# UNIVERSITATEA "DIMITRIE CANTEMIR" TÂRGU-MUREŞ

### STUDII

DE

# PSIHOLOGIE



TÂRGU-MUREŞ - 2000 -

#### Comitetul de redactie:

Redactor responsabil: Horia D. Pitariu, Teodor Podar Secretar științific de redacție: Andrada Vanga

Membrii:

Adela Crişan Camelia Stanclu

loan Dăbală

Mihaela Stoica

Hedi Hoka

Gheorghe Radu

Emil Verza

Mielu Zlate

Adriana Câmpean

Mariana Sita

Tehnoredactor: Andrada Vanga

Coordonator de editură: Helen Opelsz

Exagerat

Prețul unei reviste este de 60.000 lei)
Revistele se pot procura (direct sau prin poștă) de la adresa:

Universitatea "Dimitrie Cantemir"
Târgu-Mureş, Str. Cuza-Vodă nr. 22
Telefon: 065-166585

Fax: 065-166585

Apare trimestrial

Editura DIMITRIE CANTEMIR
Târgu-Mureş
Consilier Editorial
Ing. Dr. Alexandru Bogdan Murgu
I.S.S.N. 1454-8895

### STUDII DE PSIHOLOGIE

Tomul, 4

2000

Nr. 3-4

#### SUMAR

EDITORIAL
DUMITRU SALADE, Deziderate actuale ale muncii educative sau ce nu ne învață școala îndeajuns?
STUDII ȘI CERCETĂRI
HORIA D. PITARIU, DANIEL PAUL, Aspecte psihologice ale satisfacției profesionale la cadrele didactice din Centrele de plasament
RODOLFO E. GUTIERREZ, EMILY ITO SUGIYAMA, JORGE VILLATORO, Organizational Stress and Mental Health in a "Sandwich" Population: Middle Level Managers and Supervisors
CIOBANU GILBERT, Construirea unei scale de evaluare cu ancore comportamentale pentru programatori
MONICA ALBU, HORIA D. PITARIU, O analiză a validității relative la construct a scalelor din chestionarul FOCUS- 93 referitoare la climatul organizațional
DELIA VÎRGĂ, Comportamentul conflictual conglomerat- o nouă paradigmă în studiul conflictelor organizaționale
VALENTIN DINU, Modelul unui episod de stres organizaţional
ANDRADA VANGA, Procesarea semantică inconștientă a informațiilor afective verbale și nonverbale91

A CONTRACTOR OF THE CONTRACTOR
ADELA CRIŞAN, NICOLETA MUSCĂ, Alexitimia- un concept controversat; relaţia dintre alexitimie şi anxietate
MATT PORTER, Living as a Refugee: an Investigation into the Impact on Mental Health of Recent Stressful Changes in the Former Yugoslavia
VERA RAPAN, Stereotipuri în comunicarea politică155
METODE ȘI TEHNICI DE CERCETARE
MONICA ALBU, HORIA D. PITARIU, Pot fi măsurați superfactorii modelului BIG FIVE folosind inventarul psihologic California?
TESTE DE PSIHOLOGIE
HORIA D. PITARIU, Chestionarul de personalitate 16 PF
RESTITUIRI
ROBERT M. GUION, Confessions of an Eminent Failure
CRITICĂ ȘI BIBLIOGRAFIE
TIMOTHY MILLER (1999): Bucură-te de ceea ce ai , Editura Humanitas, București (Andrada Vanga) 191
EMIL VERZA & FLORIN EMIL VERZA (2000) Psihologia vårstelor, Editura Pro Humanite, Bucureşti (Stoica Mihaela)
ANSFRIED B. WEINERT (1998): Organisations Psychologie, Psychology Verlags Union (Cristian Scholtes)195
VIAŢA ŞTIINŢIFICĂ
Conferința Națională de Psihologia Muncii-Organizațională "Alexandru Roșca"

## STUDIES OF PSYCHOLOGY

Vol. 4

2000

Nr. 3-4

### CONTENTS

EDITORIAL
DUMITRU SALADE, What the School Doesn't Teach us Sufficiently?
STUDIES AND RESEARCHES
HORIA D. PITARIU, DANIEL PAUL, Psychological Aspects Of Job Satisfaction Among The Teachers From Special Centers
RODOLFO E. GUTIERREZ, EMILY ITO SUGIYAMA, JORGE VILLATORO, Organizational Stress and Mental Health in a "Sandwich" Population: Middle Level Managers and Supervisors
CIOBANU GILBERT, The Construction Of A Behaviorally Anchored Rating Scale For Computer Programmers
MONICA ALBU, HORIA D. PITARIU, Analysis Of The Construct Validity Of The Scales In The Questionnaire Focus-93 Concerning The Organizational Climate
DELIA VÅRGÅ, A New Approach For The Study Of Organizational Conflict
VALENTIN DINU, Le Modele Du Stress Dans Une Organisation
ANDRADA VANGA, Unconscious Processing Of Verbal And Nonverbal Affective Information91
ADELA CRIŞAN, NICOLETA MUSCĂ, The Relation Between Alexithymla And Anxiety123

IATT PORTER, Living as a Refugee: an Investigation into the Impact on Mental Health of Recent Stressful Changes in the Former Yugoslavia
/ERA RÅPAN, Stereotypes And Comunication155
RESEARCH'S METHODS AND TEHNICS
MONICA ALBU, HORIA D. PITARIU, Can The Factors Of Big Five Model Be Measured Using California Psychological Inventory?169
₹ *
PSYCHOLOGICAL TESTS
HORIA D. PITARIU, The Personality Questinaire 16 PF181
RESTITUTIONS
ROBERT M. GUION, Confessions of an Eminent Failure
CRITIQUE AND BIBLIOGRAPHY
TIMOTHY MILLER (1999): Enjoy what you have (Andrada Vanga)
EMIL VERZA & FLORIN EMIL VERZA (2000) The Psychology of Ages (Stoica Mihaela)194
ANSFRIED B. WEINERT (1998): Organisations Psychologie, Psychology Verlags Union (Cristian Scholtes)195
STIENTIFIC REALITY
National Conference of Work Psychology "Alexandru Roşca" 205

### EDITORIAL

### DEZIDERATE ACTUALE ALE MUNCII EDUCATIVE SAU CE NU NE INVAȚĂ ȘCOALA ÎNDEAJUNS

1. Argument. Problemele educației au devenit în ultima vreme tot mai des obiect de discuții, nu numai pentru școală ci și pentru toți factorii interesați. Și care factor ar putea spune că nu este interesat în problemele educației?

Aspectele educației sunt examinate din tot mai multe puncte de vedere cu instrumente științifice tot mai perfecționate, din perspective tot mai pretențioase (integrare, globalizare, flexibilizare) și cu propuneri tot mai numeroase și mai concrete.

Cu toate acestea, având în vedere complexitatea vieții sociale, cerințele mereu crescânde cu privire la pregătirea viitorilor cetățeni și specialiști, ritmul rapid al modificărilor sociale și perfecționarea continuă a științelor educației, este greu să se coreleze toate aceste elemente și să se elaboreze un plan coerent de muncă educativă care să răspundă pe deplin tuturor acestor deziderate îndreptățite.

Formularea obiectivelor educației, înregistrarea celor zece tipuri de educație recomandate de UNESCO, precum și preocuparea insistentă a factorilor de decizie din acest domeniu (MEN, institutele de cercetări de specialitate, universitățile etc.) de a realiza aceste deziderate n-au reușit pe deplin să cuprindă toate domeniile cu implicații educative și nici să realizeze la un nivel corespunzător toate obiectivele educației. Formarea unei personalități complexe, dinamice, deschise, competente și responsabile, continuă să fie încă mai mult afirmată și urmărită, fără să fi devenit un "produs" oferit societății, pe măsura așteptărilor sale.

Formulările tratatelor de pedagogie, scopurile reformelor învățământului sau obiectivele programelor de educație să cuprindă și să exprime cât mai adecvat situația etapei pe care o parcurgem.

Astfel, "formarea unei personalități Integral-vocaționale și creatoare", cum afirmă I. Nicola în Tratatul de pedagogie școlară sau "formarea de individualități caracterizate prin

# ORGANIZATIONAL STRESS AND MENTAL HEALTH IN A "SANDWICH" POPULATION: MIDDLE LEVEL MANAGERS AND SUPERVISORS

RODOLFO E. GUTIÉRREZ, EMILY ITO SUGIYAMA, JORGE VILLATORO

Facultad de Psicología, Universidad Nacional Autónoma de México, Instituto Mexicano de Psiquiatría

> Individuals occupying middle management jobs are subject to pressures from higher and lower hierarchical levels in any organization. Therefore, issues such as stress and mental health should be seriously considered since no individual can contribute to the successful operation of the organization without a minimum quality of his/her physical and psychological conditions. The purpose of this study was to obtain diagnostic stress profiles of middle management groups in a Mexican glass production factory. Three kinds of factors were measured: 1) psychological: psychosocial risk factors, mental health level, perceived stressors and perceived supports; 2) physiological: blood pressure measurement; 3) behavioral: work performance. Results indicated that among middle management levels, heads of sections showed the higher work performance but also the lowest levels of socialsituational and self supports. On the other hand, intermediate management levels as a whole, exhibited higher levels of stressors and psychosocial risk factors; and lower levels of supports and mental health.

#### INTRODUCTION

In any given organization, middle level jobs are particularly subject to pressures from the working environment and more likely to experience negative effects of stress and consequently, likely to show problems related to poor mental health.

Individuals in such positions have important organizational responsibilities, ranging from planning,

implementation and improvement to particular forms of activities. They must be able to adapt and respond rapidly to the dynamic and changing conditions typical of organizations.

Moreover, frequently their decisions and initiatives are not fully supported either by high level management or by subordinates.

These positions are affected by complex and challenging pressures. When it comes to achieving a given task or planned change, individuals must continuously invest considerable amounts of energy in order to prevent dysfunctions and to maintain a system operating to full capacity.

In addition, evidence suggests that managers and supervisors (the middle level of a hierarchical structure), are the most reluctant and resistant group when confronted with new training demands or new working methods. Thus, adequate mechanisms to handle stress levels are necessary to overcome negative attitudes towards organizational change (Robbins, 1991).

Our position is that issues such as stress and mental health in middle managers should be seriously considered. What is at stake is the individual who can or can not contribute to the successful operation an organization depending upon the quality of his/her physical and psychological conditions.

Stress has been defined in different ways. Selye, (1938) has argued that definitions that include negative implications (distress), are more common than those which mention positive implications (eustress). Nevertheless, there is an emerging consensus around the notion that a certain amount of stress is necessary, specially in the work place. Thus, the critical issue becomes locating the optimal stress level (Fisher, Schoenfelft & Shaw, 1990) that the individual

needs to function satisfactorily without reaching the point of negative or disabling stress.

This optimal stress level varies considerably among individuals, due to the fact that it involves a wide diversity of elements such as the way a situation is perceived (Lazarus, 1986); particular individual skills; stress tolerance levels and intervening personal and social factors. It also varies within an individual, depending on variables such as time (Ivancevich & Matesson, 1986).

Several studies conducted in different countries (Frankenhaeuser, Lundberg, Fredrikson, Melin, 1989; Singh, 1991; Ahmad, Khanna, 1992; Kobasa, Maddi, Kahn, 1993; Srivastava, Hagtvet, Sen, 1994; Terry, Tongue, Callan, 1995) have pointed out that there is a significant correlation between stress and performance/satisfaction in intermediate levels. They also have alerted about the consequences in other life areas (e.g. family, friends) and in physical health (e.g. cardiovascular and neuroendocrine activity).

In this scenario, the purpose of the present study was to obtain diagnostic stress profiles of middle management groups of subjects in a Mexican glass production factory. Three categories of factors associated to stress were measured:

- Psychological: psychosocial risk factors, mental health level, perceived stressors and perceived supports;
- Physiological: blood pressure measurement;
- Behavioral: work performance.

The basic assumption is that among middle managers and the rest of the employees, (higher executives, office and clerical employees and manual workers), there are similarities resulting from belonging to the same organization. However, there are also some ifferences which are unique to the position occupied within the organizational hierarchy (Quick, Nelson & Quick, 1990).

The main hypothesis implies that middle managers differ from the rest of the employees at other job levels with respect to social, work and personal levels of stress and support. Specifically, it is assumed that for the target population stress levels are higher; support levels are lower; the level of psychosocial risk factors is higher, and mental health and performance levels are lower.

An additional prediction is that measures of blood pressure for the middle managers, as compared with the rest of the employees, will be higher.

#### METHOD

#### Variables

#### Table 1

Psychological	Physiological	Behavioral	Organizational
- Psychosocial Risk Factors - Mental Health - Stress - Support	-Blood pressure	- Performance	-Position Hierarchy -Type of Activity

#### Subjects

A total of 1111 subjects employed by the glass factory participated in the study. 180 omposed the middle management group including coordinators / professionals, supervisors, heads of departments and heads of sections; and 931 were office and clerical employees or manual workers (table 2).

Table 2
Hierarchical levels - Glass industry (mexico city)

HIGHER EXECUTIVES	n=11
MIDDLE MANAGEMENT:	
Coordinators/professionals	n=47
Supervisors	n=51
Heads of Department	n=57
Heads of Sections	n=25
ADMINISTRATIVE:	
(office and clerical employees)	n=158
MANUAL WORKERS	n=762

#### Instruments

For the measurement of Psychological Variables, the SWS – Survey (c) (Gutiérrez y Ostermann, 1991), was used in this study, which is based on a theoretical model of the interaction of three dichotomous stress-support factors for work, life situation and self. Content validity of the instrument has been rigorously established internationally in twenty countries and has been field tested in various work settings (Gutiérrez & Ostermann, 1993; Gutiérrez, Ito, Contreras & Atenco, 1995 a & b; Gutiérrez & Ostermann, 1995; Gutiérrez, Ito & Villatoro, 1996).

The SWS-Survey (c) contains eight sub-scales:

- PRF. Psychosocial Risk Factors, which endanger mental health level (alpha = 0.925)
- MHL. Mental Health Level, conditions that enhance perception of well-being (alpha =0.920).
- WST. Work Stressors, stress factors in the working environment (alpha= 0.938).
- SST. Social-Situational Stressors: Non-work stress factors of life conditions (alpha = . 0.955).
- FST. Self Stressors: stress factors of disposition/life style (alpha = 0.953).
- WSU. Work Supports, support factors in the working environment (alpha = 0.944).
- SSU. Social-Situational Supports: Non-work support factors of life conditions (alpha = 0.931).
- FSP. Self Supports: support factors of disposition/life style (alpha = 0.939).

The physiological variables: Blood pressure: systolic (SBP) and diastolic (DBP) were measured through the use of a baumanometer.

The behavioral variables: Work Performance (WP) were measured by a Performance Assessment Questionnaire, which contains 12 items with seven categories of response each about working behavior: quantity, quality, morale/attitude, discipline, team work, responsibility, attendance, initiative, organization, efficiency, work place and cooperation, (Gutierrez & Ostermann, 1994). The maximum theoretical score is 84.

#### **Procedures**

Subjects were asked to respond to the SWS-Survey in their natural working place. Individual scores were obtained for each of the eight scales. Information about physiological stress indicators was confidentially obtained by the Performance Assessment Questionnaire, from the direct supervisor of each subject.

Individual results were sorted into groups according to the four hierarchical levels (executives, middle managers, clerical office employees, and manual workers).

A second sorting was done for the middle management group yielding four subgroups:

- 1.- Coordinators/ Professionals;
- 2.- Supervisors;
- 3.- Heads of Department;
- 4.- Heads of section.

Group differences by hierarchical level (intermediate vs higher executives, office and clerical employees, and manual workers), were determined in relation to work stress, mental health, blood pressure and work performance.

#### Statistical Analysis

Descriptive analysis of variance and Post hoc comparison (Sheffé) was conducted using the "Statistical Package for Social Sciences" (SPSS) version 6.1.

#### RESULTS

#### I. Analysis of variance: hierarchical levels

As predicted, data reveal both similarities and differences between middle managers and employees at upper and lower levels of the organization.

Comparing middle managers with lower level employees, results indicate that middle managers have a higher mean for Psychosocial Risk Factors (PRF) score: X=

6.15 vs. 5.05 (p=.022) as well as for Self Stress (FST): X= 6.89 vs. 5.73 (p=.013).

Table 3
Analysis of variance by hierarchical levels

	HIGHER EXECUTIVES (n=11)	MIDDLE MANAGERS (n=180)	OFFICE AND CLERICAL EMPLOYEES (n=158)	MANUAL WORKERS (n=762)	F	P
PRF	6.4545	6.1500	5.0253	5.0486	3.2069	.0225
MHL	13.3636	17.4111	19.2405	19.5945	11.4741	.0000
WST	8.7273	9.0500	8.8544	9.6667	3.1496	.0243
SST	7.1818	6.4389	5.3671	, 5.9239	1.4429	.2287
FST	6.7273	6.8889	5.7152	5.7283	3.6043	.0131
WSP	13.6364	16.9722	18.7405	18.9475	9.1110	.0000
SSP	12.8182	15.7722	17.5253	17.2559	6.7867	.0002
PSP	13.4545	16.4944	18.2911	18.2913	9.2338	.0000
SBP	75.9091	71,7000	72.0886	69.6142	5.1675	.0015
DBP	121,4545	113,7722	114.5318	110.6430	6.9947	.0001
WP	49.3333		56.3101	49.8465	40.3443	.0000

Comparing middle managers with higher executives, there are similarities (group means show no significant differences) with respect to Mental Health Level (MHL), Work Supports (WSU), Social-Situational Supports (SSP), and Self Supports (FSP). Both groups show a lower score for MHL and for the three support scales in comparison with office and clerical employees and with manual workers. There are no significant differences between these two lower levels for any of the four scales.

Nonetheless, with respect to performance, middle managers as a group, have the highest score (61.14) which is significantly higher than the performance score for the group of executives (49.33), the group of office and clerical employees (56.31), and the group of manual workers (49.855). These group differences are highly significant (p=.0000).

With respect to blood pressure, for middle managers the mean systolic pressure level (SBP) is similar to both office and clerical employees and manual workers, but significantly lower than for executives. The mean diastolic pressure level (DBP) for middle managers is also significantly below that of the executives while still similar to the workers at the lower level of the organization.

#### II. Analysis of variance: middle management subgroups

An intra-organizational hierarchy ANOVA was conducted for the middle management sub-groups: Group I (Heads of Department), Group II (Heads of Section), Group III (Coordinators /Professionals) and Group IV (Supervisors). Data shows similar high levels among groups in Mental Health Level (MHL) and low levels of Psychosocial Risk factors (PRF).

Group IV shows a Psychosocial Risk Factors (PRF) mean significantly lower than that of Group II (4.41 vs. 8.00, p = .027). The same difference between these groups appears in Social-situational Stressors (4.76 vs. 8.88 p=.07) and Self Stressors (5.09 vs. 8.32, p=.015). Likewise a higher performance level is shown by group II (65.5) when compared to Group IV (58.10; p = .018).

There were no statistically significant differences (p <.05) among groups with respect to Mental Health Level, Social-Situational Supports, Self Supports, and Work Stressors.

In relation to blood pressure, no significant differences were found among the four sub-groups of middle managers.

Table 4
Intra-organizational hierarchy ANOVA

	Heads of	Heads of S.	Coords	Superv.	F	Р
	D. (n=57)	(n=25)	PROFESS (n=47)	(n=51)		
PRF	6.7018	8.000	6.3830	4.4118	3.1259	.0272
PSI		45.0000	47 2047	10 5002	2.2392	.0854)
MHL	16.1404	15.9600 9.7600	17.3617 9.3404	19.5882 8.2157	.9810	.4030)
WST	9.2456 6.7719	8.8800	6.5532	4.7647	2.3695	.0723)
PST	7.4211	8.3200	7.4468	5.0784	3.5574	.0155
WSP	15.5263	15.8800	16.8298	19.2549	2.5836	.0549)
SSP	14.8246	13.8000	16.2979	17.3137	1.8652	.1372)
PSP	15.5263	14.9200	17.2553	17.6471	1.5093	.2138
SBP	69.6667	74.4000	71.1702	73.1373	1.5672	.1990
DBP	112.4737	117.2000	110.8085	116.274		
WP	62.4340	65.5200	60.6596	58.0980	3.4480	.0179

#### CONCLUSIONS

Analysis within the categories of middle management levels (heads of department, heads of section, coordinators/professionals and supervisors) indicated:

Significant differences (p<.05) in only three of the eleven measurements considered, suggests a definite homogeneous organizational status. Therefore subjects can be considered member of a single group

 Group II (Heads of Section) obtained the higher work performance mean, but also showed the lowest levels of Social-Situational and Self Supports.

Without considering the general management group (since the number of 11 managers was as expected the lowest of the reported groups), findings indicate that intermediate management levels exhibit higher levels of stressors and lower levels of supports in the three considered areas (work, social and self). Likewise, this group showed scores that were higher in Psychosocial Risk Factors and lower in Mental Health Level.

An important finding was that even though subject to "unfavourable" psychological conditions, the best qualified group in terms of performance was precisely the intermediate level group (even though its performance is not very high (maximum score = 84)

At the moment the SWS-Survey was applied, there was not detected any difference between hierarchical levels upon the physiological indicator used, since data showed normal blood pressure in every group.

As middle managers have to satisfy any organizational demand, uncertainty levels or work loads have to be reduced as possible. Ideally, activities for middle managers should be clearly designed and defined, eliminating ambiguities in everyday routines and in case of unexpected or rapidly changing situations which demand radically different attitudes and behaviors, middle managers must be trained to cope successfully with this kind of situations.

In summary, because of the strategical importance of middle managers for optimal functioning in any given organization, it is necessary to recognize that individuals holding these positions, are permanently subject to pressures exerted by the high executives as well as by subordinates. Therefore hey need to be supported in the personal and social areas in order to neutralize the organizational stress to which

they are exposed. It is essential for them to maintain positive attitudes and emotional balance that enable them to enjoy good mental and physical health and develop higher levels of work satisfaction. In turn, they can successfully face their work problems by recognizing, controlling, managing and coping with those stressors that interfere with the rational achievement of organizational goals.

#### REFERENCES

Ahmad, S. & Khanna, P. (1992). Job Stress and Job Satisfaction of Middle Level Employees. *Journal of Personality and Clinical Studies*. 8 (1-2), 51-56

Filley, C. A. (1985). Solución de Conflictos Interpersonales. México: Trillas.

Fisher, C., Schoenfelft, L. F. & Shaw, J. B. (1990). Human Resource Management. Boston: Houghton Mifflin Company.

Frankenhaeuser, M., Lundberg, U., Fredrikson, M. & Melin, B. (1989) Stress on and off job as related to sex and occupational status in white collar workers. *Journal of Organizational Behavior*. 10(4), 321-346

Goldberger, L. & Breznitz, S. (1993). Handbook of Stress. New York: The Free Press.

Gutlérrez, R. E., Ostermann, R. F. (1991) Work and mental health in developing countries: A research workshop. Congreso Bienal de Salud Mental. México.

Gutiérrez, R. E., Ostermann, R. F. (1993) Work and Mental Health. Concerns for a developing countries. Congreso Mundial de Salud Mental, Tokio.

Gutiérrez, R. E., Ostermann, R. F., Ito E., Contreras-Ibaañez, C. y Atenco, F. (1994). Validación en 12 culturas de la escala internacional de estres y trabajo SWS-Survey. Il Simposio Internacional de Psicología Aplicada al Perfeccionamiento de la Dirección Empresarial. La Habana.

Gutlérrez, R., Ito, E., Contreras, C. Y Atenco, F. (1995). Validez de constructo de las escalas de salud mental del SWS. *Psicología y Salud* (6)31-43. *Universidad Veracruzana.Mex*.

Gutiérrez, R. E.; Ito, E.; Contreras-Ibañez, C. y Atenco, F. (1995a). Encuesta SWS-Survey de Estrés, Salud Mental y Trabajo. VII Congreso Mexicano de Psicología. Ivencevich, J.M. & Matteson, M. T. (1989). Estrés y Trabajo. México: Trillas.

Kobasa, S., Maddi, S. R. & Kahn, S. (1993). Hardiness and health: A prospective study: Clarification. *Journal of Personality and Social Psychology*. 65(1) 297 falta completar páginas

Lazarus, R.S. & Folkman, S. (1986). Estrés y procesos cognitivos. Barcelona: Editorial Roca.

Quick, J.C., Nelson, L., & Quick, J.D. (1990). Stress and Challenge at the top. New York: John Wiley and Sons.

Robbins, S. P. (1991). Organizational Behavior. New Jersey: Prentice Hall

Sauter, S. L. & Murphy, L.R. (1996). Organizational Risk factors for job stress. Washington: American Psychological Association.

Selve, H. (1984). The Stress of Life. New York: McGraw-Hill Inc.

Singh, S. (1991). Executives under stress: Search for some preventive measures. Social Science International. 7 (1) 7-20.

Srivastava, S., Hagtvet, K., Sen, A. K. (1994). A study of role stress and job anxiety among three groups of employees in a private sector organization. Social Science International. 10(1-2) 25-30.

Stanford S. C. & Salmon P. (1993). Stress (from synapse to syndrome) San Diego: Academic Press

Terry, D., Tongue, L. & Callan V. J. E(1995) Employee adjustment o stress:: The role of coping resources, situational factors, and coping responses Anxiety, Stress and Coping, An international Journal Vol 8(1) 1-24.

Turcotte, P. R. (1986). Calidad de Vida en el Trabajo. México: Trillas.

Wendelen, E. Vous avez dit <stress>(1995) Bulletin André Renard, Belgique.