Existential fulfillment and burnout among principals and teachers

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The aim of the current study was to determine the prevalence of burnout in primary education teachers and primary school principals and to explore the relationship of existential fulfillment to self-reported burnout scores. Random samples of 215 teachers and 514 principals participated in a cross-sectional study using an anonymous, mailed survey. Two questionnaires were used in both studies. The Dutch version of the Maslach Burnout Inventory for teachers was used to assess the teachers' and principals' burnout level. Second, existential fulfillment was measured by the Längle, Orgler and Kundi Existence Scale. The results of the present study indicated that teachers' and principals' existential fulfillment is related to their burnout level. Lack of existential fulfillment was an important burnout determinant. Unfortunately, this concept has been neglected to date. Existential fulfillment may be a significant and usable point of departure for devising psychological interventions aimed at teachers and principals.

Keywords: existential fulfillment; burnout; teachers; school principals; primary school; meaning in life

Burnout

In the literature on burnout, researchers have reached consensus on what burnout is, with the following definition being proposed: 'Burnout is a psychological syndrome of emotional exhaustion, depersonalization and a sense of low personal accomplishment that can occur among individuals who work with other people in some capacity' (Maslach and Jackson 1981, 1). Three dimensions have been identified which together contribute to the syndrome: emotional exhaustion, or the feeling of total mental and emotional loss; cynicism, or a mental distance toward work and the people with whom one works (initially labeled depersonalization); and lack of efficacy, or perceived own competence (initially labeled reduced personal accomplishment).

At first, the definition of burnout and the etiology of the term were limited to contact-related jobs. The main cause of burnout was thought to lie in the high emotional requirements versus the low rewards in the health, social and teaching professions (Freudenberger 1974, 1982; Freudenberger and Richelson 1980; Maslach 1982, 1993; Schaufeli 1990). Later, the predominant view was that burnout can occur in every occupation.

Researchers have also reached consensus on how to measure burnout. Maslach has designed a three-dimensional measure for burnout, the Maslach Burnout Inventory (Maslach, Jackson and Leiter 1986), which is accepted as the common standard. In studies on burnout, the Maslach Burnout Inventory (MBI) is almost the only instrument used to measure whether and to what degree workers suffer from burnout. The MBI is not only the most widely used instrument to measure burnout, it is also accepted internationally as such.

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In the Netherlands, the MBI has been applied as an instrument for studying workers in many occupations—teachers (Brouwers, Evers, and Tomic 2001; Evers, Brouwers, and Tomic 2002), nurses (Ogus 1992; Janssen, Schaufeli and Houkes 1999), dentists (Gorter 2000), elderly care workers (Evers, Brouwers, and Tomic 2002), and pastors (Tomic and Evers 2003; Tomic, Tomic, and Evers 2004, Loonstra and Tomic 2005), to mention but a few.

Research has demonstrated that burnout is associated with decreased job performance (Brouwers and Tomic 2000; Evers, Brouwers, and Tomic 2002) and reduced job commitment, and that it predicts low career satisfaction (Lemkau, Rafferty, and Gordon 1994) and stress-related health problems (Maslach, Schaufeli, and Leiter 2001). Common job-related stressors such as work load, time pressure, or role conflict correlate more highly with burnout than client-related stressors (Maslach, Schaufeli, and Leiter 2001).

Längle (2003a) takes a different view to burnout. According to him, burnout is an enduring state of exhaustion due to work. However, in a broader perspective burnout must be understood as a form of an existential vacuum characterized by apathy, boredom and a loss of interest in relationships. People displaying symptoms of an existential vacuum appear to have high degrees of depersonalization and emotional exhaustion (Karazman 1994). Burnouts lack a sense of inner fulfillment, or in other words they misinterpret the requirements for and components of successful human existence. Burnouts view their work as something to serve their own aims and not as something that should be appreciated for its unique value and inherent meaning (Längle 2003a).

**Teachers’ and principals’ burnout**

According to Brock and Grady (2000), burnout is a serious and common concern among educators. At the start of their careers, most teachers are enthusiastic and dedicated, but as time goes by they lose interest, become cynical, and distance themselves from colleagues. They appear exhausted and overwhelmed. As the burnout process spirals downward, students fall victim to poor teaching. Some teachers and principals eventually leave the profession, while others continue with diminished productivity (Brock and Grady 2000).

Teaching is very demanding work. The demands made on teachers and principals largely involve emotionally charged relationships with students and parents. Every year a great many teachers and principals feel themselves unable to continue their work (Whitaker 1995; Maddox 1998; Flowers 2004; Herman and Marlowe 2005; Liu and Li 2005; Weber, Weltle, and Lederer 2005). They feel drained and exhausted. Studies in this field show that a considerable number of teachers experience exhaustion symptoms during their careers. Farber (1991) posits that between 5 and 20 per cent of all teachers in the USA will become exhausted at a certain point. Dutch percentages indicate a similar figure. Compared with other professions in the Netherlands, burnout occurs most frequently in education. Results show that over 13 per cent of teaching staff experience burnout symptoms (Brouwers and Tomic 1999, 2000; Hupkens 2005). More than half of these cases can be attributed to psychological complaints (van Horn and Schaufeli 1996).

Burnout is therefore a highly significant phenomenon in education. Some research on burnout among principals has been conducted (Freedman 1995; Whitaker 1995; Whitehead 2000; Sari 2004). The results indicate that the most frequent sources of burnout are issues such as complying with organizational rules and policies, excessively high self-imposed expectations, the feeling of having too heavy a workload, increased demands, role ambiguity, lack of recognition and rewards, and decreasing autonomy. In addition, factors that exacerbate burnout include school environment, teachers’ role, difficulty with parents, personal issues, and criticism from society (Halling 2004). The aforementioned issues cause principals to question whether they want to remain in their jobs.
Measuring meaning in life in burnout research

Both meaning in life and burnout have enjoyed much attention in psychological research. Frankl’s (1959) idea that existential meaning is fundamentally important to mental health, in particular, received a lot of attention. In his seminal article, Freudenberger (1974) mentions complete mental exhaustion in the helping professions, which he labeled burnout. Both concepts had a substantial impact on researchers and have been studied in depth ever since, but there are scarcely any empirical studies on how they interrelate (Yiu-kee and Tang 1995; Nindl 2001; Rebel and Tomic 2004; Loonstra and Tomic 2005; Loonstra, Brouwers and Tomic 2007).

There is ample literature on the construct meaning in life and a multiplicity of terms are used to denote it – for instance, existential fulfillment, existential well-being, purpose-in-life, psychological well-being, and spiritual well-being. All these concepts are closely related to the construct meaning in life. First, we will discuss briefly some available constructs germane to measuring meaning in life. Subsequently, we will give detailed attention to existential fulfillment.

There is no consensus in the literature about the definition of meaning in life, let alone how it can be measured. The proposed operationalizations of meaning in life have in common that they refer to Frankl (1959) as the deviser of the construct. Beyond that, they go in different directions.

In the course of time, Frankl’s (1959) conception of meaning in life resulted in various measures. For instance, Crumbaugh and Maholick (1964) developed a measure known as the Purpose in Life Test. They define purpose in life as the ontological significance of life from the point of view of the experiencing individual. Later, Crumbaugh (1977) devised the Seeking of Noetic Goals Test, meant to measure the strength of motivation a person may have for seeking meaning in his or her life. Both tools are attitudinal scales designed to measure the degree to which subjects experience meaning and purpose in life. Battista and Almond (1973) offered an alternative test, the Life Regard Inventory. Within another theoretical framework Antonovsky (1987) designed the Sense of Coherence scale based mainly on a biopsychosocial model of health. He assumed that sense of coherence in life will favor (psycho)somatic well-being.

There are also proposals to unite the different theoretical approaches into one overarching concept of meaning in life. Reker and Chamberlain (2000) define it as attempts to understand how events in life fit into a larger context, which involves both a sense of coherence like order and reason for existence, and a sense of purpose (i.e. mission in life and direction). On this premise, Reker developed the Personal Meaning Index.

Today the Purpose in Life Test, the Life Regard Inventory, as well as the Sense of Coherence scale are still used, and the Personal Meaning Index has been tested. Psychometric reviews show varying outcomes, positive and negative (Loonstra, Brouwers and Tomic 2007).

According to Bulka (1984), burnout results from a search for meaning gone astray, among other things. Loss of meaning implies a total loss of significance of one’s work and of the people with whom one works. In an attempt to explain the increase of burnout, attention has been drawn to the rise in the number of people who seek meaning in their work as a substitute, attended by the declining importance of religious convictions and all sorts of worldviews. The decline of overall life meaning might lead to people seeking meaning in their work as a substitute, resulting in unrealistic expectations about their jobs and making them more susceptible to the impact of job frustrations (Pines and Aronson 1988; Pines 1993, 2000, 2004; Schaufeli and Enzmann 1998). If this notion is valid, one of the causes of burnout is the loss of life meaning that transcends personal interests of satisfaction and well-being (Bulka 1984). This spiritual freedom and capacity to transcend is the dimension of the human personality that gives meaning to life. Frankl (1959) considers this spiritual, not to be confused with religious, dimension of human existence to be the most important attribute of man. In addition to spirituality, Frankl identified the human characteristics of freedom and of responsibility. Frankl views man as a spiritual being...
capable of self-transcendence, who is also free to choose and becomes responsible for his or her choices. Therefore an instrument is needed that makes meaning based on self-transcendence operational (i.e. meaning that transcends self-interest).

The first three measures mentioned above do not distinguish between meaning based on self-interest and meaning based on self-transcendence, and therefore these scales cannot serve to measure meaning as a predictor of burnout. The Personal Meaning Index, being the fourth scale, tries to cover transcendental meaning. Many items, however, are formulated in such an abstract way that they might be too difficult for many respondents. A convenient scale for meaning in life, based on self-transcendence, is wanted.

Several self-transcendence scales have been developed, each with its own theoretical background. The most widespread is the Self-Transcendence Scale by Reed (1991a). The scale leans heavily on life-span developmental psychology and assumes that with aging, people encounter the limits of life and start thinking about ways to transcend these limits (Reed, 1991b). The scale is formulated from the perspective of older adults.

The second scale, the Temperament and Character Inventory, originated from personality psychology and was devised by Cloninger (Cloninger, Svrakic, and Przybeck 1993). Three dimensions of character are assumed, that mature in adulthood by means of insight learning about self-concepts. Self-concepts vary according to the extent to which a person identifies the self as an autonomous individual, an integral part of humanity, and an integral part of the universe as a whole.

The third scale was developed by Längle and his co-workers (Kundi, Wurst, and Längle 2003; Längle 2003a; Längle, Orgler, and Kundi 2003). Their theory is on existential psychology and therapy, related to the Franklian analysis of a cultural deficit in modern times (Längle 2003b). Social cohesion has been replaced by individualism. A new feeling of uninhibited freedom brings with it cultural isolation and loss of identity. In this situation, people have to find existential motivation and fulfillment. In the search for meaning self-transcendence plays a central role. It is embedded in a theory of psychological maturity, in which an individual interacts with his or her environment in a balanced way.

Existential fulfillment and meaning in life

Existential fulfillment means fulfillment in life in general, with work being only one aspect. Existential fulfillment is neither about fulfillment in life apart from work, nor about fulfillment in work apart from other aspects of life. By virtue of existential fulfillment, work is given a place in life.

The correlation between the four aspects of existential fulfillment and pressure of work and burnout can be explained as follows (Längle 2003a). Someone who is incapable of making a clear distinction between the self and the environment (self-distance) has his life lived for him, and this can easily lead to his being overburdened. Someone who fails to connect work with self-transcendence may experience his work as a burden and may suffer from a lack of job satisfaction, exhaustion, and cynicism. Someone who does not perform his work by making goal-oriented choices that he can stand by (freedom and responsibility) may resort to alternative means of fulfillment, such as career, performances, status, power and income. These aspects may make that person vulnerable, because achieving these alternative goals will depend on many unverifiable circumstances (Pines 1993, 2000; Längle 2003a). Individuals who succeed in incorporating work into existential fulfillment are found to work with inner consent and therefore experience less pressure of work (Längle 2003a).

Only a few attempts have been made in burnout studies to quantify existential motivation or existential fulfillment as a possible determinant of burnout (Yiu-kee and Tang 1995; Nindl 2001;
Rebel and Tomic 2004; Loonstra and Tomic 2005). Yet, we do find studies in which burnout, viewed within the framework of existential psychology, was explained as a lack of existential meaning in one’s work. The growing search for existential meaning in one’s work is considered to be a consequence of the receding influence of religion as a source of existential fulfillment (Pines and Aronson 1988; Pines 1993, 2000, 2004; Schaufeli and Enzmann 1998). Furthermore, Pines (2004) found correlations between existential fulfillment in life in general and a decrease in the level of burnout. But apart from studies carried out by Yiu-kee and Tang (1995), Ndii (2001), and Rebel and Tomic (2004), the aforesaid correlations have scarcely been examined empirically.

Whereas the MBI is meant to measure the degree of burnout among categories of workers or individual workers, the Existence Scale was developed by Längle and his co-workers (Längle 2003a; Kundi, Wurst, and Längle 2003; Längle, Orgler, and Kundi 2003). It is a 46-item questionnaire ‘assessing the degree of someone’s personal fulfillment in one’s existence’ (Längle et al. 2003, 135).

The questionnaire asks the respondent about his ability ‘to cope in a meaningful way with oneself and the world’ (Längle et al. 2003, 136). To this end, the authors of the questionnaire posed that the individual has to take four steps to find his way towards attaining a meaningful life or realizing his existential potential. These steps are, first, the search for meaning in life, which means the individual has to gather relevant information on the world’s objects. Distortion of reality may be an impediment to reaching the other steps. Self-distance refers to the ability to distinguish oneself from the surrounding world, not to make oneself dependent on others or circumstances, and to accept things as they are. Second, there is the individual’s understanding of the qualitative relationship between the objects and between the objects and himself, named self-transcendence. Based on this self-distance, one can transcend oneself—that is, enter into relationships with people and other objects, value them, and arrive at a fundamental feeling of harmony between the world and oneself. The prerequisite for self-transcendence is self-distance. The third step refers to the individual’s choice of the various options the world offers, which means that he has to eliminate some possibilities in favor of others. This step also deals with the individual’s devotion to the chosen option. Inner freedom is important; it allows one to make decisions based on one’s own conscience, and not on fear. The final step, responsibility, consists of the individual’s carrying out his decisions and plans. It stands for the inner determination to put one’s decisions into practice.

Self-distance and self-transcendence together form the personality-factor of existential meaning. They deal with the development of the personality. Connected with this is the existence-factor, consisting of freedom and responsibility, dealing with existential fulfillment, or with taking and implementing decisions. Figure 1 shows the Existence Scale connections in diagram form.

The above-mentioned theoretical underpinnings have provided the groundwork for the Existence Scale. In the search for a suitable inventory to measure meaning in life for the purpose of burnout research, the Existence Scale by Längle was selected, on theoretical grounds, for further investigation. Reed’s Self-Transcendence Scale is not qualified to measure meaning in life as a predictor of burnout because its perspective is specifically that of older people. The subscale in Cloninger’s Temperament and Character Inventory has a different shortcoming. Its fairly esoteric items may reflect spiritual peak experiences rather than existential meaning. Längle’s Existence Scale is the more attractive choice because of its appealing theoretical basis. The attention is focused on the psychological predisposition required for a sound life orientation.

There are various reasons to examine the importance of existential fulfillment as a possible determinant of burnout among teachers and principals. First, Schaufeli and Enzmann (1998) looked upon the conflict between intentions and reality of work as the main factor in the onset of burnout. Intentions result from aspects of life that are considered to be valuable, and value is
Self-distance \( \rightarrow \) distinguish oneself from the surrounding world
\[ \downarrow \]
Self-transcendence \( \rightarrow \) enter into relationships with people and objects and value them
\[ \downarrow \]
Freedom \( \rightarrow \) choose purposes in life
\[ \downarrow \]
Responsibility \( \rightarrow \) meaningful life (existential fulfillment)

Figure 1. Aspects of existential fulfillment. Vertical arrows suggest a logical next step. Horizontal arrows suggest practical meaning (Loonstra and Tomic 2005).

connected with fulfillment and motivation. Insufficient fulfillment is connected with unrealistic values and intentions that may lead to conflicts with the realities of the workplace, increasing the risk of falling victim to burnout.

Second, as was said before, burnout will probably increase as a result of cultural changes — for instance, the tendency towards individualization, and the high expectations of new professionals (Schaufeli and Enzmann 1998). Cultural changes are associated with changes in existential fulfillment. The implication is that burnout will become a greater social and, therefore, educational problem.

Third, there is a specific reason to include teachers and principals in burnout research. The demands made on principals and teachers largely involve emotionally charged relationships with students and parents (Brock and Grady 2000). Moreover, every year a great many teachers and principals feel themselves unable to continue their work. Defining their position requires them to exhibit a great deal of independence that must be grounded in existential fulfillment. Only when teachers and principals are convinced of their own goals will they be able to stick to them and cope with resistance. If they fail to do so, they risk falling victim to role ambiguity, and that may well increase the chance of their experiencing an increase in work pressure and burnout.

We will take a few important methodological considerations into account as recommended by Guglielmi (2001). Consequently, the current study uses measures whose psychometric properties are known, so that it is possible to compare findings across studies. Appropriate multivariate data-analytic strategies will also be applied — for instance, hierarchical regression. As the typical teacher burnout study is essentially atheoretical, according to Guglielmi (2001), we adopted a theoretical framework that helps to organize research findings across investigations. Theoretical research will also be of use when developing interventions aimed at preventing and reducing burnout complaints among teachers and principals.

We also adopted a recommendation made by Barnett, Brennan, and Gareis (1999) to rewrite the seven MBI categories so that they are mutually exclusive and more readily interpretable. In addition, we used quite large samples, which is unusual in burnout research.
Burnout appears common among teachers (Brouwers and Tomic 2000; Evers, Tomic, and Brouwers 2002). The current study aims to understand the relationship between existential fulfillment and burnout scores. However, until now only two studies have associated existential fulfillment with burnout (Nindl 2001; Rebel and Tomic 2004). It is theoretically important to expand burnout research to a significant plausible factor. Existential fulfillment may contribute to the theory of the onset of burnout among principals and teachers. An adequate theory is of practical value and a prerequisite for developing effective interventions for preventing and alleviating burnout complaints among these professionals.

In the present study we examined the prevalence of burnout and existential fulfillment among primary school teachers and school principals working in primary education and evaluated the relationship of existential fulfillment to burnout dimensions. We also compared principals’ and teachers’ perceptions of existential fulfillment and burnout.

Method

Participants

In the teacher study, we randomly selected 300 teachers at primary schools in a district in the middle of the Netherlands and asked them to participate in our study. In the principal study, we randomly selected 1000 school principals across the country. All teachers and principals were eligible for the studies. We mailed a 72-item, self-administered survey to teachers’ and principals’ homes. The survey addressed topics in the following order: existence scale, burnout inventory, and demographic characteristics (gender, teacher age, years of work experience). The accompanying cover letter stated that the purpose of the study was to better understand teachers’ and principals’ feelings of existential fulfillment and teacher and principal well-being. The letter also explained that participation was elective and that responses would be anonymous. Specific hypotheses were not revealed, and burnout was not mentioned in the cover letter. After the survey was mailed to all participants, one reminder was sent by mail fourteen days later. In order to raise the response rate, we followed suggestions from Green, Boser, and Hutchinson (1997): we provided respondents with postage-free envelopes, we sent the questionnaires to the respondents directly, the respondents could contact us at any time if necessary, and we used a fairly brief questionnaire. In total, 215 teacher questionnaires (sample one) and 514 principal questionnaires (sample two) were returned, a response of 72 per cent and 51.4 per cent, respectively, which is very good for survey research not only according to Babbie (1994), but also according to the findings of Asch, Jedziewski, and Christakis (1997).

The number of male teachers was 44 (20.5 per cent) and the number of female teachers 171 (79.5 per cent). The mean age of teacher respondents was 39.5 years, whereas the national mean age of primary school teachers is 40.5 years. There was no significant difference concerning the variable ‘age’ of the 215 respondents and the total population of teachers: t(309) = 1.29, p = > .05. The number of male principals was 391 (76.1 per cent) and the number of female principals was 123 (24.0 per cent). The average age of the principals was 50.2 years, whereas the national mean age of school principals is 50.5 years. There was no significant difference in mean age of the 514 principals and the total population of principals: t(7512) = 2.71, p = > .05.

Instruments

Both studies used the same instruments. Burnout was measured with the Maslach Burnout Inventory (Maslach, Jackson, and Leiter 1996; Dutch translation by Schaufeli and van Dierendonck 1994). The items of the MBI-NL for human service professionals were presented simultaneously in Dutch and English; so as not to deviate from the original intentions of the authors, the translations
were produced by independent and professional translators. Schaufeli and Van Dierendonck (1994) translated the Maslach Burnout Inventory (Maslach, Jackson, and Leiter 1996) into the Dutch language. Their version of the MBI is widely used in the Netherlands.

The MBI (20 items) consists of three sub-scales: emotional exhaustion (8 items; e.g. ‘Working with people all day is really a strain for me’); depersonalization (5 items; e.g. ‘I don’t really care what happens to some of my students’); and personal accomplishment (7 items; e.g. ‘I have accomplished many worthwhile things in this job’). Following Barnett, Brennan, and Gareis (1999), we rewrote the seven MBI categories so that they were mutually exclusive and more readily interpretable. Teachers responded on a 7-point Likert scale, running from ‘never’, ‘less than 12 times a year’, ‘once a month’, ‘more than once a month and less than once a week’, ‘once a week’, ‘2 to 4 times a week’ to ‘5 times a week or more’. MBI reliability tests (Schaufeli 1990) showed that the emotional exhaustion sub-scale is the most reliable of the three; Cronbach’s alphas vary between .80 and .90. The other two sub-scales appeared to have Cronbach’s alphas of between .70 and .80, which may be regarded as sufficient for research purposes according to Nunnally and Bernstein (1994).

Confirmatory factor analysis has been performed on the three-factor structure of the Dutch version of the MBI-NL (Schaufeli and van Dierendonck 1994; Vlerick 1995). Schaufeli and van Horn (1995) found acceptable degrees of internal consistency, with alphas of .87, .71 and .78, for emotional exhaustion, depersonalization, and personal accomplishment, respectively (N = 916). Gorter et al. (1999) concluded that the three-factor structure of the Dutch version of the MBI is superior to alternative structures, and that it is a highly suitable instrument to measure burnout. Green and Walkey (1988) conducted a principal components analysis of previously published American and New Zealand data. The study produced a clear, replicable, three-factor solution consistent with that of the MBI authors’ descriptions.

Existential fulfillment was measured with the Existence Scale, consisting of 46 items to be rated by means of a 6-point Likert scale, ranging from ‘fully disagree’ to ‘fully agree’. It has 8 items related to self-distance, 14 items related to self-transcendence, 11 items related to freedom, and 13 items related to responsibility. Examples of such items are: ‘A situation is interesting to me only if it meets my wishes’ (SD); ‘After all there is nothing in my life to which I want to devote myself’ (ST); ‘Without much reflection I try to put off unpleasant decisions’ (F); and ‘I take too little time for important things’ (R). Translation of the Existence Scale involved two researchers and one German teacher independently translating the original questionnaire from German into Dutch and generating a consensus version. Obviously, the translators emphasized the meaning of the original items and did not follow very closely the wording of the source language, aiming at a good translation. Three other translators, with an excellent knowledge of both Dutch and German and blind to the original questionnaire, then performed a back-translation. This version was compared with the original German questionnaire.

The method of back-translation was chosen because it can improve the reliability and validity of research in different languages by requiring that the quality of a translation is verified by independent translators translating back into the original language. An important benefit of conducting a back-translation is that this allows comparison of the original source-language version with the version which was back-translated into the source language. Back-translation is the most highly recommended technique for translation in cross-cultural research (Maneesriwongul and Dixon 2004). The results indicate that the Existence Scale was successfully translated for application to Dutch teachers and principals.

Längle, Örgler, and Kundi (2003) checked the Existence Scale for homogeneity in the sense of Rasch (1960). It was shown that item parameters were invariant. Hence it was concluded that the items form one-dimensional scales and that the sum of item scores can be seen as a sufficient statistic for the person parameter. Furthermore, the Existence Scale was subjected to
factor-analysis. Längle, Orgler, and Kundi (2003) demonstrated that the original four-scale structure was maintained. Längle (2003b), Rebel and Tomic (2004) and Loonstra and Tomic (2005) found acceptable degrees of internal consistency, with average alphas of .71, .76, .80 and .83 for self-distance, self-transcendence, freedom, and responsibility, respectively. Results demonstrate that the Existence Scale is a valid and reliable measure of the construct existential fulfillment.

Results

Table 1 shows the reliability coefficients of the MBI and the Existence Scale based on the teacher, principal, Loonstra and Tomic (2005), and Längle, Orgler, and Kundi (2003) studies. For the record, the Loonstra and Tomic study was conducted among ministers. Self-transcendence internal consistency coefficient of the Längle, Orgler, and Kundi (2003) study is slightly higher, for their sample consisted of a heterogeneous group of 1028 respondents, whereas our samples consisted of more homogeneous groups of primary school teachers and principals.

Table 2 presents the mean scores, standard deviations and correlations between the four existence sub-scales and three burnout dimensions. A finding of the study is that for principals sex correlates significantly with emotional exhaustion and freedom. For both teachers and principals the results demonstrate that self-distance, self-transcendence, freedom and responsibility are negatively correlated to both emotional exhaustion and depersonalization: the lower the scores on the existence sub-scales, the higher the scores on the two burnout dimensions. The existence sub-scales are positively correlated to personal accomplishment: the higher the scores on the existence sub-scales, the higher the personal accomplishment scores. The results also show that the older teachers are, the higher the responsibility scores. However, this does not apply to principals. In contrast to teachers, the older principals are, the higher their scores on self-transcendence. Correlation coefficients are significant.

The average principal age is significantly higher than the average teacher age: $t(727) = 16.29$, $p = <.001$. We also see that principals on average score higher on depersonalization than teachers do: $t(727) = 4.01$, $p = <.001$, but they score lower on personal accomplishment. $t(727) = 5.03$, $p = <.001$ than the teachers, who are much younger. Likewise, principals score higher on the following existential fulfillment variables: self-distance, $t(727) = 4.41$, $p = <.001$ and freedom,

<table>
<thead>
<tr>
<th>Existence sub-scales</th>
<th>Number of items per scale</th>
<th>Teachers $N = 215$ &amp; $N = 280$</th>
<th>Principals $N = 514$ &amp; $N = 280$</th>
<th>Ministers $N = 280$</th>
<th>General Population Sample $N = 1028$</th>
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</thead>
<tbody>
<tr>
<td>Self-distance (SD)</td>
<td>8</td>
<td>.71</td>
<td>.68</td>
<td>.71</td>
<td>.70</td>
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<tr>
<td>Self-transcendence (ST)</td>
<td>14</td>
<td>.76</td>
<td>.66</td>
<td>.68</td>
<td>.85</td>
</tr>
<tr>
<td>Freedom (F)</td>
<td>11</td>
<td>.71</td>
<td>.79</td>
<td>.84</td>
<td>.82</td>
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<tr>
<td>Responsibility (R)</td>
<td>13</td>
<td>.80</td>
<td>.82</td>
<td>.85</td>
<td>.83</td>
</tr>
<tr>
<td>Existence Scale (Total)</td>
<td>46</td>
<td>.90</td>
<td>.91</td>
<td>.90</td>
<td>.93</td>
</tr>
<tr>
<td>Emotional Exhaustion</td>
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<td>.82</td>
<td>.88</td>
<td>.89</td>
<td>.87</td>
</tr>
<tr>
<td>Depersonalization</td>
<td>5</td>
<td>.66</td>
<td>.65</td>
<td>.70</td>
<td>.71</td>
</tr>
<tr>
<td>Personal Accomplishment</td>
<td>7</td>
<td>.79</td>
<td>.80</td>
<td>.79</td>
<td>.75</td>
</tr>
</tbody>
</table>

Table 1. A survey of alpha coefficients for the Existence Scale and burnout dimensions From the teachers’ and the principals’ studies, and two other studies.
Table 2. A survey of teacher ($N = 215$) and principal ($N = 514$) mean scores, standard deviations and correlations between burnout dimensions and independent variables.

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sex</td>
<td></td>
<td>171</td>
<td>(79.5%)</td>
<td>–</td>
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<td></td>
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<tr>
<td>2. Age</td>
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<td>50.17</td>
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<td>5.08</td>
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<td>.61**</td>
<td>.55**</td>
<td>.79**</td>
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* $p < .05$, ** $p < .01$

Note: Principals' results in boldface.
\( t(727) = 12.41, p < .05 \). No differences in mean scores between the two respondent groups were found concerning emotional exhaustion, self-transcendence, and responsibility.

For both teachers and principals, hierarchical regression was applied to determine whether adding information regarding self-distance, self-transcendence, freedom, and then responsibility improved prediction of emotional exhaustion, depersonalization and reduced personal accomplishment (Table 3). The independent variables were entered in the equation in five successive steps (Aiken and West 1991; Tabachnick and Fidell 2001; Kennedy 2003).

As a first step in the analysis, we entered teacher and principal sex to assess how much variance in the dependent variables (i.e. the three dimensions of burnout) can be accounted for by differences in sex. In the second step of the analysis, teacher age and principal age, respectively, are entered to determine how much variance in the dependent variables can be accounted for by differences in age. In the third step, self-distance is entered to determine whether \( R^2 \) increases significantly when differences in self-distance are added to the equation. The fourth step is to enter self-transcendence in order to determine whether differences in self-transcendence are related to dimensions of burnout after differences in age, self-distance and self-transcendence are statistically accounted for. The fifth step is to enter the independent variable freedom, and in the sixth step responsibility is entered. Because burnout consists of three dimensions, three regression analyses have been employed.

Teachers’ results are reported first, and then principals’ results. In Table 3, the latter results are typed in boldface. The results of the hierarchical regression analyses of the teachers’ data show that the variable responsibility added in step 6 was a significant predictor of the burnout dimensions emotional exhaustion (\( \beta = -.22, p < .01 \)) and personal accomplishment (\( \beta = .18, p < .01 \)).

| Predicting variable | Emotional exhaustion | | | | Depersonalization | | | | Personal accomplishment | | |
|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|                     | \( \beta \) | \( \Delta R^2 \) | \( \beta \) | \( \Delta R^2 \) | \( \beta \) | \( \Delta R^2 \) | \( \beta \) | \( \Delta R^2 \) |
| Step 1: Sex         | .07 | .00 | -.11 | .02 | -.07 | .00 | |
|                     | .13** | .01* | -.01 | .00 | -.02 | .00 | |
| Step 2: Age         | .03 | .00 | .06 | .00 | -.13* | .01 | |
|                     | .05 | .00 | .02 | .00 | -.07 | .01 | |
| Step 3: Self-distance | -.14 | .10** | -.01 | .06** | .09 | .10** | |
|                     | -.05 | .18** | -.12* | .12** | .04 | .16** | |
| Step 4: Self-        | -.03 | .02* | -.23** | .09** | .03 | .04* | |
| transcen-            | -.06 | .05** | -.16** | .04** | .11* | .06** | |
| dence              | -.14 | .04* | -.14 | .03* | .27** | .08** | |
| Step 5: Freedom      | -.17* | .08** | -.02 | .01* | .39** | .09** | |
|                     | -.22* | .02* | -.14 | .01 | .18* | .01 | |
| Step 6: Responsibility | -.38** | .05** | -.23** | .02* | .07 | .00 | |
| Multiple R           | .43 | .46 | | | .49 | | | |
| R^2 total            | .60 | .45 | | | .56 | | | |
| Overall Regression F test | 7.89** | 9.17** | 11.12** | 48.56** | 20.85** | 39.41** |

\* \( p < .05 \), ** \( p < .01 \)

Note: Principals’ results in boldface.
Self-transcendence, added in step 4, was significantly negatively related to the dimension depersonalization ($\beta = -.23, p < .001$). Freedom, added in step 5, was positively related to personal accomplishment ($\beta = .27, p < .001$). Regression analysis shows that the lower the scores on responsibility, the higher the scores on emotional exhaustion, and the higher the scores on responsibility, the higher the scores on personal accomplishment. There is also an inverted relationship between self-transcendence and depersonalization: the lower the scores on self-transcendence, the higher the scores on depersonalization. Freedom is significantly related to reduced personal accomplishment. The degree of variance accounted for by the predicting variables in steps 1 to 6 was 19 per cent for emotional exhaustion, 21 per cent for depersonalization and 24 per cent for personal accomplishment.

The results of the principals’ data show that the variable sex, added in step 1, was a significant positive predictor of the burnout dimension emotional exhaustion ($\beta = .13, p < .001$). Self-distance, added in step 3, was a significant negative predictor of the burnout dimension depersonalization ($\beta = -.12, p < .001$). Self-transcendence, added in step 4, was significantly negatively related to the dimension depersonalization ($\beta = -.16, p < 0.001$), and positively related to reduced personal accomplishment ($\beta = .11, p < .001$). Freedom, added in step 5, was negatively related to emotional exhaustion ($\beta = -.17, p < .001$), and positively related to reduced personal accomplishment ($\beta = .39, p < .001$). Responsibility was significantly negative related to both emotional exhaustion ($\beta = -.38, p < .001$) and depersonalization ($\beta = -.23, p < .01$). Regression analysis shows that the lower the scores on freedom and responsibility, the higher the principals’ scores on emotional exhaustion. We found the same inverted relationship between the three independent variables and depersonalization: the lower the scores on self-distance, self-transcendence, and responsibility, the higher the scores on depersonalization. In contrast, we found that the higher the scores on self-transcendence and freedom, the higher the scores on reduced personal accomplishment. The degree of variance accounted for by the predicting variables in steps 1 to 6 was 37 per cent for emotional exhaustion, 20 per cent for depersonalization and 32 per cent for reduced personal accomplishment. Existential fulfillment variables accounted for more variance in principals’ scores than in teachers’ burnout scores.

Discussion

To the best of our knowledge, this is the third study to evaluate the relationship between existential fulfillment and teacher burnout dimensions. It is also the first study that investigates school principals on this relationship.

The results show that existential fulfillment – self-distance, self-transcendence, freedom, and responsibility – is negatively correlated to emotional exhaustion and depersonalization and positively correlated to personal accomplishment. They also show that higher scores on the dimensions of existential fulfillment result in fewer burnout complaints among teachers and principals.

These findings are in agreement with Längle’s (2003a) conception of burnout and existential meaning. The present study also confirms Karazman’s (1994) research on female Austrian physicians. Nindl (2001) examined the relationship between existential fulfillment and three dimensions of teacher burnout. He observed negative correlations between the four dimensions of existential fulfillment and emotional exhaustion and depersonalization. These results are in agreement with our study. Our results are also consistent with findings of Pines (2004), Loonstra and Tomic (2005), and Rebel and Tomic (2004), who posit that existential fulfillment rooted in one’s existence makes people less prone to burnout. The greater the existential fulfillment, the less people suffer from burnout.

Frankl’s (1970, 1977, 1983) and Längle’s (2003b) theory predicts that an increasing degree of existential fulfillment diminishes the risk of falling victim to burnout. The current study shows
that this observation is plausible to a considerable extent. We may perhaps expect that teachers and principals who practice dimensions of personal fulfillment will experience positive outcomes for other determinants in suppressing burnout – for example, personality, assertiveness, and coping (Wagenvoort et al. 1998; Kundi, Wurst, and Längle 2003; Längle, Örgler, and Kundi 2003).

The correlations between dimensions of existential fulfillment on the one hand and the three dimensions of burnout on the other are in line with our expectations. The observed correlations can be put forward as an argument that the Existence Scale is a reasonably valid instrument. This is a valuable conclusion for a rather new instrument.

As existential fulfillment is a highly decisive factor with respect to the onset of burnout, it is a good idea to foster existential fulfillment to prevent future burnout complaints among teachers and principals. Four dimensions (i.e. self-distance, self-transcendence, freedom, and responsibility) are significant points of departure for devising an intervention program targeting teachers and principals. This is a worthwhile observation.

Our study has some limitations. Although the response rate was quite acceptable, response bias remains a possibility. We conducted our study primarily in January, after the Christmas break – a time of year during which teacher morale is typically relatively high (Brouwers and Tomic 2000). Surveying teachers at a different time of year, for instance in June, may well have resulted in different rates of burnout. We could not compare respondents with nonrespondents because, to fully protect the anonymity of all teachers – regardless of their participation – we obtained only limited demographic information from respondents. We did not obtain data on nonrespondents.

Measures in our study were based on self-reports, and we do not know the extent to which these self-reports accurately reflect existential fulfillment and burnout assessed in the survey. Naturally, the results of the present study on the association between existential fulfillment and burnout should be regarded with caution, but there are no indications that these findings solely reflect biased respondent reporting. The findings of the survey could be used to generate hypotheses for future research.

Finally, our study is limited by its cross-sectional design. Some reservations must be expressed as to the direction of causation. The current study does not demonstrate conclusively that a high degree of existential fulfillment leads to fewer burnout complaints. It is quite conceivable that it is just the opposite: a large number of burnout complaints lead to diminished existential fulfillment. This issue requires further investigation. Future longitudinal studies are needed to evaluate the possibility of a causal relationship between existential fulfillment and teacher and principal burnout.

However, in spite of the limitations, our study has several important strengths. First, as we satisfied a number of Guglielmi’s (2001) methodological criteria, the study uses measures whose psychometric properties are known, making it possible to compare findings across studies. Second, we also applied an appropriate multivariate data-analytic strategy (i.e. hierarchical regression). Third, as the typical teacher burnout study is essentially atheoretical according to Guglielmi (2001), we adopted a theoretical framework that would help to organize research findings across investigations. Theoretical research will also be of use when developing interventions for teachers and principals aimed at preventing and reducing burnout complaints. Fourth, we also adopted a recommendation made by Barnett, Brennan, and Gareis (1999) to rewrite the seven MBI categories so that they are mutually exclusive and more readily interpretable. Fifth, in addition we used quite large samples, which is unusual in burnout research. To our knowledge, the current study has a larger number of participants than previously reported studies regarding existential fulfillment and teacher burnout (Nindl 2001). A total of 514 principals responded to our questionnaire. Sixth, our study had a quite acceptable survey response rate (Babbie 1994; Asch, Jedrziewski, and Christakis 1997). Seventh, teachers and principals were unaware of the
purpose of the study. Eighthly, the observed association between existential fulfillment and teacher and principal burnout was statistically significant and large enough to suggest that the findings could be meaningful.

A better understanding of existential fulfillment – self-distance, self-transcendence, freedom and responsibility – leading to teacher and principal burnout is essential. It is therefore important to conduct future studies which we hope will replicate our findings.

The present study shows that existential fulfillment is associated with burnout dimensions. A high level of existential fulfillment goes along with low burnout scores. Further investigation of the prevalence, causes, consequences, and management of teacher and principal burnout is needed.

Acknowledgement

We are grateful to Susanne de Wit, who was responsible for principals’ data collection.

Notes on contributors

Welko Tomic is currently at the Open University of the Netherlands, Department of Psychology. His research interests are focused in the following major areas. The first area, organisational complaints (the person and the workplace, for instance burnout and the positive antithesis of it), articulates the key relationships between existential, social, and contextual variables. The other areas are organisational creativity, instructional behaviour, and inductive reasoning. Studies are conducted from a psychological perspective with a broad-based research approach.

Elvira Tomic is a graduate student of economics at Free University, Amsterdam.

References


