A drug called comparison
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CHAPTER 3

Burnout and depression are not identical twins: is decline of superiority a distinguishing feature?²

Abstract - There has been considerable debate about the difference between burnout and depression. To shed more light on this issue, we explored whether depressive symptomatology and the components of burnout are differentially related to feelings of superiority. Based on the clinical picture of depression, which seems to reflect a general sense of defeat, it was expected that especially individuals high in burnout and low in superiority would experience depressive symptoms. Results confirmed our expectation. Furthermore, depression was significantly related to superiority, whereas no link was observed between the core symptom of burnout (i.e., emotional exhaustion) and superiority. It is concluded that depression and burnout are closely related, but that they are certainly not identical twins.

Since the early introduction of the term ‘burnout’ by Freudenberger (1974), the uniqueness of the concept of burnout has been discussed. At first, when the majority of the burnout literature was still non-empirical, numerous definitions of burnout circulated and research on burnout was considered as ‘pop psychology’. The prevailing view was that burnout did not add much to the existing concepts related to stress and job dissatisfaction (see Glass & McKnight, 1996). Over years however, the concept of burnout became less ‘fuzzy’ and burnout research has expanded enormously (Maslach & Schaufeli, 1993).

Although nowadays the concept of burnout is more clearly defined than before, confusion still exists about, among other things, the difference between burnout and depression. Indeed, depression and burnout share some important characteristics. Depression is characterized by the following symptoms: depressed mood, an inability to derive pleasure from things, weight loss or weight gain, insomnia or hypersomnia, psychomotoric agitation or retardation, fatigue or loss of energy, feelings of insufficiency or guilt, indecisiveness or inability to concentrate, and thoughts about death and suicide (DSM-IV; American Psychiatric Association, 1994). The symptoms of burnout are: mental and emotional

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exhaustion (which refers to feelings of being ‘empty’ or ‘worn out’),
depersonalization (which indicates a negative, cynical attitude toward one’s
work or the recipients of one's care) and reduced personal accomplishment
(which refers to a negative evaluation of one’s achievements at work)
(Maslach & Jackson, 1981). Of these characteristics, dysphoric symptoms,
like fatigue, emotional exhaustion and feelings of depression, are regarded
as the most characteristic symptoms of burnout (Maslach & Schaufeli,
1993).

Notwithstanding the similarities between depression and burnout, the
two concepts differ in several respects. Compared with depressed
individuals, individuals high in burnout: (1) make a more vital impression
and are more able to enjoy things (although they often lack the energy for
it); (2) rarely lose weight, show psychomotoric inhibition, or report
thoughts about suicide; (3) have more realistic feeling of guilt, if they feel
guilty; (4) tend to attribute their indecisiveness and inactivity to their
fatigue rather than to their illness (as depressed individuals tend to do); (5)
often have difficulty falling asleep, whereas in the case of depression one
tends to wake up too early (Hoogduin, Schaap & Methorst, 1996).

More empirical evidence concerning the distinctiveness of burnout and
depression comes from a literature review by Glass and McKnight (1996).
They reviewed 18 studies that empirically investigated the relationship
between burnout and depression. The total number of the participants in
these studies exceeded 4800. In most of the studies burnout was measured
with the Maslach Burnout Inventory (Maslach & Jackson, 1981), while
various depression measures were used. The conclusion of the review was
that depression and burnout are not identical, although symptoms of
depression and burnout, notably the emotional exhaustion component, are
positively related. In a similar vein, a factor-analytic study by Leiter and
Durup (1994) suggests that burnout and depression are indeed separate
factors.

A prominent characteristic of depressed individuals is that they
experience less feelings of superiority as compared with non-depressed
individuals (see Buunk & Breenrinkmeijer, 1999). Depressed people think
less highly of themselves on dimensions reflecting attractiveness and rank
as compared with people who are not depressed (Allan & Gilbert, 1995).
Moreover, unlike non-depressed individuals, they do not seem to enhance
themselves by derogating other people. Non-depressed individuals tend to
recall more negative information about other people (Kuiper & MacDonald, 1982).

Indeed, individuals generally experience a sense of superiority toward others (for a review see Hoorens, 1993), which is accompanied by various aspects of well-being, such as feelings of happiness or contentment (see for a review: Taylor & Brown, 1988). Buunk and Ybema (1997) describe the evolutionary basis of feelings of superiority. They assume that people contend for status and prestige in a group. Feelings of superiority are in their view “the translation of the physical struggle among primates for social dominance in a group” (p. 368). In other words, feelings of superiority are a symbolic tool to ascribe status to oneself.

The theory of Involuntary Subordinate Strategies (ISS; Price, Sloman, Gardner, Gilbert, & Rohde, 1994) offers an evolutionary explanation for the relatively low feeling of superiority among depressed individuals (Buunk & Brenninkmeijer, 1999). According to this theory, depression arises when people face a state of subordination that is unacceptable for them and from which they cannot escape (Allan & Gilbert, 1997). Depression prevents individuals from trying to make a ‘come-back’ by repressing aggressive behavior to higher ranking others and by putting individuals into a state of ‘giving up’. As such, depression may be characterized by a self-image in which one is not capable of competing with rivals and higher ranked others.

Although depressed individuals experience less superiority as compared with non-depressed individuals, they do not necessarily feel inferior to others. For instance, in an experiment by Alloy and Ahrens (1987), depressed individuals appeared to believe that they had the same chance of success and failure as others, whereas non-depressed individuals thought they had a higher chance of success and a lower chance of failure than others. In a similar vein, a study by Tabachnik, Crocker and Alloy (1983) showed that depressed students see the average college student as roughly similar to themselves on depression-relevant characteristics (such as "I am a boring person"), non-depression relevant characteristics (such as "I am motivated") and depression-irrelevant items (such as “I am honest”). However, as individuals were more severely depressed, they depreciated themselves more. Thus, in general depressed individuals tend to feel less superior than non-depressed individuals, but severely-depressed individuals seem to experience inferiority toward others.

In the current study, the hypothesis is tested that a major difference between burnout and depression is the reduction of superiority. First, it is
expected that a lack of superiority will be more characteristic of depressive symptomatology than of burnout. Second, it is hypothesized that especially individuals high in burnout and low in superiority will report high levels of depressive symptomatology. Phrased differently, it is expected that particularly when burnout is accompanied by reduced superiority, depressive symptomatology will occur. Little is known about feelings of superiority among individuals who are burnt-out, but the clinical picture seems to indicate that burnt-out individuals do not feel as defeated as depressed individuals. Individuals in a state of burnout make a more vital impression than depressed individuals and unlike depressed individuals, they have not lost the ability to enjoy things. In addition, only rarely do they have thoughts about suicide and death. It may well be that they develop a depression only when they have lost their sense of superiority. By focusing on differences in superiority among burnt-out and depressed individuals, this study may provide further knowledge concerning the uniqueness of the two concepts.

**Method**

**Participants**

Participants were 190 teachers in secondary education in the Netherlands. In this profession, burnout is a widespread phenomenon (Schaufeli, Daamen, & Van Mierlo, 1994). The mean age of the participants was 44 years ($SD = 9.2$) and 60% was male. The average experience as a teacher was 18 years ($SD = 9.6$). Participants were given a questionnaire that they could fill out at home. They were told that the questionnaire concerned their self-image and how they experienced their job.

**Measures**

**Burnout.** Burnout was measured with a Dutch version of the Maslach Burnout Inventory for teachers (MBI-NL-Le, Schaufeli & van Horn, 1995), which consists of three subscales: Emotional Exhaustion, Depersonalization and Reduced Personal Accomplishment (cf. Maslach & Jackson, 1981). Burnout, as measured with the MBI, can be discriminated from more general physical and psychological symptoms (Schaufeli, Daamen, & Van Mierlo, 1994). The internal consistency of the subscales for exhaustion, depersonalization and reduced personal accomplishment was .91, .61 and .84, respectively. The relatively low internal consistency of
depersonalization was in line with several other studies (e.g., Van Horn, Schaufeli, & Enzmann, 1999; VanYperen, 1996). To get an indication of the burnout percentage of individuals with serious burnout symptoms who need clinical help, we used a criterion developed by Brenninkmeijer and VanYperen (1999). They investigated how burnout could be most accurately assessed in a non-clinical sample by comparing the scores on the three burnout subscales of 44 well functioning persons with the scores of 29 persons diagnosed as burnt-out by clinicians. The results showed that the ‘Exhaustion + 1’ criterion resulted in a low chance (6.8%) of falsely labeling a person in the non-clinical sample as burnt-out. According to this criterion, individuals should be considered as burnt-out when they not only score high (75th percentile or higher) on emotional exhaustion, but also high (75th percentile or higher) on either depersonalization or reduced personal accomplishment. In the current sample, in which participants were compared to a Dutch norm group of 916 teachers in secondary education (Schaufeli & van Horn, 1995), this criterion resulted in a burnout percentage of 15.2%.

Depressive symptomatology. Depressive symptomatology was measured with the Center for Epidemiologic Studies Depression Scale (CES-D, Radloff, 1977). This scale has been developed to measure depressive symptoms in general populations. The scale consists of 20 items, like “I enjoyed life” and “I had crying spells”. The internal consistency of the CES-D is good (Cronbach’s $\alpha = .91$).

Superiority. General superiority was assessed with the Social Comparison Scale developed by Allan and Gilbert (1995). This scale uses a semantic differential approach to measure superiority, i.e., how individuals see themselves in comparison to others. In order to measure superiority toward other teachers, we asked participants to compare themselves to other teachers, thereby altering the instructions to the scale. The scale contained 11 items concerning rank (e.g., inferior-superior), attractiveness (e.g., undesirable-desirable) and feeling different and an outsider (e.g., left out-accepted). Answers could be given on a 10-point scale, ranging from 1 to 10. Cronbach’s alpha, representing the internal consistency of the scale, was .64. To improve the internal consistency, we removed item 6 (untalented-talented) from the superiority scale, which resulted in a rise of Cronbach’s alpha to .82. To facilitate the interpretation of our results, we used the mean score on the items of the Social Comparison Scale as an indication of general superiority.
Results

To determine whether demographic variables influenced feelings of superiority, correlation coefficients were computed between superiority and age, education, number of working hours, school type and number of pupils in a school. None of these variables was significantly related to superiority \((rs \text{ varied from } -0.04 \text{ to } 0.10, \text{ ns})\). However, a t-test with gender as an independent variable showed that women reported more superiority than men \((t(183) = 2.04, p < .05, M_{\text{women}} = 6.93 \text{ vs. } M_{\text{men}} = 6.61)\).

Table 1 lists the correlations, along with the means and standard deviations, of depressive symptomatology, the burnout dimensions and superiority. Depressive symptomatology, depersonalization and reduced personal accomplishment appeared to be correlated significantly with superiority\(^3\). Superiority was lower as depression, depersonalization and reduced personal accomplishment were higher. However, the most important aspect of burnout, emotional exhaustion, did not significantly correlate with superiority. Moreover, depressive symptomatology correlated more strongly with superiority than emotional exhaustion and depersonalization \((z = 3.51, p < .001 \text{ and } z = 1.67, p < .05, \text{ respectively})\). The correlation of superiority with depressive symptomatology was not significantly stronger than the correlation with reduced personal accomplishment \((z = 0.87, \text{ ns})\). Nevertheless, as expected, a reduced sense of superiority was in general more characteristic of depressive symptomatology than of burnout.

\(^3\) A question that may arise, is whether the association between depressive symptomatology and superiority can be attributed to the CES-D items that reflect feelings of inferiority. When we repeated our analyses without items that seem to represent ‘being a failure’ (items 4 & 9) or ‘being disliked’ (items 15 & 19), the result was more or less identical \((r = -.31, p < .001)\). Thus, the association between depressive symptomatology and superiority cannot be exclusively ascribed to the influence of items reflecting inferiority.

As feelings of superiority might be more strongly clearly related to rank and attractiveness, than to fit, one may wonder to what extent the social comparison scale items pertaining to fit have influenced our results. To examine this question, we repeated the analyses with items 4 (Left out-accepted), 5 (Different-same) and 11 (Outsider-insider) removed from the scale (see Allan & Gilbert, 1995). Associations between this modified measure for superiority and emotional exhaustion, depersonalization, reduced personal accomplishment and depressive symptomatology were analogous to our original results \((r = -.08, \text{ ns}, r = -.21, p < .01, r = -.26, p < .001, r = -.28, p < .001, \text{ respectively})\).
Table 1. Correlations, means, and standard deviations of emotional exhaustion, depersonalization, reduced personal accomplishment, depressive symptomatology and superiority.

<table>
<thead>
<tr>
<th></th>
<th>DP</th>
<th>RPA</th>
<th>DEP</th>
<th>SUP</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional exhaustion (EU)</td>
<td>.56**</td>
<td>.33**</td>
<td>.68**</td>
<td>-.09</td>
<td>14.54</td>
<td>9.31</td>
</tr>
<tr>
<td>Depersonalization (DP)</td>
<td>.40</td>
<td>.61**</td>
<td>-.23*</td>
<td>5.63</td>
<td>3.91</td>
<td></td>
</tr>
<tr>
<td>Reduced personal accomplishment (RPA)</td>
<td>.44**</td>
<td>-.29**</td>
<td>13.98</td>
<td>6.32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depressive symptomatology (DEP)</td>
<td></td>
<td>-.34**</td>
<td>7.49</td>
<td>7.76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Superiority (SUP)</td>
<td></td>
<td></td>
<td></td>
<td>6.74</td>
<td>1.04</td>
<td></td>
</tr>
</tbody>
</table>

* p < .01; ** p < .001

Next, to examine whether especially individuals high in burnout and low in superiority would report high levels of depressive symptomatology, this last variable was regressed on the three burnout dimensions and superiority. To avoid problems of collinearity, we performed separate regression analyses for each dimension of burnout. In the first step, we entered the main effects of one burnout dimension and superiority and in the second step the interaction between these two variables was entered. Superiority (B = .28, *p* < .001) and emotional exhaustion (B = .66, *p* < .001) explained a significant proportion of the variance in depression (R² = .55, F(2,183) = 111.50, *p* < .001). Depression was higher as superiority was lower and emotional exhaustion was higher. Entering the interaction between superiority and emotional exhaustion resulted in a significant increase in explained variance (B = -.18, R² change = .04, *p* < .001).

Additional regression analyses (Aiken & West, 1991) revealed that only among individuals high in emotional exhaustion (1 SD above the mean) did superiority have a significant negative association with depression (B = -.44, *p* < .001). As shown in Figure 1, depressive symptomatology was strongest when high emotional exhaustion was accompanied by low superiority. The interaction of superiority with depersonalization and reduced personal accomplishment showed identical patterns as the interaction with emotional exhaustion (B = -.20 and -.25, respectively, *ps* < .001). Again, only among individuals high in depersonalization or reduced personal accomplishment did superiority have a significant negative
relationship with depression ($B = -.41$ and -.48, respectively, $ps < .001$). It can be concluded that, in line with our hypothesis, depressive symptomatology was highest among individuals high in burnout who experienced a decline in superiority.

![Figure 1](image)

*Figure 1.* Depressive symptomatology as a function of emotional exhaustion and superiority.

**Discussion**

In general, the results of the current study were in line with the expectations. It appeared that especially individuals who experienced both strong feelings of burnout and reduced superiority reported high levels of depressive symptomatology. Furthermore, depressive symptoms and the three components of burnout appeared to be differentially related to feelings of superiority. Depression was more strongly related to superiority than emotional exhaustion and depersonalization. In fact, emotional exhaustion, which constitutes the core symptom of burnout, did not have a significant association with superiority.
This study indicates that a reduced sense of superiority and a perceived loss of status are more characteristic for depressed individuals than for individuals who are burnt-out. It seems that burnt-out individuals are still ‘in the battle’ for obtaining status and consider themselves as potential winners, while depressed individuals have given up. Apparently, only when burnt-out individuals come to perceive that they have been defeated, they experience a loss of superiority and seem to develop a depression as a consequence. This process seems to be in line with Hallsten (1993), who considers burning out as one of the roads that lead to depression. It may well be that individuals with strong feelings of emotional exhaustion and an intact sense of superiority believe that they can cope with stress and that they can escape from it. In contrast, burnt-out individuals with a reduced sense of superiority may believe that they cannot get away from it and may feel ‘trapped’ by a stressor. This would be an interesting question to address in future research.

As emotional exhaustion is generally a central element of clinical depression, this study suggests that also among depressed individuals, emotional exhaustion and feelings of superiority may influence depressive symptoms in an interactive way. It is worth examining whether also in depressed populations, depressive symptomatology is highest among individuals who experience strong emotional exhaustion plus a reduced sense of superiority. Moreover, it should be examined whether superiority toward others in general is differently related to burnout. In the current study, only superiority toward individuals with the same profession has been investigated. Possibly, superiority toward others in general is differently related to burnout. For instance, teachers high in burnout may feel that they occupy a low-status job and they may therefore experience a sense of inferiority toward others in general.

In sum, the current study suggests that depression and burnout are not the same thing. Reduced superiority seems to be more characteristic of depression than of burnout. Furthermore, especially individuals high in burnout with a reduced sense of superiority seem to develop a depression. Hence, depression and burnout seem closely related, but they are certainly not identical twins.