Internalizing Behaviors of Children

Research Article

THE ROLE OF MATERNAL PSYCHOLOGICAL WELL-BEING AS A PREDICTOR OF CHILDREN’S INTERNALIZING BEHAVIORS

Kishor Roy*, and Noor Muhammad

Department of Psychology, Jagannath University, Dhaka-1100, Bangladesh

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ABSTRACT

Nowadays, mothers' psychological well-being and behavioral outcomes in children have become a major topic of interest globally in the social and clinical arena. Though fathers play an important role in parenting, mothers are the key persons responsible for caring for their children. Thus, the present study investigated the relationship between maternal psychological well-being and their children's internalizing behaviors. This study also aimed to build up some models related to predictor and outcome variables based on the current research findings. A cross-sectional survey research design was employed to conduct the study on 800 participants (400 children and 400 mothers). The children were selected from ten Bangla medium high schools in Dhaka, and the age ranges of the children ranged from 11 to 13 years. The schools and the children were selected following a multistage random sampling technique. The self-reported Bangla version of the Strengths and Difficulties Questionnaire (SDQ), the Bangla version of the General Health Questionnaire (GHQ-28), and a Personal Information Form (PIF) were administered to the participants to collect data. The correlation analysis showed a significant positive correlation between maternal psychological well-being and children's internalizing behavior. Results also revealed that somatic symptoms, anxiety and insomnia, social dysfunction, and severe depression in mothers were significantly correlated with the internalizing behavior of children. Findings from multiple regression analysis indicated that the most powerful predictor of internalizing behavior was mothers' anxiety and insomnia, which independently explained 35% of the variance. The other significant predictors were social dysfunction, severe depression, and somatic symptoms. All four predictors jointly explained 40.6% of the variance in children's internalizing behavior. The implications of the findings have been discussed in light of theory and research evidence from earlier research.

Keywords: Psychological well-being, Mother, Internalizing behavior, Children

Introduction

Behavioral development of a child is strongly influenced by how well his or her family functions (Mahalihali, 2006). Behavioral problems of the children remain lower if parents have greater

* Correspondence: kishorkumar433@yahoo.com
supports toward them (Goldberg and Carlson, 2014). For healthy development of children, mothers play the most influential role than fathers, because mothers are spending significantly more time than fathers and across several familial situations, they have direct interactions with their children (Scaglioni et al., 2008). It has been proven that a mother's poorer mental health has a negative impact on her children's behavior (Downey and Coyne, 1990). Internalizing behavior difficulties in children are frequently linked to poor psychological well-being of their mothers (Edwards and Hans, 2015). Early behavioral disorders, like internalizing behaviors, are of great concern since they tend to remain throughout childhood and adolescence (Ashford et al., 2008).

Internalizing behaviors are an inward-directed feeling that includes symptoms of depression, anxiety, withdrawal, and somatic complaints (Achenbach and Edelbrock, 1978). According to American Psychological Association (2021) internalizing behaviors are characterized mainly by phenomena inside the self, like anxiety, somatiform disorder, and depression. Internalizing problems are based in distress feelings (e.g., fear and sadness) and include depression, anxiety, loneliness, and somatic complaints (Schwartz and Harper, 2011). Internalizing behaviors are commonly connected with a variety of mood and anxiety disorders, which are principally classified as depressed disorders and anxiety disorders in the DSM-5 (APA, 2015). According to the WHO (2004) up to 20% of adolescents have one or more behavioral issues. In Bangladesh, Mallik and Radwan (2020) conducted research on 14 to 17 year school going children and found 14.90% internalizing behavior in them.

Psychological well-being is a psychological state which includes healthy, constructive, and meaningful relationships with other people living in the community, self-sufficiency, a sense of purpose and meaning in their lives, self-development, and personal growth (Ryff, 1989). Psychological well-being is the simple concept of a person’s happiness, pleasure, privileges, hobbies, and quality of life (Burris et al., 2009). Individual mood in a broad sense might be regarded as psychological well-being, which is usually defined as anxiety and depression (Krol et al., 1993). Family related factors influence mothers' psychological well-being, which has consequences for the well-being of other members of the family. Choi and Becher (2019) revealed that maternal depression was connected to an increased behavioral problem of children through mothers’ harsh parenting practices. Previous studies explored that depressive symptom of father and mother along with mother’s prohibitive and rebuffing behaviors arose as striking indicators of child. The children whose mothers are suffering from mental health problems exhibited higher initial levels of internalizing problems internalizing behaviors (Marchand and Hock, 1998). Burstein et al., (2010) found that the children whose mothers are suffering from mental health problems exhibited higher initial levels of internalizing problems. Offspring of depressed parents has been found to have higher levels of internalizing symptoms compared to offspring of normal parents (Gelfand and Teti, 1990). Greater severity, chronicity, and recurrence of maternal depression have been linked with poorer child outcomes, including more behavioral problems (Luoma et al., 2001). In another study, explored solid proof that depressive symptoms of mothers were linked with their children’s social and emotional behaviors (Bele et al., 2013). Blasio et al., (2017) found that maternal parental distress, frequently associated with negative or disengaged interactions with their offspring’s, could result in a series of children’s dysfunctional
cognitions (e.g., low self-esteem) and emotions (loneliness, fear and insecurity), which lead to internalizing reactions.

Rationale of the Study

Parenting is a difficult and stressful job whereas mothers bear the primary responsibilities for their children’s care. Mothers play roles not only as a caregiver, but also as a teacher, educator, and counselor. A supportive and cooperative mother is a source of strength and can promote her child’s healthy development. Therefore, mothers take a primary role in taking care and guiding the children and if they have any problem, it might have a negative impact on their children’s behavior. However, a considerable number of studies have been conducted on the relationship between mother’s psychological well-being and behavioral problems of children outside of our country (Goodman and Gotlib, 1999; Vallotton et al., 2016) and only a few studies conducted on children’s conduct problems and other related variables (parental acceptance-rejection) in Bangladesh (Roy et al., 2016). But a remarkable gap of studies specifically on maternal psychological well-being and internalizing behaviors of children have been found in Bangladesh. Further, among those previous studies, a maximum number of studies explored the relationship among various components of maternal psychological well-being with children’s behavioral problems but did not find the best affecting factors among the variables. Considering the above issues, the current researchers have attempted to conduct the research about the relationship between maternal psychological well-being and children’s internalizing behavior problems and to explore the best affecting factors and interaction effects among variables on Bangladeshi children. The findings of this study will help the researchers, policy makers, counsellors, psychotherapists, and other concerns to take necessary steps for better mental health of mothers and reducing behavior problems of children. Furthermore, it may add new knowledge to the existing literature related to psychological well-being of mothers and behavioral problems of children in Bangladesh.

Objectives of the Study

The main objective of the present study was to investigate the relation between mothers’ psychological well-being and children’s internalizing behaviors.

Specific objectives of the study were to investigate-

1) the relationship between maternal psychological well-being and children internalizing behavior.

2) the relationship of mothers’ anxiety and insomnia, social dysfunction, somatic symptoms, and severe depression with children’s internalizing behavior.

3) the relative importance of maternal predictors in explaining children’s internalizing behavior.

Materials and Methods

Sample and Sampling Technique

A total number of 800 participants (400 children and 400 mothers) were recruited as sample for the present study. Among 400 children, 200 were boys and 200 were girls. The children were
selected from ten secondary schools of Dhaka City and the age ranges of children were from 11 to 13 years and mothers were from 30 to 50 years ($M = 37.65$, $SD = 4.14$). List of the schools were collected from Bangladesh Bureau of Educational Information and Statistics (BANBEIS, 2020). The schools and the children were selected following multistage random sampling technique. At first ten secondary Bangla medium high schools were selected from Dhaka City by using a simple random sampling technique. Then, lists of $6^{th}$ and $7^{th}$ Grade (class) students were collected from each school and 20 students (10 male and 10 female) from each class had been selected through systematic random sampling. A total of 400 mothers of the selected children were also considered as participants. The participants were of lower (25.3%), middle (56.3%) and upper (18.5%) socio-economic backgrounds and religions.

**Measures**

The following measures were used to collect data of the present study:

The Psychological Well-Being Questionnaire

An adapted Bangla version of the General Health Questionnaire (GHQ-28) (Roy and Muhammad, 2021) was used to assess the psychological well-being of the mothers. The GHQ-28 was originally developed by Goldberg and Hiller (1979) and it is frequently used as an indicator of psychological well-being (Goldber and Williams, 1988; EURIDISS, 1990; Sanderman and Stewart, 1990; Krol et al., 1994). Through factor analysis, the GHQ-28 incorporates four subscales: somatic symptoms, anxiety and insomnia, social dysfunction, and severe depression. It is a 4-point Likert scale that ranges from “less than usual” to “much more than usual” ranging from “0” to “3”, respectively. The highest possible individual total score of GHQ-28 is 84 whereas the highest score of each subscale is 21. Score from 0 to 6 considered as having low, 7 to 13 as moderate, 14 to 21 as severe level. The total score is acquired by adding the scores of all sub-scales where the score ranges from 0 to 84. Higher score indicates poorer psychological well-being of the respondents. This measure has been reported to have good psychometric properties. The reliability coefficient for each sub-scales of GHQ-28 is highly satisfactory. Internal consistency reliability (alpha coefficient) of the GHQ-28 scale was .971 and reliability $\alpha$ coefficient for each subscale of GHQ-28 was found to be very high, such as, .92 for somatic symptoms, .95 for anxiety and insomnia, .93 for social dysfunction and .94 for severe depression subscale. A test-retest reliability coefficient for GHQ-28 was .87 at an interval of 15 days. Satisfactory level of validity was found for the adapted Bangla version of GHQ-28. GHQ-28 was shown to have face, content, convergent and structural validity.

The Strengths and Difficulties Questionnaire

An adapted self-reported Bangla version of the Strengths and Difficulties Questionnaire (SDQ) was used in the present study for measuring internalizing behavior of the children. The SDQ was originally developed by Goodman et al., (1998) and adapted by Roy and Muhammad (2022) was used to measure internalizing problems of children, where high scores indicate greater problems. The self-report version of the questionnaire is for self-completion by children aged from 11 to 16 years. The questionnaire consists of 25 items, some positive and others negative and the items are divided between five sub scales of 5 items each. With the requirement of our current study the difficulties’ part (consisting of four subscales like emotional symptoms, peer problems, conduct
problems, and hyperactivity) of the self-reported SDQ was used by the researchers. The difficulties parts of SDQ is demonstrated to have a good internal consistency (α = .93), and test-retest reliability (α = .91), and face, content, convergent and structural validity. The internal consistency of the sub scales was measured by using Cronbach’s alpha coefficient. This was .93 for the total difficulties, .87 for emotional symptoms, .83 for peer problems, .85 for conduct problems, and .86 for hyperactivity. Confirmatory factor analysis supported the second-order ‘internalizing’ and ‘externalizing’ factors fits (χ²/df = 2.49, RMSEA = .06, RMR = .02, CFI = .89, GFI = .90, TLI = .87), and the broader internalizing and externalizing subscales showed good convergent validity. To determine convergent validity of the self-reported SDQ Pearson product moment correlations were computed between difficulties score of the SDQ and CBQ (Hossain, 2001) and found significant positive correlation (r = .847, p < .01). The item is scored 0 for “not true”, 1 for “somewhat true”, and 2 for “certainly true”. Each of the 4 scale has a score ranging from 0 to 10. The internalizing score ranges from 0 to 20 and is the sum of the emotional and peer problems scales. The externalizing score ranges from 0 to 20 and is the sum of the hyperactivity and conduct scales.

Personal Information Form (PIF)
To collect personal information such as age, gender, family income, family structure, occupation and educational qualifications of mothers PIF was used in this study.

Study Design
A cross-sectional survey research design was employed in this study.

Procedure
Initially, official approval was taken from school’s authority. The researchers visited to a particular school on a pre-fixed date. After selecting the students through a randomization procedure, the researcher collected their residential addresses to collect data from their mothers about psychological well-being. Before administration of the questionnaire all the participants were requested to read the instructions on the top of the items of the scale, the researcher also given necessary instructions in both written and oral formats. Only the respondents who showed positive attitude and interest to participate in the investigation were selected. For measuring internalizing behaviors of children, the self-report of SDQ questionnaire was administrated. Beside this for measuring psychological well-being of mothers, the GHQ-28 was administered to the mothers of the respondent students. The researchers collected data from the mothers through face-to-face interviews using GHQ-28 questionnaire and assured them that they could withdraw from the study anytime, if they want to. We also informed the participants that this is a voluntary participation and small appreciation gifts were given.

The questionnaire was taken from the participants after they completed the task in accordance to the instructions. Finally, the participants were thanked for taking part in the study.

Results and Discussion
Main objective was to explore the relations of maternal psychological well-being with internalizing behaviors of children. In order to test the study objectives, the data obtained were analyzed through descriptive and inferential statistics. In order to examine the first to second
objectives that are to explore the relationship among the variables, Pearson product moment correlation was computed. The findings are presented below.

According to first research objective significant positive correlations was found between maternal psychological well-being and children’s internalizing behavior \((r = .635, p < .01)\). The results indicated that mothers whose psychological well-being is good have children those have lower internalizing behavior problem. The finding is consistent with earlier researches (Burstein et al., 2010; Foster et al., 2008; Yoon et al., 2017). The mothers whose psychological well-being is higher are able to understand the emotions and problems of their children and can guide them in a better way. Besides this, they realize their own abilities, are able to cope with normal stresses, to work regularly and productively, and are also able to make a contribution to the family and society. Poor level of psychological well-being of mothers tends to spill over and negatively affect the quality of interactions with their children. If mothers stay in critical or stressful situations because of illness, daily hassles, excessive engagement in household activities, family conflict, job stress, then it impacts on their children behavior. Mothers who are depressed have been reported to be more pessimistic (Lovejoy et al., 2000) and more critical (Webster-Stratton and Hammond, 1988) with their children. Children of depressive mothers have higher levels of internalizing symptoms than children of normal mothers (Cicchetti and Rogosch, 1996; Hammen, 1999).

Table 1. The Interrelations of Maternal Somatic Symptoms, Anxiety and Insomnia, Social Dysfunction, Severe Depression with Internalizing Behavior of Children

<table>
<thead>
<tr>
<th></th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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</thead>
<tbody>
<tr>
<td>1. Somatic Symptoms</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>2. Anxiety and Insomnia</td>
<td>.713**</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>3. Social Dysfunction</td>
<td>.615**</td>
<td>.626**</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>4. Severe Depression</td>
<td>.649**</td>
<td>.717**</td>
<td>.654**</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>5. Internalizing Behavior</td>
<td>.533**</td>
<td>.591**</td>
<td>.520**</td>
<td>.547**</td>
<td>—</td>
</tr>
</tbody>
</table>

Note. ** \( p < .01 \).

The correlation coefficients presented in Table 1 revealed that somatic symptoms, anxiety and insomnia, social dysfunction, and severe depression of mothers were significantly positively correlated with internalizing behavior of children. The results indicated that internalizing behavior of children is increased if the mothers’ somatic symptoms, anxiety and insomnia, social dysfunction, and severe depression are increased. Findings are consistent to the past studies (Ashman et al., 2008; Compas et al., 1997; Jaser et al., 2005). The mothers who have such different types of somatic and psychological problems were less cohesive, less likely to impose restrictions on their children, provide poor home environment, cannot control their emotions and produces mothers–children conflict, besides this they cannot realize the emotions and problems of their children. As a results, their children show more internalizing behavior in their daily lives and activities.
Results of some assumptions tests are presented below to verify the normality of collected data. The normality test analysis on internalizing behaviors of children shown that data are approximately normally distributed in terms of the mathematical output of the assumption test of internalizing behaviors of children. The values of skewness and kurtosis under the generally accepted limits of ±2 suggested that the data are approximately normally distributed (Field, 2009; George and Mallery, 2010). Skewness and Kurtosis have respectively indicated that data of internalizing behaviors of school children are almost normally distributed. Besides this, the visual inspection of the histograms, normal Q-Q plots, and box plots permitted that the data were approximately normally distributed, so that we can proceed to further analysis.

Cross validity of R Square

According to the cross-validation model $R^2$ value is very similar and close to the observed value of $R^2$ indicating that the cross validity of the model is very good.

To consider, in third objectives, the effects of each independent variable on internalizing behaviors of children, a forward stepwise regression analysis was performed.

Table 2. Internalizing Behavior of Children on Somatic Symptoms, Anxiety and Insomnia, Social Dysfunction, and Severe Depression of Mothers

<table>
<thead>
<tr>
<th>Predictors</th>
<th>$B$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$R^2$</th>
<th>$R^2$ Change</th>
<th>$F$ Change</th>
<th>ANOVA for Model Fit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>1.934</td>
<td>5.178</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Social Dysfunction</td>
<td>.193</td>
<td>.160</td>
<td>2.893**</td>
<td>.387</td>
<td>.037</td>
<td>23.761***</td>
<td>125.071***</td>
</tr>
<tr>
<td>3. Severe Depression</td>
<td>.156</td>
<td>.148</td>
<td>2.426*</td>
<td>.399</td>
<td>.013</td>
<td>8.267**</td>
<td>87.663***</td>
</tr>
<tr>
<td>4. Somatic Symptoms</td>
<td>.119</td>
<td>.130</td>
<td>2.191*</td>
<td>.406</td>
<td>.007</td>
<td>4.800*</td>
<td>67.578***</td>
</tr>
</tbody>
</table>

Note. ***$p < .001$, **$p < .01$, *$p < .05$.

In order to verify the third objective forward stepwise multiple regression analysis was done using mothers’ somatic symptoms, anxiety and insomnia, social dysfunction, and severe depression as predictor variables and internalizing behavior of children as outcome variable. Table 2 showed that there were four significant predictors: anxiety and insomnia, social dysfunction, severe depression, and somatic symptoms, which explained jointly 40.6% of variance in internalizing behavior of children. Regression analysis further indicated that the most powerful predictor of internalizing behavior was mothers’ ‘anxiety and insomnia’ which alone explained 35% of the variance. Standardized beta values ($\beta = .293$) indicated that as ‘anxiety and insomnia’ of mothers increased by one standard deviation, the internalizing behavior of children increased by .293
standard deviation. Results also indicated that social dysfunction was the second important predictor which alone explained 3.7% of variance in internalizing behavior. $R^2$-square change furthermore indicated that 1.3% of variance in internalizing behavior was accounted for the severe depression and .7% of variance in internalizing behavior of children was accounted for somatic symptoms of mothers. This interpretation is true only if the effects of other predictors are held constant. Also, the significant $F$-test [$F (4, 395) = 67.58, p < .001$] of Table 2 indicated that the variation in internalizing behavior of children was accounted for joint linear influences of mothers’ anxiety and insomnia, social dysfunction, severe depression, and somatic symptoms. Finally, value of ANOVA indicated that all the predictors were good and fit the models significantly.

The findings are consistent with the findings of other researchers (Frampton et al., 2010; Goodman et al., 1994; Jaser et al., 2008) who found that children internalizing problems were predicted by their mothers’ poor psychological well-being. Those mothers facing psychological distresses like somatic complains, anxiety and insomnia, social dysfunction, and severe depression fail to understand the emotions and problems of their children and cannot guide them in a better way. Children of these mothers may have negative emotionality which may predispose them to the development of internalizing behavior. Among all these psychological distresses predictors, anxiety and insomnia of mothers are more likely to impact the children more as mothers remain anxious more often and because of anxiety and improper sleep she cannot control and regulate her emotions properly. Their failure to control their own emotion leads them fail to understand the emotions and problems of their children too for which their children show more internalizing behavior. So, all the predictors significantly predict the internalizing behavior of children, but the most important predictor is mothers’ anxiety and insomnia.

**Conclusion**

The present research was undertaken in the background of sparse imperial investigations in Bangladeshi context highlighting the impact of maternal psychological well-being on children internalizing behavior. We may conclude that mothers’ poorer mental health adversely affects the children’s lives. Mothers whose psychological well-being or mental health is good their children tend to have lower internalizing behavior. Mothers’ mental health like anxiety and insomnia, somatic symptoms, social dysfunction, and severe depression significantly predict internalizing behavior of children, but the most important predictor is mothers’ anxiety and insomnia. So, it can be said that among various factors of maternal psychological well-being, anxiety and insomnia has the greatest influence to the development of internalizing behaviors in children.

The findings of the present research can be significant in a number of ways. It makes significant contributions to a variety of scientific fields. It provides new knowledge to the literature in behavioral sciences such as psychology, child psychology, and sociology. The present study advances our understanding about the process through which mothers’ psychological well-being affects their children’s behavior. The results will help us build new models and theories of mother child relations in psychology. The findings of this research can be useful ingredients for the parents and family members, researchers, and the mental health practitioners to understand how the psychological well-being of mothers’ can influence their children’s behavioral outcomes.
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References


