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The mediating role of parental satisfaction between marital satisfaction and perceived family burden among parents of children with psychiatric disorders

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ABSTRACT

Parents of children and adolescents with psychiatric disorders may experience perceived family burden. Although previous research has extensively addressed the contribution of clinical factors to perceived family burden, the contribution of marital and parental factors to family burden has rarely been studied in the context of parents whose children have a psychiatric disorder. The current study therefore examined the associations between marital satisfaction, parental satisfaction, parental efficacy, and perceived family burden among parents of children with psychiatric disorders (age range 5–14). Sixty-three parents of children who were hospitalized in a psychiatric hospital completed several questionnaires on marital satisfaction, parental satisfaction, parental efficacy, and perceived family burden. Results supported a mediating role of parental satisfaction (mediation effect size beta = −0.2, $p < 0.05$) but not parental efficacy (mediation effect size beta = 0.02, NS) between marital satisfaction and perceived family burden. Implications include the need to further study the parental experience during a child's psychiatric hospitalization and other possible factors related to burden. We would also recommend including family and marital therapy as part of routine care in this context.

1. Introduction

Parents of children and adults with serious psychiatric disorders cope with diverse challenges that are associated with perceived family burden (Mendenhall and Mount, 2011). This perceived burden is traditionally seen as being the consequence of objective changes – for instance, disruptions and limitations in the family's daily routine – as well as of subjective reactions, such as anxiety and depression (Awad and Voruganti, 2008). Studies that have assessed correlates of perceived parental burden have mainly focused on illness-related variables, such as symptom severity (Hastings, 2002; Dyck et al., 1999). However, environmental family factors such as support (Awad and Voruganti, 2008), or parents' characteristics, including the way parents perceive and acknowledge the illness (e.g., Hasson-Ohayon et al., 2017), have received more attention in recent years. The current study aimed to extend the existing literature by adding a familial-interpersonal angle and assessing the effects of marital and parental experiences on perceived family burden of parents whose children had been hospitalized on a psychiatric ward. Specifically, the study examined the mediating roles of parental efficacy and parental satisfaction on the relationship between marital satisfaction and perceived family burden.

Marital satisfaction has been shown to be associated with parents' psychological distress and perceived burden in families coping with a child who has a disability. For example, parents who are more satisfied with their marital relationship, in comparison to parents who are less satisfied with their marital relationship, experience less burden when caring for a child with a disability (Essex, 2002; Essex and Hong, 2005; Kersh et al., 2006; Hartley et al., 2011). Furthermore, having a high level of satisfaction with the marital relationship is related to greater satisfaction in parenting (Hartley et al., 2011; Essex, 2002). Notably, longitudinal studies have shown a reciprocal relationship between the

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marital and the parental experience, suggesting that the two relationship systems are related to each other, and affect the psychological outcomes of both dyad members (van Eldik et al., 2017). In addition, a spillover effect between constructs was suggested, in which the quality of the marital relationship "spills over" onto the parent-child relationship (Kouros et al., 2014). Accordingly, consistent with family systems theory, which views interactions within the family as being related to each other (Minuchin, 1985), it has been suggested that conflicts in the marital couple are transferred to conflicts in the parent-child dyad via the parent's negative emotions (Cox et al., 2001; Kouros et al., 2014). In the literature, this idea has gained more support than the competing idea of compensation, which suggests that parents compensate for being unsatisfied in their marriages by investing more in their parental roles (Erel and Burman, 1995).

Parental efficacy and parental satisfaction are two important aspects of the parenting experience. Parental efficacy refers to perceived competence in the parental role, and parental satisfaction refers to the person's enjoyment of the parental role (Johnston and Mash, 1989; Ohan et al., 2000). Both are regarded as important cognitive aspects of the parents' self-esteem as both of them represent a subjective appraisal of the parenting role. Among parents of children with different types of illnesses and disabilities, parental stress is often reported to be higher (Cousino and Hazen, 2013; Silberg et al., 2015), and parental efficacy and satisfaction to be lower (Hassall et al., 2005; Morgan et al., 2013), than that which is reported by parents whose children do not have chronic medical conditions. Similarly, it is reasonable to suggest that having a child with a psychiatric disorder might also challenge both the parental sense of efficacy and the parental sense of satisfaction. Furthermore, a child's psychiatric hospitalization might present additional and unique challenges to both the marital experience and the parental experience, as it requires both boundary-setting and assertiveness (e.g., with regard to medication adherence), renegotiation of independence-dependency issues, and adjustment to a child's overnight stays at the hospital (Clarke and Winsor, 2010). A child's psychiatric hospitalization might also create feelings of guilt and doubt among parents, in terms of their parental role during this intense and difficult period of time, as well as challenges in meeting both domestic and job-related responsibilities (Melnyk, 2000).

Recently, several studies have indicated the importance of putting more of an emphasis on *non-disease dimensions* of chronic illnesses in children when addressing the impact of an illness on children and their families (Barak et al., 2017; Mokkink et al., 2008; van der Lee et al., 2007). This idea is based on the argument that greater diversity exists within, than across, diagnostic groups, and that clinical diagnosis of a specific disease category is not particularly helpful in predicting social and psychological outcomes (Stein and Jessop, 1989). Accordingly, although there is little data regarding parents of children who are hospitalized on psychiatric wards, they can presumably be viewed through similar lens as parents of children who have other health conditions.

As mentioned above, the effects of the marital relationship on the perceived burden of parents, via the parent-child-relationship, are the focus of the current study. Previous studies conducted among parents of children with developmental disorders have shown that marital satisfaction is negatively related to perceived family burden (Kersh et al., 2006; Hartley et al., 2011), and that parental efficacy and parental satisfaction play important roles in parents' psychological outcomes (Hassall et al., 2005). However, to the best of our knowledge no study has assessed the mediating effect of perceived parental satisfaction and efficacy on the association between marital satisfaction and family burden. In accordance with the abovementioned spillover effect, we hypothesized that marital satisfaction would be associated with perceived burden via the parental cognitions of parental satisfaction and efficacy.

2. Method

2.1. Participants

Eighty-three parents were invited to take part in this study. Of these invitees, 13 declined to participate for the following reasons: they were overwhelmed by their child's hospitalization, they were afraid to disclose their emotions, and/or they did not believe that their anonymity would be maintained. The parents who declined to participate were fathers who were in the same age range as the fathers who agreed to participate. Additional information on non-participants was not available. Of the remaining 70 parents, seven were single parents and were excluded for the purposes of the current study. Thus, the final sample in this study consisted of 63 parents – 24 of whom were fathers (38.1%) and 39 of whom were mothers (61.9%) – and it is important to state that these mothers and fathers were not married to each other. The mean age was 44.05 years (SD = 6.80), the mean years of education was 14.11 (SD = 2.63), and the mean number of children in the family was 4.71 (SD = 2.55). Inclusion criteria were fluency in Hebrew and signed informed consent forms. Exclusion criteria included having an organic or psychotic disorder. The relatively high mean of number of children in the family might be attributed to the location of the hospital (that is, the hospital is located in an area heavily populated by religious families, who tend to have higher numbers of children than do secular families in Israel). Notably, there were no significant correlations between number of children in a family and the study's variables.

All participating parents were coping with the first psychiatric hospitalization of their child, which resulted from either a diagnosis of a behavioral disorder, a serious mental illness such as schizophrenia, or a communication disorder. The study took place during the first two months of the child's hospitalization, and the inpatient unit – where the study took place – is staffed by an interdisciplinary team that works with families. Services within the unit include a weekly guidance session with parents and routine meetings with the psychiatrist as well as with the on-site school counselor. Parents visit their children twice a week, and the children return home either every weekend or every other weekend, depending on clinical considerations. The children are provided with adapted school programs and psychotherapy, and their ages range from 5 to 14 years old.

2.2. Instruments

2.2.1. Marital satisfaction

Marital satisfaction was measured by the ENRICH Marital Satisfaction Scale (EMS; Fowers and Olson, 1993). The EMS includes 15 items, with 10 items representing the different categories of marital satisfaction, and 5 items that aim to neutralize the idealization of the relationship. Higher mean scores imply greater marital satisfaction. The Hebrew version in the current study used a 7-point Likert-type scale (Lavee, 1995; Lavee et al., 1996). Example items include "I am very happy with how we handle role responsibilities in our marriage" and "I have never regretted my relationship with my partner, not even for one moment." The internal reliability of the version used in the current study was Cronbach's alpha = 0.82 and was similar to the internal reliability of the original version, Cronbach's alpha = 0.86 (Fowers and Olson, 1993).

2.2.2. Parental satisfaction and self-efficacy

Parental satisfaction and parental self-efficacy were measured by the Hebrew version of the Parental Sense of Competence Scale (PSOC; Johnston and Mash, 1989; Pagorek-Eshel and Dekel, 2015). The scale is a 17-item 6-point Likert-type scale. It measures two dimensions: Satisfaction (anxiety, motivation, and frustration; e.g., "Being a good mother is a reward in and of itself") and Efficacy (parents' competence, capability levels, and problem-solving abilities in their parental role; e.g., "Being a parent is manageable, and any problems are easily

Table 1
Descriptive statistics of the study variables.

	Mean	Standard deviation	Median	Minimum	Maximum	Scale range
Parental satisfaction	4.27	0.79	4.22	2.67	5.89	1–6
Marital satisfaction	4.98	1.12	5.10	1.90	7.00	1–7
Parental efficacy	4.57	0.75	4.63	2.75	5.75	1–6
Family burden	2.62	0.50	2.62	1.69	3.76	1–4

solved"). The measure does not differentiate between children's ages or genders and was found to be negatively correlated with the child's problems (Small, 2010). In the current research, Cronbach's alpha values were 0.61 for satisfaction and 0.74 for efficacy.

2.2.3. Family burden scale

Parents' burden was assessed by Anar's Hebrew translation (Anar, 2003) of the family burden interview (Zarit et al., 1980). This scale is a 29-item questionnaire designed to assess how often the individual feels oppressed by various aspects of caregiving. Example items include: "Do you wish you could leave the care of your relative to someone else?"; "Do you feel uncertain about what to do about your relative?"; "Do you feel that your social life has suffered because you are caring for your relative?" This measure assesses the frequency with which relatives experience these feelings on a 4-point Likert-type scale and has been previously used among parents of persons with serious mental illness, to assess their perceived burden (Levy-Frank et al., 2011). In the present study, Cronbach's alpha for the scale was 0.84.

2.3. Procedure

The study was part of a large-scale study on the coping processes of parents of children who are hospitalized for psychiatric reasons (Hasson-Ohayon et al., 2017), and was conducted at a psychiatric hospital in Israel, on the children's inpatient ward. After receiving approval from the hospital's institutional review board (IRB), the research team approached the parents of children who had been hospitalized in this facility during the previous two months. The researchers explained to them the purpose of the study and the anonymous nature of its data collection. After signing informed consent forms, parents were provided with the questionnaires.

2.4. Statistical analysis

In order to examine the levels of the study variables (marital satisfaction, parental satisfaction, parental efficacy, and perceived family burden) we calculated descriptive statistics (means, SDs, medians, and ranges) for all study variables. As there are no established Israeli norms for these variables, we related the findings to the absolute values of the scale. Prior to the examination of the hypothesized mediation model, we checked whether any of the background variables should be controlled for and entered into the model as covariates. We calculated the correlations between background variables (i.e., parent's gender, age, years of education) and the outcome variable (i.e., perceived family burden). No significant correlations were found. Hence, there was no need to control for these variables in further analyses.

The third stage of the analysis consisted of testing a model based on our hypothesis that parental satisfaction and parental efficacy would mediate the association between marital satisfaction and perceived family burden; the analysis was based on the procedure proposed by Hayes (2013). For the analyses, we used a macro developed for the SPSS software by Hayes (2012). We calculated the direct effect of marital satisfaction upon perceived family burden, the indirect effect (through the mediators), and the overall effect (direct + indirect effects). Effect sizes were calculated using a completely standardized effects model (standardization of all variables). Significance of indirect effects was estimated by calculating a 95% bootstrap confidence interval (based on 5000 bootstrap samples) for the effects. An effect was considered significant ($p < 0.05$) if zero wasn't included in the 95% confidence interval. The total and direct effects were estimated directly through a standard linear regression model. According to different approaches that calculate power and effect sizes in mediation analysis, the N in the current study was sufficient to detect medium to large effect sizes (Hayes, 2017; Fritz and MacKinnon, 2007; Kenny, 2017).

3. Results

3.1. Descriptive statistics and correlations between the study variables

Table 1 presents descriptive statistics of the study variables. As can be seen, the means of parental efficacy, parental satisfaction, and marital satisfaction were above the absolute median of the scales, suggesting that there were not reduced levels of efficacy and satisfaction. Table 2 presents Pearson correlations between the study variables. Parental satisfaction, parental efficacy, and marital satisfaction were all significantly correlated (positively) with each other. Perceived family burden was found to have a significant negative correlation with parental satisfaction and marital satisfaction, but not with parental efficacy. The highest correlations were found between parental satisfaction and parental efficacy ($r = 0.51$, $p < 0.01$; 26% explained variance) and parental satisfaction and perceived family burden ($r = -0.57$, $p < 0.01$; 33% explained variance).

3.2. Assessing the mediation model

The process macro (Hayes, 2012) was used to test the study hypotheses. Results as indicated in Fig. 1 and Table 3 support the mediation hypothesis. Marital satisfaction was found to be significantly related to perceived family burden, both directly and indirectly. Also, only parental satisfaction, and not parental efficacy, was found to mediate the relationship between marital satisfaction and perceived burden. The total standard effect of marital satisfaction on perceived family burden was beta = −0.42 ($p < 0.01$), meaning that an increase of 1 SD in marital satisfaction resulted in a decrease of almost half an SD of perceived family burden. The total effect was divided almost equally between the direct effect (beta = −0.24, $p < 0.05$) and the indirect (mediated) effect (beta = −0.18, $p < 0.05$). The indirect effect mediated through parental satisfaction was significant (beta = −0.2, $p < 0.05$) and significantly larger in comparison to the indirect effect mediated through parental efficacy (beta = 0.022, N.S.).

Table 2
Inter-correlation between the study variables.

	Parental satisfaction	Parental efficacy	Marital satisfaction	Family burden
Parental satisfaction	1.00			
Parental efficacy	0.51**	1.00		
Marital satisfaction	0.39**	0.255*	1.00	
Family burden	−0.57**	−0.24	−0.42**	1.00

* $p < 0.05$.
** $p < 0.01$.

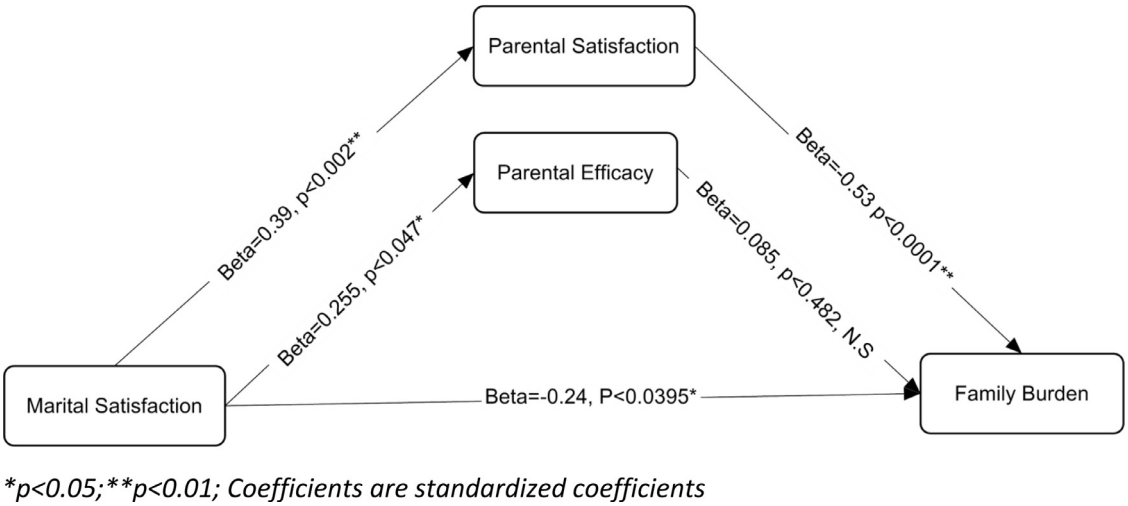

Fig. 1. Parental satisfaction and parental efficacy as parallel mediators between marital satisfaction and family burden
*$p < 0.05$; **$p < 0.01$; Coefficients are standardized coefficients.

4. Discussion

The perceived family burden of parents whose children have psychiatric disorders is receiving increased attention empirically and clinically. Based on previous research on the importance of marital satisfaction, parental satisfaction, and parental efficacy in determining the outcomes of parents who have a child with a disability, the current study assessed a mediation model of self-efficacy and self-satisfaction: two parental cognitions. According to the hypothesized mediation model, parental cognitions regarding satisfaction and efficacy mediated the association between marital satisfaction and perceived family burden. Results support the mediating role of parental satisfaction, but do not support the mediating role of parental efficacy. The mediating role of parental satisfaction is in line with the spillover effect, a phenomenon which can be described as the marital relationship spilling over onto the parent-child relationship (Kouros et al., 2014). The findings are also in line with the distinction that has been made between parental efficacy and parental satisfaction; these constructs, though related to one another, play different roles in parents' experiences and are therefore considered to be two distinct features of parental self-esteem (Johnston and Mash, 1989).

It is important to acknowledge the association between marital-relationship satisfaction and parent-child satisfaction, in the context of a child's psychiatric hospitalization, when considering clinical interventions. Although it is widely recognized that parents play a major role in the recovery of their child, and that perceived family burden is evident in their experiences (Hasson-Ohayon et al., 2017, 2014), very little research has been conducted on aspects of the parental and marital relationship during a child's psychiatric hospitalization. The current study suggests that both marital satisfaction and parental satisfaction are important contributors to parents' outcomes, indicating the need to address the quality of the marital relationship when working with parents. In other words, focusing only on the parental aspects of caring for a child who is hospitalized may not be enough. Sensitive listening to the parents as they describe their marital relationship, and helping them to improve their communication and co-coping skills, seems essential. As suggested by the mediation model, an improvement in the marital relationship can lead to an improvement in parental satisfaction which, in turn, may decrease perceived burden. Previous studies have already documented the implications that marital satisfaction has not only for parents' outcomes but also for the child's outcome (Fishman and Meyers, 2000).

The current study's findings emphasize the association between marital and parental experiences among parents of children who are hospitalized for psychiatric illnesses. These findings are in line with previous studies on parents of children with intellectual or developmental disabilities, which showed that marital satisfaction affects the parenting experience. Specifically, among parents of children with intellectual disabilities, parents who were not satisfied with their marital relationships experienced more perceived burden (Essex and Hong, 2005; Kersh et al., 2006) and less positive relationships with their child (Essex, 2002). Similarly, among parents of adolescents and adults with autism it was shown that marital satisfaction was associated with positive parenting experiences (Hartley et al., 2011). Thus, the current study, together with previous ones, suggests that marital satisfaction may serve as an important resource for parents when they are coping with parenting-related challenges. Better coping, in turn, may lead to better experiences with the child, as well as to less perceived burden.

It should be noted that causality cannot be inferred from the findings of this study. It should also be noted that the relationship between

Table 3
Direct and indirect effects: parental satisfaction and parental efficacy as mediating the relation between marital satisfaction and family burden.

Effect	Effect size (Beta)	*t*	*P*<	95% Confidence interval (LLCI;ULCI)
Total effect	−0.42	−3.75	0.0007**	−0.30; 0.085**
Direct effect	−0.24	−2.11	0.0395*	−0.21; −0.0055*
Total indirect effect	−0.18			−0.29; −0.08*
Parental satisfaction effect	−0.20			−0.32; −0.092*
Parental efficacy effect	0.022			−0.049; −0.087 N.S
Comparison of indirect effects: Parental satisfaction minus parental efficacy	−0.23			−0.38; −0.068*

* $p < 0.05$.
** $p < 0.01$.
Effects are completely standardized effects (based on standardization of all variables); Confidence Intervals is 95% bootstrap confidence interval, bootstrap based on 5000 bootstrap samples.

the factors may (1) be bidirectional, and/or (2) take place in the opposite direction (that is, positive parental experiences may affect the marital experience). For instance, being satisfied as a parent may lead to fewer marital conflicts and a better marital relationship. In addition, by perceiving a lesser amount of burden, each parent may feel less blame towards him/herself and less blame towards his/her spouse, as well as less resentment toward each other. If the relationship between the factors does in fact go in this direction (i.e., the parental experience impacting the marital one), then possible implications for treatment would be reducing perceived burden in order to help parents feel more satisfied with their marital and parental roles. Such burden-reduction might include providing parents with instrumental and emotional support. Other parental variables in the context of marital and parental satisfaction might also influence parents' perceived burden. For instance, parents' vulnerability to stress and their level of resilience have been found to be important factors in parents' adjustment to their children's disabilities (Heiman, 2002). In addition, as mentioned in the Results section, the levels of parental and marital satisfaction among the study sample were above the median, suggesting that these particular parents did not experience reduced levels of marital or parental satisfaction. Having a child hospitalized in a psychiatric hospital may in fact create closeness in the marital relationship for some parents; as such, future studies would do well to examine possible moderators, such as parents' resilience, in order to identify additional variables that moderate parents' levels of satisfaction and perceived burden.

The fact that the current study centered around *psychiatric* hospitalization, specifically, must be taken into account. Although there are similarities in the experiences of parents who have a child with a chronic health condition, regardless of the type of condition, psychiatric hospitalization poses unique challenges for parents. For example, while separated from their child – as is required during a psychiatric hospitalization – parents may struggle to understand the nature of their parental role during this difficult time period, experience uncertainty with regard to their child's condition and outcome, cope with the need to meet both domestic and job-related responsibilities, and feel a sense of guilt for not having prevented the hospitalization (Melnyk, 2000).

In terms of the current study's findings and their implications for the importance of couples' therapy in the context of a child's psychiatric hospitalization, a few limitations should be noted. As mentioned above, the cross-sectional design does not permit causality to be inferred. In addition, the relatively small N, and the fact that the parents who participated were not married to each other, limits the possibility of assessing different effects for mothers vs. fathers. The age of the hospitalized child may also have impacted the results (i.e., the parenting experience can, of course, be quite different depending on the age of the child); however, due to the small N, this factor could not be examined. In addition, there may have been a sampling bias, in that parents with low satisfaction may have decided not to participate, thus resulting in relatively high scores on the study scales. Longitudinal studies with both of the child's parents and a larger N should therefore be carried out in order to further validate the current study's results.

In sum, despite these limitations, a few conclusions can be formulated. It seems that having a satisfying marital relationship can help reduce the perceived family burden that parents may experience during their child's hospitalization. Interestingly, the marital relationship seems to provide this help via an increase in parental satisfaction. It therefore seems that a positive familial experience can assist people in coping with a crisis such as a child's psychiatric hospitalization. As such, it may be particularly important to focus on the strength of the family unit, coping together at a time of crisis. Of note, future studies should use longitudinal designs in order to further establish the beneficial effect of positive familial experiences.

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