Personality and Individual Differences 100 (2016) 1–5

Contents lists available at ScienceDirect

Personality and Individual Differences

journal homepage: www.elsevier.com/locate/paid

Burnout is associated with a depressive cognitive style☆

Renzo Bianchi [a,*], Irvin Sam Schonfeld [b]

[a] University of Neuchâtel, Institute of Work and Organizational Psychology, Neuchâtel, NE, Switzerland
[b] The City College of the City University of New York, Department of Psychology, New York, NY, United States

ARTICLE INFO

Article history:
Received 17 June 2015
Received in revised form 2 January 2016
Accepted 5 January 2016
Available online 15 January 2016

Keywords:
Burnout
Depression
Depressive cognitive style
Helplessness
Need for approval
Perfectionism
Pessimistic attribution
Rumination

ABSTRACT

We examined whether burnout is associated with a depressive cognitive style, understood as a combination of dysfunctional attitudes, ruminative responses, and pessimistic attributions. A total of 1386 U.S. public school teachers were included—1063 women (M_{AGE}: 42.73, SD_{AGE} = 11.36) and 323 men (M_{AGE}: 44.60, SD_{AGE} = 11.42). Burnout was assessed with the Shirom–Melamed Burnout Measure (SMBM). Dysfunctional attitudes were measured with the Dysfunctional Attitude Scale Short Form, ruminative responses with the Ruminative Responses Scale, and pessimistic attributions with the Depressive Attributions Questionnaire. For comparative purposes, depression was assessed using the 9-item depression module of the Patient Health Questionnaire (PHQ-9). Dysfunctional attitudes, ruminative responses, and pessimistic attributions were each similarly associated with burnout and depression. Moreover, the correlations between the SMBM and the PHQ-9 that we observed were comparable to the correlations between the SMBM and the Maslach Burnout Inventory-General Survey reported in past research. Dysfunctional attitudes, ruminative responses, and pessimistic attributions were more characteristic of individuals with high frequencies of burnout (or depressive) symptoms than of their counterparts with low frequencies of burnout (or depressive) symptoms. This study suggests that burned out individuals live in a depressive cognitive world, consistent with the view that burnout is a depressive syndrome.

1. Introduction

Burnout has been defined as a long-term, negative affective state consisting of emotional exhaustion, physical fatigue, and cognitive weariness (Shirom & Melamed, 2006; Toker & Biron, 2012). Burnout is assumed to result from chronic exposure to job stressors (Maslach, Schaufeli, & Leiter, 2001), with genetics explaining about one-third of the variance in the syndrome (Blom, Bergström, Hallsten, Bodin, & Svedberg, 2012). In the 10th edition of the *International Classification of Diseases* (World Health Organization, 1992), burnout is indexed as a factor influencing health status and contact with health services—burnout is coded Z73.0 and defined as a "state of vital exhaustion." Burnout has been related to many adverse health outcomes. For instance, burnout has been prospectively identified as a risk factor for coronary heart disease (Toker, Melamed, Berliner, Zeltser, & Shapira, 2012). Burnout has been viewed as a growing burden for working individuals, organizations, and society as a whole (Maslach et al., 2001).

Depression is primarily characterized by anhedonia and dysphoric mood (American Psychiatric Association [APA], 2013), referring at a cerebral level to hypo-activity of the reward system and hyper-activity of the punishment system, respectively (e.g., Pryce et al., 2011). Depression has been causally related to both acute and chronic stress (Alloy, Abramson, Walshaw, & Neeren, 2006; Pizzagalli, 2014; Slavich & Irwin, 2014; Tennant, 2001). Individual dispositions such as *dysfunctional attitudes*—e.g., pathological perfectionism and need for approval—, *ruminative responses*—repetitive and passive focus on the causes and consequences of one's symptoms of distress without engagement in active coping or problem solving to alleviate dysphoric mood—, and *pessimistic attributions*—the tendency to ascribe negative life events to *internal* (self-dependent), *stable* (unlikely to change), and *global* (likely to affect all areas of life) causes—have been identified as depressogenic factors (Alloy et al., 2006; Joorman, 2009; Michl, McLaughlin, Shepherd, & Nolen-Hoeksema, 2013; Mor & Winquist, 2002). Depression is considered an important public health problem. In the U.S., about 17% of adults experience at least one episode of major depression during their lifetime (Kessler et al., 2005); the lifetime prevalence of major depression in six E.U. countries (Belgium, France, Germany, Italy, The Netherlands and Spain) has been estimated to be 13% (Alonso et al., 2004).

Burnout has often been described in a way that is evocative of depression. In his seminal article on burnout, Freudenberger (1974) already indicated that when experiencing burnout, "the person looks, acts and seems depressed" (p. 161). Maslach and Leiter (1997) emphasized that burnout not only concerns the "presence of negative emotions" but also the "absence of positive ones" (p. 28), thus connecting

☆ This article is a Special issue article – "Young researcher award 2015".

* Corresponding author at: Institut de Psychologie du Travail et des Organisations, Université de Neuchâtel, rue Émile Argand 11, 2000 Neuchâtel, Switzerland.
E-mail address: renzo.bianchi@unine.ch (R. Bianchi).

http://dx.doi.org/10.1016/j.paid.2016.01.008
0191-8869/

Table 1
Means (*M*), standard deviations (*SD*), Cronbach's alphas (α), and correlations between the main study variables.

	M	*SD*	α	1	2	3	4	5	6	7	*M*	*SD*	α
1. Burnout (1–7)	3.65	1.38	.96	–	.80	.46	.49	.58	−.22	−.19	3.42	1.39	.96
2. Depression (0–27)	8.95	6.02	.87	.76	–	.47	.53	.56	−.17	−.12	8.40	6.22	.88
3. Dysfunctional attitudes (0–3)	1.06	0.53	.85	.42	.45	–	.48	.67	−.18	−.15	1.09	0.52	.84
4. Ruminative responses (1–4)	2.19	0.52	.80	.42	.48	.40	–	.58	−.12	−.09	1.99	0.52	.81
5. Pessimistic attributions (0–4)	1.16	0.77	.93	.53	.57	.63	.56	–	−.14	−.16	1.17	0.74	.93
6. Age	42.73	11.36	–	−.10	−.07	−.14	−.10	−.16	–	.77	44.60	11.42	–
7. Length of employment	14.35	9.28	–	−.08	−.06	−.11	−.10	−.11	.79	–	15.90	10.52	–

Notes. Entries below the diagonal represent women's results (full female sample; $n = 1063$); entries above the diagonal represent men's results (full male sample; $n = 323$). For women, any correlation the absolute value of which is greater than .06 is significant at $p < .05$; for men, any correlation the absolute value of which is greater than .10 is significant at $p < .05$.

burnout[1] with anhedonia and dysphoric mood, the two core symptoms of depression (APA, 2013). In a similar vein, Schaufeli and Buunk (2004) noted that "first and foremost, burnt-out individuals feel helpless, hopeless and powerless" (p. 399), suggestive of the learned helplessness and hopelessness theories of depression (Abramson, Metalsky, & Alloy, 1989; Peterson, Maier, & Seligman, 1993; Pryce et al., 2011). Peterson et al. (1993) described burnout as "an excellent example of learned helplessness" (p. 257). In the last decade, empirical evidence for an overlap of burnout with depression has in fact grown (Bianchi, Schonfeld, & Laurent, 2015a, 2015b). The burnout-depression overlap has notably been observed at etiological and symptom levels. Given their closeness, it has been recommended that burnout and depression be studied together (Shirom, 2005).

Perhaps because many researchers have posited that "burnout is more of a social phenomenon than an individual one" (Maslach et al., 2001, p. 409), dispositional vulnerabilities to burnout have long been overlooked (Alarcon, Eschleman, & Bowling, 2009; McMullen & Krantz, 1988). In a meta-analysis published in 2010, Swider and Zimmerman pointed out "the myopic focus of job burnout research on organizational- and occupational-level causes of burnout and the exclusion of individual-level causes, such as personality" (p. 487). Recently, however, there have been advances in this area of research (e.g., Langelaan, Bakker, van Doornen, & Schaufeli, 2006; Pines, 2004). Burnout has notably been associated with Type D or "distressed" personality, neuroticism, hypersensitivity to social rejection, and a history of mood and anxiety disorders (Armon, 2014; Bianchi, Schonfeld, & Laurent, 2015c; McManus, Jonvik, Richards, & Paice, 2011; Ronen & Baldwin, 2010; Rössler, Hengartner, Ajdacic-Gross, & Angst, 2015; Schonfeld & Bianchi, 2016). Despite those advances, the individual characteristics associated with burnout require further exploration.

The aim of this study was to examine whether burnout is associated with a depressive cognitive style—defined by dysfunctional attitudes, ruminative responses, and pessimistic attributions. Given the overlap of burnout with depression, we hypothesized that dysfunctional attitudes, ruminative responses, and pessimistic attributions would be associated with burnout and that individuals with high frequencies of burnout symptoms would report dysfunctional attitudes, ruminative responses, and pessimistic attributions to a greater extent than individuals with low frequencies of burnout symptoms. In order to detect potential differences between burnout and depression in relation to depressive cognitive style, our primary analyses involving burnout were accompanied by complementary analyses involving depression.

2. Methods

2.1. Participants and data collection

A convenience sample of 1386 U.S. public school teachers took part in this study (Table 1). We previously relied on this teacher sample for another purpose (Schonfeld & Bianchi, 2016). The teachers were reached with the assistance of school administrators in 18 different states, and asked to complete an Internet survey on a voluntary basis. Participants were mainly from New York City (NYC) and State ($n = 282$), California ($n = 277$), Ohio ($n = 132$), Missouri ($n = 128$), and Massachusetts ($n = 105$). Being a teacher was the only eligibility criterion for participation in the study. We note that the recruitment procedure used in this study did not allow us to estimate the response rate to our survey. Indeed, the number of teachers who actually received the survey from their school administrators is not known.

The Internet survey comprised instruments to assess burnout, depression, dysfunctional attitudes, ruminative responses, pessimistic attributions, as well as a socio-demographic and health questionnaire ascertaining gender, age and length of employment. Online questionnaires have been shown to be as reliable and valid as traditional, paper-and-pencil questionnaires (Gosling, Vazire, Srivastava, & John, 2004; Jones, Fernyhough, de-Wit, & Meins, 2008; Ritter, Lorig, Laurent, & Matthews, 2004). The survey was approved by the Institutional Review Boards of the City University of New York and the NYC Department of Education.

2.2. Burnout

Burnout was assessed with the 14-item version of the Shirom–Melamed Burnout Measure (SMBM; see Toker et al., 2012). The SMBM provides the investigator with a burnout score comprised between 1 ("Never or almost never.") and 7 ("Always or almost always."). The SMBM showed strong internal consistency in this study (Cronbach's alpha = .96).

2.3. Depression

Depression was assessed with the 9-item depression module of the Patient Health Questionnaire (PHQ-9; Kroenke & Spitzer, 2002; Cronbach's alpha = .88). The PHQ-9 targets the nine diagnostic criteria for major depression (APA, 2013) and grades depression severity from 0 to 27. Cutpoints of 5, 10, 15, and 20 represent the thresholds for mild, moderate, moderately severe, and severe depression, respectively. The specificity of the PHQ-9 exceeds 99% with a cutpoint of 15, making the PHQ-9 a useful tool for identifying cases of major depression (Kroenke & Spitzer, 2002). The PHQ-9 includes an additional item providing an index of general functional impairment ("How difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?"). The PHQ-9 has been increasingly used to study depression since its introduction in the scientific literature (Pettersson, Bostrom, Gustavsson, & Ekselius, in press).

2.4. Depressive cognitive style

Dysfunctional attitudes were assessed with the Dysfunctional Attitude Scale Short Form version 1 (DAS-SF1; Beevers, Strong, Meyer, Pilkonis, & Miller, 2007). The DAS-SF1 comprises 9 items (e.g., "If I don't set the highest standards for myself, I am likely to end up a second-rate person.") and produces a mean score ranging from 0 to 3.

[1] Most probably, this connection has been established inadvertently by these authors.