Since 2002

The Influence of Parents' Attachment on Young People's Stress during the COVID-19 Pandemic in Indonesia

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Abstract

BACKGROUND: Novel Coronavirus Diseases 19 (COVID-19) pandemic bring a significant effect on the life of people, for example, various educational activities which have been conducted in school before the outbreak are now conducted in the family. This arises some problems which then become newly-emerging sources of stress.

AIM: This research aims to reveal the correlation between parents' attachment and young people's stress during the COVID-19 pandemic.

METHOD: This research uses quantitative methods with online surveys. The research population is young people in Indonesia, and the research samples consist of 10-21 years-old young people who live with their parents and are willing to be the respondents of this research with 392 respondents. The sampling method utilizes accidental sampling for 4 weeks. The data were quantitatively analyzed by involving univariate and bivariate analysis as well as linear regression.

RESULTS: The results of the research showed that the normality test using the Kolmogorov–Smirnov Test on parents' attachment and stress was normally distributed so that the linearity test was valid using the test for linearity. The test showed that young people's stress level depends on parents' attachment with a negative correlation. The higher the parents' attachment, the lower the young people's stress.

CONCLUSION: Respondent's having a secure attachment is higher than having an insecure attachment. Parents' attachment and young people's stress have a negative correlation. Almost all variables have a significant relationship with the level of stress on young people, those are age, sex, educational background, parent's educational background, and parents' occupation. The novel coronavirus disease (COVID-19) pandemic could increase psychiatric disorders such as post-traumatic stress, anxiety disorders, and depression.

Introduction

Novel coronavirus disease (COVID-19) outbreak has spread from Wuhan, China since December 2019 [1], and became a pandemic affecting six World Health Organization (WHO) regions, namely, Americas, Europe, South-East Asia, Eastern Mediterranean, Africa, and Western Pacific [2]. Novel coronavirus disease-19 pandemic has brought significant effects on the life of human beings. People must have more awareness of this disease due to its rapid transmission, considerable mortality rate, and the unavailability of definitive therapy [3]. Based on https://covid19.who.int/, until May 14, 2021, there have been 160,813,869 confirmed cases of COVID-19, including 3,339,002 deaths [4]. In Indonesia, based on the results of a survey by the Ministry of Health of the Republic of Indonesia on March 31, 2020, reported that the number of confirmed cases of COVID-19 was 1602 cases, with 144 cases dying and 91 cases recovering. Based on https://www.kemkes.go.id/, until May 14, 2021, there were 1,734,285 cases positive, 1,592,886 recovery and 47,823 cases dying [5].

One of the vulnerable groups to the COVID-19 pandemic is young people [6], [7]. The COVID-19 outbreak may hurt the mental health of young people [8]. The novel coronavirus disease pandemic may have multiple consequences on the lives of young people: chronic stress, acute stress, school from home, working from home, restrictions on activities outside the home, lockdown in many countries, and increased time of access to social media and internet. According to research by Palupi, 58% of children have unpleasant feelings during the study at home policy. Meanwhile, 38% of children thought that the school did not yet have a good program to implement learning activities at home [9].

As a part of the ongoing efforts to contain the rapid spread of COVID-19, the WHO has recommended that all activities possible to involve the crowds must be temporarily halted. The previous research for developing countries was not available. Thus, the Indonesian government has taken various attempts such as physical distancing and large-scale social restriction. Individuals are staying at home, school from home, and work from home. It is strongly suggested that all activities such as working, praying and studying

must be done from home. Wearing masks is becoming more common in some countries where people were not used to them. Due to this policy, all family members do their routine activities at home [10].

Coronavirus has affected the course of teaching-learning activities. Before the pandemic, these activities were conducted at schools or classes. However, in the wake of the COVID-19 outbreak, teaching-learning activities are undertaken at home or e-learning using various tools such as smartphones, computers, and notebooks. The research of Zaharah and Kirilova in 2020 explains that the government has issued a policy that requires society to halt its outdoor activities. In other words, all routines must be done at home including teaching and learning activities [11].

The COVID-19 pandemic is having a psychological impact on the life of human beings [12], [13]. While having e-learning from home, children might experience anxiety, stress, sadness, boredom, tediousness, and other negative feelings. When children suffer from this condition, parents must play an important role to build their self-regulation. It is expected that children will be able to build their internal reinforcement. If the children can start establishing their internal reinforcement while accomplishing the tasks during the learning process, they will be able to obtain significant effects. Due to this explanation, this research aims to explore the influence of parents' attachment on young people's stress during the COVID-19 pandemic.

Methods

This research uses a descriptive-quantitative method with an online survey and takes place in Indonesia from June 11, 2020, to September 23, 2020. The research population is Indonesian young people from various provinces or cities such as Yogyakarta, East Java, West Java, Central Java, Kalimantan, Lampung, Bali, and others. Research samples are 10–21 years old young people who live with their parents and are willing to be respondents in this research. The total number of research subjects is 392 respondents. The primary data were collected online via Google form by the team. The Google form is sent to respondents through the WhatsApp application which can be filled without duration and can be accessed by respondents. This research adopted the instruments from Bunda in 2018. This scale is based on the three aspect, namely, biological, psychological, and behavioral. Out of 30 items of try-out 25 of which are valid with validity index 0.302–0.730 and reliability 0.901 [14].

The univariate analysis describes the respondent's characteristics, parents' attachment, and stress. Bivariate analysis is used to analyze the influence of parents' attachment on young people's stress during the COVID-19 pandemic. This bivariate analysis was undertaken using linear regression on the significance level of 5% (p = 0.05) and multivariate analysis to analyze the dominant influence factor of stress level on young people. The independent variable in this research is parents' attachment. It emphasizes how young people perceive the notion that the long-term emotional bond between parents and young people has reversible effects, leading these young people to be more responsive and possess a better self-concept. Parents' attachment was measured using a scale adapted from Inventory Parent and Peer Attachment (IPPA) Scale formulated by Armsden and Greenberg (1987). This scale is based on aspects of trust, communication and alienation. Aspects of trust are how parents and their friends respond and understand their desire and needs. Aspects of communication show the attitude of young people in which parents and friends respond and understand their needs and desire. Aspects of alienation show young people attitude toward isolation, anger and separation experience related to family and friends. Individuals with secure attachment or high security group are those who have close relationships with their parents and friends characterized by high trust and communication and low alienation scores, while individuals with insecure attachment or low security are classified with low trust and communication and high alienation scores [15].

Stress serves as the dependent variable in this research. Operational variables can be defined as the young people's responses due to the pressure from family, friends, school, or universities, urging them to immediately finish the assignments or their study during the COVID-19 pandemic. This pressure will bring some adverse effects such as the deterioration of physical and psychological conditions and the changes in their social behavior during the completion of the tasks or the study.

Results

Parents' attachment

The total number of research subjects is 392 respondents. The majority of those who are in their late teenage year are aged 16–21 years old (72.2%), female (82.1%), and university students (43.6%). Parent, father, and mother have relatively similar educational backgrounds. The majority of father's and mother's educational background is at university level (D3/S1/S2) amounting to 48.5% and 47.2%, respectively. The respondent's father mostly works in the private sector (31.9%). The majority of respondents (69.6%) live with their parents and other family members (relatives and/or close relatives and/or other families and/or friends). The majority of the number of children

in the respondent's family is two children (44.6%). The mean score on parents' attachment is 64.25 with a standard deviation ± 12.0 and the mean score on stress is 59.45 with a standard deviation of ± 8.57. The standard deviation value for parents' attachment and stress is smaller than the mean value; this indicates that the parents' attachment and stress variables are homogeneous.

Table 1 provides the data on the parents' attachment based on the respondent's characteristics. The percentage of each respondent's characteristics shows that the majority of respondents with secure attachment have the following characteristics: 10–15 years old-female respondents who study in an elementary school and live only with their mother. Besides, secure attachment can be found in the majority of respondents whose father graduated from Junior High School and mother holds a university degree (D3/S1/S2), both parents work as civil servants and the family consists of 2 (two) children. Due to the significance (p < 0.05), only three respondent's characteristic variables have a significant relationship with parents' attachment, those are: Respondent's educational background, mother's education, and the number of children in the family (the value of p = 0.007, 0.046, and 0.002, respectively).

Table 1: Parents' attachment based on the subject's characteristic

Characteristics	Attachment				p
	Insecure		Secure		
	n	%	n	%	
Age					
10–15 years old	50	45.9	59	54.1	0.735
16–21 years old	137	48.4	146	51.6	
Sex					
Male	37	52.9	33	47.1	0.358
Female	150	46.6	172	53.4	
Educational background					0.007**
University level (D3/S1/S2)	73	42.7	98	57.3	
Senior High School/Islamic High School	76	59.4	52	40.6	
Junior High School/Islamic Junior High School	28	45.9	33	54.1	
Elementary School/Islamic Elementary School	10	31.3	22	68.8	
Living with					
Father only	3	60.0	2	40.0	0.459
Mother only	5	29.4	12	70.6	
Mother and Father	25	40.3	37	59.7	
Father, Mother, and Others	135	49.5	138	50.5	
Father or Mother and Others	10	62.5	6	37.5	
Others (other families, close relatives, distant relatives, and friends)	7	46.7	8	53.3	
Do not answer	2	50.0	2	50.0	
Father's education					
University level (D3/S1/S2)	90	47.4	100	52.6	0.593
Senior High School/Islamic High School	80	50.3	79	49.7	
Junior High School/Islamic Junior High School	7	35.0	13	65.0	
Elementary School/Islamic Elementary School	10	43.5	13	56.5	
Mother's education					
University level (D3/S1/S2)	78	42.2	107	57.8	0.046*
Senior High School/Islamic High School	75	51.7	70	48.3	
Junior High School/Islamic Junior High School	19	46.3	22	53.7	
Elementary School/Islamic Elementary School	15	71.4	6	28.6	
Father's occupation					
Civil servant	37	39.8	56	60.2	0.367
Employees at Private Institutions	43	51.2	41	48.8	
Businessman	63	50.4	52	49.6	
Others	44	48.9	46	51.1	
Mother's occupation					
Civil servant	38	39.6	58	60.4	0.208
Employees at Private Institutions	20	50.0	20	50.0	
Businessman	28	44.4	35	55.6	
Others	101	52.3	92	47.7	
The number of children in the family					
1	13	39.4	20	60.6	0.002**
2	68	38.9	107	81.1	
3	69	59.0	48	41.0	
4	26	63.4	15	36.6	
More than 4	11	42.3	15	57.7	
Total	187	47.7	205	52.3	

Stress level on young people

Table 2 reveals the data on the level of young people's stress based on the respondent's characteristics. The percentage of each respondent's characteristics shows that the majority of respondents with low levels of stress have the following characteristics; 10-15-year-old male respondents who study in Senior High School and live only with their father. Besides, the majority of respondents with low-stress levels have a father and mother who hold a university degree (D3/S1/S2), work as a civil servant, and have four children. Due to the significance (p < 0.05), almost all variables have a significant relationship with the level of stress on young people, those are age, sex, education, parent's educational background, and parent's occupation. Out of nine variables, only two variables do not have significant relationships, namely, living together and the number of children in the family. Before conducting the linear regression test, the researchers had conducted a normality test using Kolmogorov–Smirnov Test because this number of respondents is more than 50 respondents.

Correlation between parent's attachments on young people's stress

The result of the residual normality test shows normal data distribution, which means that the data has a p-value or Asymp significance of 0.068 more than 0.05. Therefore, it can be concluded that the linearity test model is valid. Linearity test is one of the procedures in data analysis that is performed to examine whether the two variables have a linear relationship. Two variables have a linear relationship if the p-value of F linearity is less than 0.05 (p < 0.05). On the contrary, these variables do not have a linear relationship if the p-value of F linearity is more than 0.05 (p < 0.05). The result of the linearity test shows that parents' attachment and stress variables have the value of F = 24.489 with a significant 0.000 (p < 0.05). Thus, it can be concluded that the two variables have a linear relationship, meaning that the stress level depends on the parents' attachment.

Table 3 shows that the value of R square (R^2) is 0.059 and the value of R is 0.243. The value of R^2 represents the extent to which an independent variable can determine the independent variable. Table 4 explicates that the attachment variable can determine stress variable amounting to 5.9%. About 94.1% of stress variables are determined by other factors. R-value represents correlation coefficient -0.243. R-value equal to 0.243 (less than 0.3) indicates that two variables (parents' attachment and stress) have an insignificant relationship. The negative sign (−) explains that the relationship between two variables has a negative value.

The regression test presented in Table 4 results in the following regression equation:

Table 2: Stress level on young people based on the respondents' characteristics

Characteristics	Stress				p-value
	Low		High		
	n	%	n	%	
Age					0.000**
10–15 years old	77	70.6	32	29.4	
16–21 years old	127	44.9	156	55.1	
Sex					0.002**
Male	48	68.6	22	31.4	
Female	156	48.4	166	51.6	
Educational background					0.000**
University level (D3/S1/S2)	67	39.2	104	60.8	
Senior High School/Islamic High School	25	78.1	7	21.9	
Junior High School/Islamic Junior High School	67	52.3	61	47.7	
Elementary School/Islamic Elementary School	45	73.8	16	26.2	
Living with					0.342
Father only	5	100.0	0	0.0	
Mother only	9	52.9	8	47.1	
Mother and Father	32	51.6	30	48.4	
Father, Mother, and Others	142	52.0	131	48.0	
Father or Mother and Others	7	43.8	9	56.3	
Others (other families, close relatives, distant relatives, and friends)	6	40.0	9	60.0	
Do not answer	3	75.0	1	25.0	
Father's education					0.000**
University level (D3/S1/S2)	110	57.9	80	42.1	
Senior High School/Islamic High School	81	50.9	78	49.1	
Junior High School/Islamic Junior High School	11	55.0	9	45.0	
Elementary School/Islamic Elementary School	2	8.7	21	91.3	
Mother's education					0.000**
University level (D3/S1/S2)	121	65.4	64	34.6	
Senior High School/Islamic High School	61	42.1	84	57.9	
Junior High School/Islamic Junior High School	19	46.3	22	53.7	
Elementary School/Islamic Elementary School	3	14.3	18	85.7	
Father's occupation					0.026*
Civil servant	47	50.5	46	49.5	
Employees at Private Institutions	45	53.6	39	46.4	
Businessman	76	60.8	49	39.2	
Others	36	40.0	54	60.0	
Mother's occupation					0.002**
Civil servant	66	68.8	30	31.3	
Employees at Private Institutions	18	45.0	22	55.0	
Businessman	33	52.4	30	47.6	
Others	87	45.1	106	54.9	
The number of children in the family					0.933
1	17	51.5	16	48.5	
2	93	53.1	82	46.9	
3	59	50.4	58	49.6	
4	23	56.1	18	43.9	
More than 4	12	46.2	14	53.8	
Total	204	52.0	188	48.0	

Young people stress = 70.590–0.173 (Parents' attachment). This regression equation indicates that with a one-point increase in parents' attachment variable, there is a 0.173-point decrease in young people's stress.

Table 3: Model summary table

Model	R	R square	Adjusted R square	Standard error of the estimate
1	−0.243	0.059	0.057	832.481

Table 5 shows the multivariate analysis. Multivariate analysis can be done by including all variables that have $p < 0.25$ in the bivariate analysis, but previously dummy variables were carried out on variables that had more than 2 categories (educational background, father's education, mother's education, father's occupation, and mother's occupation). Furthermore, the variables with a $p > 0.05$ were removed one by one until a model with all $p < 0.05$ was formed.

Table 4: Linear regression test

Variable	Unstandardized coefficients		Standardized coefficients	t	Sig
	B	SE	Beta		
Constant	70.590	2.290		30.829	0.000
Attachment	−0.173	0.035	−0.243	−4.949	0.000

Table 5: Multivariate logistic regression analysis

Variable	Model						
	1	2	3	4	5	6	7
Age	0.383	0.327					
Sex	0.223	0.204	0.217				
Educational Background							
University Level	0.006	0.004	0.000	0.000	0.000	0.000	0.000
Senior High School	0.029	0.022	0.010	0.008	0.007	0.007	0.007
Father's Education							
University Level	0.134	0.127	0.128	0.118	0.085	0.028	0.016
Senior High School	0.049	0.049	0.050	0.044	0.036	0.010	0.005
Junior High School	0.016	0.015	0.014	0.012	0.011	0.003	0.003
Mother's Education							
University Level	0.014	0.010	0.012	0.010	0.008	0.007	0.001
Senior High School	0.137	0.132	0.143	0.133	0.120	0.558	
Junior High School	0.130	0.142	0.145	0.150	0.131		
Father's Occupation							
Businessman	0.223	0.179	0.153	0.156			
Mother's Occupation							
Employees at Private Institutions	0.028	0.042	0.048	0.035	0.046	0.054	0.056
Others	0.402						

Table 6 shows the final model of the multivariate logistic regression analysis. All of these variables are affect the stress level on young people. To find out which variable has the most dominant influence on stress, it can be seen from the largest OR value or Exp B, namely, educational background at university level with an Exp B of 3,569.

Table 6: Final model of logistic regression analysis

Variable	B	SE	Exp (B)	p
Educational background				
University Level	1.272	0.304	3.569	0.000
Senior High School	0.846	0.314	2.331	0.007
Father's education				
University Level	−1.877	0.779	0.153	0.016
Senior High School	−2.133	0.766	0.118	0.005
Junior High School	−2.617	0.882	0.073	0.003
Mother's education				
University Level	−0.902	0.261	0.406	0.001
Mother's occupation				
Employees at Private Institutions	0.609	0.360	1.993	0.056

Discussion

This research aims to reveal the correlation between parents' attachment and young people's stress during the COVID-19 pandemic. The results showed that the majority of respondents (52%) have a low-stress level and 53.3% of respondents have a secure parents' attachment. The parents' attachment and the young people's stress have a significant score, which means that the stress level of young people depends on the parent's attachment.

Trauma and depression

In times of pandemic, as in novel coronavirus disease (COVID-19) outbreak, there is an increased risk of post-traumatic stress disorder, anxiety, and depression [16]. Based on two studies in the weeks following the COVID-19 pandemic in Wuhan, China involving 2091 and 285 adult individuals reported a prevalence of post-traumatic stress disorder of 4.6% and 7%, respectively, more commonly associated with female gender and poor sleep quality [17], [18]. The

potential disaster impacts on young people's mental health are post-traumatic stress disorders, depression, and anxiety [19].

Psychiatric disorders on young people

The research of Nirwana (2019) has proven the significant relationship between stress level and self-efficacy with a p = 0.046 (< α 0.05). Students might suffer from either internal stress or external stress. Stress can stem from various factors such as parents' demand on having good achievement, the frequency of tests, the academic curriculum, sleep deprivation, anxiety about the future, loneliness, the quality of meals, uncomfortable classrooms, and the unavailability of learning facilities [20]. Some aspects are likely to influence children's post-disaster mental health likely the family environment, parenting practices, and parents' coping [21].

The significant negative relationship between the social support from the parents and academic procrastination in accomplishing graduating papers on the students of Physical Health Education and Recreation Study Program at University of Lambung Mangkurat Banjarbaru, Indonesia. This indicates that the higher the social support that the students receive from their parents, the less likely they will do academic procrastination in finishing their graduating papers. On the contrary, the lower the parents' social support, the higher the incidence of academic procrastination in finishing the graduating paper [22]. Despite negative outcomes possibility, many young people that exposed to disasters can cope with these experiences (e.g., to take greater responsibility for themselves, contribute to the processes of recovery, and get engaged in behaviors of prosocial) and also have the capacities of recovery and resilience [23]. Young people can have the strategies of efficient coping during epidemics. The suggestion from a study among 381 undergraduate students was that active coping strategies can predict life satisfaction during the SARS epidemic in Beijing in 2003, whereas the number of stressors and the use of avoidant coping strategies can predict the psychological symptoms [24].

Nurlaeli's research in 2020 which involved 25 Inventory Parent and Peer Attachment (IPPA) items covering three aspects, those are, trust, communication, and alienation show that mother-child attachment during the coronavirus pandemic increases. Besides, attachment gives a positive effect on children because it increases learning motivation [25]. The result of Putri's research in 2020 proves that parents' attachment has a significant influence on self-confidence with significance value p = 0.000 (0.000 < 0.01), and the correlation coefficient values shows r = 0.395. It can be concluded that parents' attachment has a significant influence on the self-confidence of young people. Attachment effectively contributes to young people's self-confidence for 15.6% [26].

Parents' attachment has a positive and significant influence on student's stress-coping. A strong bond between parents and children can foster children's trust leading them to prove that they can be trusted. A child having good self-trust tends to feel safe and have more self-confidence to explore a new environment [27]. Emotional maturity and parents' attachment have a significant negative influence on student's aggressive behavior (F = 13.873, p = 0.000), with contribution value of 16% (R^2 = 0.159). This result indicates that the higher emotional maturity (X_1) and parents' attachment (X_2), the less likely students have aggressive behavior (Y) [28]. It is advisable to promote reassurance, appropriate information, and stress-reducing actions for young people. Parents are the most evident help for young people. It is recommended to have a dialog between parents and young people to enhance comprehension and alleviate anxiety [29].

Salma (2019) argues that social anxiety has a negative correlation with parents-children attachment. Social anxiety and parents' attachment (mother) have the value of r = −0.309 with p = 0.000 (p < 0.05). Meanwhile, social anxiety and parents' attachment (father) have the value of r = −0.304 with p = 0.000 (p < 0.005). This result explains that stronger attachment between parents and young people results in lower levels of social anxiety in young people. In contrast, the weaker the attachment between parents and young people, the higher the social anxiety level of the young people [30]. Hidayat in 2018 explains that father and mother's attachment has a significant influence on self-control. Father's attachment contributes to self-control for 16.6%, and mother's attachment contributes to self-control for 13.3%. The research finding proves that the father's attachment has more contribution to self-control than the mothers. The R square value of the father's attachment (0.166) is higher than the mother's attachment (0.1333) [31].

Bunda states that attachment has a negative correlation with stress on the students in their final semester. It means that stronger attachment between these students and their parents indicates lower stress levels on the students in their final semester. Conversely, weaker attachment between these students and their parents causes a higher stress level on the students in their final semester. The result of the determinant coefficient shows that the attachment variable contributes to a negative influence on students' stress level for 35.9%. Another 64.1% are influenced by other variables causing stress on the students in their final semester [14]. Isnaeni *et al*. in their research in 2021 concluded that the main problem for children is depression, anxiety, low self-esteem, feelings of anger, and trauma. So to address these emotional and behavioral problems, it is necessary to combine several interventions and combinations of group-based approaches [32].

Conclusions

It can be summed up that the number of respondents having a secure attachment is higher than that of having an insecure attachment (52.3% and 47.7%, respectively). The majority of respondents have a low-stress level amounting to 52%. There is a negative relationship between parent attachment and young people's stress. The higher the parents' attachment, the lower the young people's stress. One point increase in parents' attachment variable, there is 0.173 point decrease in young people's stress. The novel coronavirus disease (COVID-19) pandemic could affect increased psychiatric disorders such as post-traumatic stress, anxiety disorders, and depression.

It is recommended that psychologists consider the research findings as counseling references for young people. It is also expected that other researchers can continue exploring the scientific knowledge related to parents' attachment and teenager stress variables during the COVID-19 pandemic.

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