

# The role of coping strategies in life satisfaction and psychological well-being: An investigation with deaf and hearing parents

Elisabetta Sagone<sup>1</sup>

## Abstract

*The main purpose of this investigation was to examine differences between deaf and hearing parents in relation to coping strategies, life satisfaction, and psychological well-being, as well as the role of coping strategies used by deaf and hearing parents to satisfy their own life and improve their psychological well-being. A sample of 75 adults, divided in 36 deaf and 39 hearing parents with deaf children (aged 4-7 yrs) and preadolescents (aged 9-13 yrs), were recruited from users referring to the Center for Deaf Families (Sicily). The Coping Orientation to Problems Experienced-NVI (Carver, Scheier, & Weintraub, 1989), the Satisfaction with Life scale (Pavot & Diener, 2008), and the Psychological Well-being Scales (Ryff & Keyes, 1995) were used. Deaf parents turned out to use more maladaptive coping strategies and reported lower psychological well-being than the hearing ones, with low levels of autonomy, personal growth, positive relationships, and purpose in life. Despite expectations to the contrary, deaf parents were more satisfied with their lives than the hearing ones. It seems that coping strategies, such as searching for social support and avoidance, negatively affected life expectations of both deaf and hearing parents,*

*Received:* April 18, 2017; *Revised:* December 18, 2017; *Accepted:* December 21, 2017  
© 2017 Associazione Oasi Maria SS. - IRCCS

<sup>1</sup> Department of Educational Sciences, University of Catania.

*while turning to religion had positive effects; additionally, these coping strategies (especially, searching for social support, avoidance, and turning to religion) affected the psychological well-being of deaf and hearing parents. Future research might focus on the effects of other dimensions (e.g. resilience and religious beliefs) on well-being of parents of disabled children.*

**Keywords:** Deaf parents; Coping strategy; Psychological well-being; Life satisfaction.

## 1. Introduction

The life span of families with disabled children and adolescents often goes through several critical events in terms of stressful experiences that can threaten the psychological well-being of each family member, such as siblings (see Lardieri, Blacher, & Swanson, 2000; Cuskelly & Gunn, 2006; Dew, Baladin, & Llewellyn, 2008; De Caroli & Sagone, 2013) or grandparents (see Hastings, 1997; Nybo, Scherman, & Freeman, 1998; Findler, 2000; Lee & Gardner, 2010) and, specifically, parents with disabled sons or daughters. In this direction, a pervasive impact of deafness on family quality of life has been reported across various aspects of life, including parental stress (Hintermair, 2000; Burger, Spahn, Richter, Eissele, Lohle, & Bengel, 2005), sense of coherence (Hintermair, 2004), family interactions (Bodner-Johnson, 1991; Freeman, Dieterich, & Rak, 2002), social relationships (Gregory, Bishop, & Shelton, 1995), and coping strategies (Feher-Prout, 1996; Zaidman-Zait, Most, Tarrasch, Haddad-Eid, & Brand, 2016). As indicated by several authors (Moore, Jatho, & Dunn, 2001; Jackson & Turnbull, 2004; Zaidman-Zait, *et al.*, 2016), adaptation of families with deaf children to various life challenges is affected by their personal coping resources aimed to manage stressors and challenges, increase their sense of satisfaction with life and positively affect subjective and psychological well-being; therefore, the assumption is that coping strategies functional to overcome the adversities due to sensorial disability have positive effects on the reduction of parental stress levels both in mothers and fathers (Hintermair, 2000) and their perceived self-efficacy (DesJardin, 2003; DesJardin & Eisenberg, 2007). In addition, some studies demonstrated that high levels of social support, provided by formal and informal networks (Zaidman-Zait, 2007), were associated with low levels of parental stress and high levels of life satisfaction (Lederberg & Golbach, 2002; Pipp-Siegel, Sedey, & Yoshinaga-Itano, 2002; Hintermair, 2004; 2006; Asberg, Vogel, & Bowers, 2008). In detail, Lederberg and Golbach (2002) found that parents of deaf children were likely to experience stress in relation to specific areas of their child's disability, such as communication difficulties and concerns about their future and educational challenges. Similarly, Zaidman-Zait and Most (2005) considered communication difficulties as the primary stressor for parents of children with hearing loss.

Recently, the focus of research studies on families with sensorial disabled children and adolescents has shifted from familial stress to the effects of positive adaptation and coping strategies to manage and overcome the

difficulties deriving from disability, by correlating the main perspectives on family stress, adjustment, and resilience (Patterson & Garwick, 1994; Walsh, 1996; Patterson, 2002) with the eudaimonic and hedonic perspectives (see Diener, Emmons, Larsen, & Griffin, 1985; Peterson, Ruch, Beermann, Park, & Seligman, 2007; Ryff & Singer, 2008) better expressed under the umbrella concept of *flourishing* typically emerging from the positive psychology (Delle Fave, Brdar, Freire, Vella-Brodrick, & Wissing, 2011; Seligman, 2011; Henderson & Knight, 2012). Considering the role of the quality of family life in terms of approach to well-being, several studies investigated the coping strategies, mainly used by parents of disabled children (see Sullivan, 2002; Hussain & Juyal, 2007; Lopez, Clifford, Minnes, & Ouellette-Kuntz, 2008; Dabrowska & Pisula, 2010) dysfunctional to guarantee a condition of well-being for themselves and their sons; these strategies were rarely analyzed directly in relation to both subjective and psychological components of well-being. Generally, it turned out that parents (mainly, mothers of disabled children) who adopted the emotion-focused strategies were less satisfied with their lives, reported higher levels of stress, and experienced dissatisfaction, than those who were more likely to use the problem-focused strategies.

In this study, the coping strategies taken into consideration were derived from the Italian study by Sica and his colleagues (Sica, Novara, Dorz, & Sanavio, 1997), in line with both the Carver and colleagues' model (1989) and the Folkman and Lazarus' Ways of Coping (1988), and more recently revised in a second step (Sica, Magni, Ghisi, Altoè, Sighinolfi, Chiri, *et al.*, 2008). The strategies were the following:

1. *orientation to problem solving*, including active coping (that is, taking active steps to circumvent the stressor), planning (that is, thinking about how to cope with a stressor), suppression of competing activities (that is, trying to avoid to be distracted by other things);
2. *positive reinterpretation*, including restrain coping (that is, waiting for an appropriate opportunity to occur) and positive reinterpretation and growth (that is, construing a stressful event in positive terms);
3. *searching for social support*, including seeking social support for instrumental reasons (that is, seeking advice, assistance, or information) and for emotional reasons (that is, getting moral support);
4. *avoidance*, including denial (denying the presence of the stress), behavioral and mental disengagement (that is, reducing one's effort to

deal with the stressor and distracting from thinking about the problem);

5. *turning to religion* (that is, having trust in religious beliefs).

Consistently with the main purpose of the current research and according to the *eudaimonic perspective* (Ryan & Deci, 2001), the dimensions that characterized the multi-faced concept of psychological well-being are represented by the sense of *self-acceptance*, as defined by the characteristics of self-actualization and optimal functioning; *positive relations with other individuals*, relating to the ability of expressing strong feelings of empathy for all human beings and being capable of greater love, deeper friendship, and identification with the others; *autonomy*, mainly assumed as self-determination, independence, and regulation of behavior; *environmental mastery*, considered as the ability to create environments suitable for meeting individual's needs; *purpose in life*, in terms of a sense of directedness and intentionality in changing goals in life, such as being productive and creative or achieving emotional integration in later life; and, finally, *personal growth*, relating to an optimal psychological functioning that requires not only to develop one's potentialities, but also to continue to improve and expand oneself as a person, underlining the importance of new challenges in different periods of life (Ryff & Singer, 1996). Additionally, in line with the *hedonic perspective* (Diener, Lucas, & Oishi, 2002), the subjective dimensions of well-being were represented by life satisfaction, positive and negative affect (see Watson, Clark, & Tellegen, 1988), happiness, and optimistic orientation (Scheier & Carver, 1985); among these aspects, life satisfaction was chosen in order to in-deep examine its relation with coping strategies adopted by deaf and hearing parents of children and adolescents with sensorial impairments. The recent findings demonstrated that high levels of subjective and psychological well-being in families with deaf children and adolescents represented a relevant aspect to define them as "healthy and resilient families" (Luckner & Velaski, 2004; Szarkowski & Brice, 2005; Ahlert & Greeff, 2012).

Poor results were found about the relationship between life satisfaction/psychological well-being and coping strategies adopted by parents with deaf children and adolescents (see Jackson, Wegner, & Turnbull, 2010), after comparing deaf parents (both mothers and fathers) to hearing ones (see Flaherty, 2015). Given the importance of family well-being with regard to deaf children' and adolescents' development, a better understanding of the impact of deafness on family life and how family members perceive the quality of their life.

## 2. Purpose of study

The first purpose of this study was to compare coping strategies, life satisfaction, and psychological well-being of deaf and hearing parents (mothers and fathers) with deaf children and preadolescents; the second aim was to examine the role of coping strategies on life satisfaction and dimensions of psychological well-being expressed by the two samples of parents. Considering the empirical evidence from the recent literature about the role of deafness in family quality of life (see Jackson, 2011), it was expected that:

- deaf parents would be more likely to adopt maladaptive coping strategies (as reported in the approach provided by Carver, *et al.*, 1989) than hearing ones ( $H_1$ );
- deaf parents would report lower levels of life satisfaction than hearing ones ( $H_2$ );
- deaf parents would express lower levels of psychological well-being than hearing ones ( $H_3$ ).

Specifically, consistently with the role of coping strategies on the subjective and psychological well being, it was expected that:

- adaptive coping strategies would positively affect life satisfaction expressed both by deaf and hearing parents ( $H_{4a}$ ): so, the more the deaf and hearing parents are likely to make use of positive coping strategies (or functional to adaptation toward stressful circumstances), the more they are satisfied with their everyday life;
- adaptive coping strategies would positively affect psychological well-being reported both by deaf and hearing parents ( $H_{4b}$ ): so, the more the deaf and hearing parents are likely to make use of positive coping strategies, the more they report high levels on the five dimensions of psychological well-being.

## 3. Method

### 3.1. Participants

The sample consisted of 75 Sicilian married parents aged 27-to-63 years ( $M = 41.4$ ;  $SD = 6.8$ ), divided into 36 deaf parents (20 mothers and 16 fathers) and 39 hearing parents (17 mothers and 22 fathers) with deaf children (aged 4-7 yrs) and preadolescents (aged 9-13 yrs) with different severity of deafness or with bilateral cochlear implant (74.7% without

cochlear implant, 25.3% with this implant). There were no differences between the two groups of parents in relation to the age range of their children and preadolescents. 53.3% of deaf children and preadolescents were first-born ( $n = 40$ ), while 46.7% were second-born ( $n = 35$ ). 58.7% of all parents used the Italian Sign Language to communicate within the household and social communities, while 41.3% utilized other communication systems (such as oral speech). Only five deaf parents were cochlear implant users. Parents were recruited among these who referred to the Sicilian Center for Deaf Families (A.F.A.E. – Sicily) during the months of January, February, and March 2017; they were invited to participate to this investigation following the clarifications provided by an expert researcher and after obtaining their informed consent. All the data were collected in anonymous way.

### 3.2. Measures and procedure

To explore the main topics of this study, we used the *Satisfaction with Life scale* (Pavot & Diener, 2008; Italian version: Di Fabio & Gori, 2015), the 18-item version of *Psychological Well-being Scales* (Ryff & Keyes, 1995; Italian version: Zani & Cicognani, 1999), the *Coping Orientation to Problems Experienced-NVI* (COPE-NVI: Carver, *et al.*, 1989; Italian version: Sica, *et al.*, 2008). These scales were administered in a small group setting and with supported translation by LIS interpreter in order to make content of sentences thoroughly comprehensible. .

The Italian version of *Satisfaction With Life Scale* (see Di Fabio & Gori, 2015) assessed the cognitive component of subjective well-being (i.e., life satisfaction) and consisted of five items (e.g., “In most of my ways my life is close to my ideal”) that require a response on a 7-point Likert scale (1 corresponding to strongly disagree, 7 corresponding to strongly agree) (Cronbach’s  $\alpha$  equal to .89).

The *Psychological Well-being Scale* (PWB) is a self-report inventory (see Zani & Cicognani, 1999) consisting of a set of items for each of which parents had to evaluate themselves on a 6-point Likert scale (Cronbach’s  $\alpha$  for total scale = .72), with 1 indicating strong disagreement and 6 indicating strong agreement. The short form Italian version of the PWB with 18 items grouped in six subscales was applied:

1. *autonomy* (e.g. “I have confidence in my opinions, even if contrary to the general consensus”);

2. *environmental mastery* (e.g. “In general, I feel I am in charge of the situation in which I live”);
3. *purpose in life* (e.g. “Some people wander aimlessly through life, but I am not one of them”);
4. *positive relations with others* (e.g. “People would describe me as a giving person, willing to share my time with others”);
5. *personal growth* (e.g. “I think it is important to have new experiences that challenge how you think about yourself and the world”);
6. *self-acceptance* (e.g. “I like most aspects of my personality”).

As procedure of coding system, responses were totaled for each of the six subscales (about half of the responses were reverse scored) and, for each subscale, high scores indicated that the respondent has a mastery of that area in his or her life, whereas low scores showed that the respondent struggles to feel comfortable with that particular area. A total PWB score was calculated by adding all items of six dimensions.

The *Coping Orientation to Problems Experienced-NVI* (COPE-NVI) was a measure of the extent in which each individual adopted a series of skills and strategies in order to face stressful and difficult situations (see Sica, *et al.*, 2008). It was made of 60 sentences, each corresponding to the coping strategies examined in the Carver *et al.*'s coping model (1989) and valued by parents using the following response choices: “I usually don't do this at all”, “I usually do this a little bit”, “I usually do this a medium amount”, and “I usually do this a lot” (scored from 1 to 4 points). These sentences were grouped in the subsequent five subscales (according the New Italian version created by Sica, *et al.*, 2008):

1. *searching for social support strategy* (e.g. “I talk to someone who could do something concrete about the problem”; Cronbach's  $\alpha = .85$ );
2. *avoidance strategy* (e.g. “I admit to myself that I can't deal with it, and quit trying”; Cronbach's  $\alpha = .80$ );
3. *positive reinterpretation strategy* (e.g. “I learn something from the experience”; Cronbach's  $\alpha = .62$ );
4. *orientation to problem solving* (e.g. “I concentrate my efforts on doing something about it”; Cronbach's  $\alpha = .74$ );
5. *turning to religion* (e.g. “I seek God's help”; Cronbach's  $\alpha = .79$ ).

All participants anonymously filled the above mentioned measures.



### 3.3. Statistical analyses

The examination of data was carried out by means of the SPSS 20, using t-tests, ANOVA, correlations, and linear regressions. Group of parents (deaf and hearing parents) and role (mothers and fathers) were used as independent variables, while mean scores obtained on life satisfaction, psychological well-being dimensions, and coping strategies were used as dependent variables. In detail, Student's *t* was used to evaluate differences between deaf and hearing parents on coping strategies, life satisfaction, and dimensions of psychological well-being. The ANOVA was used to verify the effects of interaction between role of parents (deaf mothers, deaf fathers, hearing mothers, hearing fathers) and coping strategies, life satisfaction, and dimensions of psychological well-being; post-hoc t-tests with Bonferroni's correction were used to verify the significant differences for the role of parents. Pearson's linear correlation was used to analyze the relationships between coping strategies and life satisfaction, between coping strategies and psychological well-being, and between life satisfaction and psychological well-being. Finally, linear regression was utilized to test the hypotheses using coping strategies as predictors and life satisfaction and dimensions of psychological well-being scores as dependent variables.

## 4. Results

### 4.1. Comparison between deaf and hearing parents for coping strategies

Considering the  $H_1$ , it was expected that deaf parents would be more likely to adopt maladaptive coping strategies than hearing ones. As far as coping strategies used by parents to overcome and cope with the difficulties linked to living with and bringing up deaf children and preadolescents are concerned (see Tab. 1), results showed that positive reinterpretation ( $M = 37.36$ ;  $SD = 4.95$ ), followed by searching for social support ( $M = 32.56$ ;  $SD = 6.88$ ) and problem solving orientation ( $M = 32.17$ ;  $SD = 4.37$ ) were the most used strategies by deaf parents; additionally, positive reinterpretation ( $M = 37.69$ ;  $SD = 6.77$ ) and problem solving orientation ( $M = 34.56$ ;  $SD = 6.26$ ) were the most used strategies by hearing parents. Statistically significant differences for group of parents in coping strategies were found (Tab. 1): namely, deaf parents were more likely to adopt the search for social support ( $p < .001$ ), the avoidance ( $p < .001$ ), and the turning to religion strategy ( $p = .005$ ) than hearing parents. In detail (Tab. 2), results

showed a significant interaction role  $\times$  coping strategies, revealing that searching for social support ( $F_{(71,3)} = 6.25$ ;  $p = .001$ ) and avoidance strategies ( $F_{(71,3)} = 7.16$ ;  $p < .001$ ) were mainly adopted by deaf mothers, while turning to religion was mainly used by deaf fathers ( $F_{(71,3)} = 4.34$ ;  $p = .007$ ).

Table 1 - *Comparisons between deaf (n = 36) and hearing parents (n = 39) on types of coping strategies analyzed by means of COPE-NVI*

Type of coping strategies	Type of group	M	SD	Min	Max	T-tests
COPE-I: Searching for social support	deaf parents	32.56	6.88	19.00	45.00	3.84**
	hearing parents	26.67	6.34	16.00	38.00	
COPE-II: Avoidance	deaf parents	31.03	5.91	22.00	44.00	4.67**
	hearing parents	24.31	6.54	16.00	43.00	
COPE-III: Positive reinterpretation	deaf parents	37.36	4.95	28.00	45.00	Ns
	hearing parents	37.69	6.77	21.00	50.00	
COPE-IV: Problem solving orientation	deaf parents	32.17	4.37	26.00	46.00	Ns
	hearing parents	34.56	6.26	21.00	48.00	
COPE-V: Turning to religion	deaf parents	21.72	4.36	14.00	28.00	2.87*
	hearing parents	18.54	5.24	8.00	29.00	

Differences significant for \*  $p < .01$  and \*\* for  $p < .001$

Post-hoc t-tests with Bonferroni's correction confirmed that there were significant differences in relation to the searching for social support between deaf mothers and hearing fathers ( $p = .001$ ) and between deaf mothers and hearing mothers ( $p = .03$ ); in relation to the avoidance strategy, between deaf mothers and hearing fathers ( $p = .002$ ), between deaf fathers and hearing fathers ( $p = .025$ ), and between deaf mothers and hearing mothers ( $p = .006$ ); lastly, in relation to the turning to religion, between deaf fathers and hearing fathers ( $p = .004$ ).

Table 2 - Differences for role of deaf and hearing parents on types of coping strategies analyzed by means of COPE-NVI

Type of coping strategies	Role of parents	<i>M</i>	<i>SD</i>	Min	Max	ANOVA
COPE-I: Searching for social support	deaf fathers	30.62	8.03	19.00	42.00	6.249*
	hearing fathers	25.72	6.53	16.00	38.00	
	deaf mothers	34.10	5.53	26.00	45.00	
	hearing mothers	27.88	6.07	16.00	36.00	
COPE-II: Avoidance	deaf fathers	30.37	5.77	22.00	38.00	7.163**
	hearing fathers	24.22	7.41	16.00	43.00	
	deaf mothers	31.55	6.12	23.00	44.00	
	hearing mothers	24.41	5.43	18.00	34.00	
COPE-III: Positive reinterpretation	deaf fathers	38.87	5.05	28.00	45.00	Ns
	hearing fathers	38.50	6.67	28.00	50.00	
	deaf mothers	36.15	4.64	31.00	45.00	
	hearing mothers	36.65	6.94	21.00	45.00	
COPE-IV: Problem solving orientation	deaf fathers	33.62	5.46	26.00	46.00	Ns
	hearing fathers	35.45	6.61	22.00	48.00	
	deaf mothers	31.00	2.91	27.00	37.00	
	hearing mothers	33.41	5.78	21.00	41.00	
COPE-V: Turning to religion	deaf fathers	23.25	3.30	18.00	28.00	4.342*
	hearing fathers	17.68	5.56	8.00	26.00	
	deaf mothers	20.50	4.78	14.00	28.00	
	hearing mothers	19.64	4.72	13.00	29.00	

Differences significant for \*  $p < .01$  and \*\* for  $p < .001$

#### 4.2. Comparison between deaf and hearing parents for life satisfaction

In relation to  $H_2$ , it was expected that deaf parents would report lower levels of life satisfaction than hearing ones. Statistical analysis carried out for group of parents (deaf parents vs. hearing parents) revealed that deaf parents were more satisfied with their everyday lives ( $M = 27.53$ ;  $SD = 3.35$ ) than hearing parents ( $M = 21.51$ ;  $SD = 9.24$ ) ( $t_{(73)} = 3.81$ ;  $p < .001$ ). Specifically, sorting by role of each parent (mothers vs. fathers), analysis of variance showed that deaf fathers ( $M = 28.50$ ;  $SD = 3.68$ ) were more satisfied with life than deaf mothers ( $M = 26.75$ ;  $SD = 2.91$ ), followed by hearing mothers ( $M = 22.88$ ;  $SD = 8.09$ ), and hearing fathers ( $M = 20.45$ ;  $SD = 8.31$ ) ( $F_{(71,3)} = 5.07$ ;  $p = .003$ ). Post-hoc t-tests with Bonferroni's correction revealed a significant difference between deaf fathers and hearing fathers ( $p = .005$ ) and between deaf mothers and hearing fathers ( $p = .03$ ), confirming the direction of the obtained results on this dimension.

#### 4.3. Comparison between deaf and hearing parents for dimensions of psychological well-being

In relation to  $H_3$ , it was expected that deaf parents would express lower levels of psychological well-being than hearing ones. Descriptive analysis revealed that deaf parents reached high mean scores on environmental mastery ( $M = 14.22$ ;  $SD = 1.57$ ), followed by self-acceptance ( $M = 13.64$ ;  $SD = 1.71$ ) and personal growth ( $M = 13.28$ ;  $SD = 1.11$ ), while hearing parents reported high mean scores on personal growth ( $M = 14.82$ ;  $SD = 2.66$ ), followed by environmental mastery ( $M = 14.00$ ;  $SD = 2.09$ ) and autonomy ( $M = 13.18$ ;  $SD = 2.52$ ).

About the initial hypothesis, significant differences for group of parents in these dimensions were found (see Tab. 3): so, deaf parents reported lower levels of psychological well-being both in total score ( $p = .004$ ) and in the dimensions of autonomy ( $p = .003$ ), personal growth ( $p = .002$ ), positive relations with others ( $p = .006$ ), and purpose in life ( $p = .026$ ) than hearing ones. Only for environmental mastery and self-acceptance, deaf and hearing parents reached very similar mean scores. In relation to the interaction role  $\times$  psychological well-being dimensions (Tab. 4), it was possible to note that hearing mothers scored higher than the others on PWB total score ( $F_{(71,3)} = 4.07$ ,  $p = .010$ ) and, specifically, on autonomy ( $F_{(71,3)} = 3.74$ ,  $p = .015$ ) and personal growth ( $F_{(71,3)} = 4.64$ ,  $p = .005$ ), while hearing fathers scored higher than the others on positive relations ( $F_{(71,3)} = 3.83$ ,  $p = .013$ ). Post-hoc t-tests

with Bonferroni's correction confirmed that there were significant differences on dimensions of autonomy ( $p = .02$ ) and personal growth ( $p = .005$ ) between deaf mothers and hearing mothers, and on personal growth ( $p = .04$ ) and relations with the others ( $p = .008$ ) between deaf mothers and hearing fathers, affirming the direction of the obtained results.

Table 3 - *Comparisons between deaf (n = 36) and hearing parents (n = 39) on dimensions of psychological well-being analyzed by means of PWB*

Dimensions of psychological well-being	Type of group	M	SD	Min	Max	T-tests
Autonomy	deaf parents	11.08	3.28	6.00	18.00	-3.12*
	hearing parents	13.18	2.52	8.00	18.00	
Environmental mastery	deaf parents	14.22	1.57	12.00	18.00	Ns
	hearing parents	14.00	2.09	10.00	18.00	
Personal growth	deaf parents	13.28	1.11	12.00	16.00	-3.32*
	hearing parents	14.82	2.66	8.00	18.00	
Relations with others	deaf parents	11.03	2.48	5.00	15.00	-2.81*
	hearing parents	12.89	3.25	7.00	18.00	
Purpose in life	deaf parents	9.36	1.96	7.00	13.00	-2.29**
	hearing parents	11.10	4.30	3.00	18.00	
Self-acceptance	deaf parents	13.64	1.71	11.00	16.00	Ns
	hearing parents	12.38	3.62	3.00	18.00	
PWB: total score	deaf parents	72.61	5.55	62.00	84.00	-2.98*
	hearing parents	78.54	10.98	58.00	98.00	

Differences significant for \*  $p < .01$  and \*\* for  $p < .05$

Table 4 - Differences for role of deaf and hearing parents on dimensions of psychological well-being analyzed by means of PWB

Dimensions of psychological well-being	Role of parents	<i>M</i>	<i>SD</i>	Min	Max	ANOVA
Autonomy	deaf fathers	11.25	3.25	8.00	18.00	3.737*
	hearing fathers	12.68	2.86	8.00	18.00	
	deaf mothers	10.95	3.37	6.00	17.00	
	hearing mothers	13.82	1.87	11.00	18.00	
Environmental mastery	deaf fathers	14.12	1.50	12.00	17.00	Ns
	hearing fathers	13.95	2.32	10.00	18.00	
	deaf mothers	14.30	1.65	12.00	18.00	
	hearing mothers	14.06	1.82	11.00	17.00	
Personal growth	deaf fathers	13.87	1.31	12.00	16.00	4.644**
	hearing fathers	14.54	3.06	8.00	18.00	
	deaf mothers	12.80	0.61	12.00	14.00	
	hearing mothers	15.17	2.06	11.00	18.00	
Relations with others	deaf fathers	11.87	1.96	9.00	15.00	3.832*
	hearing fathers	13.31	2.98	8.00	18.00	
	deaf mothers	10.35	2.68	5.00	14.00	
	hearing mothers	12.35	3.59	7.00	18.00	
Purpose in life	deaf fathers	9.62	1.78	7.00	12.00	Ns
	hearing fathers	10.40	4.80	3.00	18.00	
	deaf mothers	9.15	2.10	7.00	13.00	
	hearing mothers	12.00	3.48	6.00	17.00	
Self-acceptance	deaf fathers	13.50	1.54	11.00	16.00	Ns
	hearing fathers	11.68	4.44	3.00	18.00	
	deaf mothers	13.75	1.86	11.00	16.00	
	hearing mothers	13.29	1.89	11.00	17.00	
PWB: total score	deaf fathers	74.25	7.02	62.00	84.00	4.068*
	hearing fathers	76.59	12.51	58.00	96.00	
	deaf mothers	71.30	3.70	62.00	76.00	
	hearing mothers	81.06	8.29	61.00	98.00	

Differences significant for \*  $p < .05$  and \*\* for  $p < .01$

#### 4.4. Role of coping strategies on life satisfaction and psychological well-being: differences for group of parents

Proceeding to the analysis of linear correlations between coping strategies and life satisfaction (Tab. 5), as well as of those between coping strategies and dimensions of psychological well-being (Tab. 6), sorting by group of parents, results revealed that:

- for deaf parents: *searching for social support* was negatively correlated with life satisfaction (COPE-I:  $p = .017$ );
- for hearing parents: *searching for social support* (COPE-I:  $p = .028$ ), *positive reinterpretation* (COPE-III:  $p = .037$ ), and *turning to religion* (COPE-V:  $p = .004$ ) were positively correlated with life satisfaction, while *avoidance* was negatively correlated with life satisfaction (COPE-II:  $p = .032$ );

Table 5 - Correlations between type of coping strategies and life satisfaction separately for deaf ( $n = 36$ ) and hearing parents ( $n = 39$ )

	Group of parents	COPE-I	COPE-II	COPE-III	COPE-IV	COPE-V
Life satisfaction	deaf parents	-.40*	.08	.17	.26	-.03
	hearing parents	.35*	-.32*	.33*	-.01	.45**

Note: COPE-I: Searching for social support; COPE-II: Avoidance; COPE-III: Positive reinterpretation; COPE-IV: Problem solving orientation; COPE-V: Turning to religion. Significant correlations for \*  $p < .05$  and \*\*  $p < .01$

- for deaf parents: *searching for social support* was negatively correlated with psychological well-being (COPE-I:  $p < .001$ ) and, specifically, with autonomy (COPE-I:  $p < .001$ ), personal growth (COPE-I:  $p = .007$ ), relationships with the others (COPE-I:  $p = .014$ ); *avoidance* was negatively correlated with personal growth (COPE-II:  $p < .001$ ) and relationships with the others (COPE-II:  $p = .040$ ); *positive reinterpretation* was positively correlated with purpose in life (COPE-III:  $p = .046$ ); *problem solving orientation* was positively correlated with relationships with the others (COPE-IV:  $p = .013$ ); and finally *turning to religion* was positively correlated with purpose in life (COPE-V:  $p = .003$ );
- for hearing parents: *searching for social support* was negatively correlated with environmental mastery (COPE-I:  $p = .008$ ) and purpose in life (COPE-I:  $p = .009$ ); *avoidance* was negatively correlated with

autonomy (COPE-II:  $p = .033$ ), environmental mastery (COPE-II:  $p = .001$ ), personal growth (COPE-II:  $p = .006$ ), relationships with the others (COPE-II:  $p < .001$ ), purpose in life (COPE-II:  $p = .035$ ), and self-acceptance (COPE-II:  $p = .022$ ); *positive reinterpretation* was positively correlated with environmental mastery (COPE-III:  $p = .013$ ), personal growth (COPE-III:  $p = .022$ ), and purpose in life (COPE-III:  $p = .05$ ); *problem solving orientation* was positively correlated both with autonomy (COPE-IV:  $p = .034$ ) and environmental mastery (COPE-IV:  $p = .003$ ); and, finally, *turning to religion* was positively correlated with personal growth (COPE-V:  $p = .003$ ) and self-acceptance (COPE-V:  $p = .001$ ).

Table 6 - *Correlations between type of coping strategies and dimensions of psychological well-being separately for deaf (n = 36) and hearing parents (n = 39)*

Dimensions of psychological well-being	Group of parents	COPE-I	COPE-II	COPE-III	COPE-IV	COPE-V
Autonomy	deaf parents	-.58**	.02	.04	.22	-.18
	hearing parents	-.09	-.34*	.25	.34*	.13
Environmental mastery	deaf parents	-.10	-.30	.08	.07	-.11
	hearing parents	-.42**	-.52**	.40*	.46**	-.26
Personal growth	deaf parents	-.44**	-.58**	.12	-.04	-.25
	hearing parents	.19	-.43**	.37*	.09	.46**
Relations with others	deaf parents	-.40*	-.34*	.11	.41*	-.32
	hearing parents	.19	-.68**	.07	-.17	-.13
Purpose in life	deaf parents	.11	.32	.33*	.13	.48**
	hearing parents	-.42**	-.34*	.32*	.04	.30
Self-acceptance	deaf parents	.06	-.02	.08	-.30	.12
	hearing parents	.15	-.37*	.25	.07	.50**
PWB: total score	deaf parents	-.58**	-.24	.16	.27	-.12
	hearing parents	.23	-.57**	.30	.01	.36*

Note: COPE-I: Searching for social support; COPE-II: Avoidance; COPE-III: Positive reinterpretation; COPE-IV: Problem solving orientation; COPE-V: Turning to religion  
Significant correlations for \*  $p < .05$  and \*\*  $p < .01$



In order to verify the initial hypotheses ( $H_{4a}$  and  $H_{4b}$ ) about the role of coping strategies adopted by deaf and hearing parents on life satisfaction and psychological well-being, it was chosen to carry out linear regressions (separately for deaf and hearing parents) using COPE as independent variable whereas life satisfaction (LS) and psychological well-being (PWB) as dependent variables.

As expected by  $H_{4a}$ , results demonstrated that some coping strategies affected LS; namely,

- *searching for social support* negatively affected LS only for deaf parents ( $\beta = -.67$ ;  $t = -3.34$ ;  $p = .002$ );
- *avoidance* negatively affected LS only for hearing parents ( $\beta = -.31$ ;  $t = -2.09$ ;  $p = .04$ );
- finally, *turning to religion* positively affected LS only for hearing parents ( $\beta = .43$ ;  $t = 2.77$ ;  $p = .009$ ).

As hypothesized in  $H_{4b}$ , also in this case, results revealed that some coping strategies affected the PWB and these findings were provided both for deaf and hearing parents; specifically:

- *searching for social support* affected negatively autonomy only for deaf parents ( $\beta = -.82$ ;  $t = -4.77$ ;  $p < .001$ ) but positively relations with others only for hearing parents ( $\beta = .28$ ;  $t = 2.07$ ;  $p = .046$ );
- *avoidance* negatively affected environmental mastery ( $\beta = -.58$ ;  $t = -2.23$ ;  $p = .033$ ), personal growth ( $\beta = -.82$ ;  $t = -4.04$ ;  $p < .001$ ), but positively autonomy ( $\beta = .61$ ;  $t = 3.11$ ;  $p = .004$ ) all only for deaf parents; in addition, *avoidance* negatively affected environmental mastery ( $\beta = -.50$ ;  $t = -3.45$ ;  $p = .002$ ), personal growth ( $\beta = -.53$ ;  $t = -3.85$ ;  $p = .001$ ), relationships with others ( $\beta = -.69$ ;  $t = -5.06$ ;  $p < .001$ ), purpose in life ( $\beta = -.35$ ;  $t = -2.20$ ;  $p = .035$ ), and self-acceptance ( $\beta = -.50$ ;  $t = -3.43$ ;  $p = .022$ ) all for hearing parents;
- finally, *turning to religion* positively affected purpose in life only for deaf parents ( $\beta = .60$ ;  $t = 2.18$ ;  $p = .037$ ), and both personal growth ( $\beta = .52$ ;  $t = 3.55$ ;  $p = .001$ ) and self-acceptance ( $\beta = .63$ ;  $t = 4.10$ ;  $p < .001$ ) only for hearing parents.

## 5. Discussion

The main aims of this investigation were to carry out a comparison between deaf and hearing parents of deaf children and preadolescents with regard to coping strategies, life satisfaction, and psychological well-being, and to examine the role of coping strategies on life satisfaction and

dimensions of psychological well-being expressed by the two samples of parents.

Substantially, results confirmed the general expectations, except for the levels of satisfaction with life that was higher in deaf parents. According to H<sub>1</sub>, deaf parents tended to use more maladaptive coping strategies than hearing ones, recalling an attribution style characterized by external locus of control (see Weiner, 1985). Contrarily to H<sub>2</sub>, results indicated that levels of life satisfaction were higher in deaf parents compared with hearing ones. Finally, consistently with H<sub>3</sub>, results demonstrated that deaf parents reported lower psychological well-being than hearing ones, showing low levels of autonomy, reduced sense of personal growth, inadequate quality of relations with the others, and reduced purpose in life.

As for the role of coping strategies adopted by deaf and hearing parents on life satisfaction (H<sub>4a</sub>) and psychological well-being (H<sub>4b</sub>), findings partially confirmed the initial hypotheses, according to which the more the deaf and hearing parents with deaf sons/daughters (or with cochlear implants) were likely to make use of maladaptive coping strategies (that is, searching for social support and avoidance of critical events), the more they were dissatisfied with their everyday life; on the contrary, the more these parents (specifically, the hearing ones) tended to adopt the coping strategy linked to turning to religious beliefs, the more they were satisfied with their life. Additionally, the findings about the influence of coping strategies on psychological well-being confirmed the idea according to which the more the deaf and hearing parents with deaf sons/daughters (or with cochlear implants) were likely to make use of maladaptive coping strategies, the more they reported low psychological well-being and, specifically, low sense of personal growth and environmental mastery, and reduced purpose in life.

About the role of these parents of disabled children and preadolescents with sensory deficit, these findings indicated that, in comparison with the other parents, deaf mothers were more likely to use the searching for social support and avoidance strategies, while deaf fathers mainly tended to adopt the turning to religion strategy (obtaining high levels of life satisfaction). Additionally, in the current study, hearing mothers scored higher than the others on autonomy and personal growth, while hearing fathers scored higher than the others on positive relationships with other people. A possible explanation of this result could be directly associated (but not directly verified in this study) with the findings proposed by a large portion of the literature specialized on the impact of “deafness in family” (see Jackson & Turnbull, 2004): so, mothers were more stressed than fathers in the

management of language and system communication difficulties and adjustment of disabled pupils and, of consequences, less satisfied with their everyday life. These mothers would tend to adopt maladaptive strategies to cope with stressful events in their family's life span, also reporting lower levels of psychological well-being than the hearing parents.

About the turning to religion, which emerged as a coping strategy directly associated with some dimensions of psychological well-being and life satisfaction (especially, for the hearing parents with sensorial disabled sons/daughters), future research could clarify effects of religious beliefs and spirituality (see Bennett, Deluca, & Allen, 1995; Skinner, Correa, Skinner, & Bailey, 2001; Poston & Turnbull, 2004) in terms of resources to cope with stressful events in everyday life of families with sensorial disabled children. To this regard, Bennett and colleagues (1995) highlighted the role of prayer, church attendance, and specific religious beliefs, recognized as convenient activities to help some parents of disabled children to get a growing sense of hope and strength to overcome the difficulties associated with the growth of their disabled children. For these reasons, future investigations could examine the role of other predictors (e.g. optimistic orientation and hope) and protective factors (e.g. resilience and religious beliefs) on the well-being of mothers and fathers of disabled children in order to better understand the complex and multifaceted phenomenon of disability in the quality of life of the whole family.

Some limitations of this investigation could be due to the number of variables that may impact on psychological aspects, including the age of parents at child birth, the cause of deafness, the birth order of the deaf child, the number of deaf children, the presence of grandparents in the family, and so on. These variables were not included as selection criteria for this study because the focus was on the use of coping strategies of deaf and hearing parents with deaf children and preadolescents. However, it cannot be stated *a priori* that these variables did not affect the ways in which parents experienced their role. Future investigations could deal with the impact of these variables on coping strategies, life satisfaction, and psychological well-being.

## References

Ahlert, I. A., & Greeff, A. P. (2012). Resilience factors associated with adaptation in families with deaf and hard of hearing children. *American Annals of the Deaf*, 157, 391-404.

- Asberg, K. K., Vogel, J. J., & Bowers, C. A. (2008). Exploring correlates and predictors of stress in parents of children who are deaf: Implications of perceived social support and mode of communication. *Journal of Child and Family Studies, 17*, 486-499.
- Bennett, T., Deluca, D. A., & Allen, R. (1995). Religion and children with disabilities. *Journal of Religion and Health, 34* (4), 301-312.
- Bodner-Johnson, B. (1991). Family Conversation Style: Its effect on the Deaf Child's Participation. *Exceptional Children, 57* (6), 502-509.
- Burger, T., Spahn, C., Richter, B., Eissele, S., Lohle, E., & Bengel, J. (2005). Parental distress: The initial phase of hearing aid and cochlear implant fitting. *American Annals of the Deaf, 150* (1), 5-10.
- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology, 56* (2), 267-283.
- Cuskelly, M., & Gunn, P. (2006). Adjustment of children who have a sibling with Down syndrome: perspectives of mothers, fathers, and children. *Journal of Intellectual Disability Research, 50* (12), 917-925.
- Dabrowska, A., & Pisula, E. (2010). Parenting stress and coping styles in mothers and fathers of pre-school children with autism and Down syndrome. *Journal of Intellectual Disability Research, 54* (3), 266-280.
- De Caroli, M. E., & Sagone, E. (2013). Siblings and disability: A study on social attitudes toward disabled brothers and sisters. *Procedia – Social and Behavioral Sciences, 93*, 1217-1223.
- Delle Fave, A., Brdar, I., Freire, T., Vella-Brodrick, D., & Wissing, M. P. (2011). The eudaimonic and hedonic components of happiness: Qualitative and quantitative findings. *Social Indicators Research, 100*, 185-207.
- DesJardin, J. L. (2003). Assessing parental perceptions of self-efficacy and involvement in families of young children with hearing loss. *The Volta Review, 103* (4), 391-409.

DesJardin, J. L., & Eisenberg, L. S. (2007). Maternal contributions: Supporting language development in young children with cochlear implants. *Ear and Hearing, 28* (4), 456-469.

Dew, A., Baladin, S., & Llewellyn, G. (2008). The psychosocial impact in siblings of people with lifelong physical disability: A review of the literature. *Journal of Developmental and Physical Disabilities, 20*, 485-507.

Di Fabio, A., & Gori, A. (2015). Measuring adolescent life satisfaction. *Journal of Psychoeducational Assessment, 34* (5), 501-506.

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49*, 71-75.

Diener, E., Lucas, R. E., & Oishi, S. (2002). Subjective well-being: The science of happiness and life satisfaction. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 63-73). New York: Oxford University Press.

Feher-Prout, T. (1996). Stress and coping in families with deaf children. *Journal of Deaf Studies and Deaf Education, 1* (3), 155-166.

Findler, L. (2000) The Role of Grandparents in the Social Support System of Mothers of Children with a Physical Disability. *Families in Society: The Journal of Contemporary Social Services, 81* (4), 370-381.

Flaherty, M. (2015). What we can learn from hearing parents of deaf children. *Australian Journal of Special Education, 39* (1), 1-18.

Folkman, S., & Lazarus, R. S. (1988). Coping as a mediator of emotion. *Journal of Personality and Social Psychology, 54* (3), 466-475.

Freeman, B., Dieterich, C. A., & Rak, C. (2002). The struggle for language: Perspectives and practices of urban parents with children who are deaf or hard of hearing. *American Annals of the Deaf, 147* (5), 37-44.

Gregory, S., Bishop, J., & Shelton, L. (1995). *Deaf young people and their families: Developing understanding*. New York: Cambridge University Press.

Hastings, R. P. (1997). Grandparents of children with disabilities: a review. *International Journal of Disability, Development and Education*, 44 (4), 329-340.

Henderson, L. W., & Knight, T. (2012). Integrating the hedonic and eudaimonic perspectives to more comprehensively understand wellbeing and pathways to wellbeing. *International Journal of Wellbeing*, 2 (3), 196-221.

Hintermair, M. (2000). Hearing impairment, social networks, and coping: The need for families with hearing-impaired children to relate to other parents and to hearing-impaired-adults. *American Annals of the Deaf*, 145 (1), 41-53.

Hintermair, M. (2004). The sense of coherence: A relevant resource in the coping process of mothers with hearing impaired children? *Journal of Deaf Studies and Deaf Education*, 9 (1), 15-26.

Hintermair, M. (2006). Parental resources, parental stress, and socio-emotional development of deaf and hard of hearing children. *Journal of Deaf Studies and Deaf Education*, 11 (4), 493-513.

Hussain, A., & Juyal, I. (2007). Stress appraisal and coping strategies among parents of physically challenged individuals. *Journal of the Indian Academy of Applied Psychology*, 33 (2), 179-182.

Jackson, C. W. (2011). Family supports and resources for parents of children who are deaf or hard of hearing. *American Annals of the Deaf*, 156 (4), 343-362.

Jackson, C. W., & Turnbull, A. (2004). Impact of Deafness on Family Life: A Review of the Literature, *Topics in Early Childhood Special Education*, 24 (1), 15-29.

Jackson, C. W., Wegner, J. R., & Turnbull, A. P. (2010). Family quality of life following early identification of deafness. *Language, speech, and hearing services in schools*, 41 (2), 194-205.

Lardieri, L. A., Blacher, J., & Swanson, H. L. (2000). Sibling relationships and parent stress in families of children with and without learning disabilities. *Learning Disability Quarterly*, 23 (2), 105-116.

Lederberg, A. R., & Golbach, T. (2002). Parenting stress and social support in hearing mothers of deaf and hearing children: A longitudinal study. *Journal of Deaf Studies and Deaf Education*, 7 (4), 330-345.

Lee, M., & Gardner, J. E. (2010). Grandparents' involvement and support in families with children with disabilities. *Educational Gerontology*, 36 (6), 467-499.

Lopez, V., Clifford, T., Minnes, P., & Ouellette-Kuntz, H. (2008). Parental stress and coping in families of children with and without developmental delays. *Journal on Developmental Disabilities*, 14 (2), 99-104.

Luckner, J. L., & Velaski, A. (2004). Healthy families of children who are deaf. *American Annals of the Deaf*, 149, 324-335.

Moores, D. F., Jatho, J., & Dunn, C. (2001). Families with deaf members: American Annals of the Deaf, 1996 to 2000. *American Annals of the Deaf*, 146 (3), 245-250.

Nybo, W. L., Scherman, A., & Freeman, L. (1998). Grandparents' role in family systems with a deaf child. An exploratory study. *American Annals of the Deaf*, 143 (3), 260-267.

Patterson, J. M. (2002). Understanding family resilience. *Journal of Clinical Psychology*, 58 (3), 233-246.

Patterson, J. M., & Garwick, A. W. (1994). Levels of meaning in family stress theory. *Family Process*, 33 (3), 287-304.

Pavot, W., & Diener, E. (2008). The Satisfaction with Life Scale and the Emerging Construct of Life Satisfaction. *The Journal of Positive Psychology*, 3, 137-152.

Peterson, C., Ruch, W., Beermann, U., Park, N., & Seligman, M. E. P. (2007). Strengths of character, orientations to happiness, and life satisfaction. *Journal of Positive Psychology, 2*, 1-8.

Pipp-Siegel, S., Sedey, A. L., & Yoshinaga-Itano, C. (2002). Predictors of parental stress in mothers of young children with hearing loss. *Journal of Deaf Studies and Deaf Education, 7*, 1-17.

Poston, D. J., & Turnbull, A. P. (2004). Role of spirituality and religion in family quality of life for families of children with disabilities. *Education and Training in Developmental Disabilities, 39* (2), 95-108.

Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: a review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology, 52*, 141-166.

Ryff, C. D., & Singer, B. H. (1996). Psychological well-being: meaning, measurement, and implications for psychotherapy research. *Psychotherapy and Psychosomatics, 65*, 14-23.

Ryff, C. D., & Singer, B. H. (2008). Know Thyself and Become What You Are: A Eudaimonic Approach to Psychological Well-Being. *Journal of Happiness Studies, 9* (1), 13-39.

Ryff, C. D., & Keyes, C. L. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology, 69* (4), 719-727.

Scheier, M. F., & Carver, C. S. (1985). Optimism, coping, and health: assessment and implications of generalized outcome expectancies. *Health Psychology, 4* (3), 219-247.

Seligman, M. E. P. (2011). *Flourish – A new understanding of happiness and well-being – and how to achieve them*. London: Nicholas Brealey Publishing.



Sica, C., Magni, C., Ghisi, M., Altoè, G., Sighinolfi, C., Chiri, L. R., & Franceschini, S. (2008). Coping Orientation to Problems Experienced-Nuova Versione Italiana (COPE-NVI): Uno strumento per la misura degli stili di coping. *Psicoterapia cognitiva e comportamentale*, 14 (1), 27-53.

Sica, C., Novara, C., Dorz, S., & Sanavio, E. (1997). Coping strategies: Evidence for cross-cultural differences? A preliminary study with the Italian version of Coping Orientations to the Problems Experienced. *Personality and Individual Differences*, 23, 1025-1029.

Skinner, D. G., Correa, V., Skinner, M., & Bailey, D. B. Jr (2001). Role of Religion in the Lives of Latino Families of Young Children With Developmental Delays. *American Journal on Mental Retardation*, 106 (4), 297-313.

Sullivan, A. (2002). Gender differences in coping strategies of parents of children with Down syndrome. *Down's syndrome, Research and Practice: The Journal of the Sarah Duffen Centre*, 8 (2), 67-73.

Szarkowski, A., & Brice, P. J. (2005). Positive aspects of parenting a deaf child: Categories of potential positive influence. *Journal of the American Deafness and Rehabilitation Association*, 37, 384-395.

Walsh, F. (1996). The concept of family resilience: crisis and challenge. *Family Process*, 35 (3), 261-281.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54 (6), 1063-1070.

Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review*, 92 (4), 548-573.

Zaidman-Zait A. (2007). Parenting a child with a cochlear implant: A critical incident study. *Journal of Deaf Studies and Deaf Education*, 12 (2), 221-241.

Zaidman-Zait A., & Most, T. (2005). Cochlear implants in deaf children: Maternal expectations and impact on the family. *The Volta Review*, 105 (2), 129-150.

Zaidman-Zait A., Most, T., Tarrasch, R., Haddad-Eid, E., & Brand, D. (2016). The impact of childhood hearing loss on the family: mothers' and fathers' stress and coping resources. *Journal of Deaf Studies and Deaf Education*, 21 (1), 23-33.

Zani B., & Cicognani, E. (1999). *Le vie del benessere*. Roma: Carocci.