aged 4-6 years [38]. The research stated that the family environment and the role of parents in early childhood development are very influential, especially in the social and emotional development of early childhood [39]. The research stated that the family environment has a significant effect on the moral development of students, which means that a better family environment is better for the moral development of students [40].

The findings of this study show that the existence of *remote learning* has no partial effect on this study. These results are very different from the results of existing research which states that the change in the learning process directly to distance learning certainly has an impact on learners, educators, and parents, the existence of remote learning will cause changes in learning routines, peer bonding, and teachers' and children's mental health [29]. Changes in the learning routine will affect learners and parent learners, especially parents who are unfamiliar with technology and have an outdoor pursuit of child care. Remote learning disrupts the lives of parents and creates anxiety [32]. However, in this study, the existence of *remote learning* does not affect depression symptoms in children. Some factors that make this condition incompatible with existing research; first factor is the readiness of parents to guide children in the learning

process. The readiness of parents in the learning process is growing because of the support of teachers who guide parents in how the learning process for children. In other words, good communication relationships between teachers and parents are key to building good learning. Good communication with teachers and parents also has other roles that include mentoring children, providing opportunities or trust, providing supervision so that children remain under good supervision and direction, providing motivation, directing children, and providing effective care and learning [56, 57]. The existence of a good relationship makes parents able to overtake the children in the learning process. Another thing that causes no effect from *remote learning* is that the child's learning process is carried out by other opinions sought by parents. In this case, parents find replacement teachers to accompany children in the learning process. And, other factors are the parents in the school where the study wasn't a problem regarding the facilities or the use of technology that led to a good learning process.

The results of the study showed that mental resilience doesn't affect depression symptoms in early childhood. The mental resilience of a person has an impact on the mental health of a child. Mental resilience is a dynamic psychiatric condition that contains the ability to develop abilities in any circumstances, both in the face of interference and threats from outside their circumstances [41, 42]. In this study, changes in the learning process did not have a positive impact on depression symptoms in children. Although the learning process was changed in early childhood did not experience depression symptoms this is because the children don't feel the worst in the learning process; they still feel the same way in the learning process either done face-to-face or distance learning. This certainly is not despite the roles of parents that create an atmosphere of learning that children can follow without the stress that will respond to their mental resilience. So, it could be said that the children used as the subjects of this research had the same mental resilience. A person with good mental resilience would take the situation as a challenge [44]. The mental resilience of a person is closely related to the condition of their family [45]. So, the results of the research showed that depression in early childhood is influenced jointly by remote learning, family condition, and mental resilience. However, partially, the variables that affect depression symptoms in early childhood are the condition of the family, while the variables of remote learning and mental resilience do not affect them partially. The results of this study give an idea of how the existence of a good family condition will have a good impact on the development of children, because it is in the family that a child gets his first education, and with the family, children spend more time. A good family environment, such as a good atmosphere of caring parents and good relationships between family members, will make children grow up with a good personality and avoid depression symptoms.

#### **4-** Conclusion

The research findings showed that depression symptoms of early childhood are jointly influenced by remote learning, family condition, and mental resilience. But part of the variables that affect the depression symptoms of early childhood is remote learning variables and mental resilience that do not affect partially. So, the results of the research showed that depression in early childhood is influenced jointly by remote learning, family condition, and mental resilience. However, partially variables that affect depression symptoms in early childhood are the condition of the family while the variables of remote learning and mental resilience do not affect partially. The results of this study give an idea of how the existence of a good family condition will have a good impact on the development of children, because it is in the family that a child gets his first education, and with the family, children spend more time. A good family environment, such as a good atmosphere of caring parents and good relationships between family members, will make children grow up with a good personality and avoid depression symptoms. It can be recommended to parents and parties involved in early childhood education to give more attention to children.

#### **5- Declarations**

#### 5-1- Author Contributions

Conceptualization, I.W.K and N.W.R.; methodology, I.W.W.; validation, I.W.W.; formal analysis, P.R.U.; investigation, P.R.U.; resources, N.W.R; data curation, I.W.K.; writing—original draft preparation, I.W.K.; writing—review and editing, I.W.W.; supervision, P.R.U. All authors have read and agreed to the published version of the manuscript.

#### 5-2- Data Availability Statement

The data presented in this study are available in the article.

#### 5-3- Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

#### 5-4- Institutional Review Board Statement

This study was conducted in accordance with the Declaration of Helsinki and approved by the Institutional Review Board of the University of Mataram, Mataram, Indonesia.

#### 5-5- Informed Consent Statement

Informed consent was obtained from all subjects involved in the study.

#### **5-6-** Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this manuscript. In addition, the ethical issues, including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, and redundancies have been completely observed by the authors.

#### **6-** References

- Remuzzi, A., & Remuzzi, G. (2020). COVID-19 and Italy: what next? The Lancet, 395(10231), 1225–1228. doi:10.1016/S0140-6736(20)30627-9.
- [2] Wong, G. L. H., Wong, V. W. S., Thompson, A., Jia, J., Hou, J., ..., Piratvisuth, T., & Chan, H. L. Y. (2020). Management of patients with liver derangement during the COVID-19 pandemic: an Asia-Pacific position statement. The Lancet Gastroenterology & Hepatology, 5(8), 776–787. doi:10.1016/S2468-1253(20)30190-4.
- [3] Sahu, P. (2020). Closure of Universities Due to Coronavirus Disease 2019 (COVID-19): Impact on Education and Mental Health of Students and Academic Staff. Cureus. doi:10.7759/cureus.7541.
- [4] Mishra, L., Gupta, T., & Shree, A. (2020). Online teaching-learning in higher education during lockdown period of COVID-19 pandemic. International Journal of Educational Research Open, 1, 100012. doi:10.1016/j.ijedro.2020.100012.
- [5] Oyedotun, T. D. (2020). Sudden change of pedagogy in education driven by COVID-19: Perspectives and evaluation from a developing country. Research in Globalization, 2, 100029. doi:10.1016/j.resglo.2020.100029.
- [6] Patricia Aguilera-Hermida, A. (2020). College students' use and acceptance of emergency online learning due to COVID-19. International Journal of Educational Research Open, 1, 100011. doi:10.1016/j.ijedro.2020.100011.
- [7] Hwang, G. J., Wang, S. Y., & Lai, C. L. (2021). Effects of a social regulation-based online learning framework on students' learning achievements and behaviors in mathematics. Computers and Education, 160, 104031. doi:10.1016/j.compedu.2020.104031.
- [8] Kkese, E. (2020). McGurk effect and audiovisual speech perception in students with learning disabilities exposed to online teaching during the COVID-19 pandemic. Medical Hypotheses, 144, 110233. doi:10.1016/j.mehy.2020.110233.
- [9] Lage-Cal, S., Folgueras-Díaz, M. B., Alonso-Hidalgo, M., García-Menéndez, D., & Fernández-García, F. J. (2020). Investigation of the effectiveness of online learning tools for energy performance certificates preparation. Energy Reports, 6, 609–614. doi:10.1016/j.egyr.2019.09.034.
- [10] Andel, S. A., de Vreede, T., Spector, P. E., Padmanabhan, B., Singh, V. K., & Vreede, G. J. de. (2020). Do social features help in video-centric online learning platforms? A social presence perspective. Computers in Human Behavior, 113, 106505. doi:10.1016/j.chb.2020.106505.
- [11] Rusli, R., Rahman, A., & Abdullah, H. (2020). Student perception data on online learning using heutagogy approach in the Faculty of Mathematics and Natural Sciences of Universitas Negeri Makassar, Indonesia. Data in Brief, 29, 105152. doi:10.1016/j.dib.2020.105152.
- [12] Steed, E. A., Leech, N., Phan, N., & Benzel, E. (2022). Early childhood educators' provision of remote learning during COVID-19. Early Childhood Research Quarterly, 60, 307–318. doi:10.1016/j.ecresq.2022.03.003.
- [13] Samaha, M., & Hawi, N. S. (2016). Relationships among smartphone addiction, stress, academic performance, and satisfaction with life. Computers in Human Behavior, 57, 321–325. doi:10.1016/j.chb.2015.12.045.
- [14] Liu, Q., Huang, J., & Zhou, Z. (2020). Self-expansion via smartphone and smartphone addiction tendency among adolescents: A moderated mediation model. Children and Youth Services Review, 119, 105590. doi:10.1016/j.childyouth.2020.105590.
- [15] Rahmawati, M., & Latifah, M. (2020). Gadget Usage, Mother-Child Interaction, and Social-Emotional Development among Preschool Children. Jurnal Ilmu Keluarga Dan Konsumen, 13(1), 75–86. doi:10.24156/jikk.2020.13.1.75.
- [16] Edwards, S., Skouteris, H., Rutherford, L., & Cutter-Mackenzie, A. (2013). "It's all about Ben10<sup>™</sup>": Children's play, health and sustainability decisions in the early years. Early Child Development and Care, 183(2), 280–293. doi:10.1080/03004430.2012.671816.
- [17] O'Doherty, D., Dromey, M., Lougheed, J., Hannigan, A., Last, J., & McGrath, D. (2018). Barriers and solutions to online learning in medical education - An integrative review. BMC Medical Education, 18(1). doi:10.1186/s12909-018-1240-0.

- [18] Azubuike, O. B., Adegboye, O., & Quadri, H. (2021). Who gets to learn in a pandemic? Exploring the digital divide in remote learning during the COVID-19 pandemic in Nigeria. International Journal of Educational Research Open, 2, 100022. doi:10.1016/j.ijedro.2020.100022.
- [19] Sokal, L., Trudel, L. E., & Babb, J. (2021). I've had it! Factors associated with burnout and low organizational commitment in Canadian teachers during the second wave of the COVID-19 pandemic. International Journal of Educational Research Open, 2, 100023. doi:10.1016/j.ijedro.2020.100023.
- [20] Alban Conto, C., Akseer, S., Dreesen, T., Kamei, A., Mizunoya, S., & Rigole, A. (2021). Potential effects of COVID-19 school closures on foundational skills and Country responses for mitigating learning loss. International Journal of Educational Development, 87, 102434. doi:10.1016/j.ijedudev.2021.102434.
- [21] Avanesian, G., Mizunoya, S., & Amaro, D. (2021). How many students could continue learning during COVID-19-caused school closures? Introducing a new reachability indicator for measuring equity of remote learning. International Journal of Educational Development, 84, 102421. doi:10.1016/j.ijedudev.2021.102421.
- [22] Asanov, I., Flores, F., McKenzie, D., Mensmann, M., & Schulte, M. (2021). Remote-learning, time-use, and mental health of Ecuadorian high-school students during the COVID-19 quarantine. World Development, 138, 105225. doi:10.1016/j.worlddev.2020.105225.
- [23] Oinas, S., Hotulainen, R., Koivuhovi, S., Brunila, K., & Vainikainen, M. P. (2022). Remote learning experiences of girls, boys and non-binary students. Computers and Education, 183, 104499. doi:10.1016/j.compedu.2022.104499.
- [24] Çelik, S., Tomris, G., & Tuna, D. M. (2022). The COVID-19 pandemic: The evaluation of the emergency remote parent training program based on at-home support for children with down syndrome. Children and Youth Services Review, 133, 106325. doi:10.1016/j.childyouth.2021.106325.
- [25] Azhari, B., & Fajri, I. (2021). Distance learning during the COVID-19 pandemic: School closure in Indonesia. International Journal of Mathematical Education in Science and Technology, 53(7), 1934–1954. doi:10.1080/0020739x.2021.1875072.
- [26] Camilleri, M. A., & Camilleri, A. C. (2022). Remote learning via video conferencing technologies: Implications for research and practice. Technology in Society, 68, 101881. doi:10.1016/j.techsoc.2022.101881.
- [27] Bond, M. (2020). Schools and emergency remote education during the COVID-19 pandemic: A living rapid systematic review. Asian Journal of Distance Education Bond, 15(2), 191–247. doi:10.5281/zenodo.4425683.
- [28] Mukuka, A., Shumba, O., & Mulenga, H. M. (2021). Students' experiences with remote learning during the COVID-19 school closure: implications for mathematics education. Heliyon, 7(7), 7523. doi:10.1016/j.heliyon.2021.e07523.
- [29] Becker, S. P., Breaux, R., Cusick, C. N., Dvorsky, M. R., Marsh, N. P., Sciberras, E., & Langberg, J. M. (2020). Remote Learning during COVID-19: Examining School Practices, Service Continuation, and Difficulties for Adolescents With and Without Attention-Deficit/Hyperactivity Disorder. Journal of Adolescent Health, 67(6), 769–777. doi:10.1016/j.jadohealth.2020.09.002.
- [30] Napitupulu, R. M. (2020). Dampak pandemi Covid-19 terhadap kepuasan pembelajaran jarak jauh. Jurnal Inovasi Teknologi Pendidikan, 7(1), 23–33. doi:10.21831/jitp.v7i1.32771. (In Indonesian).
- [31] Fitri, M. (2020). Pengaruh Emergency Remote Learning Untuk Melihat Motivasi Belajar Anak Usia Dini. Child Education Journal, 2(2), 68–82. doi:10.33086/cej.v2i2.1591. (In Indonesian)
- [32] Tirajoh, C. V, Munayang, H., & Kairupan, B. H. R. (2021). Dampak Pembelajaran Jarak Jauh Terhadap Kecemasan Orang Tua Murid di Masa Pandemi Covid-19. Jurnal Biomedik: JBM, 13(1), 49. doi:10.35790/jbm.13.1.2021.31715. (In Indonesian).
- [33] Albert Sznitman, G., Zimmermann, G., & Van Petegem, S. (2019). Further insight into adolescent personal identity statuses: Differences based on self-esteem, family climate, and family communication. Journal of Adolescence, 71, 99–109. doi:10.1016/j.adolescence.2019.01.003.
- [34] Burns, A. B., Garner, A. A., Chang, A., Becker, S. P., Kofler, M. J., Jarrett, M. A., Luebbe, A. M., & Burns, G. L. (2020). Factor structure of the family climate for road safety scale in emerging adults in the United States. Accident Analysis and Prevention, 142(December 2019). doi:10.1016/j.aap.2020.105563.
- [35] Kurock, R., Gruchel, N., Bonanati, S., & Buhl, H. M. (2022). Family Climate and Social Adaptation of Adolescents in Community Samples: A Systematic Review. Adolescent Research Review, 0123456789. doi:10.1007/s40894-022-00189-2.
- [36] Valdés-Cuervo, A. A., Alcántar-Nieblas, C., Martínez-Ferrer, B., & Parra-Pérez, L. (2018). Relations between restorative parental discipline, family climate, parental support, empathy, shame, and defenders in bullying. Children and Youth Services Review, 95, 152–159. doi:10.1016/j.childyouth.2018.10.015.
- [37] Buelga, S., Martínez–Ferrer, B., & Cava, M. J. (2017). Differences in family climate and family communication among cyberbullies, cybervictims, and cyber bully–victims in adolescents. Computers in Human Behavior, 76, 164–173. doi:10.1016/j.chb.2017.07.017.

- [38] Saputro, H., & Talan, Y. O. (2017). Pengaruh Lingkungan Keluarga Terhadap Perkembangan Psikososial Pada Anak Prasekolah. Journal Of Nursing Practice, 1(1), 1–8. doi:10.30994/jnp.v1i1.16. (In Indonesian).
- [39] Ummah, S., & Nisa Fitri, N. (2020). Pengaruh Lingkungan Keluarga terhadap Perkembangan Sosial Emosional Anak Usia Dini. SELING: Jurnal Program Studi PGRA, 6(1), 84-88. doi:10.29062/seling.v6i1.624. (In Indonesian).
- [40] Nisa, R., Lindawati, Y. D., & Wahananto, J. (2020). Pengaruh Lingkungan Keluarga terhadap Perkembangan Moral Peserta Didik. IBTIDA', 1(1), 61-70. doi:10.37850/ibtida.v1i1.112. (In Indonesian)
- [41] El Iq Bali, M. M., & Fadli, M. F. S. (2019). Implementasi Nilai-nilai Pendidikan Pesantren dalam Meningkatkan Ketahanan Mental Santri. Palapa, 7(1), 1–14. doi:10.36088/palapa.v7i1.164. (In Indonesian).
- [42] Karaoglu, Baris; Turan, M. B. and P. Y. (2018). The Effects Under Graduate Students' Mental (Psychological) Toughness on the Leadership Level. Studies, European Journal of Education, 4(1), 1–12. doi:10.5281/zenodo.1100949.
- [43] Ramadhan, I., Keliat, B. A., & Wardani, I. Y. (2019). Assertiveness training and family psychoeducational therapies on adolescents mental resilience in the prevention of drug use in boarding schools. Enfermeria Clinica, 29, 326–330. doi:10.1016/j.enfcli.2019.04.040.
- [44] Nurhastuti, N., Zulmiyetri, Z., Budi, S., & Iga Setia Utami. (2021). Ketahanan Mental Keluarga Anak Berkebutuhan Khusus Dalam Menghadapi New Normal. Jurnal Buah Hati, 8(1), 20–32. doi:10.46244/buahhati.v8i1.1204. (In Indonesian).
- [45] Chan, A. C. Y., Piehler, T. F., & Ho, G. W. K. (2021). Resilience and mental health during the COVID-19 pandemic: Findings from Minnesota and Hong Kong. Journal of Affective Disorders, 295, 771–780. doi:10.1016/j.jad.2021.08.144.
- [46] Manchia, M., Gathier, A. W., Yapici-Eser, H., Schmidt, M. V., de Quervain, D., van Amelsvoort, T., Bisson, J. I., Cryan, J. F., Howes, O. D., Pinto, L., van der Wee, N. J., Domschke, K., Branchi, I., & Vinkers, C. H. (2022). The impact of the prolonged COVID-19 pandemic on stress resilience and mental health: A critical review across waves. European Neuropsychopharmacology, 55, 22–83. doi:10.1016/j.euroneuro.2021.10.864.
- [47] Lovell, B., & A. Wetherell, Mark. (2018). Caregivers' characteristics and family constellation variables as predictors of affiliate stigma in caregivers of children with ASD. Psychiatry Research, 270, 426–429. doi:10.1016/j.psychres.2018.09.055.
- [48] Wulandari, E. T. (2019). The Importance of the Effect of Learning Facilities on Student Learning Achievement. EProsiding Seminar Nasional Biologi III (22–24 March, 2019), Indonesia, 20, 258-261.
- [49] Handarini, O. I., & Wulandari, S. S. (2020). Pembelajaran Daring Sebagai Upaya Study from Home (SFH) Selama Pandemi Covid 19. Jurnal Pendidikan Administrasi Perkantoran (JPAP), 8(3), 496–503. doi:10.26740/jpap.v8n3.p496-503.
- [50] Sari, A. A. K., Syahidin Mubarok, A., Fatul Isa, U., Rinjani, S. D., & Fatunnafisah, M. (2021). Gambaran Kecemasan Orang Tua dalam Proses Pembelajaran Jarak Jauh di Masa Pandemi Covid-19. Jurnal Ilmiah Kependidikan, 8(2), 191–201. doi:10.30998/fjik.v8i2.9189. (In Indonesian).
- [51] Khofiyah, N., & Cahyani, F. E. (2021). Pemberian Edukasi tentang Peran Orang Tua dalam Pencegahan COVID-19 pada Anak Pra Sekolah. JPKMI (Jurnal Pengabdian Kepada Masyarakat Indonesia), 2(2), 145–152. doi:10.36596/jpkmi.v2i2.152. (In Indonesian).
- [52] Rice, F., Riglin, L., Lomax, T., Souter, E., Potter, R., Smith, D. J., Thapar, A. K., & Thapar, A. (2019). Adolescent and adult differences in major depression symptom profiles. Journal of Affective Disorders, 243, 175–181. doi:10.1016/j.jad.2018.09.015.
- [53] Haryanto, Wahyuningsih, H. D., & Nandiroh, S. (2015). Sistem Deteksi Gangguan Depresi pada Anak Anak dan Remaja. Jurnal Ilmiah Teknik Industri, 14(2), 142–152. doi:10.23917/jiti.v14i2.998 (In Indonesian).
- [54] Saputri, I. A., & Nurrahima, A. (2020). Faktor- Faktor yang Mempengaruhi Depresi Anak Usia Sekolah: Kajian Literatur. Holistic Nursing and Health Science, 3(2), 50–58. doi:10.14710/hnhs.3.2.2020.50-58. (In Indonesian).
- [55] Gao, B., Zhao, M., Feng, Z., & Xu, C. (2022). The chain mediating role of cognitive styles and alienation between life events and depression among rural left-behind children in poor areas in Southwest China. Journal of Affective Disorders, 306, 215– 222. doi:10.1016/j.jad.2022.03.040.
- [56] Rahmania, S., Wijayanti, R., & Hakim, S. L. (2021). Strategi Orang Tua Dalam Pendampingan Belajar Anak Selama Pandemi Covid-19. Literasi : Jurnal Kajian Keislaman Multi-Perspektif, 1(1), 99–110. doi:10.22515/literasi.v1i1.3259. (In Indonesian).
- [57] Griffith, S. F., & Arnold, D. H. (2019). Home learning in the new mobile age: Parent-child interactions during joint play with educational apps in the US. Journal of Children and Media, 13(1), 1–19. doi:10.1080/17482798.2018.1489866.

### **Appendix I: Respondent's Willingness Sheet**

# The Effect of Remote Learning, Family Climate, and Mental Resilience on Depressive Symptoms in Early Childhood

I,	, stating that I have understood
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- 1. This research is the research of I Wayan Karta from PG-PAUD, University of Mataram.
- 2. In this study I will participate as a resource person who fills out a questionnaire related to the online learning process carried out.
- 3. The researcher, namely I Wayan Karta, will maintain the confidentiality of my data and a pseudonym will be used in every written or oral research report. However, I realized due to the small sample size, someone might be able to identify me from the recorded data.
- 4. The researcher will send a brief summary of the research results after this research is completed to me if I so wish.
- 5. After signing this form will be kept by the researcher.

I agree to participate in this research.  $\Box$  Yes\*  $\Box$  No\*

I would like a brief summary of the research results sent to my address.  $\Box$  Yes\*  $\Box$  No\*

Please write your address in this box (if you answered Yes):

Respondent's signature:

Date:

Table A1	. Family	Climate	Questionnaire
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No	Statement	Score						
No.		SS	S	CS	TS	STS		
1	My parents compliment me when I get good grades							
2	My parents will scold me if I don't study							
3	My parents never give me gifts when I get good grades							
4	My parents won't be angry if I don't study							
5	My parents always help me in studying							
6	I always study alone because my parents work							
7	My parents will accompany me while studying							
8	My parents never differentiated me from my other siblings							
9	My brother and I always do homework together							
10	My parents always listen to my opinion and my brother							
11	I always tell my parents about what I learned at school							
12	My family and I always do homework together							
13	I dare not express my opinion to my parents							
14	I often fight with my brother							
15	My parents bought a book to study							
16	My parents bought me a cellphone to study online							
17	I use the same cellphone as my brother							
18	I don't like to tell my parents about what happened to me at school							
19	my family and I always watch TV together							
20	I don't like it when my brother steals my stuff							

#### Table A2. Remote Learning Questionnaire

No.	Statement	Score						
140.		SS	S	CS	TS	STS		
1	I do learn from home							
2	I learn by doing questions from the teacher							
3	I only learn with the help of WhatsApp							
4	I go to school to take assignments							
5	I prefer to study at school							
6	I have difficulty during online learning							
7	I study at school 2 times a week							
8	I feel learning from home is fun							
9	I have difficulty studying online							
10	I study at school for 2 hours from Monday to Saturday							
11	I use my own cellphone to study online							
12	I use my mother's cell phone to study							
13	I don't have a cell phone to study online							
14	At home I have no problems with the Internet network							
15	I share my cellphone with my brother while studying online							
16	I don't have a book to study							
17	I always do my homework to borrow books from friends							
18	The internet network is not adequate at my house							
19	I use the internet to find study materials.							
20	I learned to use comfortable study desks and chairs							

N	Statement	Score						
No.		SS	S	CS	TS	STS		
1	I will help a friend who fell while playing							
2	I will apologize to friends							
3	I want to try to learn what I can't learn							
4	I will continue to look for answers to the questions given by the teacher							
5	I will answer the teacher's questions without fear of being wrong							
6	I will look for answers to questions given by the teacher							
7	I will look for answers with the help of books and the internet							
8	I am always confident in the work I do							
9	I will congratulate friends when they get good grades							
10	I will still choose the answer that I think is correct							
11	I will not stop before solving the given problem							
12	I will share food with friends							
13	I won't see friends' work							
14	I'm not afraid to make mistakes in doing assignments							
15	I will continue to learn until I get a champion							
16	I don't cry when I don't get good grades							
17	I will help the teacher carry books to the teacher's room							
18	I don't want to fight over toys with friends							
19	I want to try a sport I've never tried							
20	I like to read books I've never read							

#### Table A3. Children's Mental Resilience Questionnaire

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#### Table A4. Child Depression Symptom Questionnaire

No.	Statement		Score							
110.		SS	S	CS	TS	STS				
1	I prefer to stay in the corner of the class									
2	I often shout to my friends									
3	I often cry									
4	I don't like talking to friends									
5	I always eat 3 times a day									
6	I always sleep on time									
7	I don't like playing alone									
8	I like to play with friends									
9	I prefer to talk alone									
10	I'm afraid if I'm left alone in class									
11	I enjoy studying with friends									
12	I never hit a friend									
13	I don't always sleep at 9 pm									
14	I prefer to be alone in my room									
15	I don't like talking to the teacher									