

THE EVALUATION OF A BURNOUT WORKSHOP FOR COMMUNITY NURSES

WILMAR B. SCHAUFELI
University of Nijmegen

ABSTRACT

This study evaluates the effects of a burnout workshop that was conducted for community nurses ($N = 64$). The workshop included relaxation training, didactic and cognitive stress management, interpersonal skills training, and the enhancement of a more realistic professional role. The nurses' symptom levels (*i.e.*, emotional exhaustion, tedium, psychological strain, and somatic complaints) decreased significantly. However no significant changes were observed in the attitudinal component of burnout: the nurses' negative attitudes toward their recipients (depersonalization) and toward their performance on the job (reduced personal accomplishment) did not decrease. In addition, personality (*i.e.*, the nurses' level of reactivity) played a moderating role: low reactive nurses who, by definition, are rather resistant to stress benefited more from the workshop than did high reactive nurses who are less resistant to stress. Since no control group was included, the results of this study are tentative and should be confirmed by future research.

INTRODUCTION

Burnout is considered to be a long-term stress reaction that particularly occurs among human services professions (Maslach and Schaufeli, 1993).^{1, 2} Although different definitions of burnout exist, it is most commonly described as (Maslach, 1993:20-21):

a psychological syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with 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 feeling of competence and successful achievement in one's work.

In the past decade, nurse burnout received much attention. In their recent bibliography, Kleiber and Enzmann (1990) listed 145 books, papers, and chapters that have been published on this topic during the past 15 years. After teaching, nursing is the second most popular profession as indicated by the number of publications on burnout. This is not surprising since nursing is generally considered to be a very stressful and mentally demanding job (Marshall, 1980). Research has shown that various job stressors in nursing are related to burnout, including high workload (Landsbergis, 1988), poor interpersonal support (Firth *et al.*, 1986), role problems and conflicts with administrators, physicians, and other nurses (Gray-Toft and Anderson, 1981), confrontation with death and dying (Hare, Pratt, and Andrews, 1988), and emotional demands of patients and their families (McGrath, Reid, and Boore, 1980). Burnout not only affects the individual nurse but it has negative consequences for the organization as well. Nurse burnout is positively related to tardiness, neglect, theft of drugs, and serious on-the-job mistakes (Jones, 1981a, 1981b), future absenteeism and turnover (Firth and Britton, 1989), and alcohol use (Haack, 1988).

Since burnout emerged as a social problem rather than a scholarly construct, attention was paid to its prevention from the very moment the concept was introduced in the early seventies (Maslach and Schaufeli, 1993). Particularly, burnout workshops are very popular. Most typically, these workshops that are conducted with intact teams or with individuals from different worksettings combine several approaches: *i.e.*, relaxation techniques, cognitive stress management, time management, social skills training, didactic stress management, and attitude change (Pines and Aronson, 1988).

Unfortunately, only a few studies evaluate the effectiveness of burnout prevention programs for people helpers. Pines and Aronson (1983:270) evaluated a one-day burnout workshop for employees of two social services. Although the authors claim that at the post-test--one week after the workshop finished--the level of burnout (*i.e.*, exhaustion) in the experimental group had "decreased slightly," this effect did not reach significance (*i.e.*, $p < .10$). However, compared to the control group that did not participate in the workshop, satisfaction with co-workers went up significantly in the experimental

group.

In a similar vein, Brown (1984) showed that weekly staff-support groups did not reduce the level of burnout in nurses after five months, but that they were more satisfied with their co-workers and superiors. These findings agree with Larson (1986) who evaluated a 12-week staff-support group training program for hospice and oncology workers. He also observed no significant decrease in burnout scores (*i.e.*, exhaustion). However, participants were quite satisfied with the training program and with their group experience.

West, Horan, and Games (1984) were more successful in combating burnout in registered nurses in an acute care hospital setting. They evaluated the effectiveness of the stress inoculation paradigm that consists of three approaches: (1) education or didactic stress management (*i.e.*, subjects received theoretical information about anxiety and stress); (2) training coping skills (*i.e.*, relaxation training, assertive skill building, cognitive restructuring, and time management instruction); and (3) exposure (*i.e.*, after education subjects were exposed to stress-producing situations and learned "how to handle stress" via role-playing). A four-month follow-up showed that burnout (*i.e.*, emotional exhaustion and reduced personal accomplishment) decreased significantly as did anxiety and systolic blood pressure. More detailed analysis revealed that coping skills were the principal ingredient of the stress inoculation paradigm.

Higgins (1986) compared the effectiveness of two approaches among women from various helping professions: (1) three groups received training in palliative coping skills (*i.e.*, progressive relaxation and systematic desensitization); (2) another three groups received cognitive and behavioral skills training (*i.e.*, time management, assertiveness training, and Rational Emotive Therapy). At the post-test after seven sessions, levels of emotional exhaustion had decreased about equally and significantly in both experimental conditions, whereas no significant changes were observed in both non-treated control groups.

Using a more sophisticated pretest post-test matched control group design in a sample of social services workers, Corcoran and Bryce (1983) showed differential effects of two interpersonal skills training programs that consisted of four weekly sessions of about one hour and a half each. The first program was more behaviorally oriented and followed the Human Resource Development (HRD) model. The second program was more cognitive oriented, based on Microcounseling Training (MCT). The former program included,

for instance, the training of reflective listening and personalization skills whereas the latter included skills like paraphrasing and summarization. At the post-test, burnout (*i.e.*, exhaustion) had significantly decreased in the MCT group. Moreover, burnout scores in the MCT group remained stable but increased in both matched control groups.

It is rather difficult to draw conclusion from this review of the effectiveness of workshops in reducing burnout since the reviewed studies use different samples, procedures, time frames, measurement instruments, and training methods. Besides, many studies suffer from methodological inadequacies such as the lack of control groups (*e.g.*, Brown, 1984; Larson, 1986). In addition, the number of subjects included is very small. For instance, in the best-designed study, four groups of only nine participants were included (Corcoran and Bryce, 1983). West *et al.* (1984) used the largest sample ($N = 60$) but did not include a control group.

Nevertheless, one major conclusion can be drawn: the core symptom of burnout--exhaustion--can be reduced by training professionals to use particular coping skills, most notably relaxation techniques and cognitive restructuring. This agrees with the conclusion drawn by Murphy (1984) in his more general review of the occupational stress management literature.

On the other hand, providing social support like in staff-support groups does not seem to have a positive impact on burnout levels. However, a more specific improvement of the worker's interpersonal skills leads to a reduction in levels of exhaustion. To date, little is known about the effects on the other two burnout dimensions--depersonalization and reduced personal accomplishment.

The main purpose of the present study is to evaluate a burnout workshop for nurses, using multiple self-report questionnaires that assess all aspects of burnout as well as related psychological strain and somatic complaints. In contrast to most previous approaches, the workshop not only focuses on training individual behavioral and cognitive skills, but also addresses the individual/organizational interface (Ivancevich *et al.*, 1990).

A second purpose of the present study is to explore the role of individual differences. It has been repeatedly observed that considerable individual differences exist in resistance to stress (for a review, see: Cox and Ferguson, 1991). Hence it can be expected that the effect of a burnout workshop depends on particular personality characteristics. To date, no evaluation study on stress management

programs has included such variables (Ivancevich *et al.*, 1990). In this study, a specific personality characteristic is included that has scarcely been investigated in relation to job stress. "Reactivity" refers to a basic dimension of temperament which determines the intensity of reaction to both external and internal stimuli (Strelau, 1983). Specifically, highly reactive individuals exhibit stronger physiological stress reactions than low reactive ("stress resistant") individuals to an objectively identical stimulus. Accordingly, it can be expected that high reactive individuals are more likely to deplete their emotional resources and thus experience stronger feelings of exhaustion than low reactive individuals.

Moreover, following Conservation of Resources Theory (Hobfoll, 1988; Hobfoll and Freedy, 1993), particular personality traits such as low levels of reactivity are personal coping resources that can be mobilized in demanding situations. This theory states that, based on their actual resources, people affect their environment in ways that tend to reinforce their self-beliefs. For instance, nurses with high levels of accomplishment who participate in a workshop are likely to experience positive feedback which in turn strengthens their feelings of accomplishment. In terms of the Conservation of Resources Theory, they are caught in a so-called "gain spiral." Consequently, it is expected that nurses with adequate personal coping resources (*i.e.*, low levels of reactivity) will benefit most from the workshop.

To sum up, three hypotheses are tested: (1) at the post-test, nurses who participated in the workshop will experience less burnout and fewer burnout-related psychological and somatic symptoms; (2) high reactive nurses experience more symptoms than low reactive ("stress resistant") nurses, which is particularly expected for exhaustion; and (3) burnout and related psychological and somatic symptoms will decrease more strongly in the low reactive group compared to the high reactive group.

METHOD

Participants

One hundred twenty-two of 148 community nurses who voluntarily participated in thirteen three-day burnout workshops completed a questionnaire at the beginning of the workshops (response rate: 76%). All nurses worked in the Dutch province North Holland.

Although they are grouped together in teams, they do most of their work individually at people's homes. Community nurses are typically involved in caring for the elderly, hospital after-care, and in public health activities like prevention programs for infants. The vast majority were female (97%); the mean age of the respondents was 37 years (SD = 8.8; range from 28 to 58 years; and on average they had 10 years work experience in the field (SD = 7.6; range from 1 to 33 years).

One month after the workshop was held, a mailed survey was conducted among all 122 nurses who filled out the first questionnaire. Sixty-four participants (42% of the total) returned the questionnaire. Due to occasional missing data, the number of cases varies slightly between analyses. In order to test whether or not a selection effect had occurred, a multivariate analysis of variance (MANOVA) was conducted with burnout measures, somatic complaints and psychological strain at Time 1 as dependent variables. No significant initial difference was observed between the nurses who completed the questionnaire twice and those who dropped out ($F(6,112) = .95$; n.s.). Since, in addition both groups do not differ significantly with respect to their age ($t(120) = .23$; n.s.), work experience ($t(120) = -.10$; n.s.), and personality (*i.e.*, level of reactivity), ($t(119) = .30$; n.s.), it is concluded that no selection effect between Time 1 and Time 2 has occurred as far as the variables in this study are concerned.

Workshop

The workshop was offered to 148 community nurses as one of the options for their voluntary annual retraining program. Seven workshops were conducted with intact teams; in the remaining six workshops nurses from different teams participated. Each workshop included three morning sessions, three afternoon sessions, and two evening sessions during three consecutive days. It was announced as a course that would teach the participants "how to keep fit in your work."

First Day. The morning session started with discussing one's career choice and development, including an evaluation of the importance of one's job relative to other things in life (*i.e.*, the home/work interface). Discussions took place in small groups of three nurses followed by a plenary discussion.

In the afternoon, the notion of an "energy equilibrium" was

brought up and the nurses discussed in small groups what gave them energy in their daily work and what is energy consuming. A plenary listing was made of the nurses' energy equilibrium.

In the evening session, physical relaxation techniques were practiced (*i.e.*, progressive muscle relaxation and body awareness).

Second Day. In the morning muscle relaxation exercises and body awareness training were conducted. Next, the individual/organization interface was addressed by discussing two basic professional attitudes that are generally found among community nurses: a problem-solving attitude (*i.e.*, the nurse solves the patient's problems) and a counseling attitude (*i.e.*, the nurse guides the patient to solve his or her own problems). From the perspective of burnout prevention, the latter attitude is superior. Using role-playing, the nurses practiced this counseling approach.

In the afternoon, the individual/organizational interface was continued. In small groups, the nurses analyzed their most important professional skills and attitudes and how to use them in the most effective and efficient way.

In the evening, a plenary discussion was held about these so-called "core qualities." The second day closed with muscle relaxation training and body awareness.

Third Day. The last morning started again with muscle relaxation exercises and body awareness. Next, the principles of Rational Emotive Therapy (RET) were introduced and practiced individually in the afternoon using a self-selected work-related problem. The workshop was concluded with an evaluation that included an individual plan of action aimed at how to keep fit in one's work (*e.g.*, the development of certain core qualities and a particular professional attitude).

Accordingly, the burnout workshop used a multi-faceted strategy that integrates various elements: relaxation training, didactic stress management (energy equilibrium), cognitive stress management (RET), interpersonal skills training (patient counseling), and the enhancement of a more realistic professional role (counseling instead of problem solving and core qualities). In addition to the individual approach (*e.g.*, relaxation, RET), the individual/organizational interface was explicitly addressed (*e.g.*, the nurses' professional role development).

TABLE 1
INTERNAL CONSISTENCIES (CRONBACH'S α), MEANS (M),
STANDARD DEVIATION (SD), AND STABILITY
COEFFICIENTS (r_1) OF THE MEASURES

Measures	Time 1		Time 2		r_1
	M	SD	M	SD	
TM	3.26	.74	2.97	.83	.88
MBI-EEX	17.58	9.32	14.86	8.16	.78
MBI-DEP	4.86	3.75	4.80	3.80	.75
MBI-PAC	30.38	5.31	30.19	6.86	.78
Somatic	1.42	.39	1.30	.30	.84
Complaints					
Psychological	1.97	.37	1.88	.39	.83
Strain					
Reactivity	23.87	7.49	24.90	6.90	.89

Note TM = Tedium Measure; EEX = Emotional Exhaustion; DEP = Depersonalization; PAC = Personal Accomplishment; The values of r_1 and r_2 are based on N = 122 and N = 64, respectively.

Measures

The Maslach Burnout Inventory (MBI) (Maslach and Jackson, 1986) and the Tedium Measure (TM) (Pines, Aronson, and Kafry, 1981) were employed in order to assess the nurses' level of burnout. Recently, Schaufeli and Van Dierendonck (1993) showed that the reliability and the validity of the Dutch versions of both measures are similar to the original American versions. However, they suggest eliminating two weak MBI-items: #12 and #16 (cf. Byrne, 1991). The MBI includes three subscales: *Emotional Exhaustion* (8 items), *Depersonalization* (5 items), and *Personal Accomplishment* (7 items). High emotional exhaustion and depersonalization scores and low personal accomplishment scores are indicative of burnout. The scoring dimension ranged from never (0) to every day (6). The internal consistency of the three MBI subscales was considered satisfactory since Cronbach's coefficients α exceed .70 (Table 1). That value has been proposed as a criterion for a satisfactory internal consistency by Nunnally (1978).

The 21-item of the Tedium Measure (TM) were scored on a 7-point scale from never (1) to always (7). The composite tedium or burnout score was the mean response to the 21 items with the four positive items reversed. According to the test authors, the score indicates the individual's level of physical, emotional, and mental exhaustion (Pines, Aronson, and Kafrey, 1981:202). As can be seen from Table 1, internal consistency coefficients were satisfactory for the composite TM score on both occasions.

Two of the twelve subscales were employed in the Dutch adaptation of the workstress questionnaire developed by Caplan *et al.*, (1975)--the "Vragenlijst Organisatie Stress" (VOS). *Psychological Strain* includes anxiety (*e.g.*, feeling nervous, jittery), depression (*e.g.*, feeling sad, blue, cheerful), and irritation (*e.g.*, feeling angry, annoyed). *Somatic Complaints* include sweating palms, upset stomach, trouble sleeping, and heart beating faster than usual. Both VOS subscales are scored similarly on 4-point scales ranging from never (1) to very often (4). Their internal consistencies are sufficient (Table 1).

The nurses level of *reactivity* was measured by a 22-item subscale of Strelau's (1983) Temperament Inventory. The items were scored on a 3-point rating scale: no (0), ? (1), and yes (2). A high score indicates that the individual has a low level of reactivity and is relatively resistant to stress. The internal consistency of the reactivity

scale was not sufficient, particularly at the first administration (Time 1, $\alpha = .64$; Time 2, $\alpha = .73$). The internal consistency increased substantially after three weak items had been eliminated (Table 1).

RESULTS

The results are presented in three sections: 1) some descriptive data are presented and the levels of burnout are compared with other samples; 2) discussion shifts to the effects of the workshop on the six dependent measures (*i.e.*, emotional exhaustion, depersonalization, personal accomplishment, tedium, psychological strain, and somatic complaints); 3) the moderating role of reactivity is examined.

Descriptive Data

Table 1 shows the internal consistencies (Cronbach's α), means (M), and standard deviations (SD) of the measures on both occasions. Moreover, the stability coefficients (r_1) are displayed. The mean values on the three MBI subscales have been compared with two samples: (a) a pooled sample ($N = 2,333$) that includes nurses from different fields such as psychiatric nursing, geriatric nursing, and general nursing and (b) a sample of community nurses from other institutions ($N = 99$). Multivariate Analyses of Variance (MANOVA) that included the three MBI subscales as dependent variables revealed that the present sample experienced significantly lower levels of burnout compared to the pooled sample ($F(3,2329) = 20.04$; $p < .001$) as well as to the other sample of community nurses ($F(3, 193) = 3.17$; $p < .05$).

The stability coefficients r_1 are high and indicate that the nurses' scores on the various scales were rather stable across a one-month period: between 56% and 61% of the variance of the MBI subscales at T_2 was accounted for by the nurses' scores on the corresponding scales at T_1 . The percentage is even higher for the other scales, ranging from 70% (Somatic Complaints) to 79% (Reactivity).

Effects of the Workshop

In order to examine the first hypothesis--that at the post-test nurses are less burned out and experience fewer psychological and somatic symptoms--a MANOVA with repeated measures (at T_1 and T_2) was conducted that included the six dependent variables (*i.e.*,

Emotional Exhaustion, Depersonalization, Personal Accomplishment, Tedium, Psychological Strain, and Somatic Complaints). It appears that the multivariate within-subject effect was significant ($F(6,54) = 6.13$, $p < .001$). Subsequent univariate testing revealed that at T_2 compared to T_1 the nurses scored significantly lower on Emotional Exhaustion ($F(1,59) = 12.45$, $p < .001$, Tedium ($F(1,59) = 19.10$, $p < .001$, Psychological Strain ($F(1,59) = 4.37$, $p < .05$, and Somatic Complaints ($F(1,59) = 11.73$, $p < .001$). No significant univariate differences were found between the nurses' scores on T_1 and T_2 on Depersonalization ($F(1,59) = .00$, *n.s.*) and Personal Accomplishment ($F(1,59) = .22$, *n.s.*).

In addition, it was investigated whether workshops with intact teams ($N = 34$) had a different effect on the six dependent measures than workshops in which nurses participated individually ($N = 30$). A MANOVA with repeated measures did not produce a significant time (T_1 vs. T_2) by participation (teams vs. individuals) interaction effect ($F(6,51) = 1.13$, *n.s.*).

The Role of Reactivity

Two effects of reactivity have been hypothesized: (1) high reactive nurses experience more symptoms than low reactive nurses (Hypothesis 2; main effect) and (2) burnout and related psychological and somatic symptoms will decrease more strongly in the low reactive group compared to the high reactive group (Hypothesis 3; moderator effect).

First, two approximately equal groups were composed, consisting of nurses with low ($N = 29$) and high ($N = 33$) levels of reactivity. The median of the reactivity scale (24) was used as a criterion to distinguish between these two groups.

Next, a MANOVA with repeated measures (at T_1 and T_2) and two levels of reactivity (high vs. low) was carried out that included the six dependent variables. As expected from the previous analysis, the multivariate within-subject ("time") effect was significant again ($F(6,51) = 5.89$; $p < .001$). In addition, the hypothesized significant main effect for reactivity was observed ($F(6,51) = 2.61$; $p < .05$). Univariate testing indicated that highly reactive nurses show significantly higher levels of tedium ($F(6,51) = 4.34$; $p < .01$) and lower levels of personal accomplishment ($F(6,51) = 4.07$; $p < .01$).

Finally, and most importantly, the time x reactivity effect was also significant ($F(6,51) = 3.93$; $p < .01$), indicating that reactivity plays

FIGURE 2
PSYCHOLOGICAL STRAIN IN THE HIGH REACTIVE
(N = 33) AND LOW REACTIVE (N = 29) GROUPS

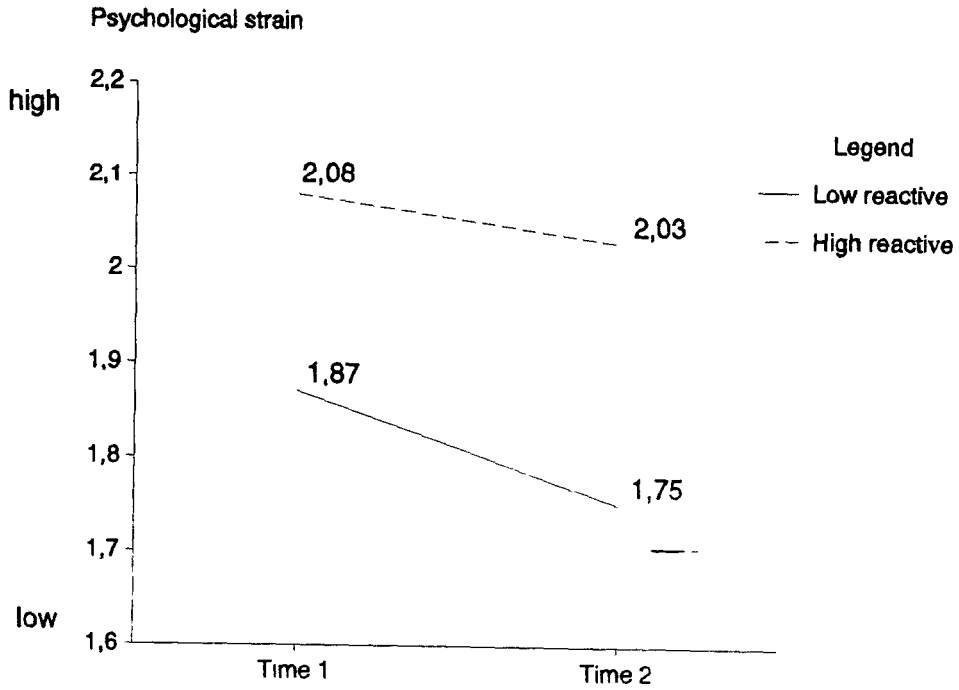


FIGURE 1
EMOTIONAL EXHAUSTION IN THE HIGH REACTIVE
(N = 33) AND LOW REACTIVE (N = 29) GROUPS

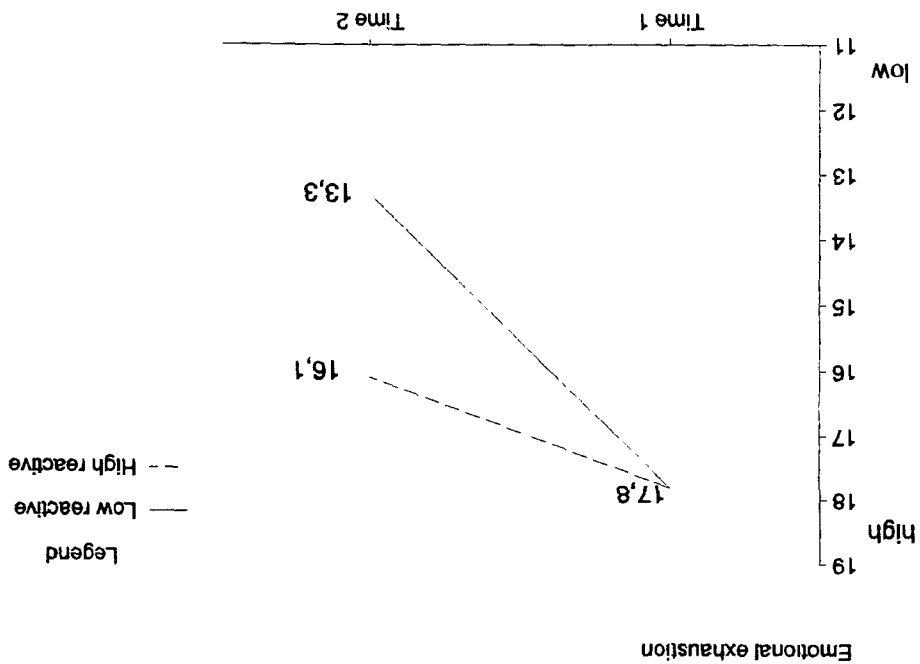
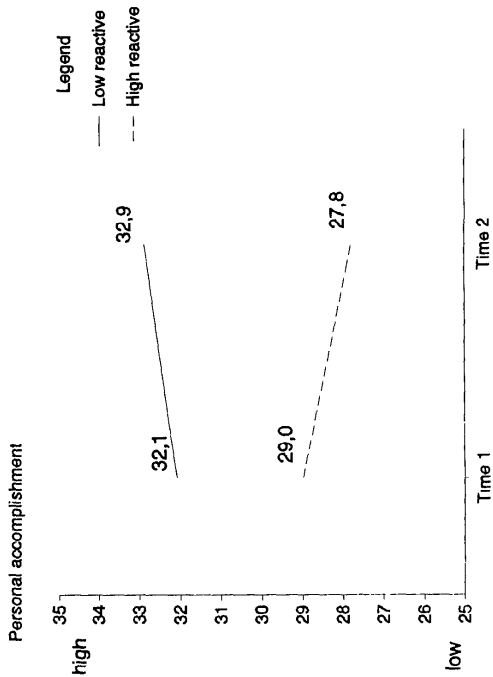


FIGURE 3
PERSONAL ACCOMPLISHMENT IN THE HIGH REACTIVE
(N = 33) AND LOW REACTIVE (N = 29) GROUPS



moderating role. Subsequent univariate analyses showed that this interaction effect was significant for Emotional Exhaustion ($F(1,56) = 7.73; p < .001$); Personal Accomplishment ($F(1,56) = 7.73; p < .001$); and Psychological Strain ($F(1,56) = 7.73; p < .001$). Figures 1-3 graphically display these three significant interaction effects.

As expected, nurses with more coping resources (*i.e.*, the low reactive group) benefit more from the workshops than nurses who can draw upon lower coping resources (*i.e.*, the high reactive group). The levels of emotional exhaustion (Figure 1) and psychological strain (Figure 2) of the former group drop significantly from T_1 to T_2 ($t(28) = 3.34; p < .01$ and $t(28) = 2.56; p < .01$, respectively, whereas no significant changes were observed among the high reactive group. In addition, the nurses' level of personal accomplishment (Figure 3) does not change significantly between T_1 and T_2 , neither for the low reactive ($t(28) = -.94; n.s.$) nor for the high reactive group ($t(28) = 1.32; n.s.$).

In sum, high reactive nurses experience more burnout (*i.e.*, reduced personal accomplishment and tedium) than low reactive nurses. Moreover, the workshop has a differential effect depending on the nurses' level of reactivity: symptoms of exhaustion and psychological strain decrease in low reactive nurses, that is, in those who are rather resistant to stress. On the other hand, high reactive and accordingly less stress resistant nurses remain at the same symptom level.

DISCUSSION

Before discussing the results, a cautionary note should be made. Strictly speaking, the effectiveness of the workshop cannot be determined since a control group is lacking. Originally, a control group was included in the research design but unfortunately the organization from which the control group was drawn found itself involved in a drastic reorganization process. Consequently, despite earlier agreements, management did not allow the researchers to distribute questionnaires because it might increase unrest among the nurses. Accordingly, the conclusions from the present study are tentative, as least as far as the stress-reducing effect of the workshop is concerned.

Nevertheless, this shows five interesting results. First, the nurses' mean level of burnout is significantly lower compared to a large heterogeneous pooled sample of nurses from different areas as well

as compared to a similar sample of community nurses. It can be speculated that a selection effect might have occurred: nurses who felt least burned out decided to participate in the workshop whereas, for their more burned out colleagues, participation might have been too threatening. Based on previous experience with stress management training, such a selection effect was anticipated. This was precisely the reason **not** to announce a "burnout workshop" but to use a more positive label instead: "How to keep fit in your work." Apparently, using the less threatening label is not enough to encourage burned-out nurses to participate in a preventive program.

Secondly, symptoms are rather stable across a one-month period. The observed test-retest coefficient of the two burnout measures (TM and MBI) are well within the range that is found in other studies (cf. Schaufeli, Enzmann, and Girault, 1993). The nurses' level of reactivity is also stable, which is not surprising since reactivity is considered to be a basic personality characteristic (Strelau, 1983).

Third, at the post-test one month after the workshop, the nurses' level of self-reported emotional exhaustion, tedium, psychological strain, and somatic complaints are significantly lower than on the pretest prior to the workshop. Quite interestingly, no differences were observed in levels of depersonalization and personal accomplishment. Obviously, mental and physical symptoms decrease whereas the attitudinal dimension of burnout is not affected by the workshop.

These results are remarkably similar to those obtained by Reynolds, Taylor, and Shapiro (1993) in their carefully controlled study on the outcomes of a stress management training. They found that levels of psychological distress decreased significantly in the experimental group whereas job and non-job satisfaction showed no differences across one-month and three-month intervals, respectively. A possible explanation might be that most burnout workshops as well as stress management training programs rely heavily on individual stress-reducing techniques (e.g., muscle relaxation, body awareness, RET) rather than on the individual/organizational interface (e.g., professional role and attitudes). The former have proven to be effective to reduce symptoms of jobstress such as anxiety, depression, hostility, and emotional distress (Murphy, 1984; Ivancevich *et al.*, 1990).

The fact that in this present study differential results were obtained for mental and physical symptoms and for job-related attitudes underscores the two-dimensional structure of burnout that was

suggested by Schaufeli and Van Dierendonck (1993). They found strong indications for a two-dimensional structure with exhaustion as the core element of burnout that is accompanied by negative attitudes toward one's clients (depersonalization) and toward one's performance on the job (reduced personal accomplishment).

Fourth, as expected, high reactive nurses experience higher symptom levels (particularly tedium or exhaustion) than do low reactive nurses who are by definition more resistant to stress. This result corroborates earlier results of laboratory experiments and field research that showed that high reactives respond to conditions of uncertainty with a high level of general arousal and with higher self-reported levels of anxiety and tension (Strelau, 1983). The observation that high reactive nurses show lower levels of personal accomplishment agrees with Eliasz (1980) who found that high reactives have fewer social skills. For instance, they are more inclined to give in to social pressure which may foster diminished personal accomplishment.

Finally, and most importantly, the nurses' level of reactivity plays a moderating role as far as the impact of the workshop on burnout and related symptoms is concerned. As expected from Conservation of Resources Theory (Hobfoll, 1988; Hobfoll and Freedy, 1993), it was observed that low reactive nurses, who can draw upon considerable coping resources, benefit most from the workshop. They show significant reductions in emotional exhaustion and psychological strain, whereas among high reactive nurses no significant changes were observed.

It is likely that the low reactive nurses better learned how to cope with jobstress through the workshop than did the high reactive nurses. This agrees with the observation during the workshops that nurses who are open to new experiences, as is typical for low reactives, seem to benefit most. This interpretation is also supported by the results of Brown-Ceslowitz (1989) who found that nurses who experienced low levels of burnout used coping strategies of planned problem solving, positive reappraisal, seeking social support, and self-controlling. The workshop stimulated nurses to cope with stress in similar ways, using cognitive stress management and interpersonal skills training.

Obviously, those with more coping resources (the low reactive group) were more effective in learning these new skills. Put in terms of the Conservation of Resources Theory: by participating in the workshop they went through another loop in their "gain spiral" which

is indicated by the significant reduction in negative symptoms. Apparently, nurses with fewer personal coping resources do not benefit from the workshop because its effect is not strong enough to set in motion a gain spiral. In other words: the workshop reinforces such a spiral but does not initiate it.

In sum, this study illustrates that a multi-faceted burnout workshop--including relaxation training, didactic and cognitive stress management, interpersonal skills training, and the enhancement of a more realistic professional role--decreases self-reported mental and physical symptoms related to burnout. Negative attitudes about the nurses' clients and about their own performance on the job, both typical of burnout, did not change. However, it emphasized once more that these results concerning the effects of the workshop are preliminary and need further confirmation since no control group was included in this study.

Perhaps, the most striking--albeit tentative--conclusion of the present study is that a double selection effect might have been at work: the least burned out nurses participated in the workshop and those who are already rather resistant to stress benefit most from it. This intriguing conclusion is equally relevant for researchers who want to seek further confirmation and for practitioners who set up and conduct burnout prevention programs.

NOTES

1. The author gratefully acknowledges Frans Vreeburg of the "Servicebureau kruiswerk Noord-Holland" in Haarlem who conducted the workshops, Rian Boots for her help in collecting and analyzing the data, and Dirk van Dierendonck and Karin van Gorp for their critical comments on earlier drafts of this article
2. Correspondence concerning this article should be addressed to Wilmar B Schaufeli, Department of Psychology, University of Utrecht, P O Box 80 140 3508 TC Utrecht, The Netherlands.

REFERENCES

- Brown, L. (1984). "Mutual Help Staff Groups to Manage Work Stress." *SOCIAL WORK WITH GROUPS* 7:55-66.
- Brown-Ceslowitz, S. (1989). "Burnout and Coping Strategies Among Hospital Staff Nurses." *JOURNAL OF ADVANCED NURSING* 14:553-557.
- Byrne, B.M. (1991) "The Maslach Burnout Inventory Validating Factorial Invariance Across Intermediate, Secondary, and University Educators." *MULTIVARI-*

- ATE BEHAVIORAL RESEARCH 26:583-605.
- Caplan, R.D., S. Cobb, J.R.P. French, R. Van Harrison, and S.R. Pinneau (1975). *JOB DEMANDS AND WORKER HEALTH*. Ann Arbor: University of Michigan, Institute of Social Research.
- Corcoran, K.J. and A.K. Bryce (1984). "Intervention in the Experience of Burnout: Effects of Skill Development." *JOURNAL OF SOCIAL SERVICE RESEARCH* 7:71-79.
- Cox, T. and E. Ferguson (1991). "Individual Differences, Stress and Coping," in C.L. Cooper and R. Payne (eds.). *PERSONALITY AND STRESS: INDIVIDUAL DIFFERENCES IN THE STRESS PROCESS*. Chichester: Wiley
- Eliasz, A. (1980). "Temperament and Trans-Situational Stability of Behaviour in the Physical and Social Environment." *POLISH PSYCHOLOGICAL BULLETIN* 11.143-153.
- Firth, H. and P. Britton (1989). "Burnout', Absence and Turnover Amongst British Nursing Staff." *JOURNAL OF OCCUPATIONAL PSYCHOLOGY* 62:55-60.
- Firth, H., J. McIntee, P. McKeown, and P. Britton (1986). "Interpersonal Support Amongst Nurses at Work." *JOURNAL OF ADVANCED NURSING* 11:273-282.
- Gray-Toft, P.A. and J.G. Anderson (1981). "Stress Among Hospital Nursing Staff Its Causes and Effects." *SOCIAL SCIENCE AND MEDICINE* 15A:639-647.
- Haack, M.R. (1988). "Stress and Impairment Among Nursing Students " *RESEARCH IN NURSING AND HEALTH* 11:125-134.
- Hare, J., C.C. Pratt, and D. Andrews (1988). "Predictors of Burnout in Professional and Nonprofessional Nurses Working in Hospitals and Nursing Homes." *INTERNATIONAL JOURNAL OF NURSING STUDIES* 25:105-115.
- Higgins, N.C. (1986). "Occupational Stress and Working Women: The Effectiveness of Two Stress Reduction Programs " *JOURNAL OF VOCATIONAL BEHAVIOR* 29:66-78.
- Hobfall, S.E. (1988). *THE ECOLOGY OF STRESS* New York: Hemisphere.
- Hobfall, S.E. and J. Freedy (1993). "Conservation of Resources: A General Stress Theory Applied to Burnout," in W.B. Schaufeli, C. Maslach, and T. Marek (eds.) *PROFESSIONAL BURNOUT: RECENT DEVELOPMENTS IN THEORY AND RESEARCH*. New York: Taylor and Francis.
- Ivancevich, J.M., M.T. Matteson, S.M. Freedman, and J.S. Phillips (1990). "Worksite Stress Management Interventions." *AMERICAN PSYCHOLOGIST* 45:252-261.
- Jones, J.W. (1981a). "Dishonesty, Burnout, and Unauthorized Work Break Extensions." *PERSONALITY AND SOCIAL PSYCHOLOGY BULLETIN* 7:406-409.
- Jones, J.W. (1981b). "Attitudinal Correlates of Employee Theft of Drugs and Hospital Supplies Among Nursing Personnel." *NURSING RESEARCH* 30:349-351.
- Kleiber, D. and D. Enzmann (1990) *BURNOUT: 15 YEARS OF RESEARCH: AN INTERNATIONAL BIBLIOGRAPHY*. Gottingen: Hogrefe
- Landsbergs, P.A. (1988). "Occupational Stress Among Health Care Workers: A Test

- of the Job Demands-Control Model." *JOURNAL OF ORGANIZATIONAL BEHAVIOR* 9:217-239.
- Larson, D.G. (1986). "Developing Effective Hospice Staff Support Groups: Pilot Test of an Innovative Training Program." *THE HOSPICE JOURNAL* 2:41-55.
- Marshall, J. (1980). "Stress Amongst Nurses," in C.L. Cooper and J. Marshall (eds.). *WHITE COLLAR AND PROFESSIONAL STRESS*. Chichester: Wiley.
- Maslach, C. (1993). "Burnout: A Multidimensional Perspective." in W.B. Schaufeli, C. Maslach, and T. Marek (eds.). *PROFESSIONAL BURNOUT: RECENT DEVELOPMENTS IN THEORY AND RESEARCH*. New York: Taylor and Francis.
- Maslach, C. and S E Jackson (1986). *MBI: MASLACH BURNOUT INVENTORY: MANUAL RESEARCH EDITION*. Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C. and W.B. Schaufeli (1993). "Historical and Conceptual Development of Burnout," in W.B. Schaufeli, C. Maslach, and T. Marek (eds.). *PROFESSIONAL BURNOUT: RECENT DEVELOPMENTS IN THEORY AND RESEARCH*. New York: Taylor and Francis.
- McGrath, A., N. Reid, and J. Boor (1989). "Occupational Stress in Nursing." *INTERNATIONAL JOURNAL OF NURSING STUDIES* 3:3-31.
- Murphy, L.R. (1984). "Occupational Stress Management: A Review and Appraisal." *JOURNAL OF OCCUPATIONAL PSYCHOLOGY* 57:1-15.
- Nunnally, N.C. (1978). *PSYCHOMETRIC THEORY*. New York: McGraw-Hill.
- Pines, A., E. Aronson, and D. Kaffry (1981). *BURNOUT: FROM TEDIUM TO PERSONAL GROWTH*. New York: Free Press.
- ____ (1988). *CAREER BURNOUT: CAUSES AND CURES*. New York: Free Press.
- Reynolds, S, E Taylor, and D. Shapiro (1993). "Session Impact and Outcome in Stress Management Training." *JOURNAL OF COMMUNITY AND APPLIED PSYCHOLOGY* 3:325-337.
- Schaufeli, W.B., D. Enzmann, and N. Girault (1993). "Measurement of Burnout: A Review," in W.B. Schaufeli, C. Maslach, and T. Marek (eds.). *PROFESSIONAL BURNOUT: RECENT DEVELOPMENTS IN THEORY AND RESEARCH*. New York: Taylor and Francis.
- Schaufeli, W.B. and D. van Dierendonck (1993). "The Construct Validity of Two Burnout Measures." *JOURNAL OF ORGANIZATIONAL BEHAVIOR* 14:631-647.
- Strelau, J. (1983). *TEMPERAMENT, PERSONALITY, ACTIVITY*. New York: Academic Press.
- West, D.J., J.J. Horan, and P A. Games (1984). "Component Analysis of Occupational Stress Inoculation Applied to Registered Nurses in an Acute Care Hospital Setting." *JOURNAL OF CONSULTING PSYCHOLOGY* 31:209-218.