ABSTRACT
The purpose of this study was to examine the effects of stress and coping style with stress among mothers of children with special needs on their involvement in the school. The findings indicate that an emotional coping style predicts a high level of stress among all mothers. Comparing mothers of children with special needs with mothers of normally-developing children, higher levels of stress were found among the former. However, this difference was not reflected in the involvement at the school which did not differ between the two groups. Moreover, it was found that mothers of children with special needs make more use of a social support coping style. The findings contribute to the investigation of predictive factors of parental stress and parental involvement in children's education.

Keywords: mainstreaming special needs children, parental involvement, stress, coping styles.

1. INTRODUCTION

A child with special needs is a child with disabilities preventing him/her from utilizing regular educational services provided to his/her peers in their residential region (Meijer, 1999). The special needs children population includes a great variety of disabilities/difficulties - physical, mental, emotional-behavioral, sensory, and cognitive or language disabilities, or comprehensive developmental disabilities (Nicpon, Allmon, Sieck, & Stinson, 2011; Ministry of Education of Israel, 2009). Moreover, in most Western European countries, as well as in Israel, there is a tendency to integrate special needs children in regular education (Blue-Banning, Summers, Frankland, Nelson, & Beegle, 2004; Naon, Milstein, & Marom, 2011).

Many parents raising special needs children cope successfully, demonstrating high levels of satisfaction with their lives. However, there is much evidence that this special type of parenting is accompanied by difficulties and high levels of stress and frustration as well as health and mental welfare issues (Dervishaliaj, 2013; Feldman, 2007). Caring for special needs children causes chronic fatigue (Giallo, Wood, Jellett, & Porter, 2013); harm to the parents’ social life (Heiman, 2002); possible injury to the family’s economic status due to the parents’ need to miss work (Carroll, 2013; Deringe, 2012; Jones & Passey, 2005), and chronic stress (Lessenberry & Rehfeldt, 2004).

2. BACKGROUND

Studies have found higher stress levels among mothers of children with special needs than among mothers of normally-developing children (Dervishaliaj, 2013; Jeans, Santos, Laxman, McBride, & Dyer, 2013; Lopez, Clifford, Minnes, & Ouellette-Kuntz, 2008;
Al-Yagon, 2007). The stress levels experienced by parents of special needs children is affected by the family’s resources, skills, knowledge, social and familial support, and type and level of the child’s disability (Singer, 2006; Dervishaliaj, 2013; Jones & Passey, 2005). Causes of stress in parents of normally-developing children may include moving from stage to stage in the educational system, providing partial information to parents by the school regarding their child’s problems, or the need to fight in order to become part of the decision-making process regarding their child (Summers, Hoffman, Marquis, Turnbull, & Poston, 2005). These parents fear their child’s low academic achievements, and may feel pressure due to their personal difficulties in dealing with their child’s academic tasks (Webster-Stratton, 1990). Unlike them, parents of special needs children live with chronic stress (Dervishaliaj, 2013).

Despite the direction of change expressed in the growing numbers of fathers involved in raising and educating their children, mothers are still more active in caring for their children, and bear most of the burden of raising them (McBride et al., 2005). Mothers in particular express higher stress levels, and are forced to give up their careers and social activities (Rentinck, Ketelaar, Jongmans, & Gorter, 2006). Research shows that mothers of ASD (Autism Spectrum Disorder) teenagers devote more time to caring for the child and to housework, and less to leisure activities, in comparison with mothers of non-ASD children. In addition, mothers are interrupted during their work day, causing additional stress (Smith et al., 2010). Regarding the effect of the severity of the disability on stress, it was found that mothers of ASD children report higher levels of stress and lower parental skills than mothers of children with serious mental disabilities (Huang, Rubin, & Zhang, 1998). It was further found that mothers of children with behavioral difficulties report higher stress levels caused by the children’s symptoms (Bristol, Gallagher, & Schopler, 1998).

Hypothesis No. 1: Mothers of children with special needs will exhibit higher levels of stress than mothers of normally-developing children.

Parents differ in the manners in which they perceive stressful situations, such as a child’s illness or disability, and in the manner in which they cope with and adapt to these situations (Tak & McCubbin, 2002). A link was found between the mother’s coping and the child’s coping and ability to adapt (Sales, Fivush, & Teague, 2007). The present study uses Folkman and Lazarus’s model, according to which coping includes an individual’s cognitive and behavioral effort to cope with stress, and methods of coping vary in accordance with circumstances (Folkman & Lazarus, 1985). The resources for coping are characterized by task-oriented and problem-solving coping methods, as well as by emotional coping via the moderation of feelings of distress caused by stressful situations. Individuals use these coping styles in all stressful situations (Folkman & Lazarus, 1985). In addition, two specific coping styles – task-oriented and emotion-oriented – enable evaluation and coping, with the nature of the coping determined by relativity in the use of the former or latter style (Folkman & Lazarus, 1985). Moreover, in comparison to the task-oriented coping style, the emotion-oriented coping style has been found to be more strongly linked to stress and emotional difficulties among parents (Hastings et al., 2005). In addition, research undertaken in Israel has found that mothers of sick children more often used the emotional coping style than mothers of healthy children. Furthermore, among mothers who tended to use an emotional coping style, eg. avoiding action and denial, parental roles were compromised (Folkman & Moskowitz, 2004). Along with this, other research has found that mothers of children with special needs use a task-oriented coping style, such as requesting social support and emotional expression, more than mothers of
Mothers of Special Needs Children, Coping Styles and Educational Involvement

normally-developing children (eg: Thoits, 1995). Studies have shown that mothers of children with special needs who made use of social support demonstrated better emotional states and coping abilities than mothers of normally-developing children. Social support influences adaptation to stress (Weiss, 2002; Shechtman & Gilat, 2005; Antonucci, Lansford, & Ajroch, 2007). Furthermore, mothers of children with developmental problems who reported utilizing little social support, demonstrated higher stress levels over time (Hauser, Warfield, Shonkoff, & Krauss, 2001). Social support prevents loneliness, provides hope and strengthens the self-esteem of the stressed parent (Dahlem, Zimet, & Walker, 1991).

**Hypothesis No. 2:** Mothers of children with special needs will make more use of emotional coping styles and social support coping styles than mothers of normally-developing children.

Raising a child with special needs affects parental involvement in the child's education. The topic of parental cooperation with and involvement in school has lately been at the center of social discourse in Israel and elsewhere. Recognition of the parents’ right to do so is essential, and could to lead to more effective outcomes for the child as well as improving the entire family’s and the school staff’s quality of life (Dunst, & Trivette, 2009; Fox, Dunlap, & Cushing, 2002). Studies have emphasized the need for cooperation between schools and parents of special needs children integrated in regular education.

The relationships between parents and schools can be described in a variety of ways, with different models to evaluate parental involvement (Fisher, 2009). The model used in this study, Friedman and Fisher (2003), describes the factors encouraging parents to want to be involved in their children's education. This model presents two components for parental involvement: first, the parents’ identification with the educational objectives and their awareness of what occurs at school, and second, the triggering of willingness for involvement, or actual involvement, in the attaining of these objectives (Fisher, 2009). The relationships between parents and the special education staff may be ambivalent, mainly due to inefficient cooperation among professionals and parents of special needs children (Hardman, Drew, & Egan, 2002). Often, difficulties may arise at a personal level, expressed in a judgmental attitude towards the families and disregarding their needs.

However, when the dialogue between the therapeutic-educational staff and the parents is based on mutual trust and shared decisions, the bond can be very efficient (Morrow, & Malin, 2004). In research undertaken in Israel, it was found that parents of special needs children maintain contact with a variety of professionals treating their child, and therefore their involvement is frequent and includes meetings with therapeutic-educational teams (Schreiber-Divon, 2011). These meetings serve several purposes: a partnership in preparing an IEP (Individual Education Plan); evaluation and follow-up regarding different aspects of the child's progress, and participation in a Special Education Placement Committee (Reiter, 1989).

**Hypothesis No. 3:** The level of involvement of Mothers of children with special needs will be higher than for mothers of normally-developing children.
3. METHOD

3.1. Sample

Mothers of children with special needs (n=72) and mothers of normally-developing children (n=75) volunteered to participate in the study. Mothers’ age range was 27-67 (M=49.93, SD=6.15). All mothers were married. All of the children attended regular state-run elementary schools (grades 1-6) in the Jewish sector in northern Israel. There was no significant difference between groups regarding mothers’ age (t(145)=1.02, p=0.31), number of rooms in the house (t(145)=1.61, p=0.11), and child’s gender (χ²= 0.17, p=0.68).

Children with special needs included children that had the following disabilities (Table 1): learning disabilities and ADHD (n=28), autism (n=14), rare diseases and physical disabilities (n=7), intellectual disabilities (n=11), sensory disabilities (n=8), conduct disorder (n=4). Normally-developing children were children at the same age as the children with special needs, and the same parental socio-economic status.

3.2. Procedure and tools

Class teachers were provided with letters of invitation for the mothers of the children in their classes regarding participation in the study. Mothers who agreed to participate signed the invitation letter and were then forwarded four questionnaires. The completed questionnaires were returned to the teachers by the children within approximately two weeks. Four mothers requested that the questionnaires be returned directly to the researcher.

Parental Involvement was measured using the Friedman-Fisher scale (2003) for parental involvement. The questionnaire’s objective is to evaluate the parents’ involvement at school. The parental involvement scale includes five sub-scales that measure the following: level of parental awareness of the school as an organization and of school pedagogy and interpersonal relationships at school (α=0.89); level of parental identification with school as a general or abstract concept and with the specific school their child attends (α=0.89); the level of school trust of the parent and child (α=0.86); and the level of passive parental involvement (α=0.87) and active involvement (α=0.90). The level of parental identification with educational objectives and with the school, and the measure of their awareness of what goes on there, will determine parental involvement in school. Participants are asked to rank their answers on a 5 point Likert Scale from 1 (never) to 5 (always). The parental involvement questionnaire comprised 50 questions, and internal consistency was high (α=0.94).
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Parenting Stress Index was measured via a questionnaire evaluating the level of parental stress [Parenting Stress Index Form/Short (Abidin, 1983) (PSI-SF)]. The objective of the questionnaire was to evaluate parental stress in parent-child interactions. The questionnaire identifies parental characteristics for mothers expressing parental stress. It includes details related to parental stress and lack of satisfaction regarding parental roles. Responses are ranked on a 1-5 scale, from "Agree" to "Does not agree". The questionnaire comprised three components: parental distress ($\alpha=0.80$); difficult child ($\alpha=0.78$); dysfunctional parent-child interaction ($\alpha=0.72$). Total score is composed of the sum of the item scores. The stress questionnaire comprised 44 questions, and internal consistency was good ($\alpha=0.85$).

Coping styles questionnaire (Folkman & Lazarus, 1985) includes details describing various strategies people use to cope with stressful events. Participants are asked to state how much they tend to use each of the strategies when faced with a stressful event (42 items total). Answers range from 1-never to 4-often. Questionnaire items are categorized into three coping styles: task-oriented ($\alpha=0.68$); emotional-oriented (including denial) ($\alpha=0.74$); and social support ($\alpha=0.80$).

4. RESULTS

The level of parental involvement is moderate ($M=3.59$, $SD=0.53$), the level of parenting stress is low ($M=2.28$, $SD=0.50$), the level of task-oriented coping style ($M=3.35$, $SD=0.52$), and social support coping style ($M=3.30$, $SD=0.69$) are moderate, and the level of emotional coping style is low ($M=2.18$, $SD=0.58$) (Table 2).

The correlation matrix summarizing the research variables for mothers' sample indicates that parental involvement has a significant positive correlation with task-oriented coping style ($r_p=0.318$, $p=0.000$), with emotional coping style ($r_p=0.200$, $p=0.015$), and with social support coping style ($r_p=0.281$, $p<0.001$). In addition, parenting stress has a significant positive correlation with task-oriented coping style ($r_p=0.190$, $p=0.021$), and with emotional coping style ($r_p=0.492$, $p=0.000$). Similar trends were found within each group of mothers, with no significant correlation differences among them.

Table 2. Means, standard deviations and correlations between the study variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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</thead>
<tbody>
<tr>
<td>1. Parental Involvement</td>
<td>3.59</td>
<td>0.53</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>2. Parenting Stress</td>
<td>2.28</td>
<td>0.50</td>
<td>0.119</td>
<td>0.190</td>
<td>0.374</td>
<td>0.169</td>
</tr>
<tr>
<td>3. Task-oriented Coping style</td>
<td>3.35</td>
<td>0.52</td>
<td>0.118</td>
<td>0.190</td>
<td>0.374</td>
<td>0.169</td>
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<tr>
<td>4. Emotional Coping style</td>
<td>2.18</td>
<td>0.58</td>
<td>0.280</td>
<td>0.492</td>
<td>0.374</td>
<td>0.245</td>
</tr>
<tr>
<td>5. Social support Coping style</td>
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<td>0.281</td>
<td>0.147</td>
<td>0.659</td>
<td>0.119</td>
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Mothers of children with special needs ($n=72$)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<tr>
<td>1. Parental Involvement</td>
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<td></td>
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<td>2. Parenting Stress</td>
<td>2.39</td>
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<td>0.310</td>
<td>0.209</td>
<td>0.327</td>
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<tr>
<td>3. Task-oriented Coping style</td>
<td>3.37</td>
<td>0.51</td>
<td>0.280</td>
<td>0.186</td>
<td>0.490</td>
<td>0.374</td>
</tr>
<tr>
<td>4. Emotional Coping style</td>
<td>2.42</td>
<td>0.56</td>
<td>0.280</td>
<td>0.490</td>
<td>0.374</td>
<td>0.245</td>
</tr>
<tr>
<td>5. Social support Coping style</td>
<td>3.43</td>
<td>0.60</td>
<td>0.254</td>
<td>0.137</td>
<td>0.754</td>
<td>0.245</td>
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Mothers of normally developing children ($n=75$)

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<th>Variable</th>
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<tr>
<td>1. Parental Involvement</td>
<td>3.57</td>
<td>0.51</td>
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<td>2. Parenting Stress</td>
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<td>3. Task-oriented Coping style</td>
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<td>0.427</td>
<td>0.186</td>
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<tr>
<td>4. Emotional Coping style</td>
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<td>0.418</td>
<td>0.277</td>
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<tr>
<td>5. Social support Coping style</td>
<td>3.18</td>
<td>0.75</td>
<td>0.200</td>
<td>0.000</td>
<td>0.200</td>
<td>0.115</td>
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</table>

$p<0.05$, $p<0.01$, $p<0.001$
In order to investigate the differences between mothers of children with special needs (n=72) and mothers of normally-developing children (n=75) regarding stress, coping styles (social support, task-oriented and emotion-oriented styles), and educational involvement, a multivariate analysis of variance (MANOVA) was undertaken. The model suggests significant differences between the two groups of mothers (Table 3) (F(5,141)=2.51, p<0.05, \(\eta^2=0.08\)). This model revealed a significant difference in the sense of stress among mothers of children with special needs (M=2.39, SD=0.54) was found to be higher than the sense of stress among mothers of normally-developing children (M=2.18, SD=0.45). Another significant effect was detected in the social support coping style (F(1,145)=4.69, p<0.05, \(\eta^2=0.04\)), such that mothers of children with special needs utilize the social support coping style (M=3.42, SD=0.60) more than mothers with normally-developing children (M=3.18, SD=0.75).

Table 3.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>F</th>
<th>df</th>
<th>(\eta^2)</th>
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<tbody>
<tr>
<td>Parenting Stress</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>normally-developing</td>
<td>2.18</td>
<td>0.45</td>
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<tr>
<td>special needs</td>
<td>2.39</td>
<td>0.54</td>
<td>6.65**</td>
<td>1,145</td>
<td>0.04</td>
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<tr>
<td>Social support coping style</td>
<td></td>
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<tr>
<td>normally-developing</td>
<td>3.18</td>
<td>0.75</td>
<td>4.69*</td>
<td>1,145</td>
<td>0.04</td>
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<tr>
<td>special needs</td>
<td>3.42</td>
<td>0.60</td>
<td></td>
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<td></td>
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</tbody>
</table>

In order to investigate the differences between mothers of children with special needs (n=72) and mothers of normally-developing children (n=75) regarding the three components of stress, an independent sample T test was undertaken. Mothers of children with special needs (M=2.26, SD=0.61) appear to suffer from more child-related stress than mothers of normally-developing children (M=2.01, SD=0.51) at a significant level (t(145)=2.66, p=0.006). In addition, mothers of children with special needs (M=2.62, SD=0.55) demonstrate more dysfunctional parent-child interaction than mothers of normally-developing children (M=2.32, SD=0.49) at a significant level (t(145)=3.46, p=0.008). No significant difference was found between mothers of children with special needs (M=2.20, SD=0.68) and mothers of normally-developing children (M=2.15, SD=0.51) regarding parental distress (t(145)=0.48, p=0.22).

In order to investigate stress and the three coping styles (social support, task-oriented and emotion-oriented) as predictors of mothers’ educational involvement, a step-wise regression analysis was conducted for each of the groups of mothers. With both models, the predictors of educational involvement entered were a sense of stress and each of the three coping styles mentioned above. Among mothers of children with special needs, the model explains 8% of the variance in the variable of educational involvement (F(1,70)=6.22, p<0.05), all of which can be attributed to an emotion-oriented coping style (B = 0.24, SE = 0.01, \(\beta = 0.29\), t=4.04, p<0.001). In addition, regarding mothers of normally-developing children, the model explains 18% of the variance in educational involvement (F(1,73)=16.25, p<0.001), all of which can be attributed to task-oriented coping style (B = 0.40, SE = 0.10, \(\beta = 0.43\), t=4.03, p=0.000).
5. FUTURE RESEARCH DIRECTIONS

In light of the change presented in the literature regarding the new perception of paternal roles (Tamis-LeMonda, Shannon, Cabrera, & Lamb, 2004), fathers’ attitudes should have been examined as well. From a methodological aspect, instead of measuring the mothers’ educational involvement in self report questionnaires, empirical measurement should be undertaken (eg: coming to school, participating in meetings, etc).

6. DISCUSSION

The present study examined the effect of stress and coping styles on the level of educational involvement of mothers of normally-developing children and mothers of children with special needs who are integrated in regular elementary schools. Similar to previous studies (Singer et al., 2007), we found that mothers of children with special needs experience more stress than mothers of normally-developing children. Moreover, the findings confirm the hypothesis that mothers of children with special needs utilize a social support coping style more than mothers of normally-developing children. Task-oriented coping style was found to be a predictor of educational involvement only among mothers of normally-developing children. No differences were detected in the mothers’ level of educational involvement.

Regarding coping styles, previous studies have demonstrated that social support coping style is popular in situations of stress among parents (Folkman & Moskowitz, 2004). Consequently, one can expect this style to be more popular among mothers of children with special needs than among mothers of normally-developing children, as the former experience more isolation and stress than the latter (Glidden, Billings, & Jobe, 2006). Moreover, we did not find any difference between the two groups of mothers in emotion-oriented coping style, although mothers of children with special needs experience higher levels of stress and tend to utilize an emotion-oriented coping style due to conflicts with school staff (Folkman & Lazarus, 1985). Yet, in the prediction examination, the emotion-oriented coping style was found to be a predictor of educational involvement among mothers of children with special needs, while among mothers of normally-developing children a task-oriented coping style was found to be a predictor. These findings can be explained via studies according to which families of special needs children tend to use emotional coping alongside a variety of coping styles (eg: Nixon & Cummings, 1999).

In consistency with studies that did not detect a difference in the level of educational involvement at school between the two groups of mothers (McKinney & Hocutt, 1982), we did not find any differences in educational involvement between mothers of children with special needs and mothers of normally-developing children. Indeed, research has found a low level of educational involvement among parents of special needs children (McKinney & Hocutt, 1982; Reiter, 1989), demonstrating that these parents do not always seek a full partnership with the school (Sadow & Safford, 1986). In addition, it should be pointed out that educational involvement comprises a number of components, such as vigilance, identification and display of trust in the school (Friedman & Fisher, 2003). Hence, there is a need to examine the differences between the two groups of mothers regarding each of these components separately.

In conclusion, the present study focuses on the variables predicting educational involvement of mothers of children with special needs. Emotion-oriented coping style has been found to increase these mothers’ educational involvement. In addition, it appears that
these mothers tend to utilize a coping style that seeks social support. From a practical viewpoint and in light of the growing trend to integrate special needs children into regular schools, these research findings should contribute to the development of involvement programs for the raising and encouragement of educational involvement among parents of special needs children integrated into the regular educational framework.

REFERENCES


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