

Existential Fulfillment And Burnout Among Principals and Teachers

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Abstract

The aim of the current study is 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 (Schaufeli & Van Horn, 1995) was used to assess the teachers' and principals' burnout level. Second, existential fulfillment was measured by the Längle, Orgler and Kundi (2003) existence scale. The results of the present study indicate that teachers' and principals' existential fulfillment is related to their burnout level. Lack of existential fulfillment is an important burnout determinant. Erroneously, 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

Existential Fulfillment And Burnout Among Principals and Teachers

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, 1993; Maslach, Jackson & Leiter, 1996). 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 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; 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, 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, but it is also accepted internationally as such.

In the Netherlands, the MBI has been applied as an instrument for studying workers in many occupations: teachers (Brouwers, Evers & Tomic, 2001; Evers,

Brouwers & Tomic, 2002), nurses (Janssen, Schaufeli & Haukes, 1999; Ogus, 1990), dentists (Gorter, 2000), elderly care workers (Evers, Brouwers & Tomic, 2002), and pastors (Tomic & Evers, 2003; Tomic, Tomic & Evers, 2004, Loonstra & Tomic, 2005), to mention but a few.

Research has demonstrated that burnout is associated with decreased job performance (Brouwers & Tomic, 2000; Evers, Brouwers & Tomic, 2002), reduced job commitment, and that it predicts low career satisfaction (Lemkau, Rafferty & Gordon, 1994) and stress-related health problems (Maslach, Schaufeli & 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 & 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

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.

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. 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 percent of all teachers in the USA will become exhausted at a certain point. Dutch percentages indicate a similar figure. Compared to other professions in the Netherlands, burnout occurs most frequently in education. Results show that over 13 percent of teaching staff experience burnout symptoms (Brouwers & Tomic, 1999, 2000; Hupkens, 2005). More than half of these cases can be attributed to psychological complaints (Van Horn & Schaufeli, 1996).

Burnout is therefore a highly significant phenomenon in education. Some research on burnout among principals has been conducted (Freedman, 1995; Sari, 2004; Whitehead, 2000; Whitaker, 1995). 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. The aforementioned issues cause principals to question whether they want to remain in their jobs.

Existential Fulfillment

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 & Tang, 1995; Nindl, 2001; Rebel & Tomic, in press). 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 & Aronson, 1988; Pines, 1993; 2000; 2004; Schaufeli & 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 & Tang (1995), Nindl (2001), and Rebel & Tomic (in press), 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 & Längle, 2003; Längle, Orgler & Kundi, 2003). It is a 46-item questionnaire "...assessing the degree of someone's personal fulfillment in one's existence." (Längle et al., 2003a, p. 135).

The underlying theory of the Existence Scale is not based on developmental or personality psychology, but on psychoanalysis and existential psychology, related to the Franklian analysis of a cultural deficit in modern times (Längle, 2003). 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 environment in a balanced way.

The questionnaire asks the respondent about his ability "...to cope in a meaningful way with oneself and the world" (Längle et al., 2003a, p. 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 other persons 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.

- INSERT FIGURE 1 ABOUT HERE -

The above-mentioned theoretical underpinnings have provided the groundwork for the Existence Scale. Längle's ES is qualified to measure meaning of life as a predictor of burnout 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 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 & Enzmann, 1998). Cultural changes are associated with changes in existential fulfillment. The implication is that burnout will become a greater social and, therefore, an 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. 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 to 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 & 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 & Tomic, 2000; Evers et al., 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 & Tomic, in press). 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 percent, and 51.4 percent, respectively, which is not only very good for survey research according to Babbie (1995), but also according to the findings of Asch, Jedrzejewski, and Christakis (1997).

The number of male teachers was 44 (20.47 percent) and the number of female teachers 171 (79.53 percent). The mean age of teacher respondents was 39.46 years, whereas the national mean age of primary school teachers is 40.49 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 percent) and the number of female principals was 123 (24 percent). The average age of the principals was 50.17 years, whereas the national mean age of school principals is 50.48 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 & Leiter, 1986; Dutch translation by Schaufeli & Van Dierendonck, 1995). 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. 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 & 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 (Green & Walkey, 1988; Vlerick, 1995; Schaufeli & Van Dierendonck, 1994). 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).

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). Längle (2003), Loonstra & Tomic (2005), and Rebel & Tomic (in press) 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

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

- INSERT TABLE 1 ABOUT HERE -

Table 2 presents the mean scores, standard deviations and correlations between the four existence subscales and three burnout dimensions. The results show that self-distance, self-transcendence, freedom and responsibility are negatively correlated to both emotional exhaustion and depersonalization: the lower the scores on the existence subscales, the higher the scores on the two burnout dimensions. The existence subscales are positively correlated to personal accomplishment: the higher the scores on the existence subscales, 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.

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, $t(727) = 12.41, p = < .05$. No differences in mean scores between the two respondent groups were found concerning emotional exhaustion, self-transcendence, and responsibility.

- INSERT TABLE 2 ABOUT HERE -

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

In the first step of the analysis, teacher age and principal age, respectively, are entered to determine how much variance in the dependent variables, i.e. the three dimensions of burnout, can be accounted for by differences in age. In the second step, self-distance is entered to determine whether R^2 increases significantly when differences in self-distance are added to the equation. The third 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 fourth step is to enter the independent variable freedom. For reasons of multicollinearity, the independent

variable “responsibility” was not entered in the equation (Tabachnick & Fidel, 2001). 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 self-distance added in step 2 was a significant predictor of the burnout dimension emotional exhaustion ($\beta = -.15, p < .01$). Self-transcendence, added in step 3, was significantly negatively related to the dimension depersonalization ($\beta = -.24, p < .001$). Freedom, added in step 4, was negatively related to both emotional exhaustion ($\beta = -.27, p < .001$) and depersonalization ($\beta = -.21, p < .05$), and positively related to personal accomplishment ($\beta = .38, p < .001$). Regression analysis shows that the lower the scores on self-distance and freedom, the higher the scores on emotional exhaustion. There is also an inverted relationship between self-transcendence, freedom and depersonalization: the lower the scores on self-transcendence and freedom, the higher the scores on depersonalization. Freedom is significantly related to personal accomplishment. The degree of variance accounted for by the predicting variables in steps 1 to 4 was 16 percent for emotional exhaustion, 19 percent for depersonalization and 23 percent for personal accomplishment.

The results of the principals’ data show that the variable self-distance, added in step 2, was a significant negative predictor of the burnout dimensions emotional exhaustion ($\beta = -.125, p < .001$) and depersonalization ($\beta = -.16, p < .001$). Self-transcendence, added in step 3, was significantly negatively related to the dimensions emotional exhaustion ($\beta = -.10, p < .01$) and depersonalization ($\beta = -.17, p < 0.001$), and positively related to personal accomplishment ($\beta = .13, p < .01$). Freedom, added

in step 4, was negatively related to both emotional exhaustion ($\beta = -.39, p < .001$) and depersonalization ($\beta = -.17, p < .001$), and positively related to personal accomplishment ($\beta = .43, p < .001$). Regression analysis shows that the lower the scores on self-distance, self-transcendence and freedom, 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 freedom, 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 personal accomplishment. The degree of variance accounted for by the predicting variables in steps 1 to 4 was 30 percent for emotional exhaustion, 20 percent for depersonalization and 32 percent for personal accomplishment. Existential fulfillment variables accounted for more variance in principals' scores than in teachers' burnout scores.

- INSERT TABLE 3 ABOUT HERE -

Discussion

To 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, and freedom – is negatively correlated to emotional exhaustion and depersonalization and positively correlated to reduced 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 & Tomic (2005), and Rebel & Tomic (in press), 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 (2003) 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 (Kundi et al., 2003; Längle et al., 2003; Wagenvoort et al., 1998).

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. Three dimensions, i.e. self-distance, self-transcendence, and freedom, are significant points of departure for devising an intervention program targeting teachers and principals.

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 & 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 & 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). 514 principals responded to our questionnaire. Sixth, our study had a quite acceptable survey response rate (Babbie, 1995; Asch, et al., 1997). Seventh, teachers and principals were unaware of the purpose of the study. Eighth, 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. Further investigation of the prevalence, causes, consequences, and management of teacher and principal burnout is needed.

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Existential Fulfillment And Burnout

Table 1. A Survey of Alpha Coefficients For The Existence Scale From The Teachers' And The Principals' Studies, And Two Other Studies.

Existence Subscales	Number of Items per Scale	Teachers N = 215 α	Principals N = 514 α	Loonstra & Tomic (2005) Ministers N = 280 α	Länge et al. (2003a) General Population Sample N = 1028 α
Self-distance (SD)	8	.71	.68	.71	.70
Self-transcendence (ST)	14	.76	.66	.68	.85
Freedom (F)	11	.71	.79	.84	.82
Responsibility (R)	13	.80	.82	.85	.83
Existence Scale (Total)	46	.90	.91	.90	.93

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Table 2. A Survey of Teacher (N = 215) and Principal (N = 514) Mean Scores, Standard Deviations and Correlations Between Burnout Dimensions and Independent Variables

	Mean	SD	1	2	3	4	5	6	7
1. Age	39.46 50.17	10.69 6.72							
2. Emotional Exhaustion	12.65 12.57	6.24 7.26	-.04 .02						
3. Depersonalization	3.31 4.28	2.61 3.12	.03 .03	.42** .45**					
4. Personal Accomplishment	32.28 30.27	4.56 5.07	-.07 -.09*	-.29** -.47**	-.30** -.36**				
5. Self-Distance	37.41 39.10	4.82 4.68	.08 .07	-.37** -.42**	-.34** -.35**	.37** .39**			
6. Self-Transcendence	73.34 74.10	5.08 5.03	.11 -.10*	-.33** -.40**	-.45** -.35**	.40** .42**	.53** .49**		
7. Freedom	52.29 53.52	5.78 6.50	.01 -.04	-.34** -.53**	-.39** -.38**	.43** .55**	.55** .64**	.66** .61**	
8. Responsibility	61.87 62.67	7.21 7.79	.20** .01	-.39** -.57**	-.35** -.40**	.41** .47**	.53** .61**	.55** .55**	.73** .79**

p < .05, ** p < .01

Note: Principals' results in boldface.

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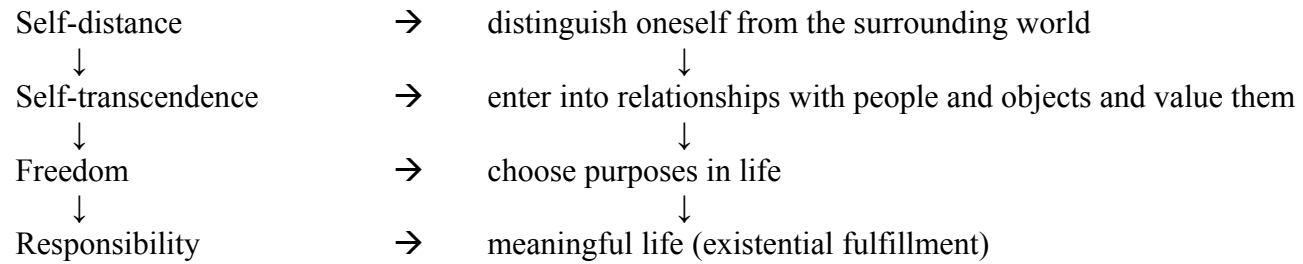
Table 3. Hierarchical Regression of Predicting Variables on Emotional Exhaustion, Depersonalization, and Personal Accomplishment

Predicting Variable	Emotional Exhaustion		Depersonalization		Personal Accomplishment	
	β	ΔR^2	β	ΔR^2	β	ΔR^2
Step 1: Age	.02 .01	.00 .00	.05 .02	.00 .00	-.09 -.06	.01 .01
Step 2: Self-distance	-.15* -.12*	.09** .18**	-.05 -.16**	.07** .13**	.10 .06	.09** .16**
Step 3: Self-transcendence	-.05 -.10*	.03* .05**	-.24** -.17**	.09** .04**	.05 .13*	.04* .06**
Step 4: Freedom	-.27** -.39**	.04* .07**	-.21** -.17**	.03* .03*	.38** .43**	.09** .09**
Multiple R	.40 .54		.44 .42		.47 .56	
R ² Total	.16 .30		.19 .18		.22 .31	
Overall Regression F test		10.00** 53.67**		12.32** 28.01**		15.08** 58.96**

*p < .05, **p < .01

Note: Principals' results in boldface.

Figure 1. Aspects of Existential Fulfillment



Vertical arrows suggest a logical next step. Horizontal arrows suggest practical meaning.
(Loonstra & Tomic, 2005)