Research Article



PSYCHOLOGICAL ILLNESS OF PARENTS OF CHILDREN WITH AUTISM SPECTRUM DISORDER: DO AFFILIATED STIGMA, FAMILY SUPPORT, AND PARENTING SENSE OF COMPETENCE HAVE SIGNIFICANT INFLUENCE?

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ABSTRACT

Parents with Autism Spectrum Disorder (ASD) children always have to face huge challenges in caring for their children and require higher efforts to manage their children's needs. These challenges disturb their regular activities which may create psychological disturbances. Besides, these disturbances can also be influenced by stigma, family support, or parental sense of competence but have no clear research evidence. We investigated (1) the relationship between affiliate stigma, family support, parenting sense of competence, and the psychological illness of parents and (2) the unique contribution of affiliate stigma, family support, and parenting sense of competence to the psychological illness of parents with ASD children. Fifty-five parents ($M_{age} = 38.85$, SD = 6.45) with ASD children were recruited from 2 special schools in Dhaka City of Bangladesh. To measure the variables, the respondents were administered a self-developed demographic questionnaire, translated Bangla version of affiliate stigma, family support, parenting sense of competence, parenting stress, and mental health measuring questionnaire. To accomplish the study, a cross-sectional survey design was followed where collected data were analyzed by applying Pearson product correlation analysis and stepwise multiple regression analysis. The findings illustrated significant associations between the constructs (e.g., affiliate stigma and parenting sense of competence) and psychological illness. Stepwise multiple regression analyses indicated that affiliated stigma (e.g., affect and cognition) and family (e.g., partner/spouse) support were important predictors of psychological illness which jointly explained 55% of the variance. Further, R^2 change explored that the effect of stigma was the strongest predictor which alone explained 40.8% of the variation in psychological illness. These findings may be useful to researchers, educators, child psychologists, and educational counselors concerned with these issues and to raise awareness regarding the psychological illness of parents with ASD children.

Keywords: Affiliated stigma, ASD child, family support, parenting sense of competence, psychological illness

Introduction

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder noticed among children within the first two or three years after birth, defined by profound impedances in social interaction

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abilities, the presence of limited interests, and dreary ways of behaving (APA, 2013). It is genuinely a range of conditions, with considerable fluctuation across individuals within cognitive performance, language capacity, and psychiatric and neurological comorbidities (Varcin, 2017). It has already been reckoned that over the world 1 in 160 children or 62.5 per 10,000 is marked out with ASD (WHO, 2019). In Bangladesh, it is observed that the prevalence rate of ASD ranged between 0.15 and 0.8% (Hossain *et al.*, 2017). Caring for a child with ASD is a big challenge for guardians that negatively affects both diagnosed kids and their parents' life (Karst and Van Hecke, 2012). Having a child with ASD creates a negative influence on the well-being of parents and their family functioning (e.g., housekeeping, financial issues, recreational activities, relationships with siblings, extended family members, friends, or neighbors) (Rao and Beidel, 2009).

Previous investigations illustrated that the parents of ASD children faced significantly higher psychological illnesses including depressive symptoms (Weitlauf, 2014), anxiety (Falk, 2014), parental stress (Hayes and Watson, 2013; Lai, 2013), and also overall poorer mental health (Kousha *et al.*, 2019) as compared to parents having no ASD children or other developmental disorders. Psychological illness in parents is assumed to deteriorate child-parent interactions (Dubois-Comtoi *et al.*, 2015), negatively effects parenting styles (Wolfradt *et al.*, 2003), and ultimately increase the possibility of developing psychological problems in children (Riahi *et al.*, 2010).

Previous studies explored various factors including the intensity of children's ASD-related behavior (Rivard *et al.*, 2014), age (Smith *et al.*, 2008) and gender (Mandell and Salzer, 2007), parents' gender (Woodman, 2014), age (Shelton *et al.*, 2010), income or occupation (Montes and Halterman, 2008) as well as financial worries about ASD children's intervention and education (Thomas *et al.*, 2016) These factors were explored based on different components of psychological illness and separate studies, There is a gap to investigate the independent effects in a combined study in the Bangladeshi context.

Affiliate Stigma

Affiliate stigma means the degree of self-belittling among partners of the designated minorities that are the internalization of negative stigma-related experiences by the close relatives of the stigmatized person (Zhou *et al.*, 2018) which affects the person's cognition, affect, behavior, self-esteem, and self-efficacy (Yap *et al.*, 2018). For stigma, the guardians may express information about the mental illness of their close ones, feel socially isolated, and leave the mentally ill patients alone (Mak and Cheung, 2008). Parents' affiliate stigma of children with ASD (Mitter *et al.*, 2019) is connected with Indian parents' burden (Singh *et al.*, 2016) and children's ADHD symptoms where information was gathered from 159 French mothers (Charbonnier *et al.*, 2019).

Family Supports

Family support is locally based (or accessible) activities, facilities, or networks that reduce stress, increase self-esteem, and promote competence among parents. It increases the parental ability to

nurture and protect their children (Hearn, 1995). It also brings positive outcomes on quality of life within family functioning, and fulfillment and brought down family stress (Kyzar *et al.*, 2012). In contrast, poor levels of support increase the probability of divorce in families of children with ASD (Hartley, 2010).

Parenting Sense of Competence

Parenting sense of competence is the exhibited capacity to apply one's knowledge and/or skills and demonstrated personal attributes based on relevancy (Gilbert *et al.*, 2009). Parents with ASD children tend to see themselves as being less capable in their nurturing roles (Raikes and Thompson, 2005) whereas their sense of competence also deteriorates their mental health, (Heydari *et al.*, 2015). and life satisfaction and in contrast increase their negative mood, and emotional distress (Jennings and Dietz, 2007). Finally, these negative outcomes of parents with ASD children hamper their children's well-being (Rodrigo and Byrne, 2011).

Rationale of the Study

In Bangladesh, Khatun *et al.* (2019) found a significant difference in stress and life satisfaction between parents with and without autistic children and a noticeable negative correlation between parental stress and life satisfaction. Karim *et al.* (2017) conducted another study on mothers with ASD and normal children where mothers with autistic children reported higher depression than mothers with normal children. Besides, Muhammad *et al.* (2020) observed noticeably higher anxiety, depression, and life stress among mothers with autistic children than parents without autistic children but found no significant differences between different levels of education and income. It has already been revealed that parents of children with ASD face psychological illness, however, is scarce evidence especially focusing on parents with ASD children about whether this illness is related to their affiliated stigma, family support, and parenting sense of competence. Previous studies were mostly qualitative in nature which generate less verifiable information based on experience and are still lacking in quantitative measures (Mak and Cheung, 2008) in the Bangladeshi context. Besides, the factors (e.g., age, gender, and the number of ASD-affected children and their siblings) which affect the psychological illness of parents with ASD children are also unknown in the Bangladeshi context.

Considering the above discussion it is apparent that there is a need to observe initial challenges as well as probable affecting factors over the psychological illness of Bangladeshi parents having children with ASD. Thus, the current investigation was designed to explore the relationship between the above-mentioned construct among parents with ASD children in Bangladesh. We have formulated the following hypotheses.

H₁. Affiliate stigma (i.e., cognition, behavior, affect) has a significant association with psychological illness (somatic symptoms, anxiety, insomnia, social dysfunction, severe depression)", and parenting stress (parental distress, parental-child dysfunctional interaction, difficult child; Charbonnier *et al.*, 2019; Fung *et al.*, 2007; Mitter *et al.*, 2019; Singh *et al.*, 2016).

H₂. Family support (kinship, partner/ spouse, informal, programs/ organization, professional services)" and has a significant association with psychological illness (somatic symptoms,

anxiety, and insomnia, social dysfunction, severe depression)", and parenting stress (parental distress, parental-child dysfunctional interaction, difficult child)" (Benson, 2006; Taylor-Richardson *et al.*, 2006).

H₃. Parenting sense of competence (i.e., satisfaction, efficacy) has a significant positive correction with psychological illness within mental health included: "somatic symptoms, anxiety and insomnia, social dysfunction, severe depression", and parenting stress included: "parental distress, parental-child dysfunctional interaction, difficult child" (Hastings and Brown, 2002; Lai, 2013).

H₄. Affiliate stigma, family support, and parenting sense of competence individually explain psychological illness within mental health included: "somatic symptoms, anxiety, insomnia, social dysfunction, severe depression", and parenting stress included: "parental distress, parental-child dysfunctional interaction, difficult child" (Benson, 2006; Charbonnier *et al.*, 2019; Fung *et al.*, 2007; Hastings and Brown, 2002).

H₅. Affiliate stigma, family support, and parenting sense of competence jointly explain psychological illness within mental health included: "somatic symptoms, anxiety and insomnia, social dysfunction, severe depression", and parenting stress included: "parental distress, parental-child dysfunctional interaction, difficult child" (Hastings and Brown, 2002; Mitter *et al.*, 2019).

Subsequently, these variables are related to each other, so it can be expected the constructs have a joint impact on psychological illness. Based on the theoretical perspective, empirical shreds of evidence and observation following the conceptual framework have been illustrated which collectively mirrors our study's current hypotheses, is shown in Figure 1 were presented the relationship between predictors (i.e., affiliate stigma, family support, and parenting sense of competence) and outcome (mental health and parental stress) variables.

Psychological Illness Affiliated Affect Stigma J. H4&5 Mental Health Predictor Family Variables Demographic | Outcome Construct ere Depression Variables Parental Distress Parental-child Dysfunctional I--Relation with ASD Parenting Parental Age Parent's Educational Sense of Qualification Competence Difficult Child Parenting Occupation of Parent's Satisfacti Age of ASD Child Gender of ASD Child Educational Qualification H_3 Efficacy of Child Stay with Spouse Number of Child Only Helper Child Developmental Training/Therapy Financial Help

Figure 1. The conceptual framework of the exploration of the study.

Materials and Methods

Participants

A total of 55 parents (father or mother) with autistic children whose ages ranged from 30 to 60 years ($M_{\rm age} = 38.85$, SD = 6.45) were selected as participants from two special-need schools for autistic children in Dhaka city of Bangladesh. Here, all participants and institutions were purposely and conveniently selected, where all participants were selected following some inclusion criteria (e.g., parents who perceived themselves to be the primary caregiver and have no known mental disorder) and exclusion criteria (e.g., parents who received any psychological services and were not interested to participate in the survey).

Measures

The following measuring instruments were administered.

Personal Information Form (PIF)

In this study, PIF was specifically designed and developed by the researchers to gather the personal data and demographic data of the respondents like the number of children, parental age, parental educational background, and ASD-affected children's age and gender. Further, types of therapies and information on the helper of children were collected to lend insight into the representativeness of the sample.

The Affiliate Stigma Scale (ASS)

The Affiliate Stigma Scale (Mak and Cheung, 2008) was translated in the present study. This self-report instrument was designed to assess the self-stigma of parents in three domains with ASD children providing care to a family member with a psychological illness or intellectual disability. As we selected parents of a family member with an ASD child in this study, we used the term ASD instead of using developmental or intellectual disability in the ASD. This questionnaire has 22 items rated on a 4-point Likert type format that ranged from 1 "strongly disagree" to 4 "strongly agree" (i.e., cognitive, affect, and behavior).

Family Support Scale (FSS)

Family support questionnaire was used to measure parents' satisfaction with the perceived helpfulness of support which included 18 items. Additionally, 18 items of the translated Bangla version (translated in the present study) measure the helpfulness of formal and informal support in the beyond 3 to half-year with two extra items that participants can write in extra sources of help. Participants are placed on a 5-point "Likert Type Scale" with '1' indicating that support was "not at all helpful" and '5' indicating "extremely helpful". The FSS also includes a "not applicable" option for people who are not using specific support. In the current study, values were moved to the FSS score sheet to make a sum for five sources of support included: "kinship, partner/spouse, informal, programs/organization, and professional services".

Parenting Sense of Competence Scale

To measure parental feelings about their competence within the parenting role who have an autistic child, translated Bangla version (translated by the present researchers) of "The Parenting Sense of Competence Scale" was utilized for the present exploration originated by Gibaud-Wallston and Wandersman (1978). This part consisted of a list of 16 items within two subscales (i.e., satisfaction and efficacy). For each item, the respondents expressed their feelings on a 6-point "Likert Type of Scale" that ranges from 1 "strongly disagree" to 6 "strongly agree".

Psychological Illness Measuring Questionnaires

General Health Questionnaire (GHQ-28). The adapted Bangla version of the general health questionnaire (Banoo, 2001) was employed in the present study (Goldberg and Williams, 1988). The short form of the measuring instrument contains 28 items that specifically concern the hinterland between psychological sickness and psychological health. It assesses the psychological disturbances in terms of both a full-scale score and scores on four subscales, reflecting "somatic symptoms, anxiety and insomnia, social dysfunction, and severe depression". The highest possible score of GHQ-28 is 84 whereas a score below 39 is considered as not having a significant level of psychiatric disturbance. Moreover, a score of 39 and above is considered as having a significant level of psychiatric disturbance. The highest score on its sub-scale is 21. A score of 0 to 6 is considered as having low stress, 7 to 13 as moderate stress, and 14 to 21 as severe stress. Every item comprises a question asking whether the respondent has recently encountered a specific symptom or item of behavior on a scale ranging from "less than usual" to "much more than usual" on a scale ranging from "0" to "3".

The Parenting Stress Index-Short Form (PSI-SF). To measure the respondent's level of stress, as well as parenting stress a translated Bangla version of the "The Parenting Stress Index-Short Form (PSI-SF)" (translated by the present researchers) was originally developed by Abidin (1995). The measuring instrument is a 5-point "Likert Type Scale" with 1 "strongly agree" and 5 "strongly disagree", containing 36 items (each in 12 items that yield distinct scores) divided into three subscales included: "parental distress-PD, parental-child dysfunctional interaction-PCDI, and difficult child-DC".

Reliability of the Measures

The selected tools have been reported to have acceptable psychometric properties (citations). The reliabilities found in the present study are summarized in Table 1.

Table 1. Mean and standard deviation and Cronbach's alpha of scores of five sets of variable.

Variables	No of Items	Reverse Coded	Score Range	Mean	SD	Cronbach' s (α) (N = 55)	Validity
Affiliated Stigma Scale	22			55.91	12.89	.57	Content & Construct
Cognitive	C1, C2, C3, C4, C5, C6 & C7			18.04	4.19	.60	Valid (Mak and
Affect	A1, A2, A3, A4, A5, A6 & A7	N/A	22-88	15.43	5.47	.60	Cheung, 2008)
Behavior	B1, B2, B3, B4, B5, B6, B7 & B8			22.43	5.48	.61	
Family Support Scale	18			47.35	15.12	.56	Valid (Dunst et al., 1984)
Kinship	3 & 8			5.12	2.34	.62	
Partner/Spouse	1,2,4,5 & 9			16.61	5.33	.60	
Informal	6,7,10 &11	N/A	0-90	10.10	4.92	.60	
Programs/Organization	12,13,15 & 16			9.13	3.61	.60	
Professional Services	14,17 & 18			6.38	3.43	.62	
Parenting Sense of Competence Scale	16			20.92	2.54	.60	Valid (Gibaud- Wallston and Wandersman, 1978).
Satisfaction	2, 3, 4, 5, 8, 9, 12, 14, 16	2, 3, 4, 5,	16-96	24.87	6.083	.61	
Efficacy	1, 6, 7, 10, 11, 13, 15	8, 9, 12, 14, 16		29.42	7.440	.62	
General Mental Health Questionnaire	28			59.15	16.55	.76	Valid (Hilari <i>et al.</i> , 2003)
Mental Health Status	A1-D7						
Somatic Symptoms	A1, A2, A3, A4, A5, A6 & A7			16.35	7.51	.66	
Anxiety and Insomnia	B1, B2, B3, B4, B5, B6 & B7	N/A	0-84	16.65	5.29	.66	
Social Dysfunction	C1, C2, C3, C4, C5,C6 & C7			16.04	4.17	.66	
Severe Depression	D1, D2, D3, D4, D5, D6 & D7			10.11	3.71	.65	
Parenting Stress Index-Short Form	36			99.85	20.12	.53	Valid (Rivas <i>et al.</i> , 2020).
Parental Distress	1, 2, 3, 4, 5, 6, 7, 8, 10, 11 & 12			32.47	12.22	.56	
Parental-Child Dysfunctional Interaction	13, 14, 16, 17, 18, 19, 20, 21, 22, 23 & 24	N/A	36- 180	37.56	6.17	.61	
Difficult Child	25, 26, 27, 28, 29, 30, 31, 32, 32, 33, 34, 35 & 36			29.82	8.14	.60	

Procedure

In this exploration, data was collected from different special needs schools and hospitals that work with ASD children. Parents with ASD children were invited via a formal application for the meeting by those special schools and hospitals to participate in the research. Those special schools and hospitals voluntarily agreed to participate. Then parent's consent was taken after explaining the purpose, confidentiality issues, probable risks, and benefits of the study. Finally, respondents were given thanks for their voluntary participation in the study.

Data Processing and Analysis

Descriptive and inferential statistics were checked in the present study using SPSS version 25. Mean and standard deviation was used as descriptive statistics whereas Pearson product-moment correlation analysis and stepwise multiple regression analysis were used as the inferential statistics.

Ethical Considerations

In the study, the participating parents faced no potential risks (e.g., either physical, psychological, social, or legal) since all probable risks were discussed, and had taken the required steps before their participation in the study. Besides, they were given as much as possible full flexibility, and the confidentiality of the participants' information was assured. After taking consent by delivering necessary debriefing (i.e., nature and objectives of the study, about right to refusal or withdrawal from participation, etc.), administered the questionnaires. Participants were also informed that there was no financial benefit to participation in the study.

Results and Discussion

Results

To test the research hypotheses, the data obtained were analyzed. Before applying inferential statistics, the normality of the collected data on psychological illness scores was checked. Regarding skewness and kurtosis, the suggested range of the data is found between (-1 to + 1), and in Shapiro-Wilk and Kolmogorov-Smirnov test, p values are above .05 indicating the variable is normally distributed.

Table 2 illustrated that affiliated stigma [i.e., affect (r = .639; p < .01), behavior (r = .566; p < .01), and cognition (r = .614; p < .01)], family support [(i.e., kinship (r = .287; p < .05), partner/spouse (r = .404; p < .01), informal (r = .353; p < .01), program/organization (r = .385; p < .01), and profession service (r = .329; p < .05)], and parenting sense of competence [i.e., satisfaction (r = .391; p < .01)] are positively and significantly correlated with psychological illness respectively. Besides, overall affiliated stigma (r = .712; p < .01) and family support (r = .468; p < .01) are also positively and significantly correlated with psychological illness, respectively.

Table 2. Correlation matrix among affiliate stigma, family support, and parenting sense of competence with psychological illness

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Affiliate Stigma	_													
2. Affect	.868**	_												
3. Behavior	.847**	.642**	_											
4. Cognition	.835**	.822**	.447	_										
5. Family Support	.366**	.886**	.447**	.660**	_									
6. Kinship	.166	.178	.170	.056	.642**	_								
7. Partner/Spouse	.293*	.161	.349**	.234	.822**	.477**	_							
8. Informal	.225	.205	.223	.133	.886**	.447**	.660**	_						
9.Program/ Organization	.309*	.312*	.267*	.195	.878**	.498**	.613**	.807**	_					
10. Professional Services	.398**	.446**	.318*	.226	.498**	.238	.150	.290*	.365**	_				
11. Parenting Sense of Competence	.266*	.186	.316*	.163	.246	.247	.110	.308*	.270*	.017	_			
12. Satisfaction	.297*	.223	.191	.371**	.368**	.197	.324*	.411**	.360**	.015	.666**	_		
13. Efficacy	.114	.066	.267*	086	.028	.169	118	.076	.067	.010	.793**	.074	_	
14. Psychological illness	.712**	.639**	.566**	.614**	.468**	.287*	.404**	.353**	.385**	.329*	.256	.391**	.022	_

Note: **p < .01. *p < .05.

Table 3. Stepwise multiple regression of psychological illness on the affiliate stigma dimensions

Predictors	Unstandardized Beta	β	t	p	R^2	R ² Change	F Chang e	ANOVA for Model Fit
Constant	-2.142		-5.705	.001				
Affiliate Stigma								
Affect	.139	.639	6.046	.001	.408	.408	36.555	54.408***
Cognition	.099	.350	2.710	.009	.481	.073	7.343	27.137**

Note: ***p < .001. **p < .01.

Dependent Variable: Psychological Illness

Table 3 revealed that there were two significant predictors among the three dimensions (i.e., affect and cognition) which explained 48.1% of the variance in psychological illness. Also indicated that the strongest predictor of psychological illness was the effect (stigma) which also alone explained 40.8% of the variance. Unstandardized beta (.139) of affect stigma suggested that as affiliated stigma increases by one unit psychological illness increases by .139 units. Standardized beta (.639) indicates that as affiliated stigma increases by one standard deviation psychological illness increases by a .639 standard deviation. Finally, values of ANOVA indicated that only one predictor is good and fits the models significantly. Affiliated stigma, namely stigma, predicts psychological illness among parents of children with ASD.

Table 4. Stepwise multiple regression of psychological illness on the family support dimensions

Predictors	Unstandardized Beta	β	t	p	R^2	R ² Change	F Change	ANOVA for Model Fit
Constant	-1.494		-3.061					
Family Support								
1. Partner/Spouse	.090	.404	3.212	.001	.163	.163	10.318	10.318***
2. Program/Organization	.095	.275	2.241	.05	.237	.074	5.024	8.063*

Note: **p < .01. *p < .05.

Dependent Variable: Psychological Illness

Results as reported in Table 4 illustrated that there were two significant predictors among the dimensions (*i.e.*, partner/spouse and program/organization) which explained 23.7% of the variance in psychological illness. Furthermore, the strongest predictor of psychological illness was the partner/spouse which also alone explained 16.3% of the variance. The unstandardized beta (.090) of partner/spouse suggested that as partner/spouse increases by one unit psychological illness increases by .090 units. Standardized beta (.404) indicates that as partner/spouse increases by one standard deviation psychological illness increases by a .404 standard deviation. Finally,

values of ANOVA indicated that only one predictor is good and fits the models significantly. Family support, namely partner/spouse, predicts psychological illness among parents of children with ASD.

Table 5. Stepwise multiple regression of psychological illness on the parenting sense of competence dimensions

Predictors	Unstandardized Beta	β	t	p	R^2	R ² Change	F Change	ANOVA for Model Fit	
Constant	-1.900		-3.009						
Parenting Sense of Competence									
Satisfaction	.076	.391	3.096	.001	.153	.153	9.584	9.584***	

Note: ***p < .001.

Dependent Variable: Psychological Illness

Standardized beta, reported in Table 5 revealed that there was only one significant predictor among the dimensions (*i.e.*, satisfaction) which explained 15.3% of the variance in psychological illness. The strongest predictor of psychological illness was satisfaction which also alone explained 15.3% of the variance. The unstandardized beta (.076) of satisfaction suggested that as satisfaction increases by one unit psychological illness increases by .076 units. Standardized beta (.391) indicates that as satisfaction increases by one standard deviation psychological illness increases by a .391 standard deviation. Finally, values of ANOVA indicated that only one predictor is good and fits the models significantly. Parenting sense of competence namely satisfaction predicts psychological illness among parents of children with ASD.

Table 6. Stepwise multiple regression of psychological illness on affiliate stigma, family support, and parenting sense of competence on psychological illness

Predictors	Unstandardized Beta	β	t	p	R^2	R ² Change	F Change	ANOVA for Model Fit
Constant	-2.142		-5.705					
Affiliate Stigma								
1. Affect	.139	.639	6.046	.001	.408	.408	36.555	36.555***
Family Support								
2. Partner/spouse	.069	.309	3.113	.001	.501	.093	9.693	26.122***
Affiliate Stigma								
3. Cognitive	.082	.290	2.353	.05	.550	.049	5.537	20.780*
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Note: ***p < .001. *p < .05.

Dependent Variable: Psychological Illness

Values of standardized β reported in Table 6 revealed that there were three significant predictors (*i.e.*, affect, partner/spouse, cognitive) which explained jointly 55.0% of the variance in psychological illness and the strongest predictor was the affect (stigma) which alone explained 40.8% of the variance. Unstandardized beta (.139) of affect (stigma) suggested that as affect (stigma) increases by one unit psychological illness increases by .139 units. Standardized beta (.639) indicates that as effect (stigma) increases by one standard deviation psychological illness increases by a .639 standard deviation. Finally, values of ANOVA indicated that all the predictors are good and fit the models significantly

Additionally, a few demographic profiles of the respondents have been computed. The mean score of some demographic variables was (relationship with ASD, parental age, parent's educational qualification, parent's occupation, ASD child age, gender of ASD, child's educational qualification, does with your wife/husband live with you, number of children, primary caregiver, types of therapy taking, financial coverage) were 1.71, 1.29, 3.55, 2.29, 1.58, 1.38, 1.75, 1.13, 1.20, 1.84, 1.98, 1.80, respectively.

Discussion

The present study was designed to investigate the relationships between affiliate stigma, family support, and parenting sense of competence with psychological illness (i.e., mental health and parenting stress) among parents with ASD children. Significant findings are summarized through the following explanations. Additionally, the results have been presented in the same order in which they were hypothesized. The stated first hypothesis findings (Table 2) confirmed the significant relationship between the constructs. According to Fung (2007) raising a child with ASD may likely go with the vulnerability to affiliate stigma and its aversive outcome on psychological illness for Chinese parents. Although studies from India have found stigma among caregivers of severe mental illness (Grover *et al.*, 2015; Singh *et al.*, 2016). Findings, affiliate stigma was also positively connected with mothers' distress and their children's ADHD-related symptoms (Charbonnier *et al.*, 2019).

Further results presented in Table 2 indicated that there was a significant positive connection between family support with a psychological illness which does not confirm the formulated second proposition. Results also indicated a significant relationship between parenting sense of competence (i.e., satisfaction) the psychological illness which was supported by the formulated third proposition which was consistent with many invigorators' research findings such as Menéndez *et al.* (2011). The fact that parents' levels of satisfaction with their parenting role established a stronger connection with child well-being (Jones and Prinz, 2005).

The next proposition result (Tables 3, 4, and 5) indicated their predictability individually. Standardized beta (β) (Table 3) indicated that two variables (affect and cognitive) in the affiliate stigma were predictors of psychological illness among them the effect was the first important predictor of psychological illness which also alone explained 40.8% of the variance. Affect

stigma and cognitive impairment are two significant predictors among the three which explained 48.1% of the variance. Further, (Table 4) the strongest predictor of psychological illness was partner/spouse which also alone explained 16.3% of the variance. Here, satisfaction (Table 5) was the only significant predictor among the dimensions which explained 15.3% of the variance in psychological illness. Parenting sense of competence, namely, satisfaction predicts psychological illness.

To prove the fifth hypothesis the outcome (Table 6) indicated that psychological illness was accounted for by joint linear influences of affect of stigma, cognition, and partner/spouse. Values of standardized beta (β) revealed that there were three significant predictors (i.e., affect, partner/spouse, and cognitive) which explained jointly 55.0% of the variance in psychological illness was the strongest predictor of the outcome variable was affecting (stigma) which alone explained 40.8% of the variance. Finally, the values of ANOVA indicated that all the predictors are good and fit the models significantly. Affiliate stigma (affect and cognitive), and family support (partner/spouse) jointly explain the psychological illness.

Limitations

Some limitations are not avoidable here. Firstly, the small sample size caused poor reliabilities of the measures and the sample was selected only from two special schools due to school closure during the pandemic which indicates generalizability problems. Secondly, respondents were not so cooperative due to the pandemic situation. Thirdly, it's a cross-sectional study, so it's not clear whether the perception of affiliated stigma, family support, and parenting sense of competence would change with time which is possible in a longitudinal study.

Recommendations

For reducing the psychological illness of parents with ASD children, several remedies should be adopted including parents and family counseling and giving quality time to ASD children and their parents. CBT therapists may work by taking steps to increase current treatment practices through a more prominent understanding of the variables confronting families impacted by ASD. Providers can genuinely make great steps in supporting and improving the lives of these people. Family members, society, and other caregivers have to be educated about ASD and increased awareness about ASD children and their patients, and proper guidance about how to behave with them.

Conclusion

The present study advances the understanding of the process through which affiliate stigma, family support, and parenting sense of competence affect the psychological illness or well-being of parents with ASD children which would be helpful for researchers, educators, child psychologists, educational counselors, and even parents who are concerned with these issues. The study also suggests that other family members and close relatives within society should provide proper support to sustain the psychological and physical well-being of parents with ASD children.

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