Predictors of Behavioral Problems in the Context of Maternal Parenting styles among Jordanian Kindergarten and Elementary-School Children after the COVID-19 Pandemic

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Abstract

This study investigated predictors of behavioral problems in the context of maternal parenting styles among Jordanian kindergarten and elementary-school children after theCovid-19 pandemic. The participants were 222 mothers with children from 3-8 years old who agreed to complete an online questionnaire. The survey consisted of the Eyberg child behavior inventory, which includes 36 items, and the parental authority questionnaire, which consists of 30 items. The results revealed that the total mean scores for children's behavioral problems were moderate. Furthermore, it was found that the most predominant parenting style was the authoritative parenting style. However, the data model's only significant predictors of child behavioral problems were the authoritarian parenting style, and the child gender and the mother's age. Mothers of children with behavioral problems can collaborate with teachers to help their children decrease their concerns.

Keywords: Child'sbehavioral problems; the pandemic (COVID-19); Kindergarten and Elementary-School Children.

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التنبؤ بالمشاكل السلوكية في سياق أنماط التنشئة الأمومية بين أطفال رياض الأطفال والمدارس الابتدائية في الأردن بعد جائحة كوفيد-19

الملخص

تناولت هذه الدراسة المتنبئات بالمشكلات السلوكية وأساليب التربية الأمومية لدى أطفال الروضة والمدارس الابتدائية الأردنيين بعد جائحة كوفيد. اشتملت عينة الدراسة على 222 أمًّا من اللواتي لديهن أطفال تتراوح أعمارهم بين 3-8 سنوات، واللواتي وافقن على تعبئة الاستبانة إلكترونيا. وقد تكونت الاستبانة من أداة أيبرج (Eberg) التي تتضمن (36) فقرة، وأداة السلطة الوالدية، والتي تضمنت (30) فقرة. وأظهرت النتائج أن متوسط درجات المشكلات السلوكية لدى الأطفال كان معتدلا. علاوة على ذلك، فقد تبين أن أسلوب التربية الأكثر شيوعا هو أسلوب الوالدي الديمقراطي، وعلى العكس كانت المتنبئات المهمة الوحيدة المتوقعة لنموذج البيانات للمشكلات السلوكية لدى الاطفال هو الأسلوب الوالدي الاستبدادي، وجنس الطفل، وعمر الأم. وأوصت الدراسة أن على الأمهات اللواتي يعاني أطفالهم من مشاكل سلوكية التعاون مع المعلمات لتقليل مخاوفهن.

الكلمات المفتاحية: المشاكل السلوكية للأطفال; جائحة (كوفيد -19); أطفال الروضة والمدارس الإبتدائية.

Introduction

Externalizing behavioral problems are the most frequent and continual form of psychological problems of childhood which is the increasing concern after the pandemic (Doan, etal., 2023). Moreover, externalizing problems during childhood, such as conduct disorder, oppositional defiant disorder, and attention deficit hyperactivity disorder, are frequent and significant mental health problems that are often comorbid and frequently correlated with poor outcomes during adolescence and adulthood (Mannuzza &; Pliszka, 2000; Barkley et al., 2006; Biederman et al., 2008; Pardini & Fite, 2010; Van Heel et al., 2019; Mak et al., 2020). The most common psychopathology among preschoolers was Attention-Deficit/Hyperactivity Disorder (86%), followed by disruptive behavioral disorder (61%) (Wilens et al., 2002; Pardini & Fite, 2010).

Maternal parenting and the child's behavioral problems

Several trends and research studies in the field over the last 30 years have focused interest on younger children who may be at risk to externalize behavioral problems (e.g., aggression toward peers and parents, marked noncompliance, and high activity level) and show early signs of these problems in the context of parenting, which are likely to come in early childhood psychopathology (Campbell et al., 2000; Kuppens& Ceulemans, 2019).

Kaufman, et.al. (2000) examined the association between authoritative and authoritarian parenting styles, problem behavior and socio-emotional adjustment among primary school children. Results indicated that authoritative parenting associated positively with socio-emotional adjustment and negatively with children's behavioral problems. Moreover, there are no significant correlations between authoritarian parenting and adjustment.

Dwairy and Menshar (2006) conducted a study to examine the most predominant parenting styles with a sample of (351) in the Egyptian community. The results showed that authoritarian style was the most frequent style with males and authoritative with females in a rural community and vice versa in the urban community. However, there was a higher level of psychological disorders among females than males.

Morgan (2009) investigated the effects of socioeconomic status on children's behavioral problems and other socio-demographics (e.g., gender, race, and ethnicity). Results indicated that boys displayed behavioral problems twice than girls. Also, it showed that children from lower educational level households displayed behavioral problems twice as likely as girls, especially with a mother with a low educational level. Which this result is also emphasized by Tamis-LeMonda et al., (2009).

Al-Hassan and Takash (2011) interviewed 112 families to discover the similarities and the differences between mothers and fathers in regards to success and failures in rearing and progressive versus authoritarian attitudes in Jordan. The results showed that there are similarities between mothers and fathers who have high level of progressive attitudes than authoritarian attitudes. Another study by Nes (2014), focused on the association between the socio-

demographics (e.g., mother employment) and children's behavioral problems at age (3-5) from (22,115) Norwegian mothers. They reported their children to have severe to moderate behavioral problems whether they are employed or unemployed. According to the parents' reports, there was a strong negative linear relationship between parental age and externalizing behavioral problems (Zondervan-Zwijnenburg, 2020).

Keyser,Ahn, and Unick (2017) investigated the relationship between maternal level factors (maternal spanking, maternal depression, parenting stress) child level factors (attachment, cognitive ability, child welfare involvement) and children's behavioral problems from age 3 - 9.

Results indicated that there is a strong relationship between maternal depression, secure attachment, and the impact on children's behavioral problems. However, parent depression had decreased the impact on children's behavioral problems.

Van Heel et.al. (2019), investigated transactional relationships among adolescent personality, parental control, and externalizing problem behavior (i.e., aggressive or rule-breaking behavior). The results showed that parental control had an important role in increasing behavioral problems among adolescents.

Covid-19 outcomes related to parenting and children's behavioral problems

The COVID-19 pandemic has affected all countries in all aspects of life, including Jordan.The education field has been particularly hit by the need to have children in all stages to stay home and learn online (Abuhammad, 2020; Spiteri et al., 2023). When school children are forced to learn at home, as was the case during the pandemic, parents have the added burden of monitoring any behavioral problems of their children while learning online. Recent studies in different countries suggest that parents' relationships with children and their parenting styles and behaviors were negatively impacted by the pandemic, including school closures (e.g., Christner et al., 2021; Hanetz-Gamliel et al., 2021). Also, the COVID-19 has been linked with an increase in mothers' anxiety and children's behavioral problems during the ongoing COVID-19 pandemic (Domínguez - Álvarezet al., 2020; Ghosh et al., 2021).

The rearing had an enormous effect on parents functioning. Parents' experienced parenting stress, which also impacted their parenting styles and their children's internalizing and externalizing problem behaviors, (e.g., sadness, anxiety, hitting, and anger), during the pandemic comparing after the pandemic (Jayanto, Koesma & Soetikno 2021). Recent research emphasizes that parenting styles are getting challenged and exaggerated during the later life.

Previous research studies have shown that poor parenting styles based on inconsistency in the relationship and physical punishment are causes of children's behavioral problems(Campbell et al., 2000).In particular,the association between children's emotional/behavioral issues and COVID-19 distress was substantially mediated by negative parenting styles (Hails, et al.,

2022).Moreover, permissive parenting (responsive and neglectful)styles were related to higher incidences of externalizing children's behavioral problems (Aunola & Nurmi, 2005; Del Vecchio & O'Leary, 2006). Particularly, parenting styles and the COVID-19 pandemic dynamic had a notable interaction effect on externalizing symptoms in children (Liu, et al., 2023).The level of maternal rejection is also highly correlated with externalizing behaviors in young children in low-income families (German etal., 2013; Keyser, Ahn, & Unick, 2017).In fact, following the pandemic, there seems to have been an increase in psychological issues for both parents and children (Francisco et al., 2020; Lee et al., 2021; Waller et al., 2021). In addition, to examining the mediation-moderation relationships between mothers' anxiety symptoms and mentalization abilities and the prediction of child's behavioral problems, Dollberg et al., (2021) investigated the direct and indirect relationships between COVID-19, maternal anxiety symptoms, and behavioral issues in children in Palestine. The study consisted of two groups, with 140 mothers, 53 of whom were recruited after the pandemic and 87 were recruited before the pandemic. Results indicated that, in comparison to mothers in the pre-COVID-19 group, mothers in the COVID-19 group reported greater internalizing and externalizing behaviors in their children and had more anxiety symptoms.The relationship between the pandemic and the externalizing behaviors of children was tempered by the mentalization of mothers.

Christner et al. (2021) conducted a study during the COVID-19 pandemic to examine children's psychological well-being and behavioral problems in Germany with a sample of 2,672. Results showed that older children (7-10) experienced emotional problems and young children (3-6) experienced conduct problems and hyperactivity. Also, parents reported their stress level, their children's stress, and children's behavioral problems during the pandemic.

Additionally, following the implementation of COVID-19-related restrictions, a study employing a sample of 645 American parents whose children were between the ages of 2 and 7 years revealed an increase in the prevalence of behavioral issues in children (Gassman-Pines et al., 2020). Also, 841 Italian parents experienced a significant increase in children's behavioral problems (Giannotti, 2022).

Yaffe, (2023) conducted a study which examined the association between maternal parenting styles and mothers' worry about COVID-19 outcomes on preschool children's health and behaviors. The sample consisted of one hundred and four mothers. The results showed negative maternal attitudes (i.e., anger, stress) were connected with authoritarian parenting styles, while maternal pleasures were connected with more authoritative styles (i.e., support and warmth).

The previous research identified the reality of children's behavioral problems regarding maternal parenting styles and other factors during and after the pandemic.Thus, psychosocial interventions for children and parents after the COVID-19 pandemic are essential in childhood (Boldt, et al., 2021) and trauma

or adverse events untreated display themselves through developmental, behavioral, and problems of mental health (Williams et al., 2015; Lui, 2023).

Theoretical Framework

Resilience Theory Perspective

This study followed the resilience theory, emphasizing that environment and parental rearing influence childhood development (Davidov,2015). Masten et al., (2009) stated that resilience research significantly contributed to the literature on child development. Resilience indicates the lack of effective response to negative events and coping afterward, during, or when faced with high-risk situations (Bonanno & Diminich, 2013,). Based on resilience theory, for children to be resilient when they face an adverse event, they rely on people and social contexts to help provide positive opportunities and considered protective factors (Henry, 2015; Bülow, etal.,2021). Resilience relates to "parenting styles and child's behavior in that authoritative parenting, child self-control, and parental involvement are protective factors and permissive and authoritarian parenting and temperamental predisposition toward negative externalizing behaviors can be considered as risk factors" (Masten et al., 2009, see in Sommer thesis 2010, p. 19). This is also emphasized by Morgan (2009) and McDonald (2018), which indicated that risk factors in the socio-demographic background of the child or family raise a child's risk of behavioral problems.As a result, according to the theories on family resilience (Henry et al., 2015), the daily functioning of the family might get changed within these days along (Masten & Motti-Stefanidi, 2020).

Statement of the Problem

The situation of COVID -19 pandemic was stressful for families and their children; it is probably that some families were affected more or less than others, depending on the parents' circumstances and resources they have. For example, non-employed parents might have been more affected than employed ones, or parents who have more children might have been more affected than parents who have one child (Christner, 2021). From my experience as a researcher and a mother, the COVID-19 pandemic was stressful for families and their children, how much a family was affected depended on parents' circumstances and resources. The literature clearly states that strict discipline, poor social support, poverty, and maternal depression all contribute to poor behavioral consequences in early childhood (Herba et al., 2016). Due to these reasons, children face multiple impairments in healthy and appropriate development (Kandel & Kao, 2001; Jeffrey Hill et al., 2003; Kiernan & Huerta, 2008). These studies strongly support the high association between a child's rearing and behavior disturbances. However, data from the Jordanian context are rare on these issues and minimal research has been directed toward young children and adolescents, externalizing behavioral problems. In addition, empirical research on the predictors of children's behavioral problems after the pandemic is limited. To date, no documented studies describe this problem in

the Jordanian population after three years of the COVID-19 pandemic. The results of this current study, which focuses on the predictors of children's behavioral problems in the context of maternal parenting styles after the pandemic, could add to the understanding of the psychological health of young children and parenting related to how mothers deal with their children after this kind of crisis. In addition, understanding children's behavioral problems in this context could help parents and school teachers develop safe and academically productive environments.

Research Questions

1- What are the prevalence rates of children's behavioral problems and maternal parenting styles among Jordanian kindergarten and elementary-school children after the pandemic?
2- Do maternal parenting styles and socio-demographics predict child's behavioral problems after the pandemic?

Research Method and Procedures

Sample

A computer generator randomly selected the sample. Mothers who had children aged 3-8 and did not have any developmental delay were selected; were required to be Jordanian and live in Jordan. Those who did not meet the criteria were excluded from the study. The age of the mothers ranged from 20-50 years. Data were collected through surveys sent online to the participants who agreed previously to participate in the study. The survey questions included three domains that addressed the research variables. Some questions were adapted from the Eyberg Child Behavior Inventory (ECBI) and the Parental Authority Questionnaire. Other questions were chosen based on the literature review and suggestions made by experts who have researched and published extensively on early childhood behavioral problems and parenting topics.

Measures

The Arabic version of self-report questionnaires was applied to the current study. The instrument included the following sections:

1- **The Parental Authority Questionnaire** (PAQ) was used for the current study which included authoritative, authoritarian, and permissive styles, measured the prevalence of maternal parenting styles. Some of the instrument wording was adjusted by the researcher to fit the study's objectives for example, the word "after the pandemic". Mothers were asked to rate 30 statements on a 5-point Likert scale as follows: strongly disagree (score = 1) to strongly agree (score = 5) based on how frequently they sensed, interacted, and managed behavioral problems in their children after the pandemic. Buri (1991) developed this measure to assess maternal parenting styles characteristic based on Baumrind's

(1971) theory. The internal consistency of PAQ was α = .73, .83, and .81, respectively.

2- **The Eyberg Child Behavior Inventory (ECBI)** survey (Eyberg & Pincus, 1999) was used to measure child's behavioral problems post the pandemic which included 36 items on a7-point scale: 1= never (the behavior never occurs), 2 & 3 = seldom, 4 = sometimes, 5 & 6 = often, 7 = always (the behavior always occurs). Some of the instrument wording was modified by the researcher to fit the objectives of the current study. Mothers rated each statement to evaluate how frequently their child's behavioral problems in the last two weeks. The total rate of behavioral problems ranged between (36-252). At the same time, the identification of behavioral problems ranged from (0-36) on a yes -no scale. This measure has shown strong validity and reliability as a concise measure of childhood problem behavior conduct (Boggs et al., 1990). However, this study adapted the Nyberg to indicate a 5 –point Likert scale. The internal consistency of ECBI was α = .90. Participants' total frequency of problem identification represents a high score ranging from (36-180).

3- **Covariates:** Socio-demographic characteristics were collected via the Parental Authority Questionnaire and included the following variables: Child's gender, child's age, mother's academic education, mother's age, and employment status.

Data Collection and Analysis Procedures

After mothers' consent was obtained by email, sending messages by email, what-is-up, and posting on social media, an online consent form was attached to the questionnaire. Mothers were invited to read and sign it before completing the questionnaire. Mothers were informed that their participation was voluntary and that their responses might increase understanding of the behavioral problems of young children. Respondents completed questionnaires comprised of self-report measures about their maternal parenting style and their child's behavioral problems. The SPSS statistical package was used to summarize demographic information of mothers and their children by descriptive statistics, such as frequencies, means, and standard deviations. Since this study used a 5-point Likert scale, the statistical analysis used: 1.33-2.33 was low, 2.34-3.67 was moderate, and 3.68-5 was high. The demographic variables analyzed included information on the age of the mother, gender of the child, educational background, the child's age, and current employment status. Additionally, 5-way ANOVA was computed to examine the impact of maternal parenting styles and other variables on child's behavioral problems after the pandemic. Some of the variables were controlled during multivariate analysis. Also, multiple regression analysis was computed to investigate the predictors of maternal parenting styles with child's behavioral problems.

Study Limitations

This limitation of the study may not reflect all Jordanian mothers due to potential bias within the chosen group. This must be kept in mind when interpreting the findings. This sample represents mothers with children from ages 3-8. It is unknown about mothers with children of other ages; assumptions about them cannot be drawn from this data. Furthermore, it is expected that finding potential risk factors for childhood problem behavior symptoms will be difficult. The results were limited by available measures. The measures used may not always be optimal, and there are certainly other risk factors that have not been measured. Moreover, excluding mothers without internet access through an online survey limits the representativeness of the results.

Results

The results of this study analysis are based on the two guiding study questions. An alpha level of 0.05 was applied to all results. Table 1 shows the demographic data of 222 mothers participating in the study. 61% of mothers were undergraduates, 23% had high school or less, and 14% had a graduate degree. 48% of the mothers' age ranged between (31-40), 28% of the mothers' age ranged between (20-30) and 23% of the mothers' age ranged between (41 and above). Also, 57% of the participants were unemployed, and 42% were employed.

Table 1: Demographic characteristics

		Frequency	Percent
Child's gender	Male	111	50.0
	Female	111	50.0
Child's age	3-5	87	39.2
	6-8	135	60.8
Mother's education	High school or less	53	23.9
	Undergraduate	137	61.7
	Graduate	32	14.4
Mother's age	20-30	63	28.4
	31-40	107	48.2
	41 and above	52	23.4
Employment	Employed	95	42.8
	Unemployed	127	57.2
	Total	222	100.0

The study used means and standard deviations to assess the prevalence rates of children's behavioral problems and maternal parenting styles after the pandemic. The total mean scores for the items in each scale are shown in Table 2.

Table 2: Descriptive Statistics of the occurrence of children behavioral problems identified by mothers

	N	Minimum	Maximum	Mean	Std. Deviation
Child problem behaviors (CPB)	222	1	4	2.49	.546
Permissive style (PS)	222	1	5	2.78	.660
Authoritarian style (AS)	222	1	5	2.87	.789
Authoritative-flexible style (AFS)	222	2	5	3.92	.633
Valid N (listwise)	222				

Table 2 illustrates that the total mean scores for behavioral problems for children were moderate M=2.49, with a standard deviation of .546 and scores ranging from (36 to 141).
The analysis also showed that the most frequent maternal parenting style after the COVID-19 that Jordanian mothers rated among the three subscales of parenting styles was authoritative (M=3.92), followed by authoritarian (M= 2.87), and permissive (M= 2.78).

Table 3: Means & SD of Children's behavioral problems due to demographic variables

		Mean	Std. Deviation	N
Child's gender	Male	2.57	.519	111
	Female	2.41	.564	111
Child's age	3-5	2.54	.502	87
	6-8	2.46	.572	135
Mother's academic education	High school or less	2.56	.636	53
	Undergraduate	2.51	.500	137
	Graduate	2.32	.564	32
Mother's age	20-30	2.67	.497	63
	31-40	2.39	.541	107
	41 and above	2.48	.571	52
Employment	Employed	2.47	.546	95
	Unemployed	2.51	.548	127

As shown in Table 3, the statistical analysis shows that mothers identified child's behavioral problem scores with their sons (M = 2.57) higher than their daughters (M= 2.41). In addition, there are statistically significant differences between boys and girls regarding behavioral problems (F= 5.967 p< 0.05), as shown in Table 4 below.

Another unexpected result was that mothers with children aged 3-5 identified problem behavior occurrences (M = 2.54, n = 87) more than mothers with children aged 6-8 (M= 2.46, n = 135). Meanwhile, mothers with high school or less education experienced behavioral problems with their children (M= 2.56, N = 53) more than undergraduates and graduates (M = 2.51, n = 137; M = 2.32, n = 32, respectively). Moreover, mothers aged 20-30 experienced behavior problems with their children (M = 2.67, n = 63) more than mothers aged 31-40 and 41 and above (M = 2.39, n = 107; M = 2.48, n = 52, respectively). Additionally, unemployed mothers experienced problem behaviors among their children (M = 2.51, n = 127) more than employed mothers (M = 2.47, n = 95).

Table4: 5-way ANOVA. Predictors of children's behavioral problems

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Gender	1.682	1	1.682	5.967	.015
Child age	0.00006	1	0.00006	.000	.988
Education	1.068	2	.534	1.894	.153
Mother age	2.476	2	1.238	4.391	.014
Employment	.107	1	.107	.381	.538
Error	60.337	214	.282		
Corrected Total	65.978	221			

As illustrated in Table 4, the 5-way ANOVA analyses were conducted to examine the impact of demographic variables on children's behavioral problems after the pandemic. Results showed that the child's gender and mother's age were the only significant predictors and effects of the child's behavioral problems. These results indicate statistically significant differences between boys and girls, with boys having more frequent behavioral problems. Moreover, the current result also indicated statistically significant differences between mothers aged 20-30 and 31-40, with the younger group having more children's behavioral problems. Thus, to show the statistically significant differences between the means scores, a post hoc test was employed, too (see Table 4a) below.

Table 4a: Post Hoc Test for Multiple Comparisons using Scheffe Method

(I) Mother's age	(J) Mother's age	Mean Difference (I-J)	Std. Error	Sig.
20-30	31-40	.28(*)	.085	.005
	41 and above	.19	.100	.159
31-40	20-30	-.28(*)	.085	.005
	41 and above	-.08	.091	.646
41 and above	20-30	-.19	.100	.159
	31-40	.08	.091	.646

* The mean difference is significant at the .05 level.

Results from the standardized regression analysis are presented in Table 5 below. The authoritarian parenting style was the only significant predictor and effect in the data model. In contrast, the other predictor variables (permissive and authoritative parenting styles) were insignificant and therefore excluded. In other words, an authoritarian parenting style during these ages was associated with higher child's behavioral problem scores (B=.210, p <0.05). However, the authoritative and permissive styles did not predict child's behavioral problems because the association was too weak to reach significance.

Table 5: Stepwise multiple regression results for the predictors of maternal parenting styles with children's behavioral problems

Model	R	R Square	ANOVA		Coefficients			
			F	Sig.	B	Std. Error	T	Sig.
Authoritarian style	.303	.092	22.235	.000(a)	.210	.044	4.715	.000

Dependent Variable: Children's behavioral problems (CPB)
Permissive style and authoritative-flexible style were Excluded.

Discussion

The findings of this study indicated that the authoritative parenting style is the most frequent used style among mothers between the three parenting styles after the COVID-19 pandemic. This result is due to the expected interpretation that mothers were more flexible, warmer, and less stressed with their children after the pandemic compared to during the pandemic as mentioned in previous literature and this might have affected their relationship and being warmth with them and caused the moderate rate of children's behavioral problems. This finding is in line with the previous study by Yaffe, (2023) that found while maternal pleasure was linked to more authoritative parenting techniques, such

as warmth and support, negative maternal feelings, such as anger and anxiety were typically related with authoritarian and indulgent parenting styles, particularly verbal aggression. Also, the previous research showed that the parenting styles and daily routines of families with their children changed extremely (Bülow, etal., 2021). As well as previous research emphasized that the last three years especially after the Corona crisis changed the family life (Masten & Motti-Stefanidi, 2020). Thus, crisis conditions such as the COVID-19 affect the connection between children's behavioral problems and parenting practices.

Another result in this study showed that mothers experienced more behavioral problems with their sons rather than with their daughters, and the lockdown of pandemic affected them. This result might be because boys are more active in their behaviors than girls, who are calmer and more sensitive, so mothers need more discipline and control over their sons. This is in line with the previous research study by Morgan (2009) that found boys displayed behavioral problems twice as likely as girls who were the latter being calm.

The most crucial finding in this current study is with children's age. Children aged 3-5 have higher behavioral problems than those aged 6-8. This may be because their mothers have less experience in parenting at this early age, which might impact their children's behaviors. However, the previous research study emphasized these issues with both ages of children (Gassman-Pines et al., 2020; Giannotti, 2022).

Moreover, the current study identified that children's behavioral problems improved with mothers with high school or less education. This shows that a higher educated mother tends to be more caring and democratic with their children or might have more resources than a lower-educated mother who have fewer resources (Al-Amir, 2004). Moreover, the findings of this study showed differences regarding mother education, age, employment, and the level of behavioral problems with their children. In other words, the younger and unemployed mothers were found to experience children's behavioral problems at higher levels than older and employed mothers. It might be interpreted that those mothers have less experience rearing and caring for their children than others, and the unemployed mothers as well affect children's behavioral problems. However, this is inconsistent with a previous research study conducted by Nes et al., (2014) which indicated that the employed mothers experienced behavioral problems in their children.

This current study also emphasized that males reported more behavioral problems than females with significant differences. However, this result is inconsistent with previous research by Van Heel (2019) that indicated child gender did not appear to be a significant predictor in the interaction between child's behavioral problems (i.e., rule-breaking behavior) and parenting. The final important finding is that the significant predictors of the child's behavioral problems in this study are the child's gender and the mother's age. This finding might be that males are active and tend to be more aggressive in their behaviors than females, who are calmer and more sensitive; as a result, mothers need

more discipline and control over their sons. This is in line with one meta-analysis of over 150 studies (i.e,Tamis-LeMonda et al., 2009; Morgan, 2009).
Regarding mothers' age, which is a predictor of children's behavioral problems, it can be interpreted that mothers aged 20-30 have less experience in parenting and rearing than other mothers, so this might impact their children's behavioral problems. In other words, parents with younger ages are more likely to punish their children, which lead to behavioral problems. This is supported by the evidence that is now available; children of older mothers are frequently less likely than those of mothers in their teens and twenties to experience behavioral problems (Zondervan-Zwijnenburg, 2020)
In addition, the authoritarian parenting style was also found to be a significant predictor in this current study. This is likely because the authoritarian style is more concerned with strict adherence and control. These results show an association between an authoritarian maternal style and the child's behavioral problems, which is consistent with the previous literature (Kaufmann, 2000; Kiernan & Huerta, 2008). Thus, the more stable the maternal parenting style is, the lower the child's behavioral problems. These results aligned with findings from other studies showing the relationship between maternal factors and child-level factors (cognitive skill, attachment, child well-being involvement) with children's behavioral problems (Keyser et al., 2017).

Conclusion and Recommendations

This current study addressed empirical knowledge around the predictors of behavioral problems regarding maternal parenting styles among their children, as well as the prevalence rates of children's behavioral problems and maternal factors post the pandemic. Maternal factors and other predictor variables were used to comprehensively describe the significant predictors of child's behavioral problems at ages 3-8. As found in past research, the results indicated that mothers experienced more behavioral problems among their sons than daughters.
It is widely indicated in the literature and supported by this current study that the authoritarian maternal style is a significant predictor of the child's behavioral problems; this style includes power, control, and obedience, and does not recognize the child's opinions (Smetana, 2017), leading to some problems during the relationship between mothers and their children. Mothers of children with behavioral problems can collaborate with teachers to help their children decrease their problems. The findings pointed to maternal behaviors and other variables such as a child's gender and mothers' age as predictors of children's behavioral problems and a possible starting point after Corona crisis related interventions. In this study, only self-reported data were employed as the methodology design. It is recommended to conduct qualitative research that includes observations and interviews in line with the self-report to observe the interaction between mothers and their children. The current study recommends further investigation and would benefit by investigating pre/post-pandemic data and how the pandemic impacted any of the current research variables. As well

as, future research could examine other predictors of child's behavioral problems, such as the father's age, education and employment status, and paternal style.

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