



Research Article

Relationship between burnout and depressive symptoms: A study using the person-centred approach



Kirsi Ahola^{a,*}, Jari Hakanen^a, Riku Perhoniemi^a, Pertti Mutanen^b

^a Work Organizations, Finnish Institute of Occupational Health, Topeliuksenkatu 41 a A, FI-00250 Helsinki, Finland

^b Creating Solutions, Finnish Institute of Occupational Health, Topeliuksenkatu 41 a A, FI-00250 Helsinki, Finland

ARTICLE INFO

Article history:

Received 20 November 2013

Received in revised form 19 March 2014

Accepted 27 March 2014

Keywords:

Burnout

Dentistry

Depression

Latent class analysis

Person-centred approach

Psychosocial factors at work

ABSTRACT

We applied a person-centred approach to study the relationship between burnout and depressive symptoms at baseline and over seven years. We examined how the symptom clusters and trajectories are related to the baseline sociodemographic and psychosocial work characteristics. At baseline, burnout and depressive symptoms clustered into three groups: low, intermediate, and high level of symptoms. Four developmental trajectories – low, high, increasing and decreasing symptoms – emerged in the longitudinal analysis. The psychosocial work characteristics were reflected in the level and development of the symptoms. The results support the conceptual similarity between burnout and depressive symptoms in the work context.

© 2014 The Authors. Published by Elsevier GmbH. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/3.0/>).

1. Introduction

The nature of the relationship between burnout and depression has long been a focus of scientific interest in occupational health (Ahola et al., 2005; Ahola & Hakanen, 2007; Bakker et al., 2000; Iacovides, Fountoulakis, Kaprinis, & Kaprinis, 2003; Leiter & Durup, 1994; Schaufeli & Enzmann, 1998; Shirom, 2005; Toker & Biron, 2012; Warr, 1987). Burnout is a process in which the psychological resources of an employee are gradually depleted as a consequence of prolonged stress at work (Maslach, Schaufeli, & Leiter, 2001). A mismatch between the expectations and the resources of the worker on the one hand and the job demands, job resources, and possibilities in the job on the other may lead to burnout, if coping is dysfunctional and the mismatch prevails (Schaufeli & Enzmann, 1998). Research has found that high work load, as well as lack of participation and social support at work, increases the risk of burnout (Schaufeli & Enzmann, 1998; Ahola et al., 2006). In the final stage of this process, burnout can also be defined as a three-dimensional syndrome of exhaustion, cynicism, and diminished professional efficacy (Maslach & Jackson, 1996). Depression in turn can be defined as a way of reacting to challenges that are perceived as impossible, as a melancholy mood state, or as a clinical mental disorder (Gruenberg & Goldstein, 2003). Depression is non-specific in nature and can develop in any domain of life.

Further, depressive disorders are multifactorial in origin. Genetic, developmental, and environmental influences are interlinked in the process (Hidaka, 2012; Kendler, Gardner, & Prescott, 2002; Kendler, Gardner, & Prescott, 2006; Kessler, 1997) and work factors represent one type of environmental influence. Evidence exists that high job demands, as well as low job control and social support, increase the risk of depression (Bonde, 2008; Sinokki et al., 2009; Virtanen et al., 2007).

Results regarding the relationship between burnout and depression are mixed (Ahola & Hakanen, 2007; Bakker et al., 2000; Toker & Biron, 2012; Hakanen & Schaufeli, 2012; McKnight & Glass, 1995). The manifestation of burnout and depression with similar and correlating symptoms (for example, low energy and self-esteem) refers to the similar phenotype of the constructs. However, several studies using confirmatory factor analyses have shown that the burnout and depressive symptoms do not psychometrically group together (Bakker et al., 2000; Leiter & Durup, 1994; Iacovides, Fountoulakis, Moysidou, & Ierodiakonou, 1999). Instead of loading on one factor, that would be expected were burnout and depression manifestations of the same phenomenon, two second-order factors emerged when the questionnaire items measuring burnout and depressive symptoms were analysed together. In addition, burnout and depression do not always co-exist. In a population-based Finnish study, half of the employees with severe burnout had a depressive disorder while the other half was free of such disorders (Ahola et al., 2005).

It has also been studied whether burnout and depression share a similar process occurring in different contexts, i.e., at work

* Corresponding author. Tel.: +358 30 474 2492; fax: +358 30 474 2552.

E-mail addresses: kirsi.ahola@ttl.fi (K. Ahola), jari.hakanen@ttl.fi (J. Hakanen), pertti.mutanen@ttl.fi (P. Mutanen).

regarding burnout and in private life regarding depression (Bakker et al., 2000; Taris, 2006). In a Dutch study among teachers it was found that lack of reciprocity in the work domain was associated with burnout, whereas lack of reciprocity in intimate relationships outside work was associated with depressive symptoms (Bakker et al., 2000), supporting the qualitative similarity between burnout and depression. However, other studies have found qualitative differences in the process and associates of burnout and depression. For example, in a Dutch study among teachers a reduced sense of superiority, i.e., the inability to rate oneself favourably in comparison to others, was related to depressive symptoms but not to burnout (Brenninkmeijer, van Yperen, & Buunk, 2001). Burnt out teachers experienced depressive symptoms only when their sense of superiority compared to their colleagues was low. Similarly, in a French study among health care professionals burnout and depressive symptoms were differently related to sociodemographic and work factors (Martin et al., 1997). Burnout was more common among female workers with unconventional work hours, young workers, and those who had instrumental work motivation, whereas depressive symptoms were more common among senior workers and those with a low level of social support at work. There are differences between burnout and depression also on the inflammatory biomarker level (Toker, Shirom, Shapira, Berliner, & Melamed, 2005). Among female Israeli employees, burnout was positively associated with the concentrations of C-reactive protein and fibrinogen, while depressive symptoms were not. In conclusion, many studies have refuted the idea of burnout and depression sharing the same process.

These studies showing both similarities and distinctions between burnout and depression raise questions regarding the relationship between these constructs. Answers have been sought by investigating the temporal relationship between burnout and depressive symptoms. Among nurses, burnout and depressive symptoms seemed to develop in parallel, but independently of each other (McKnight & Glass, 1995). In other samples, reciprocal associations between the two were observed, i.e., a path emerged from burnout to depressive symptoms as well as from depressive symptoms to burnout (Ahola & Hakanen, 2007; Toker & Biron, 2012; Nyklíček & Pop, 2005). Among dentists, the unidirectional path from burnout to depressive symptoms gained the strongest support (Hakanen & Schaufeli, 2012).

The mixed results on burnout and depression could reflect there being several kinds of subgroups and on-going processes. Previous inconsistent findings on the relationship between burnout and depressive symptoms have been obtained with a variable-centred methodology (i.e., correlation, regression, and structural equation). These approaches focus on the stability of the variables and ignore potential variability and differences between individuals. Instead, person-centred methodology (i.e., cluster analysis, latent class analysis, and growth mixture modelling) enables the simultaneous investigation of several constructs at a time and allows the dynamics between the constructs to be taken into account (Jung & Wicrama, 2008; Laursen & Hoff, 2006; Magnusson, 1999). To the best of our knowledge, the person-centred approach has not previously been applied to the investigation of the relationship between burnout and depressive symptoms.

The aim of this study among Finnish dentists was first to determine how burnout and depressive symptoms cluster at the baseline and then to analyse how they develop during the follow-up using the person-centred approach. We defined burnout as a syndrome of emotional exhaustion, depersonalization and diminished personal accomplishment and used the mood state definition of depression which was operationalized using depressive symptoms. We first analysed whether the burnout and depressive symptoms occur together, as would be expected if they are manifestation of the same phenomenon or whether dentists

form subgroups showing different combinations of burnout and depressive symptom levels as would be expected if burnout and depression were two independent constructs. The mean levels of burnout and depressive symptoms were the core determinants in forming the clusters at the baseline of the study. In the second phase of the study, we analysed the development of the symptoms over three time points in seven years in order to find out if burnout and depressive symptoms develop in tandem or separately. The former would be expected if burnout and depressive symptoms were manifestations of the same phenomenon and the latter if the phenomena were independent of each other. The initial mean level and the growth (increase or decrease) of burnout and depressive symptoms in the three measurement points were the determinants in forming the latent developmental trajectories. Finally, we compared the socio-demographic and work characteristics of the employees in the emerging clusters and trajectories in order to describe the subgroups.

2. Materials and methods

2.1. Participants

This study was part of a longitudinal research project on well-being and health in dentistry. At baseline in 2003 (Time 1, T1), a questionnaire was sent to all dentist members of the Finnish Dental Association ($n = 4588$). Participation was voluntary. We obtained the approval of the Ethics Committee of the Finnish Institute of Occupational Health for the study. Altogether, 3255 (71%) dentists responded. Of those identified three years later in 2006 ($n = 3035$), 2555 (84%) took part in the follow-up study (Time 2, T2). In 2010 (Time 3, T3), 1964 dentists participated in the study once more. They constituted 86% of those Time 2 participants that could be identified ($n = 2275$) and 60% of the Time 1 participants.

At Time 1, the sample was representative of all Finnish dentists in terms of sex and age (Hakanen, 2004). At Time 3, women (77% vs. 64%, $p < 0.001$), older dentists (44 vs. 42 years, $p < 0.001$), and those with less depressive symptoms ($p < 0.05$) were slightly over-represented among participants compared to the drop-outs. At Time 3, the participants accounted for half (49%) of the practising dentists in Finland.

2.2. Measures

Burnout was measured using the Maslach Burnout Inventory (MBI) which is intended for use in human service work (Maslach & Jackson, 1996; Maslach, Leiter, & Schaufeli, 2008). The emotional exhaustion subscale comprised nine items, the depersonalization subscale five items, and the personal accomplishment subscale seven items. The items are scored on a seven-point frequency rating scale ranging from 0 ("never") to 6 ("daily"). High scores on emotional exhaustion and depersonalization and low scores on personal accomplishment are indicative of burnout. The items of personal accomplishment were reversed. We included people with a maximum of two missing values on the emotional exhaustion scale, one missing value on the cynicism scale, and two missing values on the personal accomplishment scale. A respondent's missing values were replaced by the mean of the respondent's existing values of the dimension in question. The reliability (Cronbach's α) of the whole inventory was 0.89 at T1, and 0.90 at both T2 and T3.

In order to assess the level of burnout, we calculated a weighted sum score of the dimensional averaged scores so that exhaustion, depersonalization and diminished personal accomplishment had different weights in the syndrome (Kalimo, Pahlkin, Mutanen, & Toppinen-Tanner, 2003; Kalimo, Hakanen, & Toppinen-Tanner, 2006). This syndrome indicator was derived with the help of a discriminant function analysis in which various health-related

Download English Version:

<https://daneshyari.com/en/article/317366>

Download Persian Version:

<https://daneshyari.com/article/317366>

[Daneshyari.com](https://daneshyari.com)