



The Relationship Between Parents' Hypochondriasis and Children's Obsessive Beliefs Mediated by Nervous Pressures: A Case Study in District 8 Education Department of Tehran

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Abstract: The aim of this study was to investigate the relationship between parents' hypochondriasis and obsessive beliefs in their children, mediated by nervous pressures, in the Education Department of District 8, Tehran. This research is a descriptive-survey study in terms of data collection method and is applied in terms of purpose. The study population consisted of parents of elementary school students in District 8 of Tehran, totaling 1700 individuals. Based on Morgan's table and a 5% error level, a sample of 313 participants was selected using simple random sampling, of which 302 questionnaires were returned. Data collection tools included the Ahvaz Hypochondriasis Questionnaire, the OBQ for obsessive beliefs, and the Parental Stress Scale. The Kolmogorov-Smirnov test was used to assess normality, followed by structural equation modeling and path analysis using LISREL software. The findings revealed significant positive relationships between parents' hypochondriasis and nervous pressures (t -value > 1.96), nervous pressures and children's obsessive beliefs (t -value > 1.96), and parents' hypochondriasis and children's obsessive beliefs (t -value > 1.96). Overall, the results indicate that parents' hypochondriasis directly and indirectly—through increasing nervous pressures—contributes to the development of obsessive beliefs in children. These findings highlight the importance of addressing parental mental health and stress management as key components in preventive and therapeutic programs for reducing obsessive tendencies among children.

Keywords: Children's Obsessive Beliefs, Parents' Hypochondriasis, Nervous Pressures

Introduction

Hypochondriasis, also referred to in psychological and psychiatric terminology as illness anxiety, describes individuals who, despite being physically healthy, believe that they are suffering from a serious disease and continuously complain about imagined symptoms and ailments. Although medical examinations and complementary diagnostic evaluations reveal no physical abnormalities, hypochondriacal individuals strongly believe that they suffer from a severe or life-threatening illness and persistently seek medical treatment with significant anxiety and distress. For this reason, this condition has also been referred to as "imaginary illness syndrome" (Baur, 1989).

Individuals with hypochondriasis typically experience persistent obsessive thoughts and fears about illness. They show constant preoccupation and concern regarding their health status and bodily functions. They frequently doubt the normal functioning of their bodies and express numerous complaints about physical pain. Bodily sensations that most people consider normal are often interpreted by these individuals as signs of severe and incurable diseases (Looper & Kirmayer, 2001). They may interpret normal bodily activities such as variations in heart rate, bowel movements, mild headaches,

sweating, fatigue, and even minor and common issues such as insomnia, changes in appetite, fever, runny nose, sore throat, or minor skin conditions as exaggerated symptoms of serious illness (Barsky et al., 1994). Sometimes they focus on vague or ambiguous bodily sensations that hold no meaning other than illness in their interpretation. For instance, a simple stomachache or general fatigue may be perceived as the onset of a dangerous and frightening disease. This hypochondriacal perception is considered a disorder when it persists for at least six months and continues despite repeated medical reassurance about the person's physical health, often resulting in frequent visits to clinics and healthcare providers (Baur, 1989).

Hypochondriasis affects men and women at relatively similar rates and may appear at any age, including childhood, although it is most common in early adulthood. Individuals who are highly sensitive to environmental stimuli, tend to overanalyze situations, possess low tolerance thresholds, and have difficulty ignoring everyday concerns are more susceptible to developing hypochondriacal tendencies. Such individuals often exhibit Type A personality characteristics and are more vulnerable to illness anxiety (Pasha, 2005). Parents with such personality traits may inadvertently create conditions that contribute to the development of similar tendencies in their children. These individuals often transform minor frustrations into major failures and become preoccupied with them. Instead of solving problems effectively, they engage in persistent negative rumination. In other words, they attach greater importance to negative thoughts and often show heightened sensitivity and disproportionate reactions to stressful or anxiety-provoking situations (Dannahy & Stopa, 2007).

In families where anxiety disorders are prevalent, hypochondriacal tendencies are more likely to emerge. Because such parents often interact with their children and others with heightened anxiety, stress, and psychological pressure, they tend to struggle with stress rather than employing effective problem-solving strategies. Consequently, their children may also become exposed to stressful environments, feel incapable of coping with problems, and eventually experience psychological difficulties themselves (Watt & Stewart, 2000).

In the modern era, psychological stress has become a significant component of everyday life. Nervous or psychological pressures are frequently observed in daily experiences, and most individuals encounter varying degrees of stress at different points in their lives. The presence of such pressures can lead to numerous negative consequences, including unmet needs, feelings of frustration, depression, anxiety, dissatisfaction with life and interpersonal relationships, and reduced efficiency in daily functioning. Stress has been recognized as one of the most influential factors affecting human performance (Folkman & Moskowitz, 2004).

Although numerous studies have examined hypochondriasis, relatively little attention has been paid to the influence of parental hypochondriasis on obsessive beliefs in children. Parents with hypochondriacal concerns may unintentionally impose significant psychological pressures on their children. Therefore, the present study investigates this issue and attempts to answer the fundamental question of how nervous pressures mediate the relationship between parental hypochondriasis and obsessive beliefs in children.

Stress is considered an inseparable component of human life and one of the major contributors to both psychological and physical disorders. It can significantly reduce an individual's functioning and overall well-being (Folkman & Moskowitz, 2004). Assessing the level of stress arising from environmental conditions can provide valuable insight into the physical and psychological health of members of a society, enabling appropriate decisions to be made to reduce stress when necessary.

Parental behavior toward children also plays a significant role in the emergence of hypochondriacal tendencies. Parents with sensitive and emotionally fragile personality traits may create conditions that facilitate the development of such tendencies in their children. Furthermore, in families where anxiety disorders are common, hypochondriasis tends to occur more frequently (Watt & Stewart, 2000). These parents often interact with their children and even with friends and acquaintances with heightened anxiety, stress, and psychological pressure. Instead of applying effective problem-solving skills, they continuously struggle with psychological stress and often perceive themselves as incapable of resolving problems. Such a stressful environment is likely to be transmitted to children, who may learn or imitate these maladaptive patterns (Taylor et al., 2010).

In some cases, individuals with hypochondriasis may have learned during childhood interactions that affection and attention can be obtained through expressions of illness. By exaggerating or pretending to be ill, they may seek sympathy and avoid responsibilities. Psychologists suggest that when anxiety disorders become more pervasive and manifest as obsessive tendencies, parental monitoring of health issues may become excessive and obsessive. This behavior may implicitly teach children to perceive themselves as ill or vulnerable to disease (Deacon & Abramowitz, 2008).

Parents who themselves suffer from hypochondriasis often believe that they alone are affected by the disorder. However, other family members may be even more vulnerable to its long-term psychological consequences. Continuous exposure to such patterns may gradually lead to emotional distress and depression within the family. Among family members, children are particularly susceptible because they may not fully understand the situation and often share strong emotional bonds with their parents. As a result, they may experience deeper psychological impacts and develop various cognitive or emotional difficulties (Kradinova et al., 2019).

Despite these potential consequences, many parents remain unaware of these effects. Moreover, the relationship between parental hypochondriasis, nervous pressures, and obsessive beliefs in children has not been sufficiently clarified in academic research. Therefore, in order to clarify this issue, the present study examines the relationship among these variables and explores the mediating role of nervous pressures in the relationship between parental hypochondriasis and obsessive beliefs in children.

Material and Methods

This study employed a non-experimental, correlational research design based on path analysis. The statistical population consisted of parents of elementary school students affiliated with the Education Department of District 8 of Tehran, totaling 1,700 individuals. According to Morgan's sample size table, a minimum sample of 313 participants was determined. Participants were selected through simple

random sampling. Questionnaires were distributed among them, and after data collection, 302 valid questionnaires were returned and analyzed.

Instruments

Ahvaz Hypochondriasis Inventory: The Ahvaz Hypochondriasis Inventory, consisting of 45 items, was developed by Naderi et al. (2004) in Ahvaz, Iran. Factor analysis indicated two dimensions: *Physical complaints and mental preoccupations* (35 items) and *Fear and worry* (10 items). Participants respond to each item with “Yes” or “No.” Naderi et al. (2004) reported a split-half reliability coefficient of 0.86, internal consistency (Cronbach’s alpha) of 0.90, and a test–retest reliability of 0.67 after six weeks. In the present study, Cronbach’s alpha coefficients were 0.78 for the first subscale (*physical complaints–mental preoccupations*) and 0.75 for the second subscale (*fear and worry*).

Obsessive Beliefs Questionnaire (OBQ-44): The OBQ-44 includes 44 items designed to assess pathological cognitive dimensions in individuals with obsessive–compulsive tendencies. Respondents indicate their level of agreement with each item on a 7-point Likert scale (0–6). The questionnaire consists of six cognitive domains central to obsessive–compulsive beliefs: Responsibility for harm or injury, Overestimation of threat, Perfectionism, Need for certainty, Importance of thoughts and Thought control. The Persian version of this questionnaire has demonstrated high validity and reliability in Iranian samples. In the present research, Cronbach’s alpha for the total scale was 0.82.

Parenting Stress Questionnaire (PSQ): The PSQ, developed by Abidin (1983), measures parental stress through 36 items covering four dimensions: Defensive responding, Parental distress, Parent–child dysfunctional interaction and Difficult child. A composite reliability coefficient of 0.91 was reported by the test’s developer. In the present study, the Cronbach’s alpha coefficient for the total PSQ scale was 0.89.

Procedure

After receiving approval for the research proposal and obtaining the necessary administrative and ethical permissions, coordination was made with the school management and teaching staff of the selected institutions. Questionnaires were distributed among 313 parents selected through simple random sampling. A total of 302 questionnaires were returned, yielding a response rate of 96.48%, which provided a sufficient and reliable sample for statistical analysis.

Collected data were analyzed using the Structural Equation Modeling (SEM) approach with the assistance of LISREL software (version 8.72) to test the proposed path model.

Ethical Considerations

All procedures of the study adhered to ethical research standards in psychology and behavioral sciences. The following ethical guidelines were observed:

Informed consent: Participants were fully informed of the study’s purpose, voluntary nature, and confidentiality assurances before completing the questionnaires;

Confidentiality: Personal information of participants was kept confidential and used solely for research purposes;

Right to withdraw: Participants had the right to withdraw from the study at any stage without any consequences;

Non-harm principle: The study involved no physical or psychological harm or risk to the participants

and Data integrity: Data were analyzed and reported honestly, with no manipulation of results.

Results

In total, data obtained from 302 participants (186 men and 116 women) were analyzed. Among them, 8 participants held a doctoral degree, 119 had a master's degree, and 175 held a bachelor's degree. To assess the normal distribution of data, the Kolmogorov–Smirnov test was used. The results are summarized in Table 1.

Table 1. Kolmogorov–Smirnov test results for normality

Variable	Significance Level	α (Alpha)	Result
Parents' Hypochondriasis	0.783	0.05	Normal
Nervous Pressures	0.671	0.05	Normal
Children's Obsessive Beliefs	0.559	0.05	Normal

As shown in Table 1, the significance level for all variables exceeds 0.05, confirming the normality of the data distribution. Thus, parametric statistical methods, including path analysis, were applied. To evaluate the significance of the relationships among variables, the *t*-value statistic was utilized. The purpose of path analysis is to identify the causal relationships among the variables represented in the conceptual research model. A hypothesis is confirmed if the *t*-value ≥ 1.96 at the 0.05 significance level. Figure 1 illustrates the structural equation model in the standardized estimation state, while Figure 2 displays the same model with the corresponding *t*-values.

Hypothesis 1: There is a significant relationship between parents' hypochondriasis and nervous pressures ($\beta = 0.92$).

Hypothesis 2: There is a significant relationship between nervous pressures and children's obsessive beliefs ($\beta = 0.94$).

Hypothesis 3: There is a significant relationship between parents' hypochondriasis and children's obsessive beliefs ($\beta = 0.65$).

According to the *t*-value results:

Between hypochondriasis and nervous pressures, $t = 9.20$

Between nervous pressures and obsessive beliefs, $t = 10.63$

Between hypochondriasis and obsessive beliefs, $t = 6.46$

Since all *t*-values are greater than 1.96, all proposed relationships are statistically significant.

Model Fit Indices

The goodness-of-fit indices for the structural model are presented in Table 2.

Table 2. Model fit indices of the proposed model

Structure	χ^2	df	χ^2/df	GFI	AGFI	IFI	TLI	CFI	NFI	RMSEA
Proposed Model	226.56	132	1.71	0.91	0.94	0.90	0.91	0.91	0.92	0.07

The Root Mean Square Error of Approximation (RMSEA) is one of the most widely used model fit indices. An RMSEA value below 0.10, coupled with a significant p-value ($p < 0.05$), indicates an acceptable model fit. Additionally, when the ratio of χ^2/df is less than 3, the model fit is considered satisfactory.

In the present model, $\chi^2/df = 1.71$ and $RMSEA = 0.07$, both of which indicate a good fit. Furthermore, the remaining goodness-of-fit indices (GFI, AGFI, IFI, TLI, CFI, NFI) are all above 0.90, confirming the adequacy and suitability of the proposed structural model for the empirical data.

The results of the structural equation modeling show that parents' hypochondriasis significantly and positively predicts both nervous pressures and children's obsessive beliefs; Nervous pressures significantly mediate the effect of parental hypochondriasis on children's obsessive beliefs and the final model demonstrates appropriate fit statistics, confirming the conceptual validity of the hypothesized relationships.

Discussion

The present study examined the relationship between parents' hypochondriasis and children's obsessive beliefs, with the mediating role of nervous pressures. After data collection and descriptive analyses, the findings were interpreted according to the proposed hypotheses.

The findings concerning the relationship between parents' hypochondriasis and nervous pressures are consistent with prior research. Pasha (2005) found a significant relationship between hypochondriasis, anxiety, and depression among students. Similarly, Watt and Stewart (2000) demonstrated that hypochondriacal individuals acquire illness-related signs and symptoms through parental modeling, and that elevated childhood anxiety is associated with hypochondriasis in adulthood. Moreover, Barsky et al. (1994) reported a connection between childhood trauma and both adult hypochondriasis and anxiety. Looper and Kirmayer (2001) further confirmed that excessive fear of physical vulnerability—fear of illness, injury, and negative appraisals of general health—leads to high distress, reduced activity, impaired functioning, and ultimately, disability. These scholars describe anxiety and disability as complementary dimensions of hypochondriasis.

These results can be interpreted as follows: Individuals with hypochondriasis tend to experience constant concern about their health and imagined bodily disorders. Persistent worry naturally generates ongoing anxiety and stress (Looper & Kirmayer, 2001). Since these individuals' primary complaints revolve around physical illness and somatic problems, the observed relationship is unsurprising.

The observed relationship between nervous pressures and children's obsessive beliefs aligns with the work of Laposa et al. (2015), who reported that higher anxiety sensitivity predicts greater intensity of obsessive-compulsive symptoms among both clinical and non-clinical populations. In addition, Deacon and Abramowitz (2008) found that individuals with obsessive-compulsive disorder (OCD) tend to fear the physical symptoms of anxiety and report significantly higher anxiety sensitivity compared with healthy individuals.

When anxiety disorders exceed normal levels, they may manifest in obsessive-compulsive-like symptoms. Parents who display excessive concern about their children's health—constantly checking for signs of illness, insisting on “healthy” behaviors, or exercising strict health control—may inadvertently instill illness-related thoughts and fears in their children. This health-related scrutiny can lead children to adopt hypervigilant or obsessive checking behaviors regarding their own bodies.

The relationship between parents' hypochondriasis and children's obsessive beliefs agrees with previous findings. McKay et al. (2004) reported a strong connection between health-related worries in OCD (including fear of illness or hypochondriacal concerns) and injury-related fears. Likewise, Freydoni et al. (2014) found that over 30% of individuals diagnosed with OCD met the diagnostic criteria for hypochondriasis.

A plausible explanation is that individuals suffering from hypochondriasis often imagine themselves afflicted with the most severe possible illness, repeatedly complain about physical conditions, and are acutely sensitive to even the smallest bodily changes. Over time, such hypersensitivity and vigilance toward physical functioning may be internalized by their children as obsessive belief systems regarding health and bodily integrity.

More broadly, the study suggests that many psychological problems in children originate from unmet essential emotional needs during childhood. According to Ebrahimi et al. (2016), insecure or unhealthy parents who fail to provide a sense of safety at home cause children to feel insecure, leading them to develop defensive reactions aimed at managing anxiety. These defensive mechanisms may evolve into rigid internal standards, which under certain conditions can develop into pathological obsessive behaviors.

Thus, the presence of excessive parental fear (e.g., fear of vulnerability and injury) and strict parental standards are viewed as key contributing factors in the emergence of obsessive tendencies in children. In this process, a continued pattern of parental illness behavior and perceived physical weakness reinforces the child's internal sense of fragility, predisposing them to obsessive or illness-related thought patterns.

Limitations

This study faced several limitations. The short duration of contact with parents may have left some ambiguities unresolved, suggesting that additional sessions for communication and clarification would have strengthened the findings. Although the brief interviews opened a window for parents' emotional release and sharing of problems, questionnaire-based studies are always susceptible to misinterpretation or differing understandings of items, which may distort the results. Future research could employ longitudinal or multi-session designs to overcome these limitations and verify causal relationships more clearly.

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