

BURNOUT AMONG GENERAL PRACTITIONERS: A PERSPECTIVE FROM EQUITY THEORY

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This study investigated the relationship of harassment by patients, feelings of inequity and social support on burnout in a national exemplary sample of 567 Dutch general practitioners. Burnout was measured using the Maslach Burnout Inventory. LISREL VII was employed to test an a priori specified linear structural equation model that was based on equity theory. This model that was successfully fitted to the data postulates that: (1) burnout consists of two dimensions: emotional exhaustion, and negative attitudes towards one's patients and towards oneself (i.e., depersonalization and reduced personal accomplishment); (2) feelings of inequity and social support play an intervening role between harassment by patients and emotional exhaustion; (3) emotional exhaustion fosters a negative attitude, which in its turn aggravates the doctors poor relationships with his or her patients. It is concluded that equity theory enhances our understanding of the relationship between practitioner and patient as a determinant of burnout.

Since its "discovery" in the early seventies burnout in human service professions has been considered the result of the demanding and emotionally charged relationships between professional (i.e., "caregiver") and recipients (cf. Maslach & Schaufeli, 1993). Pioneers such as Maslach (1978) and Freudenberg (1974) emphasized the key role that client- or patient-contacts play in the development of the burnout syndrome. It has been shown that as the amount of contact with recipients increases, either in terms of a higher caseload or a greater percentage of time spent in direct contact burnout is more likely to occur (Koeske & Koeske, 1989; Whitehead, 1989; Lewinston, Conley & Blessing-Moore, 1981; Maslach & Pines, 1977; Savicki & Cooley, 1983; Rogers & Dodson, 1988).

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Moreover, burnout is greater when the nature of the contact is especially upsetting, frustrating, or difficult (Maslach & Jackson, 1984; Meadow, 1981; Pines & Maslach, 1978; Ackerley, Burnell, Holder, & Kurdek, 1989; Chiriboga & Bailey, 1986). Accordingly, burnout is related to the quantity as well as to quality of the contacts the professional has with his or her clients. Despite these findings that indicate the importance of the relationship of professionals with their clients, virtually no attention has been paid to the social psychological processes that are involved in these interpersonal contacts between care-giver and recipient. The present study tries to fill this gap between social psychological theory and burnout research by taking a perspective from equity theory. Recently, Buunk and Schaufeli (1993) have argued that this theory provides a promising framework for improving our understanding of burnout.

We investigated general practitioners (GPs), assuming that the key for understanding burnout is to be found in their emotionally demanding relationships with patients. The importance of good relationships with patients for the GPs well-being was recently demonstrated by a study of Cooper, Rout, and Faragher (1989). They found that job demands related to patient-contacts, patients' expectations, and interruptions by patients had a negative impact on the levels of job satisfaction and mental health of British GPs. Nevertheless, surprisingly little research has been conducted on burnout among general or family practitioners.

The conceptual model that guided the present research is illustrated in figure 1, and is described in greater detail in the next three sections.

BURNOUT

Burnout is considered to be a long-term stress reaction (Maslach & Schaufeli, 1993). Although different definitions of burnout exist, it is most commonly described as "a psychological syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with other people in some capacity. Emotional exhaustion refers to feelings of being emotionally overextended and depleted of one's emotional resources. Depersonalization refers to a negative, callous, or excessively detached response to other people, who are usually the recipients of one's services or care. Reduced personal accomplishment refers to a decline in one's feelings of competence and successful achievement in one's work" (Maslach, 1993; pp. 20-21).

However, the three burnout-dimensions are not equivalent. Emotional exhaustion is considered to be the key dimension of the syndrome that shows the most robust and consistent relationships with various job

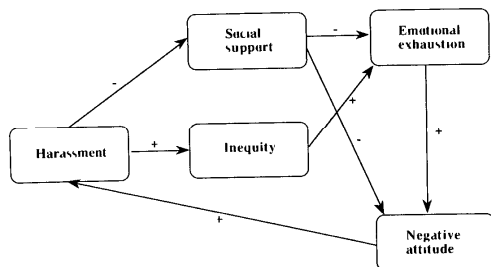


FIGURE 1. Hypothetical model

stressors such as work overload, lack of social support, and role problems (cf. Schaufeli, Enzmann & Girault, 1993). The two other dimensions (i.e., depersonalization and reduced personal accomplishment) have often been studied only as an afterthought (cf. Shirom, 1989). Recently, Schaufeli and Van Dierendonck (1993) have shown that burnout can be conceptualized as a two-dimensional construct including emotional exhaustion and negative attitudes. In their validity study among nurses a two-dimensional model of burnout fitted best to the data. The first dimension consists of emotional exhaustion and is related to somatic complaints and psychological strain, whereas the second dimension consists of depersonalization (i.e., a negative attitude towards one's recipients) and reduced personal accomplishment (i.e., a negative attitude towards oneself in relation to the job). Leiter and Maslach (1988) proposed a process model of burnout in which emotional exhaustion arises first in response to a demanding environment that is mainly characterized by emotionally charged relationships with recipients. Emotional exhaustion in turn brings about negative attitudes towards recipients (depersonalization) as professionals attempt to gain emotional distance from them as a way of coping with their exhaustion. Simultaneously, a negative attitude develops towards one's accomplishments in the job (reduced personal accomplishment). Recently this model has been tested in cross-sectional (Leiter, 1993) and longitudinal data (Lee & Ashforth, 1993). Accordingly, emotional exhaustion plays a crucial role in burnout, that differs from negative attitudes like depersonalization and reduced personal accomplishment.

It is likely that these negative attitudes in turn have a negative impact on the quality of the doctor-patient relationship. That is, such negative attitudes increase the likelihood of harassment by patients because they feel rejected. This agrees with Roter and Hall (1991) who showed that

behavior of patients towards their physicians is a measured reciprocal response of the attitude of the physician toward them. Thus, a more negative and distant attitude of burned out GPs toward their patients will reinforce not only the subjective experience of harassment but also the actual demanding behavior of patients. In terms of our model (see Figure 1) this means that a negative feedback-loop is hypothesized: demanding contacts with patients (i.e., harassments) are considered to be a precursor of burnout, whereas burnout aggravates the demanding nature of these contacts.

EQUITY

According to equity theory, people evaluate their relationships with others in terms of rewards, costs, investments, and profits (cf. La Gaipa, 1977). They expect that what they invest and gain from a relationship is proportional to what the other party in the relationship invests and gains (Adams, 1965; Walster, Walster, & Berscheid, 1978). However, unlike most other relationships, the relationship between GPs and patients is basically complementary: the physician is supposed to provide care and give attention, whereas the patient is supposed to receive. Hence, the doctor and the patient enter into a relationship from different perspectives. As a result, it will be difficult to establish an equitable relationship (Roter & Hall, 1991). Equity theory predicts that when people experience inequity, for example when GPs meet harassment by patients, they will try to reduce this tension in order to restore equity. Walster et al. (1978) suggest several strategies that someone who feels exploited or under-benefitted could employ to obtain equity. However, most of these strategies, such as demands for compensation or retaliation, are inappropriate within a doctor-patient relationship. Therefore, doctors who experience a lack of reciprocity will most likely use a psychological strategy to obtain equity, for instance by developing negative attitudes towards patients. Such callous, cynical, and impersonal attitudes constitute a symptom of the burnout syndrome. A recent study by VanYperen, Buunk, and Schaufeli (1992) among Dutch hospital nurses showed that feelings of inequity were indeed an important determinant of burnout.

SOCIAL SUPPORT

Finally, in our study, we also included perceived social support. A number of cross-sectional studies showed that burnout is positively associated with a lack of social support from colleagues and superiors (e.g., Constable & Russel, 1986; Davis-Sacks, Jayartne & Chess, 1985; Shinn, Rosario, March & Chestnut, 1984). This finding is confirmed by

longitudinal studies (Jackson, Schwab, & Schuler, 1986; Leiter, 1990; Wade, Cooley & Cavicky, 1986). In addition, we hypothesize a negative relationship between harassment and social support. A number of studies has shown that persons under stress are less likely to experience social support (for a review see: Buunk & Hoorens, 1992). At least two explanations can be given for this somewhat counterintuitive result. First, individuals who are under stress may not look very attractive for others to affiliate with and offer them support. Secondly, individuals under stress may be reluctant to look for support out of embarrassment or of fear of looking incompetent. As Maslach (1982) pointed out, the latter might particularly be the case among human service professionals.

In sum, our general research question is: What effect has experiencing harassment by patients on burnout among GPs and what role do feelings of inequity and social support play? More particularly, our model assumes that demanding relationships with patients (harassment) are indirectly related to burnout through the experience of inequity and through a lack of social support. Moreover, the development of negative attitudes aggravates the demanding relationship with patients thereby increasing the risk of burning out.

METHOD

SUBJECTS

Participants were drawn from a registration system at The Netherlands Institute of Primary Health Care. This system, encompassing virtually all general practitioners established in The Netherlands, allowed us to draw a national exemplary sample. In selecting participants, gender, age, and grade of urbanization were taken into account. The sample was stratified according to practice form (i.e., single, shared, group practice, health care center). Eight hundred and one practitioners were mailed the questionnaire, the response rate was 71%. The sample consisted of 482 male (85%) and 85 female (15%) practitioners. Their mean age was 43 years (range 26 to 68) with a mean of 12 years of work experience (range 0 to 40).

MEASURES

Burnout. Burnout was measured with the Maslach Burnout Inventory, originally consisting of three subscales: Emotional Exhaustion, Depersonalization and Personal Accomplishment (Maslach & Jackson, 1986). The items 12 ("I feel energetic") and 16 ("Working with people directly puts too much stress on me") were omitted, as suggested by Byrne (1993)

and Schaufeli and Van Dierendonck (1993). Using confirmatory factor analysis, both studies showed that the factorial validity of these two items is insufficient. Following the two-dimensional conceptualization of burnout of Schaufeli and Van Dierendonck (1993), it is assumed that reduced Personal Accomplishment and Depersonalization constitute the second dimension of burnout: negative attitudes towards the recipients and towards oneself in relation to the job.

Harassment by Patients. Harassment was measured using an adaptation of a scale developed by Mechanic (1970). The original scale contains 14 items, each of which describes one type of patient behavior (e.g., "a patient who insisted on referral to a consultant although you did not regard the referral necessary"). The original scale was supplemented by four items. The scale was hereby adapted to patient behavior deemed important for Dutch general practitioners working in the nineties. The respondent was asked about two aspects of an encounter with such a patient using two four-point scales: a frequency scale, ranging from *never* (1) to *often* (4) and an intensity scale ranging from *no burden* (1) to *very burdensome* (4).

Perception of Inequity. The GPs perception of inequity, that is, the balance of investments and outcomes in the relationships with patients, was measured using three items (e.g., "How often do you feel you invest more in the relationships with patients than you receive in return?"). A five-point scale was used, ranging from *never* (1) to *often* (5).

Social Support. Social support was measured using a scale from the Dutch adaptation of the workstress questionnaire developed by Caplan, Cobb, French, van Harrison, and Pinneau (1975), the "Vragenlijst Organisatiestress-Doetinchem" (VOS-D) (Bergers, Marcelissen, & De Wolff, 1986). The instruction prompts respondents to indicate the amount of support they perceive from three sources: (a) colleagues with whom one shares a practice; (b) colleagues in the group that fill in for one another in the evenings and in weekends (locum tenency); (c) their spouse. Each subscale consisted of five items with an answering format ranging from *never* (1) to *always* (4).

As can be seen from the values of Cronbach's alphas on the diagonal of Table 1, the internal consistencies of the scales included in the present study is quite acceptable, with only one exception (i.e., depersonalization).

ANALYSIS

Linear structural analyses were employed using LISREL VII with general least square estimation to assess the fit of the proposed model (Jöreskog & Sörbom, 1989). The fit indices produced by LISREL are

found to vary with sample size (Marsh, Balla, & McDonald, 1988). Therefore, the absolute chi-square goodness-of-fit index and the other LISREL fit-indices (i.e., Adjusted-Goodness-of-Fit - AGFI, and Root Mean Square Residual - RMSR) are supplemented by two incremental fit indices: the Tucker-Lewis Index (TLI) and the Relative Noncentrality Index (RNI) for assessing the relative fit of a model (McDonald & Marsh, 1990). Incremental fit indices indicate the fit relative to a so-called null-model, in which all measurement variables each constitute a separate construct that are unrelated to one another.

The model, as displayed in Figure 1, consists of hypothetical constructs or latent variables that are estimated by one or more empirical, manifest variables that are directly observed (i.e., the scales introduced before). The so-called measurement model of LISREL specifies how the unobserved latent variables are measured in terms of the observed manifest variables. More specifically, the measurement model estimates the strength of the relationships between the corresponding latent and manifest variables. In order to be mathematically identified, each latent variable needs to be estimated by at least two manifest variables. However, emotional exhaustion and inequity are only estimated by a single manifest variable. As was suggested by Kenny (1979), this problem can be circumvented by using reliabilities (i.e., Cronbach's alphas) to estimate the strength of the relationship between latent and manifest variables. According to his suggestions, this strength equals the square root of the reliability of the manifest variable. Consequently, the random error variance is one minus the reliability.

RESULTS

Table 1 shows the mean values, standard deviations, internal consistencies (Cronbach's alphas), and intercorrelations of the variables included in the current study.

An indication of the level of burnout among GPs was obtained by comparing the scores of this sample with a group of 667 Dutch nurses from different work settings (Schaufeli & Van Dierendonck, 1993). Compared to GPs, nurses experience significantly less emotional exhaustion ($M = 15.17, SD = 7.72; t = 7.45; p < .001$), less depersonalization ($M = 5.94, SD = 3.98; t = 16.77; p < .001$) and more personal accomplishment ($M = 28.46, SD = 4.30; t = 8.21; p < .001$). In other words, GPs exhibit significantly more burnout symptoms on all three dimensions.

Before actually testing the hypothetical model, the adequacy of the measurement model is evaluated. Anderson and Gerbing (1988) suggest a procedure to test whether or not the measurement model is misspeci-

TABLE 1
Descriptive statistics and intercorrelation of variables ($n = 567$)

	M	SD	1	2	3	4	5	6	7	8	9
1. Emotional Exhaustion ^a	18.31	6.96	(.88)								
2. Depersonalization	9.57	3.67	.45	(.64)							
3. Pers Accomplishment ^b	26.66	3.20	-.33	-.44	(.74)						
4. Harassment, frequency	43.02	5.56	.38	.35	-.23	(.79)					
5. Harassment, burden	37.58	7.79	.37	.34	-.20	.57	(.77)				
6. Inequity	8.73	2.03	.47	.33	-.22	.42	.36	(.74)			
7. Support, spouse	8.50	1.92	-.10	-.16	.14	-.01	-.06	-.01	(.82)		
8. Support, colleagues	7.67	2.36	-.17	-.09	.07	-.09	-.16	-.04	.29	(.77)	
9. Support, locum tenency	6.10	2.35	-.20	-.11	.15	-.13	-.08	-.11	.18	.33	(.75)

^a with item 16 excluded

^b with item 12 excluded

TABLE 2
Goodness-of-fit indices of burnout-models ($n = 567$)

	X^2	df	p	AGFI	RMSR	TLI	RNI
Null-model	1018.33	36	.000	.54	.240		
Null submodel	215.07	29	.000	.87	.251	.76	.79
Full saturated model	33.07	19	.024	.97	.032	.97	.97
Hypothetical model	34.18	22	.047	.97	.032	.98	.97
Respecified model	34.90	23	.053	.97	.034	.98	.97

fied, in which case a fitting model cannot be found. In order to assess possible misspecifications in the measurement model two additional models have to be fitted to the data: (1) the so-called full saturated model, in which all parameters relating the five latent variables included in the model to one another are estimated; (2) the so-called null submodel, in which all these parameters are fixed at zero. Next, a chi-square test is constructed using the chi-square value of the full saturated model ($X^2 = 33.07$) and the degrees of freedom of the null submodel ($df = 29$). Since this pseudo chi-square test failed significance ($p = .28$), it is unlikely that misspecifications have occurred in the measurement model. Hence, we can proceed to testing the hypothetical model.

According to both incremental fit indices, the fit of the hypothetical model (see Figure 1) is quite satisfactory being well above .90, the criterion suggested by Bentler and Bonnet (1980). The path from social support to negative attitude proved to be nonsignificant. Therefore, this relationship was constrained at zero. This respecification of the hypothetical model did not significantly reduce the fit to the data ($X^2_{(1)} = .72$, $p = .41$). The relationships of this respecified model explain 39% of the variance of emotional exhaustion and 40% of the variance of the GPs negative attitude.

Figure 2 shows the so-called standardized solution of the respecified model. The path-coefficients can be interpreted as standardized regression coefficients. As hypothesized, both inequity and social support mediate the relationship between harassment by patients and emotional exhaustion. However, the indirect effect of harassment through feelings of inequity is much stronger than through lack of social support. Moreover, emotional exhaustion is strongly related to negative attitudes, which in its turn is related to harassment. Accordingly, the negative feedback loop is confirmed. However, contrary to expectations, social support was not significantly related to negative attitude.

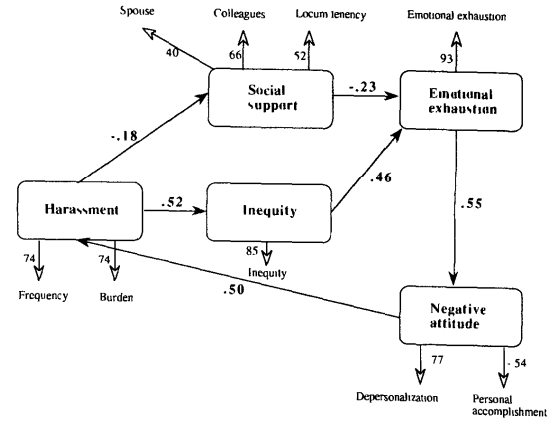


FIGURE 2. Respecified model, standardized solution

DISCUSSION

The results of this study present a strong case of burnout among general practitioners as related to experiencing harassment by patients. This finding lends credence to Maslach's (1978) and Freudenberg's (1974) early view that the emotional and demanding nature of the professional-recipient relationship is a root-cause of burnout. Our results for the Dutch situation are also largely consistent with those obtained by Cooper et al. (1989) with British general practitioners, who found that demands of the job caused by patients are a main predictor of the GPs mental well-being. The relevance of harassment by patients is supported by the high incidence of such events: 25% of the Dutch general practitioners in the present study reported having experienced some kind of physical threat during the year preceding the survey. Apparently, such experiences leave a mark, as is testified by the relative high level of burnout among GPs compared with nurses from various health care settings.

The finding that depersonalization and reduced personal accomplishment constitute a separate aspect of burnout (Schaufeli & Van Dierendonck, 1993) is replicated in this study by the acceptance of the hypothesized measurement model. The consistency of the results across these two studies confirms the validity of the two-dimensional concep-

tualization of burnout including: emotional exhaustion and negative attitudes towards one's recipients and towards oneself.

The internal consistency of depersonalization is somewhat low. However, the negative impact on the validity of our results is somewhat reduced since we analyzed relationships between latent variables. This means that the variance of the latent variable "negative attitudes" is simultaneously estimated by depersonalization and personal accomplishment.

Our model confirms the negative feedback loop of the GPs negative attitude to harassment. This agrees with Roter and Hall (1991), who pose that the relationship between professional and patient is reciprocal by its very nature. Negative attitudes from doctors and patients reinforce each other, which eventually may lead to increased feelings of burnout among GPs. However, because of the cross-sectional nature of this study, one should be careful with inferences about cause and effect. The existence of a negative feedback loop should be confirmed using a longitudinal design.

The role of inequity in generating burnout, as suggested by Buunk and Schaufeli (1993), is supported in this study. In contrast to the findings of VanYperen et al. (1992), in our model inequity is related exclusively to emotional exhaustion. It is interesting to speculate on possible explanations for this difference. A reasonable explanation of this finding is our use of linear structural modelling with LISREL in contrast to MANOVA, that was used by VanYperen et al. (1992). LISREL has the advantage that it takes into account all direct and indirect effects simultaneously. It is therefore possible that in the present study the effect of inequity on depersonalization and personal accomplishment, as reported by VanYperen et al. (1992), manifests itself as an indirect effect through emotional exhaustion. This interpretation is strengthened by the fact that inequity is moderately related to depersonalization ($r = .33$) and personal accomplishment ($r = -.22$), but that these relationships turned out not to be significant in our model.

The results confirm the negative relationship of social support with burnout. The finding that GPs who report more harassment experience less support agrees with the studies reviewed by Buunk and Hoorens (1992) and with the ideas of Maslach (1982). This somewhat counterintuitive finding as well as the previously mentioned negative feedback loop is consistent with the conservation of resources theory (Hobfoll, 1988). This theory stipulates that resources tend to enrich other resources ("gain spiral") and that lack of resources leads to further loss of resources ("loss spiral"). Social support and positive attitudes can be regarded resources, whereas the experience of harassment can be interpreted as a loss of resources (Hobfoll, Freedy, Lane, & Geller, 1990). An experience

of loss, especially caused by chronic stressors like patients who come back repeatedly, may start a loss spiral.

A strong point of our study is that this sample can be regarded as exemplary of all general practitioners in The Netherlands. Furthermore, the response rate is high compared with recently obtained response rates for Dutch general practitioners, that were in the order of 60% (van der Wouden, Hingstman, & Elzinga, 1988).

A limitation of the present study is the conceptualization of equity. The items used focus only on the balance between investments and outcomes in relationships with patients. No explicit reference was made to the general practitioner to compare his or her input and outcome to those of their patients, which would be more in accordance with the original equity formula of Adams (1965). However, the strong relationship between harassment and inequity may be interpreted as support for the concept validity of the equity scale. Patients who call the doctor in the middle of the night for a minor illness or who are aggressive are clearly exploiting the doctor-patient relationship. Besides, "equity is in the eye of the beholder" (Walster et al., 1977) and empirical data suggest that pinning down equity to one formula is easier said than done (Harris, 1983). It can, therefore, be concluded that equity theory and the way it is conceptualized in this study offers a promise to enhance our understanding of the underlying mechanisms of burnout.

As mentioned previously, the model is tested on cross-sectional data and needs to be validated longitudinally. Finally, only self-report data have been included. So future studies should include more objective measures.

The relative high level of burnout among general practitioners emphasizes the relevance of giving attention to the doctor-patient relationship. The importance of inequity in the burnout process suggests that to diminish burnout general practitioners should be provided with the opportunity to restore equity in this relationship. This can be achieved by teaching general practitioners to develop an attitude of "detached concern" (Lief & Fox, 1963). In the same vein, it is important to have general practitioners allow to terminate a relationship with a patient. Terminating a relationship with a patient runs counter to the physician's professional attitude. The general practitioner is there to listen and to help, to devote his attention to the life and problems of another human being (Spence, 1960). At present, this is a point of considerable controversy in The Netherlands (Schretlen, 1992). In conclusion, the somewhat surprising negative relationship of social support with harassment by patients emphasizes the importance for general practitioners to carefully monitor their relationships with colleagues.

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