RESEARCH ARTICLE

COVID-19 pandemic: stress and life satisfaction among parents of children with autism spectrum disorder in Malaysia

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Abstract:

Since the global coronavirus disease (COVID- 19) outbreak, the family of children with special needs have had difficulty to care of their children especially parents of children with autism spectrum disorder (ASD). Stress has become a persistent subject in the effect of a special needs' child in the family, mainly the parents. Parents may experience the factors such as financial burdens or psychological difficulties resulting from this pandemic which may trigger their mental health problems. There is a substantial link between parenting stress and life satisfaction, implying that parenting stress is a predictor of life satisfaction among parents of disabled children such as ASD. This study aims to determine the relationship between stress and life satisfaction during COVID-19 pandemic. Seventy-one parents of children with ASD in Malaysia participated in this study. Two outcome measures were used which is the Parental Stress Scale (PSS) and the Satisfaction with Life Scale (SWLS). The result reported that the total mean score of the parents of children with ASD was found to be at a high level of stress [mean= 63.5 (8.22)]. In addition, the relationship between parental stress and life satisfaction was negative, strong and significant (r=-0.805, p< 0.001). Moreover, there was a significant difference between parental stress with age and gender, where the age group (51-60) [mean=69.30 (1.43)] and the father [mean=66.24 (5.88)] was at a higher level of stress. However, there were no significant differences between parental stress with education level, financial factors, and employment status. Stress management programs for parents especially, for older age and fathers, play a significant role in regulating emotional well-being and enhancing parent adjustment capabilities, which improve life satisfaction.

Keywords: autism spectrum disorder, COVID-19, life satisfaction, parental stress

1. INTRODUCTION

COVID-19, a novel coronavirus, a contagious disease, has quickly spread across the world since its first discovery in Wuhan, Hubei Province, China, in December 2019 (Dhiman et al., 2020). The family of children with special needs is confronted with a bigger problem with the sudden appearance of COVID- 19 pandemic (Saeed, Tahir, Sy & Mahmood, 2020). According to Dhiman et al., (2020), caregivers may find it more challenging to care for the children with special needs such as ASD, ADHD, CP, and chronic disability since it has been advised that social distancing was encouraged as the best choice to steer clear of the manifestation of the COVID-19.

Previous studies showed that parenting stress is an anticipated elements in the mental health of parents of children with special needs (Chen, Chen, Li & Ren, 2020). It is reported that during COVID- 19 pandemic, the stress and emotional welfare of the parents of children with ASD crucially worsened in Saudi Arabia (Alhuzimi, 2021). In

Malaysia, few studies have reported that parents' children with special needs are associated with stress. According to Isa et al., (2017), it is found that greater stress levels in caregivers may increase vulnerability to stress-induced illness and interfere with their adaptation to caring for their child with a learning disability. Furthermore, a study conducted by Ahmad Basri & Nik Hashim (2019), found that parents with ASD experience substantially more due to their dissatisfaction with their children's interactions. It is also found that parents of adult ASD exhibited significantly more parenting stress than parents of younger ASD children (Xin Lee et al., 2017).

There are only a few studies found to be associated with parental stress and children with ASD. In China, it was found that parents of children with ASD reported much more stress compared to parents of children in absence of disabilities or parents of children with other disabilities or chronic diseases (Wang et al., 2012). children.

A quantitative study by Keenan, Newman, Gray & Rinehart, (2016) on child attachment and caregiver factors among ASD was conducted. The study is to examine child attachment and caregiver factors such as psychological distress, parenting stress, and romantic attachment style between group differences and to investigate the relationship between child attachment and caregiver factors within group patterns. This study reported an extraordinarily higher parenting stress and psychological distress among caregivers with children with ASD compared to caregivers with typically developing children (Keenan et al., 2016).

In study between parenting stress and life satisfaction, there are more than 90 percent of Chinese families with children with ASD prohibit attain satisfactory outcomes, and the families pursue to undergo as a result of severe stress and poor family quality of life (China Association of Persons with Psychiatric Disability & their Relatives, 2014). Other than that, it is reported that fathers of children with disabilities encounter significant stress in daily parenting hassles, parenting stress and health stress, and family life events and changes. It also stated that the fathers with disabled children face additional challenges as a result of their disabled children, who require specialised observation and expanded compassionate, such as assistance with task accomplish or even activities of daily living skills (Darling et al., 2011).

In China, the study by Lu et al., (2018) found that parenting stress is a strong predictor of life satisfaction along with social support among Chinese parents of children with ASD. This cross- sectional study was conducted in Guangdong province in southern China among 479 parents of children with ASD age ranges from 3 to 18 years. In this study, it is also reported that the mean score of parenting stress is higher than the recommended cut off and there is adverse correlation between the level of parenting and life satisfaction.

An exploratory study was conducted in Abu Dhabi in UAE by Tahir et al., (2020) aiming to comprehend the effect of COVID-19 on parents of children with special needs. The questionnaire form was accomplished by 44 participants from several nations, and it is discovering that because of their child's increased demands, parents of children were already under abundance of stress. The fact that most parents were required to assist their children through e-learning, the closure of parks, beaches, and other public areas, as well as strict movement restrictions, meant that children were constantly at home and thus required more attention and supervision from their parents than usual.

A quantitative study by Alhuzimi (2021) in Saudi Arabia explores the stress and emotional welfare of parents of children with ASD during the COVID-19 pandemic. It is reported that the parental stress and mental welfare of parents of children with ASD in Saudi Arabia deteriorated markedly during the COVID-19 pandemic (Alhuzimi, 2021). In China, a study was conducted by Chen, Chen, Li & Ren,

(2020) which evaluated the psychological well- being among parents of children with special needs. There were 1450 responses that included parents of children with ASD, intellectual disability, or visual and hearing impairment. The study reported that parents of children with ASD were expected to have mental health issues than the parents of children with an intellectual disability and a visual or hearing impairment.

In this COVID- 19 pandemic, parents with special needs children especially with ASD might have problems taking care of their children as it interrupts the normal routine of their child as the child may not go to the school or private centre as usual. Children with disabilities might encounter extensive problems such as behavioural regression for not being able to enter the rehabilitation training, treatment, and school education (Chen, Chen, Li & Ren, 2020). Other than that, parents might have financial burden or personal factors due to this pandemic as previous studies have reported that parents of special needs often face poverty due to unemployment, decreases social and economic status which may trigger mental health problems (Chen, Chen, Li & Ren, 2020). However, there is a lack of the study reporting about the stress between the parents with ASD children in this COVID- 19 pandemic. Previous studies have stated that there is indeed a strong connection between parenting stress and life satisfaction, concluding that parenting stress are the predictors of life satisfaction among parents of children with disabilities (Lu et al., 2018; Darling et al., 2011; Wang et al., 2017). The possible mechanism between parenting stress and life satisfaction remains unknown even though its association has been excellently established (Wang, Huang & Kong, 2017). Therefore, this research attempts to investigate the interrelation between stress and life satisfaction among parents with ASD in Malaysia during the COVID- 19 pandemic.

2. MATERIALS AND METHODS

2.1 Study Design

A cross- sectional study design with purposive sampling method was used. The study is located in National Autism Society of Malaysia (NASOM) which is a non-governmental organization association for autism society in Malaysia. The estimated children with autism registered in NASOM are approximately 400 children. The sample size has been calculated by Raosoft sample size calculator. The recommended sample size that is needed in this study is 197 participants. However, the total number of respondents that participated in this study are 71 respondents. The inclusion criteria for this study are having a child(ren) diagnosed with ASD (between 6 to 12 years old) by a child psychiatrist or specialist; able understand English language and able to communicate and make informed consent. The exclusion criteria for this study are parents who have depression and mental disorders such as schizophrenia, bipolar disorder, or

others diagnosed by physician and parents who do not directly takes care of their children (e.g., sending centre and etc). The objectives of this study are to identify the levels of stress that are encountered by the parents with ASD in Malaysia; to determine the relationship between the level of stress and life satisfaction encountered by the parents with ASD during COVID- 19 pandemic, and to examine the differences stress related to demographic factors such as age, gender, education's level, financial factors, and employment status.

2.2 Data Collection Procedure

Ethical approval was obtained from the faculty of Health Science and the institute of research, management and innovation (IRMI), Universiti Teknologi Mara (UiTM)(FERC/FSK/MR/2022/0116). The survey questionnaire was created using Google Forms and were distributed to participants using online platforms such as Facebook, Telegram, and WhatsApp. The questionnaire has three section which are Section A: Demographic data, Section B: The Parental Stress Scale (PSS) form (Nærde & Sommer Hukkelberg, 2020), and Section C: The Satisfaction With Life Satisfaction Scale (SWLS) form (Durak et al., 2010). The data for this study is compiled by accumulate finished forms over a period of three to four months. The aim and description of this study was included in the questionnaire. Consent was obtained prior to answering the survey.

2.3 Instrument

2.3.1 Demographic Data

The demographic data consists of several questions that the participant needs to fill out. This section contains questions that are related to personal data of the participant. This demographic data consists of questions regarding participant's age, gender, educational level, employment status, and monthly household income.

2.3.2 The Parental Stress Scale (PSS)

The Parental Stress Scale (PSS) was developed to measure individual levels of stress associated with raising children (Nærde & Sommer Hukkelberg, 2020). This assessment focuses on parents' opinions of their parental role rather than stressors. The PSS has 18- item self- administered to evaluate in which the parents answer to statements about their child's common relationship. The respondent will rate their level of agreement for each statement on a 5- point likert scale; 1 for strongly agree, 2 for disagree, 3 for undecided, 4 for agree, and 5 for strongly agree (Louie et al., 2017). The scoring for this assessment is the positive items which are items 1, 2, 5, 6, 7, 8, 17, and 19 are reverse scored, and then the total of all items is added. The range of score for this assessment is from 18 to 90 which are from low

stress to high stress. The interpretation of this assessment is that the greater the scores, indicates more parental stress. Other than that, it is stated that the PSS has specificity in that it concerns parenting stresses regardless of marital, financial, or other type of life stressors (Lessenberry & Rehfeldt, 2004). According to Berry and Jones (1995), the scale's scores were reliable with a coefficient of 0.83 and a mean inter item correlation of 0.23 and a 6- week test- retest correlation was 0.81 (Louie et al., 2017).

2.3.3 Satisfaction With Life Scale (SWLS)

Satisfaction with Life Scale (SWLS) is an evaluation that uses five statements to assess global life satisfaction with regard to quality of life (Durak et al., 2010). This assessment has 5 statements based on a 7- point Likert- type scale which are 1 for strongly disagree to 7 for strongly agree. The interpretation for this assessment is the higher the score, the greater the life satisfaction. The scores of this assessment can be interpreted by comparing the individuals scores from normative samples which are 5-9 for extremely dissatisfied, 10- 14 for dissatisfied, 15- 19 for slightly dissatisfied, 20 for neutral, 21-25 for slightly satisfied, 26-30 for satisfied, and 31-35 for extremely satisfied (Weber et al., 2015). According to the study by Weber et al. in 2015, internal consistency for this assessment is reported to comprehend a greater Cronbach alpha coefficient value of 0.87. Moreover, the SWLS correlated with the single item measure of happiness with a range of r= 0.57 to r= 0.58, positive affect with r= 0.50 to r = 0.51, Delighted-Terrible scale with r = 0.62 to r = 0.510.68, and the Fordyce percent of time happy question with r= 0.58 to 0.62 (Weber, Harzer, Huebner & Hills, 2015). Besides, it was also reported that the SWLS has negative correlation with Bradburn's measures of negative affect with r=-0.32 to r=-0.37 and it is shown that SWLS has a nonsignificant relationship with the Marlowe- Crown scale with r = 0.02.

2.4 Data Analysis

The Statistical Package version 20 for the Social Science Package (SPSS) was used. A descriptive analysis was used to identify the levels of stress among parents with ASD children in Malaysia. Next, Pearson Correlation used to discover the relation between the level of stress experienced by parents with ASD and life satisfaction. Independent t-test and Analysis of Variance (ANOVA) test has been performed to examine the differences related stress to demographic factors as age, gender, education's level, financial factors, and employment status.

3. RESULTS AND DISCUSSION

3.1 Demographic Characteristics

Table 3.1 shows the demographic characteristics of

respondents, a total of 71 respondents participated in this study. Fathers as the main caregiver participated was 37 (52.1%) followed by 24 (33.8%) of mothers being the main caregiver.

Other than that, most of the respondents are from tertiary education level with 27 respondents representing 38.0% of this study, followed by secondary education level with 24 respondents (33.8%), and primary education level with 20 respondents representing 28.2% of the study. Based on the findings, the majority of the respondents are employed with 26 respondents (36.6%), followed by unemployed, and self-employed with 19 respondents representing 26.8% respectively.

Finally, this study reported that most of the respondents has monthly household income of RM 2,501- RM 4,850 with 26 respondents (36.6%), followed by monthly household income of RM 4.851- RM 10,970 with 24 respondents (33.8%), and monthly household income less than RM 2,500 with 11 respondents (15.5%). The minority of the respondents has more than RM 10,971 with 10 respondents representing 14.1%.

Table 3.1: Demographic characteristics of respondents

	Variables	n (%)
Main Caregiver	Father	37 (52.1)
	Mother	34 (47.9)
Age	21- 30	15 (21.1)
	31- 40	23 (32.4)
	41- 50	23 (32.4)
	51- 60	10 (14.1)
Level of education	Primary	20 (28.2)
	education	24 (33.8)
	Secondary education	27 (38.0)
	Tertiary education	
Employment	Employed	26 (36.6)
status	Unemployed	19 (26.8)
	Self- employed	19 (26.8)
	Retired	7 (9.9)
Monthly Household Income	Less than RM 2,500	11 (15.5)
	RM 2,501- RM 4,850	26 (36.6)
	RM 4,851- RM 10,970	24 (33.8)

More than RI	M 10 (14.1)
10,971	

3.2 Level of Stress of Parents with ASD Children

Table 3.2 below categorises the responses of respondents based on PSS items. Based on the distribution responses, most of the respondents scored 3 (undecided) and 4 (agree) which indicates that the respondents have parenting stress. Table 3.2.1 below shows the total mean and standard distribution of parenting stress. Based on the distribution responses, the total mean score and standard distribution of respondents (M= 63.5, SD= 8.22) which indicates the parents with ASD children has high level of stress.

Table 3.2: Level of Parental Stress among parents with ASD children

PSS items	1	2	3	4	5	Mean ± SD
I am happy in my role as a parent	5	7	22	18	19	3.55 ± 1.19
There is little or nothing I wouldn't do for my child(ren) if it was necessary.	6	6	23	16	20	3.55 ± 1.23
Caring for my child(ren) sometimes takes more time and energy than I have to give.	2	7	20	6	1	3.63 ± 0.96
I sometimes worry whether I am doing enough for my child(ren).	2	4	24	25	16	3.69 ± 0.98
I feel close to my child(ren).	6	6	16	22	21	3.65 ± 1.23
I enjoy spending time with my child(ren).	10	2	23	24	12	3.37 ± 1.22
My child(ren) is an important source of affection for me.	6	6	23	17	19	3.52 ± 1.21
Having	3	9	19	23	17	3.59 ± 1.16

child(ren) gives me a more certain and optimistic view for the future.						
The major source of stress in my life is my child(ren).	2	4	26	26	13	3.62 ± 0.95
Having child(ren) leaves little time and flexibility in my life.	3	5	22	39	2	3.45 ± 0.84
Having child(ren) has been a financial burden.	1	2	23	41	1	3.51 ± 0.72
It is difficult to balance different responsibilities because of my child(ren).	3	4	27	33	4	3.44 ± 0.86
The behaviour of my child(ren) is often embarrassing or stressful to me.	1	6	23	41	71	3.46 ± 0.71
If I had it to do over again, I might decide not to have child(ren).	2	6	26	33	4	3.44 ± 0.84
I feel overwhelmed by the responsibility of being a parent	2	3	20	42	4	3.61 ± 0.78
Having child(ren) has meant having too few choices and too little	4	4	25	37	1	3.38 ± 0.85

control over						
I am satisfied as a parent	1	10	17	28	15	3.65 ± 1.01
I find my child(ren) enjoyable	8	4	24	18	17	3.45 ± 1.24

Table 3.2.1: Total mean and standard distribution of Parenting Stress

Variable	Mean ± SD
Parental Stress	63.5 ± 8.22

The findings are consistent with those previous study in Malaysia, which reported that, parents of children with ASD had significantly higher levels of parental stress (Ahmad Basri & Nik Hashim, 2019). In addition, according to Hayes et al., (2013), the findings of meta-analysis, parents of children with ASD experience more parenting stress than parents of children with typically developing or other disability.

3.3 Relationship Between Level of Stress and Life Satisfaction

A Pearson's correlation test (α <0.01) was used to evaluate relationship between level of stress and life satisfaction among parents with ASD children. The correlation between parental stress and life satisfaction were negative and significant, rs = -.805, n=7, p= 0.005. The observed correlation coefficient (r) is -0.805, which suggest negative and strong correlation.

Table 3.3: Correlation Between Parental Stress Scale (PSS) and Satisfaction With Life Scale (SWLS)

	Variables	PSS	SWLS
PSS	Pearson	1	805*
	Correlation		.000
	Sig. (2-tailed)	71	71
SWLS	N	805*	1
5.1.25	Pearson Correlation	.000	
	Sig. (2-tailed)	71	71
	N		

*. Correlation is significant at the 0.01 level (2-tailed).

This finding was consistent with prior research which a statistically significant relationship was also discovered between parental stress and life satisfaction. According to

AL-Hadrawi (2020), approximately 83 % of parents endure moderate to severe levels of psychological stress, and 36 percent are dissatisfied with their lives, which there was an adverse correlation between parents' psychological stress and their life satisfaction. Other than that, a study in China reported more than 90% of Chinese families with ASD are unable to achieve good outcomes, and the families are forced to suffer as a result of extreme stress and low family quality of life (China Association of Persons with Psychiatric Disability & their Relatives, 2014). It is also reported that the mean parenting stress score is greater than the recommended cut off, and that there is a negative correlation between parental level and life satisfaction (Lu et al., 2018). Hence, in this study is consistent with previous research in which there are negative correlation between parental stress and life satisfaction among parents with ASD children.

3.4 Level of Stress and Gender

Table 3.4 below shows that the relationship between parental stress and gender. The independent t-test showed that the mean difference of parental stress between father and mother was statistically difference (t(69) = 3.06, p=0.003). The mean parental stress between father has higher mean (66.24) compared to the mother (60.59). The mean difference between two groups are 5.66 with 95% CI of 1.97, and 9.34).

Table 4.5.1: The relationship between parental stress and gender

Variables	Father	Mother	Mean	t-	P
	(n=37)	(n=34)	diff.	stats	value
	Mean (SD)	Mean (SD)	(95% CI)	(df)	
Parental Stress	66.24 (5.88)	60.59 (9.41)	5.66 (1.97, 9.34)	3.06 (69)	0.003

The differences between level of stress with gender has been investigated and it was found that the mean differences of parental stress between the father and mother was statistically different. The mean of parental stress between the father is higher compared to mother. This present study was inconsistent with prior research in which, there is no statistically significant difference in the mean of parental stress levels between fathers and mothers of children with ASD (Ahammed, 2021). In addition, other studies also reported that there is some indication that mothers of autistic children are more stressed than fathers of autistic children (Kovshoff, Brown, et al., 2005; Kovhoff, Ward, et al., 2005; Flippin & Crais, 2011). According to Flippin & Crais in (2011), it was observed that fathers of children with ASD appear to endure less overall stress than mothers. In addition, parents of children with ASD are more likely to experience heightened stress, and mother are especially prone to higher levels of child-related stress. Furthermore, it also has been reported that in Chinese population, the differences in parenting responsibilities usually the mothers are typically more exposed to children with ASD than fathers due to their caregiving role (Hu et al., 2019; Ng et al., 2021).

3.5 Level of Stress and Parents Age

Table 3.5 below shows that the comparing mean parental stress with parents' age. The One- Way ANOVA was statistically significant, indicating that there was significant effect of parents' age on parental stress (F(3, 67) = 2.93, p < 0.001, $n^2 = 0.116$). Subsequent post- hoc analysis (Scheffe procedure) suggested that the parents' age group of 51 to 60 years old (M=69.30, SD= 1.43) had significantly parental stress as compared to the parents' age group of 21 to 30 years old (M=59.80, SD= 9.69). However, there were no significant difference between parents' age group of 31 to 40 years old and 41 to 50 years old.

Table 3.5: Comparing mean parental stress with parents' age

Variables	n	Mean PSS (SD)	F-stats ^a (df)	P value
21- 30	15	59.80 (9.69)	2.93 (3, 67)	< 0.001 ^b
31- 40	23	63.91 (8.89)		
41- 50	23	63.09 (6.55)		
51- 60	10	69.30 (1.43)		

Other than that, the relationship between level of stress with parents' age has been tested with one- way ANOVA test. It is found that there was significant effect of parents' age on parental stress and subsequent post- hoc analysis (Scheffe procedure) suggested that the parents' age group of 51 to 60 years old (M=69.30, SD= 1.43) had significantly parental stress as compared to the parents' age group of 21 to 30 years (M=59.80, SD= 9.69). Contrary with previous research which indicates that the results also show that 30-35-year-old ASD parents are much more stressed than parents of TD children of the same ages (Ahmad Basri & Nik Hashim, 2019).

3.6 Level of Stress and Educations Level

Table 3.6 below shows that the comparing mean parental stress with educations level. The One- Way ANOVA was statistically non- significant, indicating that there was no significant effect of educations level on parental stress (F(2, 68) = 3.10, p= 0.051, n^2 = 0.116). The mean of parental stress between primary education level (65.85) compared to secondary education level (64.96) followed by tertiary education level (60.56).

Table 3.6: Comparing mean parental stress with educations level

Variables	n	Mean PSS (SD)	F-stats ^a (df)	P value
Primary	20	65.85 (5.60)	3.10 (2, 68)	0.051
Secondary	24	64.96 (5.98)		
Tertiary	27	60.56 (10.59)		

The level of stress with educations level has been tested with one- way ANOVA and it was noted that there was statistically non- significant, indicating that there was no significant effect of educations level on parental stress. parenting stress was higher among mothers with high or low education than among mothers with intermediate education, with low education being the most stressful (Parkes et al., 2015).

3.7 Level of Stress and Financial Factors

Table 3.7 below shows that the comparing mean parental stress with monthly household income. The One- Way ANOVA was statistically non- significant, indicating that there was no significant effect of financial factors on parental stress (F(3, 67) = 3.10, p = 0.210, $n^2 = 0.06$).

Table 3.7: Comparing mean parental stress with monthly household income

Variables	n	Mean PSS (SD)	F-stats ^a (df)	P value
Less than RM 2,500	11	64.36 (6.12)	3.10 (3, 67)	0.210
RM 2,501- RM 4,850	26	63.69 (63.69)		
RM 4,851- RM 10,970	24	61.25 (8.82)		
More than RM 10,971	10	67.70 (7.12)		

The level of stress with financial factors has been tested with one- way ANOVA and it was noted that there was statistically non- significant, indicating that there was no significant effect of financial factors on parental stress. However, in prior research, it has been observed that around 30% of parents can hardly afford the cumulative financial means required to care for a child with ASD in the long run which explains why parents of special needs children have lower life satisfaction than parents of typically developing

children (Lu et al., 2015; Ng et al., 2021). In Malaysia, it has been reported that parents with a high socio-economic status have more solid financial status for the family, which reduces stress (Ahmad Basri & Nik Hashim, 2022). Other than that, according to Lu et al., (2015), it is stated that, higher income also contributes to parental adaptation and assists families in meeting the increased financial needs associated with supporting the health and daily lives of disabled children which contribute high level of satisfaction and low parental stress.

3.8 Level of Stress and Employment Status

Table 3.8 below shows that the comparing mean parental stress with employment status. The One- Way ANOVA was statistically non- significant, indicating that there was no significant effect of financial factors on parental stress (F(2, 68) = 3.10, p= 0.210, n²= 0.09).

Table 3.8: Comparing mean parental stress with employment status

Variables	n	Mean PSS (SD)	F-stats ^a (df)	P value
Employed	26	61.19 (8.69)	2.22 (3,	0.094
Unemployed	19	66.84 (6.92)	67)	
Self-	19	62.42 (9.05)		
employed Retired	7	66.29 (8.22)		

The level of stress with employment status has been tested with one- way ANOVA and it was noted that there was statistically non- significant, indicating that there was no significant effect of employment status on parental stress. This is inconsistent with prior research in which it was found that the relationship was statistically significant and discovered that 39% of parents of children with ASD, in the preceding year, the parents in the family had quit a work, did not take a job, or drastically changed a career due to childcare issues connected to the kid with ASD (Montes & Halterman, 2008). Other than that, in Chinese population, most of them must quit their careers to care for and educate their autistic children at home, which may raise the financial burden on families in which affect them in experienced significant psychological distress (Ng et al., 2021).

4. LIMITATIONS

This study has found that several limitations such as the number of participants for this study was limited as the total number of respondents received is 71, exceeding the anticipated sample size of 197. In the future, it should be considered to use more representative larger samples for this

study. Other than that, when performing this study, some limitations were encountered, including the problem that the questionnaire was designed in English, which not all respondents could understand because the majority of Malaysians speak Bahasa Malaysia, the country's native language. It should be considered in the future to use more representative large samples for this study. The third limitation of the present study is that all of the data was obtained through self-report assessments. Despite their high reliability and validity, self-report assessments may be influenced by recollection bias, under-reporting of information, and answer subjectivity.

5. CONCLUSION

The current study vastly expanded the understanding of the aspects as the level of stress among parents with autism spectrum disorder children. Stress management programmes for parents play a significant role in regulating emotional well-being and enhancing parent adjustment capabilities, which in response helps improve life satisfaction. Future research should look into the relationship between parental stress and other's child variables such as child age, severity of the condition, and behaviour problem. Identifying this variable may aid in population planning and intervention methods. Considering the possible processes, these findings could help in determining how to promote positive psychological treatment aimed to reduce parental stress. Other than that, future research should investigate the coping strategies that the parent use to cope with the parental stress. These findings, in view of the potential mechanisms, could be beneficial in identifying how to implement positive psychological interventions aimed at enhancing satisfaction of life.

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