

Marital satisfaction and attribution style in parents of children with Autism Spectrum Disorder, Down Syndrome and non-disabled children

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Abstract

The aim of this research is to explore whether there are any differences in couple satisfaction and couple attributions between families with disabled and non-disabled children and to understand if a relationship exists among the above-mentioned variables in parents of children with and without disability. Parents of children with Autism Spectrum Disorder (low functioning n = 16; high functioning n = 20); with Down Syndrome (n = 24) and parents of non-disabled children (n = 40) were selected. Couple relationship was investigated using the Italian version of the Dyadic Adjustment Scale (DAS) and the Relationship Attribution Measure (RAM). Compared with other groups, parents of children with ASD reported lower marital satisfaction and a pattern of attribution that is negatively related to marital satisfaction. Couple satisfaction and couple attribution are strongly related both in families of children with ASD and in families of children with Down Syndrome. Results showed differences between families of children with or without a disability, and between parents of children with Autism and with Down syndrome. These results can act as both a stimulus towards further research in families with disabled children and as a starting point for clinical interventions.

Keywords: Family, Couple functioning, Dyadic Adjustment Scale, Disability.

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1. Introduction

Research on family and disability focuses on individual, familiar and social aspects, such as the severity of disability, maternal well-being and family resources (Weiss, 2002; Olsson & Hwang, 2008). These factors have been generally analysed comparing families with a disabled child to families of children with typical development.

Several studies have reported that parents of children with disabilities experience higher levels of stress than parents of typically developing children (Boyd, 2002). When a child is born with a disability, the family must modify previous routines to guarantee the child's care. The difficulties encountered from the reorganization of familiar relationships could be related to anxiety, overprotection, rigidity (Lardieri, Blacher, & Swanson, 2000), and might explain lower levels of coherence, less emphasis on the personal growth of other family members (Larcan, Cuzzocrea, & Oliva, 2008; Larcan & Cuzzocrea, 2011), and higher levels of parental depression compared with parents of non-disabled children. The unexpected and permanent nature of the problem could influence family functioning and future outcomes (Llewellyn, McConnell, Thompson, & Whybrow, 2005). This is more evident in parents of children with Autism Spectrum Disorder (Osborne, McHugh, Saunders, & Reed, 2008).

Belchic (1996) reported significantly lower parenting efficacy in parents of a child with autism compared to parents of a child without disability. Mothers of children with mental retardation reported a higher social burden than those of children with a physical disability (Tangri & Verma, 1992), especially when the children with disabilities grow up (Rimmerman & Duvdevani, 1996; Cuzzocrea & Larcan, 2005).

Children with autism can experience various problems, such as insomnia (Johnson & Malow 2008), and sensory impairment like taste, smell, visual and auditory processing problems (Rogers, Hepburn, Stackhouse, & Wehner, 2003; Ghanizadeh, Alishahi, & Ashkani, 2009). These problems are likely to affect the behaviour of their parents who are usually tired and depressed, showing negative reactions in both their professional and family life.

Mothers especially report lower parenting competence (Raj Kumari & Harpreet, 2010), greater stress (Weiss, 2002) and a lower level of marital intimacy, compared with mothers of children with normal development and with mothers of children with Down Syndrome (Dabrowska & Pisula, 2010).

Family functioning and, moreover, how each part of the family perceives the situation, is fundamental for the comprehension of interactions between children with disability and their parents. The cognitive model of Lazarus and Folkman (1984) regarding the relation between stress and coping has been consi-

dered one of the theoretical foundations on the development of specific models on family functioning (McCubbin & Patterson, 1983; Patterson, 1988). Parental cognitions have been analyzed from several studies that indicated that parents can develop characteristics of self-blame in response to their child's disability (Grant & Whittell, 2000). Garwick, Kohrman, Titus, Wolman and Blum (1999) pointed out that parents with children with autism tend to blame themselves for child's disability. This dysfunctional pattern seems to be related with parental resilience; in fact parents who tended to blame themselves for the child's disability were less resilient than those families who adopted other causal explanations (Sanders, Mazzucchelli, & Studman, 2004).

On the other hand, Ireland, Sanders and Markie-Dadds (2003) have analysed other variables that influence the family system: in particular, marital relationship seems to be strongly related with children's emotional and behavioural problems. The poor dyadic adjustment in parents of children with disabilities has been highlighted by many authors (Walker, Manion, Cloutier, & Johnson, 1992; Najman, Behrens, Andersen, Bor, O'Callaghan, & Williams, 1997). Parents are more likely to report difficult child behaviour when there are low levels of partner support and high levels of disagreement between partners (Cuzzocrea & Larcán, 2005). Parents of children with disruptive behaviour disorders show low cohesion and expression of affection, less parental support and poorer marital adjustment than parents of non-disabled children (Hibbs, Hamburger, Kruesi, & Lenane, 1993).

Marital satisfaction is one of the protective factors for a positive adaptation to stressful situations, such as the management of a disabled child. Higher levels in marital satisfaction are related to lower levels of depression, lower parenting stress, and improved efficiency in the parents' role (Kersh, Hedvat, Hauser-Cram, & Warfield, 2006).

Much of the research demonstrates that parents of disabled children and, specifically, those with children with ASD, report lower levels of marital satisfaction when compared with couples of non-disabled children and with those of children with Down syndrome (Higgins, Bailey, & Pearce, 2005; Kersh *et al.*, 2006).

Sanjuán and Magallares (2009) underlined how attribution styles could be considered an important aspect for marital satisfaction in couples with children with normal development; in fact the attribution style is a cognitive variable which reflects how people typically explain the causes of negative events in which they are involved (Sanjuán & Magallares, 2009), even more in stressful situations (Fincham & Bradbury, 1992).

According to the Abramson, Seligman, and Teasdale model (1978), there are three dimensions from which attributions regarding the causes of situations

are made, locus (degree to which a situation is attributed to something about oneself), stability (degree to which a situation is a result of long-lasting causes), and globality (degree of pervasiveness of the cause of a situation).

Fincham and Bradbury (1992) identify three other responsibility attribution styles: the intent of the act, the motivation, and blame. The sharing of meanings attributed to an event plays a key role in the organization and maintenance of family processes; it helps to reduce the ambiguities and misunderstandings relating to a difficult situation and creates a coordinated response that is critical to maintaining stability within the couple. Many researchers (Bradbury & Fincham, 1990; Fincham & Bradbury, 1992; McNulty & Karney, 2001) highlighted how couples in stressful situations showed a depressotypic attribution style. These couples tend to consider negative events as being internally caused, stable and global (Horneffer & Fincham, 1995) and, in some cases, the spouses blame each other for the situation (Fincham & Bradbury, 1993).

In dissatisfied couples, negative attributions are related to the depreciation of the positive partner's behaviour and the accentuation of its negative expression, while the opposite pattern is true for satisfied couples. The partner's negative behaviours are judged as intentional, part of the person's character and unlikely to change over time (Fincham & Bradbury, 1992). A similar pattern of attribution can cause feelings of hostility and dysfunctional interactions with the partner. Opposite attribution styles were found in satisfied couples (Jacobson, McDonald, Follette, & Berley, 1985; Baucom, 1986). Even though there is strong evidence (Kersh, *et al.*, 2006; Sanjuán & Magallares, 2009) about the role of couple attribution in marital satisfaction, in literature there is a lack of analysis of these variables in families of children with disability (Boyd, 2002).

2. Aims and hypothesis

For these reasons, the main aim of this study was to investigate the relationship between attribution style and couple adjustment in families with disabled children. In particular, it was analysed whether there were significant differences in couple adjustment and in style of attribution among four familiar contexts: (1) Parents of children with low functioning Autism Spectrum Disorder; (2) Parents of children with high functioning Autism Spectrum Disorder; (3) Parents of children with Down Syndrome; (4) Parents of non-disabled children.

The second object was to investigate whether there were significant correlations among the above-mentioned variables, in each of the four groups of parents.

3. Methods

3.1 Participants

Fifty married couples with two children agreed to take part in the study: 30 of them had a child with disability and 20 had both non-disabled children (fathers' average age = 43.8 ± 5.5 ; mothers' average age = 40.1 ± 4.8). The participants were selected from the same information obtained through a socio-demographic questionnaire. All families belonged to a middle socio-cultural level (20% of parents had a secondary school level, 45% of parents had a high secondary school level and 35% had a university degree. Most of the mothers were housewives (58%), while the 42% worked in public offices. Most of the fathers worked in public administration (64%), while 36% had an independent job.

These families were divided into four groups in relation to the presence or absence of a child with disability and in relation to the type of disability. 36 parents of children with Autism Spectrum Disorder, of which 20 parents (average age = 40.5 ± 4.8) of high functioning children, and 16 parents of low functioning children (average age = 41.13 ± 5.1) were selected. 24 parents (age = 43.7 ± 6.2) had a child with Down Syndrome and 40 parents (age = 41.9 ± 5.4) had non-disabled children.

3.2 Instruments and Procedure

Individual questionnaires were separately presented to each parent. The Latin Square design was used to control the order in which the questionnaires were presented.

In order to investigate the partners' perceptions of couple adjustment, both partners were asked to fill in separately the Italian format of *Dyadic Adjustment Scale* (DAS) (Gentili, Contreras, Cassaniti, & D'Arista, 2002). The DAS (Spanier, 1976) is a 32-item self-report measure of relationship adjustment by determining the degree of satisfaction couples are experiencing. Respondents are asked to rate each of the items on a Likert-type scale choosing the most suitable response options.

The DAS reliability in this study was $\alpha = .93$ (fathers: $\alpha = .95$; mothers: $\alpha = .89$). DAS includes the following four sub-scales: (1) *Dyadic Cohesion*, 5 items, assess the common interests and activities shared by the couple (fathers: $\alpha = .72$; mothers: $\alpha = .67$); (2) *Dyadic Consensus*, 13 items, focus on matters important to the relationship: religion, recreation, friends, household tasks, and time spent together (fathers: $\alpha = .94$; mothers: $\alpha = .86$); (3) *Dyadic Satisfaction*, 10 items, measure commitment and satisfaction perceived by partners with the present state of the relationship (fathers: $\alpha = .82$; mothers: $\alpha = .70$);

(4) *Affectional expression*, 4 items, measure individual's satisfaction in the expression of affection and sex in the relationship (fathers: $\alpha = .69$; mothers: $\alpha = .48$). High scores in this questionnaire indicate a functional couple adjustment.

The attribution style was evaluated by the Relationship Attribution Measure (RAM) (Fincham & Bradbury, 1992). Stimulus events on the Relationship Attribution Measure (RAM) consisted of 10 hypothetical negative partner's behaviours (e.g. "your spouse criticizes something you say"). Specifically parents are asked to rate on a 6-point scale the extent to which they agreed or disagreed with attribution statements made about each of the negative partner's behaviours. The statements were used to assess the different types of attributions. The reliability of all RAM subscales is good with $\alpha = .98$ (fathers: $\alpha = .98$; mothers: $\alpha = .97$). For causal attributions, respondents were asked about the extent to which the cause lies in the partner (*locus* - fathers: $\alpha = .87$; mothers: $\alpha = .80$), was likely to change (*stability* - fathers: $\alpha = .92$; mothers: $\alpha = .88$) and affected other areas of the marriage (*globality* - fathers: $\alpha = .93$; mothers: $\alpha = .91$). For responsibility attribution, items assessed criteria believed to be fundamental for the ascription of responsibility and intentionality of the act (*intent* - fathers: $\alpha = .94$; mothers: $\alpha = .94$), its motivation (fathers: $\alpha = .95$; mothers: $\alpha = .95$) and whether it was justified by mitigating circumstances (blame - fathers: $\alpha = .96$; mothers: $\alpha = .94$). In this questionnaire high scores underline a dysfunctional style of attributions for couple relationship.

3.3 Data analysis

The Statistical Package for Social Science (SPSS) was used to verify the hypothesis. Non-parametric statistics were used to analyse data. To analyse possible differences among groups the Kruskal-Wallis (1952), based on χ^2 statistic, and the Jonckheere-Terpstra test (J-T) (1954) were calculated. In addition, to verify statistical differences between simple comparisons the Mann-Whitney (U) test (1947) was applied. In order to verify statistical differences within sub-scales, Wilcoxon Signed Ranks Tests (1945) were calculated separately on dependent variables (DAS and RAM scores).

To verify whether there were significant correlations between dyadic adjustment (DAS) and styles of attribution (RAM) in each of the four groups of parents, Spearman tests (1904) were calculated. To better compare the results, all data were transformed into \sin^{-1} (Freeman & Tukey, 1950).

4. Results

4.1 Differences between groups

Table 1 synthesizes the means and standard deviations of DAS scores ob-

tained from the four groups of parents. The statistical analysis showed significant differences among groups for dyadic satisfaction [$\chi^2(3) = 16.69; p < .001$] and in the total DAS scores [$\chi^2(3) = 8.01; p < .05$]. These differences were confirmed by the Jonckheere-Terpstra test [$DAS_{tot}: J-T = 2.36; p < .02$; Dyadic Satisfaction: $J-T = 3.34; p < .001$].

Table 1 - Means and Standard Deviations of Dyadic Adjustment Scale (DAS) scores by parents of disabled (low and high functioning Autism and Down Syndrome) and nondisabled children

| Parents of children with | Dyadic cohesion | | Dyadic consensus | | Dyadic satisfaction | | Affectional expression | | DAS Total | |
|--|-----------------|-----|------------------|-----|---------------------|-----|------------------------|-----|-----------|-----|
| | M | SD | M | SD | M | SD | M | SD | M | SD |
| Autism Spectrum Disorder – Low Funct. | .93 | .24 | 1.01 | .29 | .95 | .17 | 1.03 | .31 | .98 | .21 |
| Autism Spectrum Disorder – High Funct. | .91 | .23 | 1.08 | .23 | 1.04 | .17 | 1.13 | .27 | 1.04 | .19 |
| Down Syndrome | .99 | .17 | 1.13 | .13 | 1.08 | .11 | 1.15 | .21 | 1.09 | .11 |
| No disability | .99 | .17 | 1.15 | .11 | 1.11 | .08 | 1.14 | .17 | 1.11 | .09 |

Regarding the total DAS scores, parents of children with low functioning autism reported poorer couple adjustment than parents of children with Down Syndrome [$U = 119.5; Z = -2.01; p < .04$] and parents of non-disabled children [$U = 176; Z = -2.61; p < .009$], but they didn't differ with parents of children with high functioning autism [$U = 127; Z = -1.05; p = .3$]. No statistical differences were found when comparing parents of children with high functioning autism with parents of children with Down Syndrome [$U = 215; Z = -.57; p = .56$] and parents of non-disabled children [$U = 305; Z = -1.49; p = .13$].

All families with autistic children presented lower scores in all DAS subscales. The statistical analysis confirmed that parents of children with high functioning autism reported lower couple satisfaction than parents of non-disabled children [$U = 28; Z = -1.91; p < .05$]. Instead these parents did not differ in affectional expression [$U = 378; Z = -.34; p = .173$], consensus [$U = 336; Z = -.99; p = .31$] and cohesion [$U = 310; Z = -1.41; p = .15$] in comparison with parents with non-disabled children. No statistical differences between parents of children with high functioning autism and of children with low functioning autism were found [*Dyadic Cohesion*: $U = 157; Z = -.08; p = .93$; *Dyadic Consensus*:

$U = 132$; $Z = -.89$; $p = .38$; *Dyadic Satisfaction*: $U = 110$; $Z = -1.58$; $p = .11$; *Affectional expression*: $U = 135$; $Z = -.79$; $p = .44$]. No statistical differences between parents of children with high functioning autism and parents of children with Down Syndrome were found [*Dyadic Cohesion*: $U = 203$; $Z = -.87$; $p = .38$; *Dyadic Consensus*: $U = 227$; $Z = -.30$; $p = .76$; *Dyadic Satisfaction*: $U = 208$; $Z = -.74$; $p = .45$; *Affectional expression*: $U = 237$; $Z = -.07$; $p = .94$].

Parents of children with low functioning autism had lower scores in the dyadic consensus [$U = 202$; $Z = -2.14$; $p < .03$] and couple satisfaction [$U = 102$; $Z = -3.97$; $p < .0001$] when compared with families with a non-disabled child. These groups were not differing in affectional expression [$U = 283$; $Z = -.66$; $p = .49$] and cohesion [$U = 266$; $Z = -.97$; $p = .33$].

Parents of children with low functioning autism had lower scores in couple satisfaction than parents of children with Down Syndrome [$U = 97$; $Z = -2.63$; $p < .008$]. These groups did not differ in affectional expression [$U = 165$; $Z = -.74$; $p = .47$], consensus [$U = 136$; $Z = -1.53$; $p = .12$] and cohesion [$U = 165$; $Z = -.75$; $p = .47$].

There were no significant differences between parents of children with Down Syndrome and non-disabled children in affectional expression [$U = 1472$; $Z = -.11$; $p = .90$], consensus [$U = 405$; $Z = -1.04$; $p = .29$], couple satisfaction [$U = 363$; $Z = -1.63$; $p = .11$] and cohesion [$U = 460$; $Z = -.27$; $p = .78$].

The Wilcoxon Signed Ranks Test confirmed that parents of children with high functioning autism have higher levels of affectional expression than of consensus [$Z = 1.91$; $p < .05$], couple satisfaction [$Z = 1.98$; $p < .05$], and cohesion [$Z = 3.55$; $p < .0001$]. In addition, they presented a lower evaluation in cohesion than in consensus [$Z = 3.66$; $p < .0001$] and couple satisfaction [$Z = 2.76$; $p < .006$]. These parents had the lowest scores in consensus and couple satisfaction and no statistical differences were found between these aspects [$Z = .78$; $p = .43$].

Parents of children with low functioning autism showed low dyadic adjustment in all sub-scales analysed. No statistical differences were found comparing affectional expression scores with consensus [$Z = -.465$; $p = .64$], couple satisfaction [$Z = -1.345$; $p = .18$] and cohesion [$Z = -1.55$; $p = .12$]. In the same way, no statistical differences were found comparing cohesion with consensus [$Z = -1.34$; $p = .18$] and with couple satisfaction [$Z = -.31$; $p = .76$], such as couple satisfaction and consensus [$Z = -1.810$; $p = .07$]. Parents of children with Down syndrome have higher levels of affectional expression than couple satisfaction [$Z = 2.1$; $p < .04$], and cohesion [$Z = 3.34$; $p < .001$], but no statistical differences were found comparing with consensus [$Z = -.91$; $p = .36$]. On the other hand, levels of cohesion were lower if compared with consensus [$Z = 3.14$; $p < .002$] and couple satisfaction [$Z = 2.54$; $p < .01$]. Also in this situation, differences between couple satisfaction and consensus were not found [$Z = 1.29$; $p = .2$].

Parents of non-disabled children evaluated the affectional expression better than cohesion [$Z = 3.69; p < .0001$]. No statistical differences were found comparing affectional expression with couple satisfaction [$Z = .51; p = .61$] and with consensus [$Z = -.25; p = .79$]. These parents gave a lower evaluation in cohesion than in consensus [$Z = 4.53; p < .0001$] and in couple satisfaction [$Z = 3.6; p < .0001$]. In addition, these parents presented a higher consensus than couple satisfaction [$Z = 1.99; p < .05$].

Table 2 shows means and standard deviations of RAM sub-scales obtained from parents of children with high and low functioning autism, with Down Syndrome and from family of non-disabled children. The analysis highlighted some significant differences among groups in the globality sub-scale [$\chi^2(3) = 8.71; p < .03$], confirmed by the Jonckheere-Terpstra test [$J-T = -2.19; p < .03$].

The groups differed in the motivation sub-scale [$\chi^2(3) = 7.81; p < .05$], even though the tendency test did not confirm these results [$J-T = -1.67; p < .09$]. On the other hand, even if no statistical differences comparing blame scores between parents were found [$\chi^2(3) = 6.9; p = .07$], the Jonckheere-Terpstra test underlined a significant tendency [$J-T = -2.25; p < .02$].

The analysis of scores of couple attributions expressed by parents and the data analysis underlined how parents of children with high functioning autism obtained the same statistical scores comparing with parents of children with low functioning autism [*Locus*: $U = 127; Z = -1.03; p = .3$; *Globality*: $U = 128; Z = -1.01; p = .3$; *Stability*: $U = 127; Z = -1.05; p = .3$; *Motivation*: $U = 101; Z = -1.8; p = .06$; *Intent*: $U = 109; Z = -1.62; p = .1$; *Blame*: $U = 141; Z = -.57; p = .58$] and comparing with parents of children with Down Syndrome

Table 2 - Means and Standard Deviations of Relationship Attribution Measure (RAM) scores by parents of disabled (low and high functioning Autism and Down Syndrome) and nondisabled children.

| Parents of children with | Causal attribution | | | | | | Responsibility attributions | | | | | |
|--|--------------------|-----|-----------|-----|-----------|-----|-----------------------------|-----|------------|-----|-------|-----|
| | Locus | | Stability | | Globality | | Intent | | Motivation | | Blame | |
| | M | SD | M | SD | M | SD | M | SD | M | SD | M | SD |
| Autism Spectrum Disorder – Low Funct. | .80 | .29 | .64 | .29 | .70 | .28 | .69 | .32 | .71 | .31 | .66 | .34 |
| Autism Spectrum Disorder – High Funct. | .69 | .23 | .56 | .27 | .61 | .27 | .53 | .30 | .56 | .37 | .57 | .31 |
| Down Syndrome | .66 | .21 | .56 | .27 | .64 | .28 | .54 | .35 | .55 | .30 | .52 | .36 |
| No disability | .73 | .17 | .53 | .18 | .48 | .21 | .46 | .24 | .45 | .22 | .44 | .23 |

[*Locus*: $U = 237$; $Z = -.07$; $p = .94$; *Globality*: $U = 223$; $Z = -.40$; $p = .9$; *Stability*: $U = 234$; $Z = -.14$; $p = .88$; *Motivation*: $U = 238$; $Z = -.03$; $p = .97$; *Intent*: $U = 234$; $Z = -.13$; $p = .9$; *Blame*: $U = 209$; $Z = -.72$; $p = .47$] and comparing with parents of non-disabled children [*Locus*: $U = 361$; $Z = -.61$; $p = .4$; *Globality*: $U = 317$; $Z = -1.3$; $p = .2$; *Stability*: $U = 397$; $Z = -.04$; $p = .9$; *Motivation*: $U = 359$; $Z = -.64$; $p = .51$; *Intent*: $U = 353$; $Z = -.73$; $p = .5$; *Blame*: $U = 288$; $Z = -1.7$; $p = .08$].

Simple comparisons show, instead, that parents of children with low functioning autism have higher scores in the globality [$U = 170.5$; $Z = -2.71$; $p < .007$], intent [$U = 162.5$; $Z = -2.86$; $p < .004$], motivation [$U = 154$; $Z = -3.02$; $p < .003$] and blame sub-scales [$U = 172.5$; $Z = -2.68$; $p < .007$] than parents of non-disabled children; no statistical differences were found between these two groups in locus [$U = 286$; $Z = -.61$; $p = .4$] and stability [$U = 237$; $Z = -1.5$; $p = .13$] scores.

Parents of children with Down Syndrome had a higher score in globality sub-scale than parents of non-disabled children [$U = 319.5$; $Z = -2.23$; $p < .03$]. No statistical differences were found in other sub-scales [*Locus*: $U = 407$; $Z = -1.01$; $p = .3$; *Stability*: $U = 450$; $Z = -.41$; $p = .7$; *Motivation*: $U = 401$; $Z = -1.09$; $p = .27$; *Intent*: $U = 435$; $Z = -.62$; $p = .5$; *Blame*: $U = 433$; $Z = -.65$; $p = .5$].

The Wilcoxon Signed Ranks Test showed the same results in families with children with high and low functioning autism. Parents of children with high functioning autism tend to attribute negative events to the partner more than stability [$Z = 3.54$; $p < .0001$], globality [$Z = 1.89$; $p < .05$], intent [$Z = 3.22$; $p < .001$], motivation [$Z = 2.45$; $p < .01$] and blame [$Z = 2.69$; $p < .007$].

The same results were found in parents of children with low functioning autism. They showed the same dysfunctional pattern of attributions in which one partner's behaviour is perceived as the cause of the problem more than stability [$Z = 2.58$; $p < .01$], globality [$Z = 2.27$; $p < .02$], intent [$Z = 1.96$; $p < .05$] or blame [$Z = 2.86$; $p < .004$]. No statistical differences between locus and motivation were found [$Z = 1.65$; $p < .09$].

A different result was found in parents of children with Down Syndrome: in this case there were higher scores in locus only in comparison with motivation [$Z = 2.16$; $p < .03$] and globality [$Z = 2.03$; $p < .04$]. Unlike other groups, these parents show higher scores in globality compared with motivation [$Z = 2.55$; $p < .01$] and blame [$Z = 2.11$; $p < .03$] scales.

The style of attribution of parents with non-disabled children seems more similar to that of parents of autistic children. In fact, even in this family context, parents tend to attribute negative events more to the partner than to stability [$Z = 4.88$; $p < .0001$], globality [$Z = 4.87$; $p < .0001$], intent [$Z = 4.76$; $p < .0001$], motivation [$Z = 5.08$; $p < .0001$] or blame [$Z = 5.13$; $p < .0001$]. However, unlike others, in these groups parents had a significantly higher score

in stability than intent [$Z = 2.68; p < .007$], motivation [$Z = 2.17; p < .03$] and blame [$Z = 2.34; p < .02$] scales.

4.2 Correlations between DAS and RAM

The second object was to investigate whether there were statistical correlations between couple adjustment and style of attribution in each of the four groups of parents. As shown in table 3, higher scores in RAM sub-scales that represent a dysfunctional style of attributions are negatively related with total DAS, especially in the two groups of parents with autistic children. The relation between attributions style and couple functioning are similar in parents of Down Syndrome children and in parents with non-disabled children. In families with high functioning children, all DAS sub-scales were negatively correlated with the different aspects of couple attribution.

These results were also confirmed when analysing parents of low functioning children, but, in this case, couple satisfaction seems not to be related with locus [$\rho = -.16; p = .55$], stability [$\rho = -.35; p = .18$], globality [$\rho = -.39; p = .14$] and blame [$\rho = -.45; p = .08$]. Parents of low functioning children show that a high level of dyadic satisfaction was associated with a lower tendency to attribute intentionality [$\rho = -.53; p < .03$] and to blame the partner [$\rho = -.49; p < .05$] in negative situations. In parents of children with Down syndrome, only the locus sub-scale was strongly related to all the DAS sub-scales [Locus vs. Consensus: $\rho = -.42; p < .037$; Locus vs Satisfaction: $\rho = -.53; p < .007$; Locus vs. Cohesion: $\rho = -.55; p < .005$; Locus vs. Affectional Expression: $\rho = -.48; p < .016$].

Different correlations in parents with non-disabled children were found. In this context, it was possible to observe a lower tendency to attribute responsibility to the other partner together with high dyadic consensus [$\rho = -.38; p < .02$]. Consequently, the lower tendency to attribute responsibility to the other was associated with less difficulty in expressing affection [$\rho = -.32; p < .04$]. In families with non-disabled children, couple satisfaction seems to be a relevant aspect in moderating the partners' relationship. High scores in satisfaction were significantly correlated with the tendency to attribute motivation [$\rho = -.57; p < .0001$], blame [$\rho = -.51; p < .001$] and intent [$\rho = -.43; p < .005$]. In addition, couple satisfaction in parents of non-disabled children significantly reduced the generalization of negative partner behaviour [*Globality*: $\rho = -.42; p < .006$].

Table 3 - *Spearman's rho correlations between total DAS and Couple Attributions (RAM) scores expressed by parents of disabled (low and high functioning Autism and Down Syndrome) and nondisabled children.*

| <i>Groups</i> | | <i>Locus</i> | <i>Stability</i> | <i>Globality</i> | <i>Intention</i> | <i>Motivation</i> | <i>Blame</i> |
|---|----------|--------------|------------------|------------------|------------------|-------------------|--------------|
| Autism Spectrum Disorder - LF (N=16) | <i>ρ</i> | -.51 | -.57 | -.58 | -.81 | -.75 | -.79 |
| | <i>p</i> | .045 | .02 | .02 | .001 | .001 | .001 |
| Autism Spectrum Disorder - HF (N=20) | <i>ρ</i> | -.71 | -.83 | -.79 | -.82 | -.75 | -.71 |
| | <i>p</i> | .001 | .001 | .001 | .001 | .001 | .001 |
| Down Syndrome (N=24) | <i>ρ</i> | -.57 | -.24 | -.21 | -.15 | -.27 | -.26 |
| | <i>p</i> | .003 | .26 | .33 | .49 | .21 | .22 |
| No disability (N=40) | <i>ρ</i> | -.11 | .02 | -.28 | -.29 | -.44 | -.37 |
| | <i>p</i> | .53 | .91 | .08 | .07 | .004 | .02 |

5. Discussion and Conclusion

The first object of this research project was to analyse the differences in dyadic adjustment and couple attributions in parents of children with high and low functioning Autism Spectrum Disorder and in parents of children with Down Syndrome, compared to parents of non-disabled children.

This paper has brought to light some interesting results, underlining differences between families of children with disability and families with non-disabled children and between parents of children with different types of disabilities. The presence of a disabled child is associated with a lower level of dyadic adjustment and, as expected, it seems that parents with autistic children experience more difficulties. In particular, it is clear that parents of children with low functioning autism perceive lower levels of couple adjustment when compared with parents of children with Down Syndrome and with parents of non-disabled children. The presence of a child with high functioning autism seems to be associated with less dyadic adjustment only if compared with parents of non-disabled child.

Interesting results regard the style of attribution: parents of children with low functioning autism use different parental styles of attribution comparing with parents of non-disabled children. In particular, parents of children with low functioning autism show a tendency to generalize partner's negative behaviour and to use internal locus of control for negative events. In this group, the couple blames partner's behaviour that are perceived as intentional and stable over time. On the other hand, parents of children with Down Syndrome tend to generalize partner's negative behaviour more than parents of non-disabled children.

The second object was to examine the correlations between partners' perceptions of couple adjustment and style of attribution in each of the four groups of parents. In accordance with literature (Fincham & Bradbury 1992), results confirmed that couple attributions are strongly related with dyadic adjustment in all families. However, a stronger relationship emerged in parents of children with low functioning autism that reported a dysfunctional pattern of couple attribution and an internal locus of control for negative events. In addition, the results show that parents of children with Down Syndrome probably had an internal locus of control for negative events which is extremely dysfunctional for couple relationship. Overall, this paper underlines a strong negative relation between a dysfunctional attributional style and dyadic adjustment, mostly in families of children with low functioning autism. Even though it is not possible to verify the direction of the relation between couple adjustment and couple attributions, the strong relation between these variables has been demonstrated.

In conclusion, it is possible that the stressful situation experienced by parents of children with Autism Spectrum Disorder, mostly those of children with low functioning autism, have contributed to maintaining a dysfunctional pattern of attributions over time and, consequently, to decreasing couple satisfaction.

Unfortunately, the limited number of parents does not allow generalizations regarding these results. The results obtained can act as both a stimulus towards further research on families of children with autism and other disabilities, and also as a starting point for further clinical interventions. In fact, these results highlight a dysfunctional pattern of attribution in the two groups of parents with autistic children and a strong relation between this pattern and dyadic adjustment. For this reason, it could be useful in the assessment of families of children with disabilities to consider the importance of cognitive factors (Venkatesh, 2008), because dysfunctional beliefs can quickly become stable and be the cause of dysfunctional behaviours against the partner (Fincham & Bradbury, 1992; Boyd, 2002; Sanjuán & Magallares, 2009). Partners, using dysfunctional patterns of attribution, would be more prone to develop depression when faced with stressful situations than those who habitually offer external, unstable, and specific causes to explain these negative events: this pattern could

be extremely dysfunctional for family functioning and for parenting.

A specific training for parents of children with disabilities, focused on couple relationship and, in particular, on dyadic attribution, could be important to prevent any possible problem that could interfere on a healthy psychological development of the child.

Furthermore, it could be interesting to study these variables, not only in relation with couple satisfaction and couple adjustment, but also in relation with other variables that can influence family functioning, such as the parents' perception of stress or coping strategies used to deal with the child's disability. In fact, the differences among groups reported in this study showed that the type of disability is a very important variable that can influence couple relationship in different ways. This study focused on families of children with autism spectrum disorder and with Down Syndrome, but it could also be useful to evaluate couple functioning and attribution styles in families of children with other types of disability, such as learning disorders or ADHD.

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