

Association between burnout and sense of coherence among speech and language therapists: an exploratory study in Italy

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Abstract. *Background and aim:* Job burnout has been recognized as a serious occupational hazard among professionals, such as health care professionals. The sense of coherence (SoC) is deemed to be a personal resource capable of reducing the impact of job stressors and, consequently, the experience of job burnout. The purpose of this study was to investigate the relationship between SoC and job burnout among speech and language therapists. *Materials and methods:* A descriptive and cross-sectional analysis was carried out through an online self-reported questionnaire. A total of 217 Italian speech and language therapists were involved in the study. The Anova test, T-test and logistic regression were performed to study the association between SoC and job burnout. *Results:* The Anova test showed that job tenure was not associated to job burnout. The T-test showed that speech and language therapists having a low SoC exhibited significantly higher emotional exhaustion, higher cynicism, and lower professional efficacy ($t=-7.190$ d.f.=215 $p<.001$) when compared to those having a high SoC. Finally, the odds ratio showed that low SoC was associated with high emotional exhaustion (OR=11.86; 95% CI=5.52-25.49; $p<0.05$), low SoC was associated with high cynicism (OR=4.41, CI=2.50-7.80; $p<0.05$), and low SoC was associated with low personal efficacy (OR=4.70; CI=2.59-8.52; $p<0.05$). *Conclusion:* Our results are in line with previous studies which showed that SoC is a fundamental personal resource which may activate workers' reaction to various stressors, thus reducing the experience of burnout. (www.actabiomedica.it)

Key words: sense of coherence, emotional exhaustion, cynicism, professional efficacy, job burnout, speech and language therapists

Introduction

Over the last 25 years, the percentage of workers at risk of suffering from high occupational stress has increased, affecting more than 30% of workers globally. The 5th European Working Conditions Survey reported that, during the previous three years, around 45% of workers had experienced different psychosocial risks that significantly affected their workplace (1). If not controlled, those psychosocial risks can expose workers to the risk of developing severe distress, anxiety, depression, and burnout (2).

Recently, EUROFOUND highlighted that between 15% and 25% of EU workers reported moderate forms of job burnout (3). Job burnout is considered as the result of workers' cumulative negative response to chronic work-related stress. It has been operationalized as consisting of three components: emotional exhaustion, cynicism, and professional inefficacy. Emotional exhaustion is mainly related to workers' experience of stress and the associated deterioration of emotional and physical resources. According to Leiter and Maslach's definition (4), the experience of exhaustion reduces workers' initiative while progressively limit-

ing their capacity for demanding work' (5). Cynicism refers to detachment from work as a reaction to the overload of exhaustion and it is linked to the loss of passion for one's work (4). Finally, professional inefficacy refers to workers' feelings of ineffectiveness and lack of achievement and productivity at work (4).

Burnout has been identified as an occupational hazard which affects mainly helping professionals, such as human service, education and health care professionals. Job burnout has been associated with several health problems, such as hypertension, gastrointestinal disorders, and insomnia (6, 7). It has also been associated with performance related issues (8-11), demonstrating its direct impact on workplace effectiveness.

In the last two decades there has been an increased emphasis on resource-based theories on stress. According to Hobfoll, job burnout could be considered as the result of people's failure in acquiring adequate resources (12). In this respect, job burnout might thus occur due to a lack of resources (13). According to the Conservation of Resources (COR) theory, resources are defined as 'those entities that either are centrally valued in their own right, or act as means to obtain centrally valued ends' (13).

Among the most prominent resource-based theories on stress, Antonovsky (14) suggested that a strong sense of coherence (SoC) might be a personal resource capable of enabling individuals to mobilize external and internal resources to reduce the impact of job stressors and promote effective coping strategies by finding solutions and resolving tension in a health promoting manner (15).

SoC has been defined as: "A global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (a) the stimuli deriving from one's internal and external environments in the course of living are structured, predictable and explicable; (b) the resources are available to one to meet the demands posed by these stimuli; and (c) these demands are challenges, worthy of investment and engagement" (16).

SoC entails elements of comprehensibility (cognitive elements), manageability (instrumental elements) and meaningfulness (motivational elements) (17) which allow workers to make use of adaptive coping strategies (18). Accordingly, workers with high

SoC perceive and understand the world as more comprehensive, manageable, and meaningful (19). Baker et al. (1997) suggested that SoC is negatively correlated with emotional exhaustion and cynicism, and positively correlated with personal accomplishment (20). Del-Pino-Casado et al. (2018) highlighted that high levels of SoC may protect workers from job stress and they are linked to a reduced risk for various health problems (21,22). On the contrary, a weak SoC might lead to job stress and burnout.

In the last 25 years, there has been a considerable amount of research that has examined burnout and SoC in several helping professions. Among those, speech and language therapists are vulnerable to burnout because of their role in the rehabilitation process, which requires close interaction with patients, frequent contact with patients may suffer with pain, and may face discouraging barriers or setbacks during extended treatment intervals. According to Worrall and Yiu (2000), speech-language therapists develop a deep relationship with their patients, becoming psychologically and emotionally involved in helping others (23). However, very few researches have investigated these phenomena, pertaining to speech and language therapists. In fact, the available studies investigating burnout among speech and language therapists are related to the macro-group of workers in rehabilitation contexts. For example, Li Calzi and colleagues (2006) in their study found that rehabilitation therapists showed "medium" levels of both emotional exhaustion and cynicism (24).

Aim

The purpose of this study was to investigate the relationship between SoC and job burnout among speech and language therapists.

Methods

Design and participants

A descriptive and cross-sectional analysis was carried out through an online self-reported questionnaire

on limesurvey. The convenience sample was recruited through a public announcement on Italian official social network groups of speech and language therapists which contained an invitation to participate in the anonymous survey.

Specifically, the survey's homepage reported information about the study purpose and a general description of the questionnaire, including information about risks and benefits of participating. The time needed to complete the survey and privacy policy information were also reported. All the survey was in Italian language. A total of 217 Italian speech and language therapists were involved in the study. 94.5% of the total were women (N=205) and 5.5% were men (N=12).

The mean age of the respondents was 32.15 ± 9.47 years, with an average length of service of 8.32 ± 8.92 years.

Instrument

The questionnaire included a socio-demographic section and a set of validated scales from the international literature. The Italian version of Maslach Burnout Inventory-General Survey was used (25). Participants used a seven-point Likert scale, ranging from 0 (never) to 6 (every day), to rate the extent to which they experienced emotional exhaustion (5 items; e.g., 'I felt emotionally drained from my work'), cynicism at work (5 items; e.g., 'I have become less enthusiastic about my work') and professional efficacy (6 items; e.g., 'At my work, I feel confident that I am effective at getting things done'). In the present study, Cronbach's alpha for each subscale was 0.90 for emotional exhaustion, 0.83 for cynicism and 0.76 for professional efficacy.

SoC was measured by using the Italian adaptation of the SOC-13 developed by Antonovsky (26). The scale consists of 13 items, each of which is scored on a Likert scale, ranging from 1 ('very often') to 7 ('very seldom or never'). The SOC scale measures three dimensions: comprehensibility (five items; e.g.: 'Do you have the feeling that you are in an unfamiliar situation and don't know what to do?'); manageability (four items; e.g.: 'Has it happened that people whom you counted on disappointed you?'); and meaningfulness

(four items; e.g.: 'Until now your life has had: no clear goals or purpose at all - very clear goals and purpose'). Cronbach's alpha was 0.78.

Data analysis

Frequency and percentage have been used in analyzing data. The relationships between burnout (emotional exhaustion, cynicism and professional efficacy) and SoC have been analyzed with the Pearson correlation analysis.

For multiple comparisons, the ANOVA test with Bonferroni correction was used to examine between-group burnout and SoC differences. The ANOVA test was deemed to be appropriate, as the data displayed normally distributed residuals and homogeneity of variance. Logistic regression was performed in order to study the relationship between SoC and burnout. The independent variables used in the burnout model included demographic characteristics (i.e., tenure) and SoC levels. Burnout and SoC were divided into two levels, high vs. low, using 33rd and 66th percentiles as cut-off points. Tenure was divided into three groups: less than 2 years, from 2 to 10 years, more than 10 years.

The odds ratios (ORs) and their 95% confidence intervals (CIs) were calculated. A significance level of 0.05 was chosen. Statistical analyses were carried out by using the SPSS program version 21.0 (SPSS: An IBM Company, Chicago, IL, USA).

Ethical consideration

This study has been conducted in accordance with the recommendations of the local ethic committee at the University of Cagliari. In Italy, no ethical approval is required for observational nature studies, since they are not defined as medical/clinical research, according to the Italian law No. 211/2003. In fact, the study included non-clinical surveys which used non-invasive measures (self-ratings).

Furthermore, this study complies with the Declaration of Helsinki (27) and with the Italian privacy law (Decree No. 196/2003). No treatments or false feedbacks were given, and no potentially harmful evaluation methods were used.

Participation was completely voluntary, and participants could drop out at any time without any negative consequences. All data were stored only by using an anonymous ID for each participant. Written online informed consent to participate in the survey was provided by clicking on 'I accept.'

Results

Means and standard deviations for the study's variables are given in Table 1. Our results supported the underlying assumptions postulated in the literature about the correlation between SoC and burnout. Specifically, Pearson correlation showed that SoC was negatively correlated to EE ($r=-0.40$, $p<.01$), cynicism ($r=-0.39$, $p<.01$) and PE ($r=-0.41$, $p<.01$).

The ANOVA test showed a non-significant main effect of job tenure on emotional exhaustion, $F(2, 210)= 0.104$, *ns*, cynicism $F(2, 210)= 0.047$, *ns*, and personal efficacy $F(2, 210)= 0.523$, *ns*.

Results from the Independent Samples t-Test (table 2) showed that speech and language therapists with low SoC exhibited significantly higher emotional exhaustion ($t=7.941$ d.f.=215 $p<.001$), higher cynicism

($t=6.676$ d.f.=215 $p<.001$), and lower professional efficacy ($t=-7.190$ d.f.=215 $p<.001$) when compared to those having high SoC.

Finally, in order to assess the impact of SoC on burnout among speech and language therapists, binary logistic regression was performed. The association between low SoC and high emotional exhaustion (66th percentile: >3.6) was statistically significant $OR=11.86$; 95% $CI=5.52-25.49$; $p<0.05$ (table 3), low SoC was associated with high cynicism (66th percentile: >2.00) $OR=4.41$, $CI=2.50-7.80$; $p<0.05$ (table 3), and low SoC was associated with low personal efficacy (33rd percentile: <4.67) $OR=4.70$; $CI=2.59-8.52$; $p<0.05$ (table 4).

Discussion

The present study aimed at investigating how SoC was associated with job burnout (e.g., emotional exhaustion, cynicism and personal efficacy) among Italian speech and language therapists.

We did not find significant associations between job tenure and the three components of job burnout in this study. These results are not in line with traditional

Table 1. Means, standard deviations and Pearson correlation (r) between the variables of the study (N=217)

	M	SD	1	2	3	4
1. Job tenure	8.32	8.93				
2. SoC	4.54	0.57	0.28**			
3. EE	2.96	1.45	-0.03	-0.40**		
4. Cynicism	1.76	1.40	-0.08	-0.39**	0.65**	
5. PE	4.90	0.85	0.12	0.41**	-0.34**	-0.43*

SoC: Sense of Coherence, EE: Emotional Exhaustion, PE: Professional efficacy M: mean, SD: standard deviation ** $p<0.01$, * $p<0.05$

Table 2. The associations between SoC and emotional exhaustion among speech and language therapists (N=151)

Variables	Emotional Exhaustion				OR	95% CI
	High		Low			
	N	%	N	%		
SoC						
Low	61	77.2%	16	22.2%	11.86*	5.52-25.49
High	18	22.8%	56	77.8%		

SoC=Sense of Coherence; OR=odds ratio; 95% CI=95% confidence interval. * $p<0.05$

Table 3. The associations between SoC and emotional exhaustion among speech and language therapists (N=111)

Variables	Cynicism				OR	95% CI
	High		Low			
	N	%	N	%		
SoC						
Low	75	67.6%	34	32.1%	4.41*	2.50-7.80
High	36	32.4%	72	67.9%		

SoC=Sense of Coherence; OR=odds ratio; 95% CI=95% confidence interval. * p<0.05

Table 4. The associations between SoC and emotional exhaustion among speech and language therapists (N=111)

Variables	Personal efficacy				OR	95% CI
	High		Low			
	N	%	N	%		
SoC						
Low	61	72.6%	48	36.1%	4.70*	2.59-8.52
High	23	27.4%	85	63.9%		

SoC=Sense of Coherence; OR=odds ratio; 95% CI=95% confidence interval. * p<0.05

studies which showed that workers having a longer job tenure are at higher risk for job burnout (28). Other studies (29-30) reported insignificant associations between job tenure and emotional exhaustion, cynicism and lower professional efficacy.

Results from the Independent t-Test showed that low levels of SoC are significantly associated with higher levels of emotional exhaustion, cynicism and lower professional efficacy. Furthermore, when odds ratios were considered, a significantly increased OR in emotional exhaustion, cynicism and low personal efficacy emerged when SoC was low. Those results are in line with previous researches, which highlighted that SoC is an essential personal resource in activating workers' reaction to various stressors (31). Basically, the stronger SoC a worker has, the better ability to activate cognitive, affective and instrumental strategies directly linked to wellbeing he/she has. Accordingly, these outcomes corroborate the theory that SoC is an important personal resource which allows workers to appraise work-related stressors as not relevant, facilitating problem-solving under stress and protecting workers from burnout (32).

Study limitations

The first limitation of this study is that participants were not randomly selected from the national health care system. This may create a selection bias and limit the generalizability of the results. The study must be repeated by analyzing a larger and more representative sample of speech and language therapists. The second limitation of this study is that the data were cross-sectional in nature. This precludes conclusions about the direction of the relationships between SoC and burnout observed. Future longitudinal research is required to further understand how SoC influences the development of job burnout. Another limitation is represented by the use of a self-reported questionnaire, which may have determined a bias related to social desirability and common method (33).

Conclusions

This study suggests that low SoC is a potential risk factor for job burnout among speech and lan-

guage therapists. In his definition, Antonovsky (14) theorized SoC as an attitude developed in childhood and stable after age 30. However, recently, Kähönen, Näättänen, Tolvanen, and Salmela-Aro (34) developed a salutogenic group intervention aimed to increase SoC among healthcare workers. Future studies should consider the efficacy of this intervention among speech and language therapists.

Conflict of interest: None to declare

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