

The Mediating Role of Parenting: How Parental Well-Being and Distress Influence Child Problem and Prosocial Behaviors

Agnes Maria Sumargi
Faculty of Psychology
Widya Mandala Surabaya Catholic University
Indonesia
agnes-maria@ukwms.ac.id

Eli Prasetyo
Faculty of Psychology
Widya Mandala Surabaya Catholic University
Indonesia
eli@ukwms.ac.id

Abstract

Children's problem behaviors should be managed properly while their prosocial behaviors should be nurtured. As parents play a significant role in children's lives, their well-being and psychological distress could influence children's behavior through different mechanisms. This study investigated the roles of effective parenting (positive encouragement and parent-child relationship) and ineffective parenting (parental inconsistency and coercive parenting) in mediating the relationships between parental well-being and psychological distress, and children's problem and prosocial behavior as reported by parents. One-hundred and seventythree parents of primary school children completed a paper and pencil survey consisting relevant measures. Mediation analyses using PROCESS macros showed that parental well-being and psychological distress significantly influenced children's problem behavior through effective and ineffective parenting, respectively. However, only parental well-being significantly influenced children's prosocial behavior through effective parenting. The results highlight the importance of parental well-being, as it fosters positive parenting practices and promotes prosocial behavior in children.

Keywords: child problem behaviors, child prosocial behaviors, parenting, psychological distress, parental well-being.

Received 19 February 2024/Accepted 3 August 2024 ©Author all rights reserved



Introduction

Mental health problems in children and adolescents requires attention. Based on the results of the Indonesia-National Adolescent Mental Health Survey (I-NAMHS) on 5,670 children aged 10-17 years, 34.8% have mental health problems and 5.5% have experienced a mental disorder in the past 12 months (Center for Reproductive Health et al., 2022). The most common mental health problems are anxiety (26.7%) and attention deficit and/or hyperactivity problems (10.6%), while behavioral problems are experienced by 2.4% of children. A similar pattern was found in children aged 6-12 years (Saputra et al., 2017). Among these children (*N* = 143), 37.8% had emotional problems, 27.3% had attention and hyperactivity problems, 18.9% had behavioral problems, and 16.1% had problems with peers. It is therefore important to address the mental health problems as they can have negative impacts on their family life, peer relationships and academic performance (Center for Reproductive Health et al., 2022; Pedersen et al., 2019; Saputra et al., 2017). Furthermore, emotional and behavioral problems in childhood can develop into juvenile delinquency such as substance abuse and criminal behaviors in adulthood (Dubowitz et al., 2021; Guarnaccia et al., 2022), as well as depression and suicidal behavior (Soto-Sanz et al., 2019).

Given the importance of preventing mental health problems, nurturing children's prosocial behaviors is crucial as it can serve as a protective factor, promoting positive mental health outcomes. Prosocial behavior is defined as actions that benefit others or improve the well-being of others (Pfattheicher et al., 2022). It encompasses caring about others' feelings, willingness to share, helping others, being kind to others, and offering assistance that develop from childhood (Aarø et al., 2022; Grueneisen & Warneken, 2022). Research shows that prosocial behavior aids in stress recovery (Lazar & Eisenberger, 2022), Compared to self-rewarding behavior, engaging in prosocial behavior after a stressor reduces physiological stress responses such as heart rate, diastolic blood pressure and mean arterial pressure, thereby offering greater benefits for individuals in recovering from stress. Studies among elementary schoolers in China demonstrate a positive correlation between children's prosocial behavior and their subjective well-being in school (Liu et al., 2021). This relationship is mediated by children's relatedness needs and self-esteem. By displaying prosocial behavior, children receive positive evaluation from others, which



increases their self-worth and ultimately leads to happiness and satisfaction with their school life. Furthermore, prosocial behavior has been linked to higher optimism, lower depressive symptoms, and better academic performance (Oberle et al., 2022). However, longitudinal research also suggests that children with behavioral problems like aggression tend to exhibit lower levels of prosocial behavior in adolescence (Katsantonis & McLellan, 2023). This highlights the importance of giving children's prosocial behavior as much attention as their behavioral problems.

Parenting practices have been found to impact children's behavior (Cooke et al., 2022; Wong et al., 2021). Harsh disciplinary practices and conflictual relationships between parents and children were found to be associated with increased behavioral and emotional problems in children, while also reducing their prosocial behavior. In contrast, a good relationship between parents and their children reduced the occurrence of emotional and behavioral problems and increased prosocial behavior (Katsantonis & McLellan, 2023). A meta-analytical review shows that harsh parenting and manipulation increased the risk of emotional problems in children and adolescents. In contrast, warmth and supportive parenting were associated with decreased emotional problems in children and adolescents (Manuele et al., 2023). This is further emphasized by Taraban and Shaw (2018), who use the term positive parenting to indicate parenting practices that are warm, sensitive, provide support and set limits to children, and negative parenting to indicate parenting practices that are inconsistent, over-reactive, controlling, and harsh to children. Positive parenting practices are typically linked to more favorable child outcomes such as better social competence and academic achievements. Additionally, these practices are associated with lower emotional and behavioral problems. Overall, the studies have indicated that parenting practices can have significant positive or negative impacts on child development. Understanding the factors that influence parenting is therefore crucial.

Belsky (1984) proposed a model that encompasses a variety of factors influencing parenting and child development. One of the factors is parent characteristics such as depression. Research has shown that parental stress or depression can negatively impact parenting practices. Parents with these conditions often show negative reactions and are less sensitive their child's needs. This



negative parenting practice is associated with an increase in child emotional and behavioral problems (Sumargi et al., 2018; Taraban & Shaw, 2018).

Meanwhile, Newland (2015) proposed a different model that highlights more on family well-being. This model emphasizes family strengths, positive parenting, and child well-being, shifting the focus away from family deficits, negative parenting, and child maladjustment. Parental well-being, for example, is seen as a key factor influencing positive parent-child relationships, which in turn contributes to a child's social competence and self-regulation. Inspired by Newland's model this study examines not only parental distress and its impact on child emotional and behavioral problems but also considers parental well-being and its impact on child prosocial behavior. Parenting as a mediating variable is also examined from the positive side (effective parenting) as well as the negative side (ineffective parenting).

It is important to note that research on parental well-being, parenting practices, and their impacts on child behaviors in non-Western cultures remains limited. For example, Cheah et al., (2009) examined mothers of preschoolers and found that psychological well-being influenced authoritative parenting style when mothers reported low levels of stress. They also found that child self-regulation mediated the relationship between authoritative parenting and child behavioral problems. However, their study did not examine all three variables (i.e., parent characteristics, parenting, and child behaviors) within a single model. Additionally, participants of this study were Chinese immigrants living in the United States and therefore, they did not represent people from non-Western cultures. Meanwhile research in Turkey and Africa countries demonstrates that parents' anxiety or depression was associated with negative parenting such as the use of punishment and inconsistent discipline practices, which in turn increased child emotional and behavioral problems and decreased child social competence (Huang et al., 2017, 2018; Yurduşen et al., 2013). Although these studies have been conducted in non-Western cultures, they focus on risk factors contributing to negative parenting and child maladjustment (i.e., anxiety and depression), not including protective factors such as parental well-being that promotes positive parenting and child well-being. For this reason, this current study examines the relationships between parental well-being and distress with child behaviors



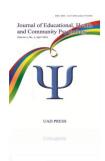
with effective and ineffective parenting as the mediators. This research extends a previous study on junior high-school students examining the relationships between reported parental well-being, authoritative parenting style, and adolescents' behavioral problems (Sumargi & Kristi, 2017). It includes both positive and negative aspects of parents' psychological conditions (i.e., well-being and stress), parenting practices (effective and ineffective parenting), and child outcomes (i.e., child problem and prosocial behaviors).

The hypotheses tested in this study are as follows: (I) Parental well-being influences child problem behavior through parenting practices (effective parenting increases and ineffective parenting decreases); (2) Parental distress influences child problem behavior through parenting practices (effective parenting decreases and ineffective parenting increases); (3) Parental well-being influences child prosocial behavior through parenting practices (effective parenting increases and ineffective parenting decreases); (4) Parental distress influences child prosocial behavior through parenting practices (effective parenting decreases and ineffective parenting increases).

Method

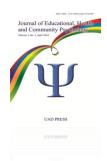
Participants

Participants in this study were 173 parents of school-aged children, recruited from an elementary school in Surabaya. The parents had an average of 40 years old (SD = 6.37). The majority were mothers (66.47%). They were married (90.17%), of Javanese ethnicity (60.69%), with a bachelor degree (40,46%) or high school diploma (37,57%), working full time (57,56%), and having no financial difficulties (52.02%). The participants had children with an average age of 9 years old (SD = 1.60). Most of the children were male (57.23%), in grades 4 and 5 of elementary school (26.59% and 23.12%, respectively), and lived with their nuclear families (62.43%). Most of participants stated that their children were raised by themselves or by their spouse (32.74%), and some were also helped by grandparents (31.14%). Tabel 1 shows the details of participants' characteristics.



<u>Table 1.</u>
Details of Participants' Characteristics

Characteristics		N	%
Participants' gender	Female (mother)	115	66.47
	Male (father)	58	33.53
Marital status	Married	155	89.60
	Single	4	2.31
	Living with partner	1	0.58
	Divorced	7	4.05
	Widowed	6	3.47
Ethnicity	lavanese	105	60.69
,	Chinese Indonesian	37	21.39
	Ethnicities in Flores	11	6.36
	Other ethnicities (Batak, Minang, Betawi,		
	Balinese)	20	11.56
Educational qualification	Elementary school or below	2	1.16
	Junior high school	2	1.16
	Senior high school	- 65	37.57
	Vocational/technical diploma	29	16.76
	Bachelor's degree (Undergraduate)	70	40.46
	Postgraduate degree (Master's or	, ,	
	Doctoral)	5	2.89
Occupation	Full time	99	57.56
Сопримен	Part time	12	6.98
	Freelance	9	5.23
	Unemployed	52	30.23
Financial difficulty	Yes	75	43.35
, , , , , , , , , , , , , , , , , , ,	No	90	52.02
	Not sure	8	4.62
Child gender	Female	74	57.23
8	Male	99	42.77
Child education	Grade I	30	17.34
	Grade 2	31	17.92
	Grade 3	24	13.87
	Grade 4	46	26.59
	Grade 5	40	23.12
	Grade 6	2	1.16
Family structure	Nuclear family	108	62.43
,	Step family	5	2.89
	Single-parent family	9	5.20
	Extended family	51	29.48
Child caregiver	Self-cared or by spouse	55	32.74
G : -	Assisted by grandparents	54	31.14



<u>Table 1.</u>
Details of Participants' Characteristics

Characteristics		N	%
	Assisted by daycare/school	10	5.95
	Assisted by babysitter/housemaid	27	16.07
	Others	22	13.10

Note: N = 173, except for child caregiver (N = 168) because of missing data.

Measures

Pemberton Happiness Index (PHI) was used to measure parental well-being. PHI is an integrative well-being measure that assesses general well-being, hedonic well-being, eudaemonic well-being, and social well-being, referred to as remembered well-being. It also considers individual's negative and positive emotional states, referred to as experienced well-being (Hervas & Vazquez, 2013). The remembered well-being scale consists of 11 items with response options ranging from "Totally disagree" (score 0) to "Totally Agree" (score 10). The experienced well-being scale has 10 items with response options "Yes" (score 1) and "No" (score 0). Scoring is reversed for negative statements. The scores of the 10 items on the experienced well-being scale are summed and considered as a single score of experienced well-being. Parental well-being scores are obtained from the average score of the items in the remembered well-being scale (11 items) and the experienced well-being scale (1 item). A higher score indicates better parental well-being. The PHI has been translated into Indonesian and used in several studies with good reliability (Sumargi & Giovanni, 2021; Sumargi & Kristi, 2017). In this study, the internal consistency the PHI was good, at .86.

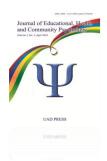
The Depression Anxiety Stress Scale-21 (DASS-21) was used to assess parental psychological distress. The DASS-21 is a short version of the DASS measure developed by Lovibond and Lovibond (1995) that consists of three scales: Depression (7 items), Anxiety (7 items), and Stress (7 items) (Henry & Crawford, 2005). Response options for each item range from "Did not apply to me at all" (score 0) to "Applied to me very much or most of the time" (score 3). Scores for each item are summed to obtain a total score of distress. A higher score indicates a higher level of distress. The DASS-21 has been translated into Indonesian and used in several studies with



good reliability (Andriani & Sumargi, 2020; Sumargi et al., 2015). In this study, the internal consistency of the DASS-21 was good, at .84.

Parenting and Family Adjustment Scales (PAFAS) was used to assess parenting practices. PAFAS consists of two parts: PAFAS-Parenting and PAFAS-Family Adjustment (Sanders et al., 2014). In this study, only PAFAS-Parenting was used. PAFAS-Parenting consists of 23 item that measure parental consistency, coercive parenting, positive encouragement, and parent-child relationship (Sanders et al., 2014). In the validation study of PAFAS on Indonesian parents, several items were dropped, resulting 15 items of PAFAS-Parenting. These can be categorized into effective parenting (7 item on positive encouragement and parent-child relationship) and ineffective parenting (8 item on parental inconsistency and coercive parenting) (Sumargi et al., 2018). Response options for each PAFAS-Parenting item range from "Not true of me at all" (score 0) to "True of me very much or most of the time" (score 3). Scoring follows the original PAFAS version, which indicates levels of dysfunctional parenting. A higher score indicates more dysfunctional parenting practices (Sanders et al., 2014). The Indonesian version of PAFAS-Parenting has satisfactory construct validity and internal consistency (Sumargi et al., 2018). In this study, the internal consistencies of PAFAS-Parenting were .78 for effective parenting and .62 for ineffective parenting.

Strength and Difficulties Questionnaire (SDQ) was used to assess children's problem behavior and prosocial behavior based on parent reports. The SDQ is a brief behavioral screening questionnaire for children and adolescents consisting of five scales. The first four reflect problem behaviors as follows: conduct problems (5 items) and hyperactivity (5 items), often referred to as externalizing problems, and emotional problems (5 items) and peer problems (5 items), often referred to as internalizing problems. Additionally, the SDQ also assesses children's prosocial behaviors (5 items). Response options for the SDQ range from "Not true" (score 0) to "Certainly true" (score 2). Scoring is reversed for negative statements. The scores are then summed. A higher score on the externalizing and internalizing problems scales (SDQ-Total Difficulties) indicates that the child is more frequently reported by their parents as exhibiting problem behaviors. Meanwhile, on the Prosocial scale (SDQ-Prosocial), a higher score indicates that the child is more frequently reported by their parents as exhibiting prosocial behaviors. This



study used the Indonesian version of the SDQ available on the SDQ website. Based on previous research, the reliability of the SDQ-Total Difficulties is relatively good (Sumargi & Kristi, 2017). In this study, the internal consistency for the SDQ-Total Difficulties was .72 and for the SDQ-Prosocial was .61.

Procedure

Measures used in this study was compiled into a questionnaire and distributed to parents through students at school. Given the school only allowed data collection from parents of students in grades 1-5 of elementary school, the questionnaire was only distributed in those classes. In addition to obtaining informed consent, parents also received instructions on how to complete the questionnaire. If a parent had more than one child between the ages of 6 and 12, they were asked to report on the child whose birthday was closest to the date of the questionnaire was filled out. Due to this instruction, there were several parents of 6th grade elementary school students who participated in this study. As a token of appreciation, souvenirs were given to parents who returned the questionnaire to the school.

Out of 209 questionnaires distributed, 182 were returned (87% return rate). However, 9 were excluded from the analysis. These questionnaires either did not meet the participant criteria (e.g., the child's age outside the range) or contained incomplete data (parents did not complete all or most scale items). This resulted in a final analysis based on data from 173 parents.

Data analysis

Mediation analysis was conducted using the PROCESS macro for SPSS path analysis (Hayes, 2017). This technique is an Ordinary Least Squares (OLS) regression technique that utilized bootstrapping. In this study, we employed 10,000 resamples with a seed of 2437, and a 95% biascorrected confidence interval. All data processing was performed using SPSS for Windows version 22.



Results

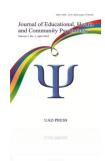
Pre-analysis

An inspection of the data revealed 17 missing values (0.12%) from 12 respondents (6.94%). Little's MCAR test indicated that the missing data were entirely random, $\chi^2(751) = 812.99$, p = 0.06. Therefore, data omission or imputation using any method was considered appropriate (Schafer & Graham, 2002). In this study, Expectation Maximization (EM) method was chosen to impute missing data.

Examination of skewness and kurtosis values revealed that data for well-being, distress, effective parenting, and child prosocial behavior deviated from normality. Therefore, data transformation was applied to these four variables. Re-analysis with the transformed data showed that normality assumptions were met for all except for effective parenting. Meanwhile, examination of multivariate outliers using Mahalanobis Distance did not reveal any significant deviations for either the problem behavior model or the prosocial behavior model. Finally, linearity and homoskedasticity assumptions were assessed using P-P plot graphs with problem behavior and prosocial behavior as the dependent variables. The results showed that data points were relatively evenly distributed along the diagonal line and no obvious patterns in the scatter plots. In conclusion, the assumptions of normality, linearity, and homoskedasticity were met with the transformed data, allowing for the mediation analysis to be performed.

Data description

Table 2 shows the descriptive statistics (*Mean* and *SD*) for each variable. Based on the table, mean scores of parental well-being and child prosocial behavior were above the midpoint of the score range. Conversely, mean scores of parental distress, effective and ineffective parenting, and child problem behavior were below the midpoint of the score range. This indicates that most participants had high levels of well-being and low levels of distress. Parenting from most parents also appeared to be positive. Furthermore, parents reported low levels of child problem behavior and high levels of child prosocial behavior.



<u>Table 2.</u>
Descriptive Statistics of Research Variables

	Variables ^a	I	2	3	4	5	6
Ι.	Child problem behavior	-	.35***	30***	.25**	33***	33***
2.	Parental distress	-	-	38***	.03	37***	07
3.	Parental well-being	-	-	-	24 ^{**}	19 [*]	.1 7 *
4.	Effective parenting	-	-	-	-	09	22 ^{**}
5.	Ineffective parenting	-	-	-	-	-	14
6.	Child prosocial behavior	-	-	-	-	-	-
	Mean	8.73	10.23	7.98	1.69	8.58	7.98
	SD	4.69	7.32	1.38	2.40	3.71	1.73
	Score range	0-40	0-63	0-10	0-21	0-24	0-10

Notes: ^aCorrelation was calculated using transformed data, while M and SD were calculated from raw data (N = 173).

Table 2 also presents the results of product moment correlations between research variables. It was found that child problem behavior was significantly related to all variables. High levels of parental distress and low levels of well-being were associated with increased child problem behavior. Effective and ineffective parenting were also significantly correlated with child problem behavior. It should be noted that higher scores on effective parenting indicate less positive encouragement and poorer parent-child relationships. For ineffective parenting, a high score indicates poor parenting in terms of consistency and harshness. Problem behavior was negatively correlated with prosocial behavior. Prosocial behavior was positively correlated with parental well-being and effective parenting. As expected, parental distress was negatively correlated with parental well-being. While parental distress was significantly correlated only with ineffective parenting, parental well-being was significantly correlated with both effective and ineffective parenting.

Mediation Results

Mediation analyses were conducted using the SPSS PROCESS macro for path analysis to test each hypothesis. The results can be seen in <u>Table 3</u> below.

p < .05; p < .01; p < .001

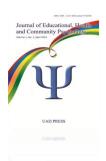


Table 3.

Path Coefficients and Mediation Effects of Parenting on the Relationship between Parents' Psychological Conditions and Child Outcomes

Child Outcomes					
Path	Ь	SE	t	Þ	95% CI
Hypothesis I ^a					
$WB \rightarrow EP(a_i)$	-1.22	0.41	-2.97	0.003	-2.030.41
$EP \rightarrow PB(b_i)$	1.12	0.35	3.22	0.002	0.43 - 1.81
WB →PB					
Total effect (c)	-4.70	1.92	-2.44	0.016	-8.500.90
Direct effect (c')	-2.88	1.89	-1.52	0.129	-6.61 - 0.85
$WB \rightarrow EP \rightarrow PB$					
Indirect effect (a_ib_i)	-1.37	0.76	e	e	-3.290.26
$WB \rightarrow IP (a_2)$	-1.46	1.54	-0.95	0.342	-4.50 - 1.57
$IP \rightarrow PB (b_2)$	0.31	0.09	3.31	0.001	0.12 - 0.49
$WB \rightarrow IP \rightarrow PB$					
Indirect effect (a_2b_2)	-0.45	0.55	e	е	-1.78 - 0.44
Hypothesis 2 ^b					
$D \rightarrow EP(a_i)$	-0.06	0.07	-0.86	0.389	-0.19 - 0.07
$EP \rightarrow PB(b_i)$	1.12	0.35	3.22	0.002	0.43 - 1.81
D → PB					
Total effect (c)	0.95	0.31	3.09	0.002	0.34 - 1.55
Direct effect (c')	0.71	0.31	2.32	0.022	0.10 - 1.31
$D \rightarrow EP \rightarrow PB$					
Indirect effect (a_1b_1)	-0.06	0.08	е	e	-0.27 - 0.06
$D \rightarrow IP (a_2)$	0.98	0.24	4.00	0.000	0.50 - 1.46
$IP \rightarrow PB (b_2)$	0.31	0.93	3.31	0.001	0.12 - 0.49
$D \rightarrow IP \rightarrow PB$					
Indirect effect (a_2b_2)	0.30	0.12	e	e	0.11 - 0.61
Hypothesis 3 ^c					
WB \rightarrow EP (a_i)	-1.35	0.42	-3.20	0.002	-2.190.52
$EP \rightarrow P(b_i)$	-0.14	0.04	-3.62	0.000	-0.210.06
WB →P					
Total effect (c)	0.22	0.20	1.06	0.292	-0.19 - 0.62
Direct effect (c')	0,03	0.20	0.14	0.885	-0.37 - 0,43
$WB \rightarrow EP \rightarrow P$					
Indirect effect (a_ib_i)	0.18	0.08	e	e	0.06 - 0.39
$WB \rightarrow IP(a_2)$	-0.32	1.58	-0.20	0.842	-3.22 - 2.81
$IP \rightarrow P(b_2)$	-0.01	0.10	-1.29	0.198	-0.03 - 0.01
$WB \rightarrow IP \rightarrow P$					
Indirect effect (a_2b_2)	0.00	0.03	e	e	-0.04 - 0.08
Hypothesis 4 ^d					
$D \rightarrow EP(a_l)$	-0.02	0.06	-0.32	0.748	-0.15 - 0.11

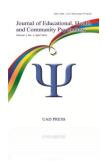


Table 3.

Path Coefficients and Mediation Effects of Parenting on the Relationship between Parents' Psychological Conditions and Child Outcomes

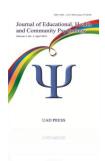
Child Outcomes					
$EP \rightarrow P(b_i)$	-0.14	0.04	-3.62	0.000	-0.210.06
$D \rightarrow P$					
Total effect (c)	0.02	0.03	0.60	0.548	-0.04 - 0.08
Direct effect (c')	0.03	0.03	0.89	0.375	-0.03 - 0.09
$D \rightarrow EP \rightarrow P$					
Indirect effect (a_1b_1)	0.00	0.01	e	e	-0.01 - 0.02
$D \rightarrow IP (a_2)$	0.93	0.24	3.88	0.000	0.46 - 1.40
$IP \rightarrow P(b_2)$	-0.01	0.01	-1.29	0.198	-0.03 - 0.01
$D \rightarrow IP \rightarrow P$					
Indirect effect (a_2b_2)	-0.01	0.01	е	e	-0.04 - 0.01

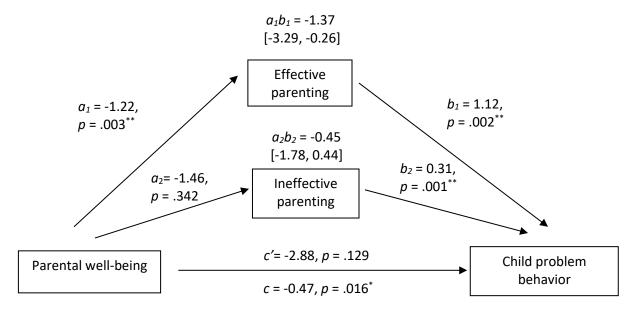
Note. WB = Parental well-being, EP = Effective parenting, IP = Ineffective parenting, PB = Problem behavior, D = Parental distress, P = Prosocial behavior. ^aParental distress, financial difficulties, and child age were controlled (N = 172 due to missing data on demographic variables), ^bParental well-being, financial difficulties, and child age were controlled (N = 172 due to missing data on demographic variables), ^cParental distress, child caregiver, and child age were controlled (N = 167 due to missing data on demographic variable), ^dParental well-being, child caregiver, and child age were controlled (N = 167 due to missing data on demographic variable).

Hypothesis I

A mediation analysis was conducted to test the relationship between parental well-being and child problem behavior through effective parenting and ineffective parenting, controlling for parental distress and demographic factors of financial difficulty and child age. As seen in Table 3 and Figure I, parental well-being was only significantly related to effective parenting, t(170) = -2.97, p < .01, but in the next path, both effective and ineffective parenting were significantly correlated with child problem behavior, t(170) = 3.22, p < .01 and t(170) = 3.31, p < .01, respectively. The total effect between well-being and child problem behavior was also significant, t(170) = -2.44, p < .05 but the *direct effect* between the two variables was not significant, t(170) = -1.52, ns. Meanwhile, a significant indirect effect was found only for effective parenting, as demonstrated by the bootstrapping confidence interval (CI) of -3.29 to -0.26, which does not include zero.

 $^{^{\}rm e}$ t and p values were not available because the indirect effect was tested using a bootstrap confidence interval method (Hayes, 2017)

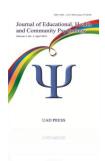


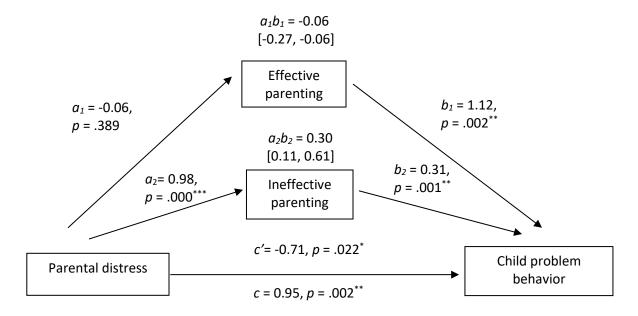


<u>Figure 1</u>. Mediation model paths and statistics between parental well-being and child problem behavior. This model controls for parental distress, financial difficulties, and child age. Shown are unstandardized regression coefficients, p values, and the bootstrapping CI's (lower limit, upper limit) for indirect effects. CI's that do not include zero indicate statistical significance. N = 172 due to missing data in demographic variables. **p < .01, *p < .05

Hypothesis 2

The mediation effects of effective and ineffective parenting on the relationship parental distress and child problem behavior were examined. Parental well-being and demographic factors of financial difficulty and child age were controlled for in this analysis. As seen in Table 3 and Figure 2, parental distress was only significantly related to ineffective parenting, t(170) = 4.00, p < .001, but in the next path, both effective and ineffective parenting were significantly related to child problem behavior, t(170) = 3.22, p < .01 and t(170) = 3.31, p < .01, respectively. The total effect between parental distress and child behavior problem was significant, t(170) = 3.09, p < .01, as was the direct effect between the two variables, t(170) = 2.32, p < .05. However, a significant indirect effect was found only for ineffective parenting, as demonstrated by the bootstrapping confidence interval of 0.11 to 0.61, which does not include zero.



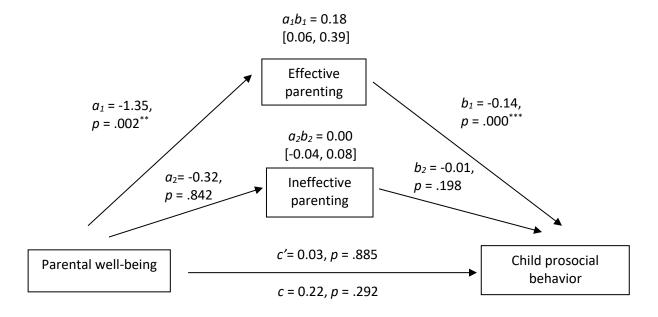


<u>Figure 2.</u> Mediation model paths and statistics between parental distress and child problem behavior. This model controls for parental well-being, financial difficulties, and child age. Shown are unstandardized regression coefficients, p values, and the bootstrapping Cl's (lower limit, upper limit) for indirect effects. Cl's that do not include zero indicate statistical significance. N = 172 due to missing data in demographic variables. ***p < .001, *p < .01, *p < .05

Hypothesis 3

A mediation analysis was performed to test the relationship between parental well-being and child prosocial behavior through effective and ineffective parenting, controlling for parental stress, and demographic factors of child caregiver and child age. As seen in Table 3 and Figure 3, parental well-being was only significantly related to effective parenting, t(165) = -3.20, p < .01. This effective parenting then significantly influenced child prosocial behavior, t(165) = -3.62, p < .001. Meanwhile, the effect of parental well-being on ineffective parenting and the effect of ineffective parenting on child prosocial behavior were not significant. The total effect between parental well-being and prosocial behavior was not significant either, t(165) = 1.06, ns, as was the direct effect between the two variables, t(165) = 0.03, ns. However, for indirect effect, effective parenting was found to mediate the relationship between parental well-being and child prosocial behavior. This is demonstrated by the bootstrapping confidence interval of 0,06 to 0,39, which excludes zero.



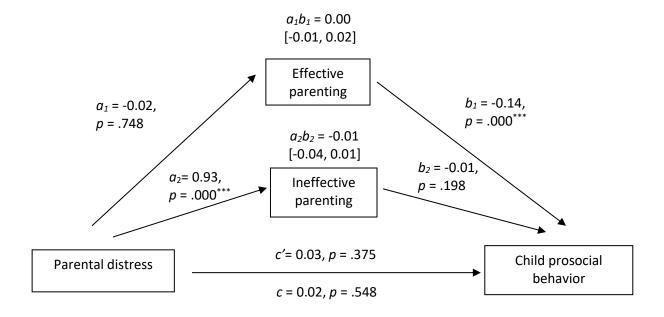


<u>Figure 3.</u> Mediation model paths and statistics between parental well-being and child prosocial behavior. This model controls for parental distress, child caregiver, and child age. Shown are unstandardized regression coefficients, p values, and the bootstrapping Cl's (lower limit, upper limit) for indirect effects. Cl's that do not include zero indicate statistical significance. N = 167 due to missing data in demographic variables. ***p < .001, **p < .01.

Hypothesis 4

The mediation effects of effective and ineffective parenting on the relationship parental distress and child prosocial behavior were examined. Parental well-being and demographic factors of child caregiver and child age were controlled for in this analysis. As seen in Table 3 and Figure 2, parental distress was significantly associated with ineffective parenting, t(165) = 3.88, p < .001. However, in the next path, ineffective parenting was not significantly associated with child prosocial behavior, t(165) = -1.29, ns. In contrast, effective parenting was significantly related to child prosocial behavior, t(165) = -3.62, p < .001. The total effect between parental distress and child prosocial behavior was not significant, t(165) = 0.60, ns, as was the direct effect between the two variables, t(165) = 0.89, ns. No significant indirect effects were found for either effective or ineffective parenting, thus, the hypothesis 4 was not confirmed.





<u>Figure 4.</u> Mediation model paths and statistics between parental distress and child prosocial behavior. This model controls for parental well-being, child caregiver, and child age. Shown are unstandardized regression coefficients, p values, and the bootstrapping Cl's (lower limit, upper limit) for indirect effects. Cl's that do not include zero indicate statistical significance. N = 167 due to missing data in demographic variables. ****p < .001.

Discussion

This study combines Belsky's parenting model and Newland's family well-being model. It examines parents' psychological conditions from two sides: parental distress and parental well-being, and how each of these conditions affects parenting practices. As a result, these parenting practices may then impact children's behavior, both negative (problem behavior) and positive (prosocial behavior). Specifically, this study investigates the influence of parental well-being and distress on children's problem and prosocial behavior through effective and ineffective parenting.

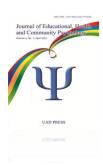
Mediation analyses revealed that while effective parenting mediated the relationship between parental well-being and child problem behavior (hypothesis I), and ineffective parenting mediated the relationship between parental distress and child problem behavior (hypothesis 2), parenting did not mediate the relationship between parental distress and child prosocial behavior (hypothesis 4). Effective parenting was found to mediate only the relationship between parental



well-being and child prosocial behavior (hypothesis 3). Thus, not all hypotheses in this study were supported.

Overall, the results of this study suggest different mechanisms for parental well-being and distress in relation to child behavior. Parental well-being was found to be associated with effective parenting, while parental distress was found to be associated with ineffective parenting. The impact of well-being was also found to be broader than that of distress, with parental well-being being associated with a decrease in child problem behavior and an increase in child prosocial behavior, while parental distress was only associated with an increase in child problem behavior.

The important role of parental well-being and its impact on parenting and child behavior has also been found in previous studies (Cheah et al., 2009; Sumargi & Kristi, 2017). A study by Cheah et al (2009) showed that psychological well-being predicts authoritative parenting, particularly when parents experience lower stress levels. Similarly, the study by Sumargi and Kristi (2017) demonstrated that authoritative parenting mediates the relationship between parental well-being and adolescent problem behavior, with increased parental well-being positively influencing authoritative parenting, which then leads to a decrease in adolescent problem behavior. The result of this study (hypothesis I) support and extend the previous findings by specifically revealing the dimensions of parenting that are influenced by parental well-being and which in turn influence child problem behavior. These dimensions are positive encouragement and parent-child relationship. Parents with a high level of well-being are satisfied with their life, motivated to develop themselves, independent, connected to others, and able to contribute well to society (Hervas & Vazquez, 2013). In general, parents feel happy and have a meaningful life, and therefore they demonstrate positive views and attitude towards those around them, including their children. Parents become more likely to employ positive parenting strategies such as paying attention to and appreciating children (positive encouragement), and inviting children to talk and spend time together (parent-child relationship) (Sanders et al., 2014; Sumargi et al., 2018). This effective parenting is correlated with a decrease in child emotional and behavioral problems (Pinquart, <u>2017</u>).



In this study, increased well-being not only impacts a decrease in child problem behavior (hypothesis I), but also leads to an increase in child prosocial behavior (hypothesis 3). Increased prosocial behavior is characterized by children's concern for other's feelings, kindness, willingness to share, and helpfulness (Goodman, 1997). With a high level of well-being, parents can provide support and positive responses to children's prosocial behavior. A strong relationship between parents with their children may enable parents to develop children's emotional and social competencies related to prosocial behavior, such as the ability to express and regulate emotions and show empathy for others (Spinrad & Gal, 2018). Children can also learn by observing parents' behavior when interacting with others. Parents who encourage children's prosocial behavior will make children emulate that behavior (Padilla-Walker et al., 2016). Katsantonis and McLellan (2023) found that a positive parent-child relationship is a protective factor that can prevent mental health problems and increase children's care and empathy for others. Prosocial behavior that is fostered from childhood tends to continue into adolescence (Katsantonis & McLellan, 2023). According to Newland (2015), parental well-being provides the foundation for positive parenting, which ultimately supports child well-being.

The next finding regarding the mediating effect of ineffective parenting in the relationship between parental distress and child problem behavior (hypothesis 2) is consistent with Belsky's parenting model and previous research findings (Belsky, 1984; Huang et al., 2017, 2018; Taraban & Shaw, 2018). Parents experiencing distress tend to be inconsistent in their parenting (e.g., not following through on what they say) and tend to use harsh discipline strategies (e.g., yelling, threatening, and even hitting their children). As a results, this contributes to increased problem behavior in children (Huang et al., 2017; Sumargi et al., 2015). Taraban and Shaw (2018) highlight parents experiencing distress are more likely to demonstrate negative responses to their child. Parental distress potentially creates conflicts in the family, leading to domestic violence or child abuse, which can impact child emotional and behavioral problems (Crum & Moreland, 2017; Huang et al., 2017; Jones et al., 2021).

It is important to note, however, that while parental distress significantly influences ineffective parenting, this study did not find parenting mediation in the relationship between parental distress



and child prosocial behavior (hypothesis 4). As shown in Table 2, ineffective parenting did not significantly correlate with child prosocial behavior. Parental distress also did not have a direct effect on prosocial behavior (Figure 4). This differs from other studies that have found a significant relationship between parental distress and decreased child prosocial behavior (Ward & Lee, 2020). The difference in results may be related to the samples. The parents in Ward and Lee's (2020) longitudinal study were parents of young children (3 years old), while in this study, the parents were parents of elementary school children (6-12 years old). Unlike young children who are still dependent on their parents, elementary school children are more independent and have more activities outside their home, such as at school. Thus, elementary school children are likely to be influenced by their school environment. Schools play a role in developing children's emotional and social skills, particularly in fostering empathy and helping behaviors (Mulyawati et al., 2022). Moreover, in Indonesia, moral or character education is part of the elementary school curriculum, which aims to foster children's prosocial behavior (Novitasari, 2017). This may be why some children still demonstrate prosocial behavior even though their parents experience distress and often employ ineffective parenting strategies.

This study has several limitations that need to be addressed in future research. First, the research design used in this study is cross-sectional, meaning that data were collected simultaneously for all variables. Future studies should use a longitudinal or experimental design to establish causal relationships between parents' psychological conditions, parenting, and child outcomes. Second, this study utilizes parent report, implying child behaviors and parent-child relationship from parents' perspectives. To avoid bias, further research can include direct observation or teacher report to measure child behaviors and parenting practices more objectively. Third, the prosocial behavior measure used in this study is a behavioral screening tool with a limited number of items. Therefore, it does not comprehensively measure various components of prosocial behaviors. Future studies should consider including a more comprehensive measure of child prosocial behavior with a broader range of items. Finally, this study involves participants from one school, limiting the generalizability of the results. Future research can expand the population by involving parents from various schools across Indonesia to enhance the generalizability of the findings.



Conclusion

The results suggest that parenting plays a mediating role in the relationship between parental psychological conditions (both distress and well-being) and child behaviors, with slightly different relationship mechanisms involved. Well-being is related to child problem behavior and prosocial behavior, mediated by effective parenting (positive reinforcement and parent-child relationship), while distress is related to child problem behavior, mediated by ineffective parenting (inconsistent and coercive parenting). This implies that child problem behavior can be reduced by increasing parental well-being and addressing parental distress. Notably, there has been extensive research on parental distress in relation to parenting and child problem behavior, but less research on parental well-being based on a positive psychology framework in relation to parenting and child behaviors. Based on the results in this study, increasing parental well-being can reduce child problem behavior as well as promote child prosocial behavior. Therefore, family intervention programs aiming to prevent and manage child emotional and behavioral problems should consider parental well-being as a protective factor. In addition to teaching positive parenting skills to parents, family intervention programs can include strategies to promote parental well-being, such as emotion regulation, relaxation, and mindfulness techniques (Ling et al., 2021; Townshend et al., 2016). Thus, measuring parental well-being can be a valuable indicator of program effectiveness.

This study represents an initial effort to develop a model of parenting and family well-being in the context of Indonesian (non-Western) culture. This model incorporates both positive and negative aspects of parental psychological conditions, parenting, and child behaviors. Future research can further refine the model by considering additional variables such as parent-caregiver teamwork, school-family relationships, and child cognitive and social competence.

Acknowledgment

The authors would like to thank all parents who participated in the study and students who helped with the research.

Conflict of Interest

The researchers declare that this paper has no conflicts of interest.

Sumargi, Prasetyo.

Author Contribution

All authors have contributed equally to the study's conceptualization, interpreting data, reviewing, and editing the manuscript.

Data Availability

Data can be provided upon request to the author.

Declarations Ethical Statement

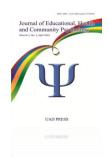
The study followed the guidelines of the Declaration of Helsinki.

Informed Consent Statement

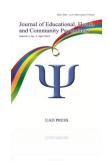
Informed consent was obtained from all persons involved in the study.

References

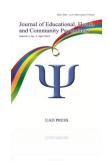
- Aarø, L. E., Davids, E. L., Mathews, C., Wubs, A. G., Smith, O. R. F., & de Vries, P. J. (2022). Internalizing problems, externalizing problems, and prosocial behavior-three dimensions of the Strengths and Difficulties Questionnaire (SDQ): A study among South African adolescents. *Scandinavian Journal of Psychology*, 63(4), 415–425. doi: 10.1111/sjop.12815
- Andriani, R., & Sumargi, A. M. (2019). Hubungan antara kebersyukuran (*gratitude*) dengan stres pada ibu yang memiliki anak dengan gangguan spektrum autisme. *Experientia*, 7(2), 26-32. doi: 10.33508/exp.v7i2.2728
- Belsky, J. (1984). The determinants of parenting: A process model. *Child Deevelopment*, 55(1), 83–96. doi: 10.2307/1129836
- Center for Reproductive Health, University of Queensland, & Johns Bloomberg Hopkins School of Public Health. (2022). Indonesia National Adolescent Mental Health Survey (I-NAMHS): Laporan Penelitian. https://qcmhr.org/outputs/reports/12-i-namhs-report-bahasa-indonesia
- Cheah, C. S. L., Leung, C. Y. Y., Tahseen, M., & Schultz, D. (2009). Authoritative parenting among immigrant Chinese mothers of preschoolers. *Journal of Family Psychology*, 23(3), 311. doi: 10.1037/a0015076 https://doi.org/10.1177/1077559520941919
- Cooke, J. E., Deneault, A., Devereux, C., Eirich, R., Fearon, R. M. P., & Madigan, S. (2022). Parental sensitivity and child behavioral problems: A meta-analytic review. *Child Development*, *93*(5), 1231–1248. doi: 10.1111/cdev.13764
- Crum, K. I., & Moreland, A. D. (2017). Parental stress and children's social and behavioral outcomes: The role of abuse potential over time. *Journal of Child and Family Studies*, 26, 3067–3078. doi: 10.1007/s10826-017-0822-5
- Dubowitz, H., Roesch, S., & Lewis, T. (2021). Child maltreatment, early adult substance use, and mediation by adolescent behavior problems. *Child Maltreatment*, 26(2), 238–248. doi: 10.1177/1077559520941919



- Goodman, R. (1997). The Strengths and Difficulties Questionnaire: a research note. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, 38(5), 581–586. doi: 10.1111/j.1469-7610.1997.tb01545.x
- Grueneisen, S., & Warneken, F. (2022). The development of prosocial behavior—from sympathy to strategy. *Current Opinion in Psychology*, 43, 323–328. doi: 10.1016/j.copsyc.2021.08.005
- Guarnaccia, C., De Vita, E., Sortino, L., & Giannone, F. (2022). Links between adverse childhood experiences, psychopathological symptoms and recidivism risk in juvenile delinquents. *European Journal of Criminology*, 19(5), 1040–1059. doi: 10.1177/1477370820941408
- Hayes, A. F. (2017). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. Guilford publications.
- Henry, J. D., & Crawford, J. R. (2005). The short-form version of the Depression Anxiety Stress Scales (DASS-21): Construct validity and normative data in a large non-clinical sample. *British Journal of Clinical Psychology*, 44(2), 227–239. doi: 10.1348/014466505X29657
- Hervas, G., & Vazquez, C. (2013). Construction and validation of a measure of integrative well-being in seven languages: The Pemberton Happiness Index. *Health and Quality of Life Outcomes*, 11, 1–13. doi: 10.1186/1477-7525-11-66
- Huang, K.-Y., Abura, G., Theise, R., & Nakigudde, J. (2017). Parental depression and associations with parenting and children's physical and mental health in a sub-Saharan African setting. *Child Psychiatry & Human Development*, 48, 517–527. doi: 10.1007/s10578-016-0679-7
- Huang, K.-Y., Bornheimer, L. A., Dankyi, E., & de-Graft Aikins, A. (2018). Parental wellbeing, parenting and child development in Ghanaian families with young children. *Child Psychiatry & Human Development*, 49, 833–841. doi: 10.1007/s10578-018-0799-3
- Jones, J. H., Call, T. A., Wolford, S. N., & McWey, L. M. (2021). Parental stress and child outcomes: The mediating role of family conflict. *Journal of Child and Family Studies*, 30, 746–756. doi: 10.1007/s10826-021-01904-8
- Katsantonis, I., & McLellan, R. (2023). The role of parent—child interactions in the association between mental health and prosocial behavior: Evidence from early childhood to late adolescence. *International Journal of Behavioral Development*. doi: 10.1177/01650254231202444
- Lazar, L., & Eisenberger, N. I. (2022). The benefits of giving: Effects of prosocial behavior on recovery from stress. *Psychophysiology*, *59*(2), e13954. doi: 10.1111/psyp.13954
- Ling, J., Zahry, N. R., & Liu, C.-C. (2021). Stress management interventions among socioeconomically disadvantaged parents: a meta-analysis and moderation analysis. *International Journal of Nursing Studies*, 120, 103954. doi: 10.1016/j.ijnurstu.2021.103954
- Liu, W., Su, T., Tian, L., & Huebner, E. S. (2021). Prosocial behavior and subjective well-being in school among elementary school students: the mediating roles of the satisfaction of relatedness needs at school and self-esteem. *Applied Research in Quality of Life*, 16(4), 1439–1459. doi: 10.1007/s11482-020-09826-1



- Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. Behaviour Research and Therapy, 33(3), 335–343. doi: 10.1016/0005-7967(94)00075-U
- Manuele, S. J., Yap, M. B. H., Lin, S. C., Pozzi, E., & Whittle, S. (2023). Associations between paternal versus maternal parenting behaviors and child and adolescent internalizing problems: A systematic review and meta-analysis. *Clinical Psychology Review*, 105(102339), 1–16. doi: 10.1016/j.cpr.2023.102339
- Mulyawati, Y., Marini, A., & Nafiah, M. (2022). Pengaruh empati terhadap perilaku prososial peserta didik sekolah dasar. *Scholaria: Jurnal Pendidikan Dan Kebudayaan*, 12(2), 150–160. doi: 10.24246/j.js.2022.v12.i2.p150-160
- Newland, L. A. (2015). Family well-being, parenting, and child well-being: Pathways to healthy adjustment. *Clinical Psychologist*, 19(1), 3–14. doi: 10.1111/cp.12059
- Novitasari, N. (2017). Urgensi peran sekolah sebagai komunitas adil untuk mentransformasikan perilaku prososial siswa SD di era digital native. In A. R. Hakim (Ed.), Seminar Nasional PGSD Universitas Kanjuruhan Malang (p. I). Universitas Kanjuruhan Malang. https://semnas.unikama.ac.id/pgsd/artikel.php
- Oberle, E., Ji, X. R., & Molyneux, T. M. (2022). Pathways from prosocial behaviour to emotional health and academic achievement in early adolescence. *The Journal of Early Adolescence*, 43(5), 632–653. doi: 10.1177/02724316221113349
- Padilla-Walker, L. M., Nielson, M. G., & Day, R. D. (2016). The role of parental warmth and hostility on adolescents' prosocial behavior toward multiple targets. *Journal of Family Psychology*, 30(3), 331. doi: 10.1037/fam0000157
- Pedersen, M. L., Holen, S., Lydersen, S., Martinsen, K., Neumer, S.-P., Adolfsen, F., & Sund, A. M. (2019). School functioning and internalizing problems in young schoolchildren. *BMC Psychology*, 7(1), 1–13. doi: 10.1186/s40359-019-0365-1
- Pfattheicher, S., Nielsen, Y. A., & Thielmann, I. (2022). Prosocial behavior and altruism: A review of concepts and definitions. *Current Opinion in Psychology*, 44, 124–129. <u>doi: 10.1016/J.COPSYC.2021.08.021</u>
- Pinquart, M. (2017). Associations of parenting dimensions and styles with internalizing symptoms in children and adolescents: A meta-analysis. *Marriage & Family Review*, 53(7), 613–640. doi: 10.1080/01494929.2016.1247761
- Sanders, M. R., Morawska, A., Haslam, D. M., Filus, A., & Fletcher, R. (2014). Parenting and Family Adjustment Scales (PAFAS): Validation of a brief parent-report measure for use in assessment of parenting skills and family relationships. *Child Psychiatry & Human Development*, 45, 255–272. doi: 10.1007/s10578-013-0397-3



- Saputra, F., Yunibhand, J., & Sukratul, S. (2017). Relationship between personal, maternal, and familial factors with mental health problems in school-aged children in Aceh province, Indonesia. *Asian Journal of Psychiatry*, 25, 207–212. doi: 10.1016/J.AJP.2016.10.025
- Schafer, J. L., & Graham, J. W. (2002). Missing data: Our view of the state of the art. *Psychological Methods*, 7(2), 147–177. doi: 10.1037//1082-989X.7.2.147
- Soto-Sanz, V., Castellví, P., Piqueras, J. A., Rodríguez-Marín, J., Rodríguez-Jiménez, T., Miranda-Mendizábal, A., Parés-Badell, O., Almenara, J., Alonso, I., & Blasco, M. J. (2019). Internalizing and externalizing symptoms and suicidal behaviour in young people: A systematic review and meta-analysis of longitudinal studies. *Acta Psychiatrica Scandinavica*, 140(1), 5–19. doi: 10.1111/acps.13036
- Spinrad, T. L., & Gal, D. E. (2018). Fostering prosocial behavior and empathy in young children. Current Opinion in Psychology, 20, 40–44. doi: 10.1016/j.copsyc.2017.08.004
- Sumargi, A., Filus, A., Morawska, A., & Sofronoff, K. (2018). The Parenting and Family Adjustment Scales (PAFAS): An Indonesian validation study. *Journal of Child and Family Studies*, 27(3), 756–770. doi: 10.1007/s10826-017-0926-y
- Sumargi, A., & Giovanni, J. (2021). Strength-based parenting and well-being in adolescence [Strength-based parenting dan kesejahteraan remaja]. *Anima, Indonesian Psychological Journal*, 36(1), 90–107. doi: 10.24123/aipj.v36i1.2788
- Sumargi, A., & Kristi, A. N. (2017). Well-being orang tua, pengasuhan otoritatif, dan perilaku bermasalah pada remaja. *Jurnal Psikologi UGM*, 44(3), 185–197. doi: 10.22146/jpsi.25381
- Sumargi, A., Sofronoff, K., & Morawska, A. (2015). Understanding parenting practices and parents' views of parenting programs: A survey among Indonesian parents residing in Indonesia and Australia. *Journal of Child and Family Studies*, 24(1), 141–160. doi: 10.1007/s10826-013
- Taraban, L., & Shaw, D. S. (2018). Parenting in context: Revisiting Belsky's classic process of parenting model in early childhood. *Developmental Review*, 48, 55–81. doi: 10.1016/J.DR.2018.03.006
- Townshend, K., Jordan, Z., Stephenson, M., & Tsey, K. (2016). The effectiveness of mindful parenting programs in promoting parents' and children's wellbeing: a systematic review. *JBI Database of Systematic Reviews and Implementation Reports*, 14(3), 130–180. doi: 10.11124/JBISRIR-2016-2314
- Ward, K. P., & Lee, S. J. (2020). Mothers' and fathers' parenting stress, responsiveness, and child wellbeing among low-income families. *Children and Youth Services Review*, 116, 105218. doi: 10.1016/j.childyouth.2020.105218
- Wong, T. K. Y., Konishi, C., & Kong, X. (2021). Parenting and prosocial behaviors: A meta-analysis. *Social Development*, 30(2), 343–373. doi: 10.1111/sode.12481
- Yurduşen, S., Erol, N., & Gençöz, T. (2013). The effects of parental attitudes and mothers' psychological well-being on the emotional and behavioral problems of their preschool children. *Maternal and Child Health Journal*, 17, 68–75. doi: 10.1007/s10995-012-0946-6

