

A STUDY ON SIGNIFICANT SOURCES OF THE "BURNOUT SYNDROME" IN WORKERS AT OCCUPATIONAL CENTRES FOR THE MENTALLY DISABLED¹

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In this study, the burnout syndrome is analysed from the perspective of the interactive models of occupational stress perspective. Role conflict, role ambiguity, and social support at work (from the supervisor to the co-workers) were included as environmental variables. Self-confidence was included as a personality variable. The sample were workers at an occupational centre for mentally retarded people (N=95). Regression analysis showed that role ambiguity, together with self-confidence, were significant predictors of personal accomplishment, while role conflict was found to be a significant predictor of emotional exhaustion. Evidence for modulation effects of self-confidence on the relationship between role ambiguity and personal accomplishment was obtained.

En este estudio se analiza el síndrome de quemarse por el trabajo desde la perspectiva de los modelos interaccionistas de estrés laboral. Como variables del entorno se han considerado el conflicto de rol, la ambigüedad de rol, y del apoyo social en el trabajo desde el supervisor y desde los compañeros. Como variables de personalidad se han considerado los sentimientos de autoconfianza de los sujetos. La muestra del estudio está compuesta por 95 trabajadores de centros ocupacionales para discapacitados psíquicos. Los análisis de regresión han presentado que la ambigüedad de rol junto con los sentimientos de autoconfianza son predictores significativos de la realización personal en el trabajo, mientras que el conflicto de rol ha resultado un predictor significativo de agotamiento emocional. Se han obtenido efectos significativos de modulación de la autoconfianza para la relación entre la ambigüedad de rol y la realización personal en el trabajo.

INTRODUCTION

The Burnout Syndrome has been defined as a response to the chronic work stress typically found in professionals working in care service organisations. According to Maslach and Jackson (1981-86), such a response is a process characterised by low personal accomplishment and high emotional exhaustion and depersonalisation. By low personal accomplishment we refer to the trend towards negative self-evaluation by these professionals. Such an evaluation especially affects their ability to do

their work and the relationship with the people they are attending to. Feelings of emotional exhaustion refer to a situation of exhaustion due to daily and sustained contact with people they have to attend to as a matter of work. Depersonalisation can be defined as the development of negative feelings and of cynical attitudes and feelings towards the addressees of their work.

When the burnout syndrome is estimated by the Maslach Burnout Inventory (MBI) (Maslach and Jackson, 1986), it is possible to distinguish two different aspects. The first one, comprising emotional exhaustion and depersonalisation dimensions, has an emotional content; the second one is constituted by low personal accomplishment, and has a cognitive-aptitudinal component (see Dignam, Barrera and West, 1986; Lee and Ashforth, 1990; Holgate and Clegg, 1991; Leiter, 1991; Gil-Monte, Peiró and Valcárcel, 1993b, among others) - though different models exist about the relationship established between antecedents and consequences among dimensions of MBI (Golembiewski, Munzenrider and Carter, 1983; Leiter and Maslach, 1988; Lee and Ashforth, 1993; Gil-Monte, Peiró

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and Valcárcel, 1995). Gil-Monte et al (1995) pointed out that it seems reasonable to hypothesise that low personal accomplishment may be an antecedent variable for emotional exhaustion and that both variables, in turn, behave as antecedents of depersonalisation. Several reviewed studies show that professionals working with mentally disabled people are apt to develop the burnout syndrome, which leads to an impairment in quality of the services provided by the organisation (e.g., Caton, Grossnickle, Cope, Long and Mitchell, 1988; Cherniss, 1988; Eichinger, Heifetz and Ingraham, 1991). Of the variables identified as antecedents of the syndrome within professionals working with the mentally disabled, variables of a sociodemographic style (Beck and Gargiulo, 1983), conflict and role ambiguity (Fimian, 1984; Crane and Iwaniki, 1986), lack of social support at work, autonomy, and work overload, among others, are mentioned (Savicki and Cooley, 1987).

Although the burnout syndrome has primarily been studied as a result of organisational variables, such as role stress (Lee and Ashford, 1993), work overload (Gil-Monte et al, 1993b) or interpersonal relationships (Leiter, 1988), various studies have been made which suggest that personality variables may play an important role in its development (Beck and Gargiulo, 1983; Chernis, 1993; Piedmont, 1993). Beck and Gargiulo (1983), in relation to professionals working with mentally disabled people, noted that work stress not only depends on environmental stressors, but also on subjects' reaction to stress. Thus, though a great variety of stressors exist in education, these sources of stress cannot be considered in isolation but, on the contrary, a series of personal variables, such as capacities, perceptions and educator's personality factors, must be considered. Beck and Gargiulo suggest the hypothesis that, as a professional group, educators working with the mentally disabled may even be less susceptible to work stress effects, since they have personality factors orienting them to work as professionals in special education. Interactive models of work emphasise an explanation of the relations between MBI dimensions and their significant antecedents through a consideration of work environment and personal variables. Some attempts to study the burnout syndrome from such a perspective are shown in Carroll and White's work (1982) and in Cox, Kuk and Leiter (1993).

Among organisational environment variables, conflict and role ambiguity have been widely studied in relation

to this syndrome. From reviews of different works (e.g., Pierson-Hubeny and Archambault, 1987; Cash, 1991; Manlove, 1993, etc.) it may be suggested that a trend exists in which role conflict establishes a more intense relation with emotional exhaustion and depersonalisation, while role ambiguity links with low personal accomplishment. Gil-Monte, Peiró and Valcárcel (1993a) pointed out that, given the content of MBI dimensions, such a trend may be due to the fact that role conflict mainly triggers an emotional-type response, while role ambiguity leads to a kind of response which basically contains a cognitive-aptitudinal component. These results have also been obtained in studies with professionals working with mentally disabled people. For instance, Crane and Iwaniki (1986) showed that, for a sample of special education teachers, role conflict explained the greater percentage of variance in emotional exhaustion (14%) and depersonalisation (14%), while role ambiguity did the same for personal accomplishment (7%). They suggest that it is reasonable to conclude that a causal relationship exists between these role dysfunctions and the burnout syndrome within this kind of professional.

Another organisational environment variable explaining significant percentages of the variance in MBI dimensions is the degree of social support that one perceives at work. Different sources of social support at work (social support from workmates and from supervisors) are unevenly associated with MBI dimensions. Some studies have suggested the possibility that these results may be conditioned by the type of support offered by each of the sources (e.g., Leiter and Maslach, 1988; Huebner, 1993). Thus, supervisors usually provide social support of a formal character (e.g., feed-back information on the task, chances of promotion, praise, etc.), while workmates typically give informal support (e.g. friendship, feeling of belonging, emotional support in general, and so on).

However, from the reviewed studies, a clear pattern of relations between the two sources of social support and MBI dimensions cannot be established. Thus, while some studies (e.g., Leiter, 1991; Manlove, 1993; Eastburg, Williamson, Gorsuch, and Ridley, 1994) show that both sources of social support are significantly associated with the three MBI dimensions, others (Price and Spence, 1994) show that social support from workmates is not associated with any of the MBI dimensions at a significant level, or that it is not a good predictor

(Russell, Altmaier and Velzen, 1987); in other studies, the relationship between supervisors' social support and emotional exhaustion is found to be non-significant (e.g., Richardsen, Burke and Leiter, 1992; Gil-Monte et al., 1993b). However, some other studies (e.g., Price and Spence, 1994; Turnipseed, 1994) found that the relation between this source of support and personal accomplishment is not significant, but that it is significant for the rest of the MBI dimensions. Such a disparity of results may be due to several factors, such as the way in which social support is operationalised (e.g., structural, functional, etc.), the diverse professional composition of the samples chosen, and the different countries in which studies were made.

Two models of the influence of social support in the stress process related to the burnout syndrome have been proposed. The direct effects model states that social support may help lessen the effects of the syndrome (or its absence increase them) regardless of changes in stress levels; the second model, the buffering model, states that social support at work may result in the impact of stress on the subject or the evaluation that he/she makes of the stressors being lower. In the reviewed literature there is statistical evidence for the direct effects model (Eastburg et al, 1994), as well as for the buffering effects model (Koeske and Koeske, 1989), with the relationship being significant only for workmates' social support in the latter case.

Among the personality variables studied with respect to the burnout syndrome we emphasise the self variables - especially those involved with feelings of perceived professional challenge. Cherniss (1993) devised an explanatory model in which self-esteem feelings and perceived self-efficacy play a fundamental role in the development of the syndrome. Leiter (1992) argues that the burnout syndrome may be understood as a crisis in professional self-efficacy. In addition, Thompson, Page and Cooper (1993) offered a model in which levels of professional self-confidence appear as a mediating variable for the subsequent development of depersonalisation and emotional exhaustion feelings. On the other hand, correlational studies show that the three MBI dimensions significantly associate with expectations of efficacy (Lee and Ashforth, 1990) and with self-confidence feelings (Gil-Monte et al, 1995), although the relation with personal accomplishment is the most intense. Such a relation is positive, while it is negative for emotional exhaustion and depersonalisation. Together with this direct effect, it has been pointed out from models of work stress (Peiró and

Salvador, 1993) that personality variables have a modulating effect on the relation established between stressors and their short-term and long-term effects. From this point of view it seems appropriate to state the hypothesis that self-confidence has a modulating effect on the relation established between the organisational environment variables considered in the present study (role stress, social support at work) and the dimensions of the syndrome.

The aim of this study is to analyse the relationship between the variables considered to be antecedents of the burnout syndrome and the MBI dimensions.

Thus, the following hypotheses have been stated: a) self-confidence levels will be positively and significantly associated with personal accomplishment and negatively with emotional exhaustion and depersonalisation; b) social support, from supervisors and workmates, will be positively associated with levels of personal accomplishment, and negatively with emotional exhaustion and depersonalisation; c) role stress variables (conflict and role ambiguity) will be negatively and significantly related to personal accomplishment, and negatively to emotional exhaustion and depersonalisation; d) personal accomplishment will show a negative relationship with emotional exhaustion and depersonalisation, while emotional exhaustion will be positively related to levels of depersonalisation; e) self-confidence will have a buffering effect on the relationship between role stress and MBI dimensions, as well as on the relationship between social support (from supervisors and workmates) and the MBI dimensions, and f) perceived social support from supervisors and workmates will show a buffering effect on the relationship between role stress and MBI dimensions.

METHOD

Subjects

Subjects were 95 employees in occupational institutions for mentally retarded people in the Valencia Autonomous Community. The highest percentage of subjects worked as monitors (35.8 %, n=34). The remaining group of professionals was comprised of 14 psychologists, 2 teachers, 3 educators, 3 workshop supervisors, 1 social worker, 1 office worker, and 1 male nurse. In 35 questionnaires (36%), job was not specified. 29.5% of the sample were males (n=28), and 65% females (n=66). In one questionnaire, sex was not specified. Mean age was 39.95 years (22-60 age range, SD 7.67). Work contracts were permanent for 79.8% of the subjects and temporary for 20.2%.

Instruments

Self-confidence levels were measured by using five items of an adaptation of the "Trait Sport-Confidence Inventory" (TSCI) (Vealey, 1986), in which the word "athlete" was replaced by "workmate". Cronbach's alpha coefficient for the present study was .84.

Social support at work was estimated using 6 items of the "Organisational Stress Questionnaire" (OSQ) (Caplan, Cobb, French, Van Harrison and Pinneau, 1975). These items reflect some aspects of social support coming from workmates (3 items) and supervisors (3 items). Reliability coefficient in this study was $\alpha=.86$ for the supervisors' social support scale, and $\alpha=.76$ for the workmates' social support scale.

Perceived role conflict and *role ambiguity levels* were measured by 3 items, for each of the variables, taken from their respective OSQ scales. Reliability values were $\alpha=.69$ for role ambiguity and .68 for the role conflict scale.

The *burnout syndrome* was estimated by MBI (Maslach and Jackson, 1986). This instrument is comprised of 22 items measuring the three dimensions in the syndrome: personal accomplishment (8 items), emotional exhaustion (9 items), and depersonalisation (5 items). Reliability coefficients obtained in the study were: $\alpha=.76$ for the personal accomplishment subscale, $\alpha=.87$ for emotional exhaustion, and $\alpha=.52$ for depersonalisation.

Procedure

Data were collected from employees of occupational institutions for the mentally disabled during a meeting on work stress held in the Valencia Autonomous Community. Questionnaires were given out among peo-

ple attending the meeting during one of the speeches, and subjects had 15 minutes to complete them. When the speech was over, the questionnaires were returned to the researcher. Out of the 125 questionnaires distributed, 95 were returned - a 76% answer rate.

RESULTS

As shown in Table 1, obtained reliability values were acceptable for every scale except the depersonalisation scale, which presented a relatively low Cronbach's alpha value ($\alpha=.52$).

Results show that self-confidence levels were significantly associated with personal accomplishment, but not with emotional exhaustion nor with depersonalisation. This outcome means that hypothesis *a* is only partially confirmed. Supervisors' social support at work had a significant relationship with emotional exhaustion and with those of personal accomplishment, but this relationship was not significant with respect to depersonalisation. However, the relationship between workmates' social support and the three MBI dimensions was significant in the same direction indicated by the hypothesis. Such a result confirms most of hypothesis *b*. The present results did totally confirm hypothesis *c*, since role conflict and role ambiguity were significantly and positively associated with emotional exhaustion and depersonalisation, and negatively with personal accomplishment. With regard to the hypothesised relationships between MBI dimensions, they were all significant in the expected direction. This result fully confirms hypothesis *d*.

A step forward in the study of the relationship between the burnout syndrome and the antecedent variables considered here is represented by the study of the proportion of the variance explained by each of those variables

Table 1
Descriptive Statistics, reliability values and variables correlations²

| | M | SD | Range | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|-------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1. Self-confidence | 6.48 | 1.06 | 1-9 | (.84) | | | | | | | |
| 2. Workmates Social Support | 3.25 | .66 | 1-4 | .08 | (.76) | | | | | | |
| 3. Supervisor Social Support | 2.90 | .85 | 1-4 | .16 | .50 | (.86) | | | | | |
| 4. Role Conflict | 2.73 | .79 | 1-5 | -.11 | -.41 | -.37 | (.68) | | | | |
| 5. Role Ambiguity | 2.11 | .76 | 1-5 | -.33 | -.40 | -.43 | .38 | (.69) | | | |
| 6. Personal Accomplishment | 36.43 | 6.89 | 0-48 | .35 | .33 | .22 | -.32 | -.48 | (.76) | | |
| 7. Emotional Exhaustion | 17.56 | 10.12 | 0-54 | -.14 | -.45 | -.40 | .69 | .40 | -.40 | (.87) | |
| 8. Depersonalisation | 4.69 | 4.44 | 0-30 | -.00 | -.22 | -.12 | .32 | .28 | -.28 | .40 | (.52) |

² Cronbach's alpha reliability values are shown on the diagonal.. Values higher than .16 were significant, $p < .05$

when analysed all together. A stepwise multiple regression analysis was made. Such an analysis has an exploratory character, useful for the design of models for future intervention, since it allows us to decide which of the variables explain the greatest percentage of variance in MBI dimensions.

As can be seen in Table 2, stepwise regression analysis shows that, in personal accomplishment, only role ambiguity and self-confidence can explain significant proportions of the variance. The remaining independent variables considered (role conflict and supervisors' and workmates' social support) did not significantly increase the percentage of variance. Using hierarchical regression analysis, every independent variable was included in the regression equation. It must be emphasised that, when all the variables were considered, beta value for role ambiguity was $-.32$ ($p < .05$), while it was only $-.13$ (non-significant) for role conflict.

As far as emotional exhaustion is concerned, only two variables explained significant percentages of variance (role conflict and workmates' social support). Perceived role conflict levels explained the greater percentage of variance ($R^2 = .47$), with a beta value of $.60$ ($p < .05$). The three remaining independent variables did not significantly increase the explained percentage of variance. When all the variables were put together in the regression equation, beta coefficient value for role conflict obtained a value of $.56$, and role ambiguity reached a value of $.09$. For the self-confidence variable beta was $-.02$, and in the case of the depersonalisation variable, only role conflict could significantly explain its variance ($R^2 = .10$).

When MBI dimensions were included in the regression analysis together with the rest of the antecedent variables,

as established by Gil-Monte et al's (1995) model on the burnout syndrome model previously described, variance in emotional exhaustion was significantly explained by role conflict (beta = $.62$), and by levels of personal accomplishment (beta = $-.20$). In the depersonalisation variable only emotional exhaustion could explain significant proportions of the variance (beta = $.40$).

The hypothesised buffering effects were evaluated through hierarchical regression analysis. In order to test hypothesis *e*, 4 hierarchical regression analyses were made with each of the MBI dimensions. The antecedent variable (role conflict, role ambiguity, supervisors' social support or workmates' social support), the modulating variable (self-confidence) and the product of self-confidence and each of the antecedent variables, were alternatively entered in these analysis (see Baron and Kenny, 1986). Out of the 12 relationships considered, only self-confidence showed modulating effects in the relation between role ambiguity and personal accomplishment. In this regression equation role ambiguity explained 23% of the variance ($F = 27.91$, $p < .001$), self-confidence explained an additional 4% ($F = 5.32$, $p < .05$), and the mutual product explained an additional 3% ($F = 3.97$, $p < .05$). These results almost fully confirm hypothesis *e*.

In order to test hypothesis *f*, 4 hierarchical regression analyses were also run with each of the MBI dimensions. Again, the antecedent variable (role conflict or role ambiguity), the modulating variable (supervisors' or workmates' social support), and the mutual product were alternatively entered, up to a total of 12 regression analyses. In none of the cases did the mutual product variable significantly increase the percentage of variance explained in the MBI dimensions. This result means that hypothesis *f* was not completely confirmed.

DISCUSSION

The goal of the present study was to analyse the relationships between role stress (role conflict and role ambiguity), social support at work (from supervisors or workmates), self-confidence, and MBI dimensions. The study of such relationships was approached from an interactionist model perspective on work stress, which states that the main determinant for the intensity of the subject's response to stress is the imbalance between environmental demands and the subject's coping abilities. In line with this perspective, the results here obtained suggest that organisational environment variables, especially roles stress and the self-confidence persona-

Table 2
Stepwise regression analysis for MBI dimensions

| Variable Step | R2 increase | Beta | F for equation |
|--------------------------------|-------------|------|----------------|
| <i>personal Accomplishment</i> | | | |
| 1 Role ambiguity | .23 | -.41 | 17.27*** |
| 2 Self-confidence | .04 | .22 | |
| <i>Emotional Exhaustion</i> | | | |
| 1 Role conflict | .47 | .60 | 47.27*** |
| 2 Workmates' social support | .03 | -.20 | |
| <i>Depersonalisation</i> | | | |
| 1 Role conflict | .10 | .32 | 10.45*** |
| *** p < .001 | | | |

lity variable, can be considered as significant antecedents of the burnout syndrome. Workmates' social support, although reaching significant correlation with the MBI dimensions, has been found to be a significant predictor of emotional exhaustion only when personal accomplishment was not included into the regression equation. However, supervisors' social support at work, although reaching significant correlations with personal accomplishment and with emotional exhaustion, was not found to be a significant predictor of them when considered together with the rest of the variables in the study.

Role ambiguity turned out to be the most important predictor of personal accomplishment, explaining 23% of the variance in this dimension. In contrast, role conflict was the main predictor for emotional exhaustion - a dimension that explains 47% of the variance. In addition, neither role ambiguity for emotional exhaustion, nor role conflict for personal accomplishment, were significant predictors.

Overall, these results concur with the results obtained by other studies with professionals working with mentally retarded people (e.g. Crane and Iwaniki, 1986). Thus, it seems appropriate to state that role conflict and role ambiguity are significant antecedents of the burnout syndrome for this type of professional. In addition, these variables show distinct patterns of behaviour in the developmental process of the syndrome. Role conflict primarily develops a response of an emotional character, while role ambiguity leads to a response of a basically cognitive-aptitudinal character. A similar result has also been obtained for other occupations, such as nursery professionals (e.g. Cash, 1991; Gil-Monte et al, 1993a), so that it seems reasonable to suggest that it can be generalised beyond the limits of the professions considered here.

Results concerning social support at work allow us to postulate that a significant association exists between sources of social support within work organisations and MBI dimensions. However, only workmates' social support arose as a significant predictor of emotional exhaustion from the regression analysis, although with a beta value lower than the one obtained for role conflict. In addition, the hypothesised buffering effects for social support were not found to be significant in any of the cases. Thus, in contrast to role dysfunctions, it seems that, for our present study, social support at work has a secondary role in the development of the syndrome. Results are similar to those obtained by Gil-Monte et al (1993b) using a sample from nursery professionals.

As in other studies (Lee and Ashford, 1990), perceived professional competence, as estimated through self-confidence, appeared in regression analysis as a significant predictor of personal accomplishment. Such a result confirms the cognitive aptitudinal character of this variable. Moreover, the results of the hierarchical regression show that this variable modulates the relationship between role ambiguity and personal accomplishment. Hence, as our sampled professionals' self-confidence levels increase, role ambiguity decreases personal accomplishment at a lower rate. Thus, those professionals with higher self-confidence will be less likely to develop the syndrome than those with lower self-confidence levels. In the line of theoretical models of the burnout syndrome developed by Thomson et al. (1993), or by Cherniss (1993), it seems convenient to include some measure of self-confidence in studies on the burnout syndrome or, in its absence, a measure of perceived professional competence.

The joint analysis of the results suggests that environmental variables, as well as personality variables, explain significant proportions of the variance in the burnout syndrome. However, we cannot state that decisive results for the work stress interactionist model were obtained in our study, since only one out of the twelve regression analyses made provided some support for the buffering hypothesis.

Results concerning the relationships between the three MBI dimensions show that personal accomplishment may be understood as a significant predictor of emotional exhaustion. This variable also increased by a significant 4% the variance explained by role conflict in emotional exhaustion. Gil-Monte et al (1995) have pointed out that the explanation for this relationship may be inferred from works by Bandura (1986, 1989), who states that those beliefs that subjects hold about their capacities directly affect their own emotions. Meanwhile, emotional exhaustion has been found to be the only predicting variable for depersonalisation when this and the rest of the variables in the study are included in the equation. This finding is in line with most of the studies on the syndrome, and this fact mainly -though not exclusively- conditions the development of depersonalisation to the development of emotional exhaustion.

In summary, from our results we may draw the following conclusions: a) in order to explain the development of the burnout syndrome it is necessary to take into account personality cognitive variables (e.g., self-confidence) and

organisational environment variables (e.g., dysfunctions in role accomplishment); b) self-confidence in professionals working in occupational institutions for mentally retarded people is a significant predictor of personal accomplishment; c) role stress variables have different patterns of behaviour: while role conflict generates a response of a basically emotional character, role ambiguity generates a basically cognitive-aptitudinal response; d) personal accomplishment may be taken as a significant predictor of emotional exhaustion; e) emotional exhaustion are the main predictor of depersonalisation; and f) with a view to future studies, it seems appropriate to approach research on social support at work by considering its dimensions or aspects in a more microscopic way (e.g., social support as social integration, as quality relationships, as perceived help, as updating of supporting behaviour, as degree of support perceived by the subject, etc.).

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