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Organizational Role Stressor Index: A New Tool in the Study of Barriers to Building Employee Engagement

The goal of this article is the presentation of a new tool to assess stressor frequency as stemming from occupational role organization. This tool was developed subject to Polish market conditions. The development of this new tool focused on four categories linked with the occupational role—role conflict, role ambiguity, role overload, and low role prestige. The article presents the results of standardization studies in which a total of $N = 771$ employees from various organizations took part. Study results reinforce the four-factor structure of the tool, the high reliability of measurements, and its accuracy. The tool may be used in both scientific studies and in surveys of employee opinions in specific organizations.

Key words: role stress, employee opinion surveys.

Introduction

As the name itself implies, the idea of organizational stress as stemming from the filling of a role puts the concept of occupational role at the center of interest. Next to standards and values, role is a main component of each social system, including that of an organization. It encumbers a person with the obligation of making certain types of decisions and establishes a framework for that person's behavior (Rizzo et al., 1970). The organizing of the occupational role may, like the role itself, be a source of stress as caused by conflict, ambiguity, and overload in that very role (Kahn et al., 1964). A conflict of roles is tied to the existence of a lack of cohesion or contradiction among the requirements within a given role as well as expectation

stemming from the serving of various roles. Ambiguity of roles comes from interference on the level of the transmission of expectations or a lack of information regarding expectations and requirements made by superiors, for example. Overload in a role relates to the excessive number of tasks to perform in a given amount of time.

The concept of organizational stress as stemming from occupational role filled has accumulated many references, continuations, and revisions (Örtqvist and Wincent, 2006). One of the more influential models is the one developed by scientists from the University of Michigan that is based on an individual–environmental fit. This model encompasses two types of fit of the individual to his or her environment. The first takes into account the level to which the talents and capabilities of the person relate to the requirements and expectations of the work. The second type involves the scale to which the organization provides the individual with reinforcement and satisfies that person's needs.

Occupational stress stems from a mismatch between the employee and his or her environment. “Work generates stress to the degree to which it lacks the means to satisfy the individual's motivation and proportionally to the degree of mismatch of the individual's talents to work requirements, which are prerequisite to achieving those means” (Van Harrison, 1987, p. 264). On the basis of many conducted studies, in addition to role conflict, ambiguity, and overload, the authors of this model isolated an additional category of stress caused by the mismatch between the employee and the work environment: uncertainty as to a future in that job, the failure of utilize skills and talents, and low level of participation.

Organizational Stress Stemming from the Role

Role Conflict

Stress caused by role conflict makes its appearance in a situation in which the employee observes a contradiction between the requirements made by the giver of the role (e.g., the superior) or between the requirements of various role givers (e.g., the superior and in-house client), or among various roles filled within the framework of the given organization (e.g., team leader vs. key customer manager). Such contradictions can grow to a degree such that the meeting of one of the requirements impedes or even makes impossible the meeting of another (Kahn et al., 1964). J. R. Rizzo et al. (1970) detailed several types of conflict stemming from perceived incongruity and lack of cohesiveness of the role. These are: (1) Conflict between the system of employee values and activities stemming from the role filled; (2) Conflict

stemming from the mismatch of resources (external, such as time and tools, and internal, such as talents) to the filled role; (3) Conflict caused by the filling of various roles necessitating contradictory behavior; (4) Conflict resulting from the receiving of contradictory requirements, the need to implement mutually exclusory goals, and incohesive standards for assessing work outcomes.

The mismatch in the filled role may take on a twofold form. In the first case, it is an absence of predispositions vital to the performance of the entrusted job. In the second case, qualifications, talents, and competencies held cannot be utilized in the current job. Both forms of mismatch can result in negative emotional tension, although they are tied with the feeling of various emotions. The lack of expected competencies may be a challenge that causes fear, while an absence of the ability to utilize potential gives birth to frustration, disappointment, and ultimately dependency. The results of research carried out by B. Erdogan and T. N. Bauer (2009) demonstrate that the consequences of qualifications exceeding expectations (over-qualification) are moderated by autonomy in performing tasks. Subject to conditions of significant freedom as to directions and ways of performing work, the negative impact of excessive qualifications on satisfaction and on a desire to stay with the company decrease.

C. Maslach and M. P. Leiter (2010) call attention to another type of match perceived by employees. They define it through the lens of the agreement of work with other aspirations evaluated in six areas: workload (type, work rate, and job position requirements), control (participation in making decisions), community (relations with others), fairness (a fair subdivision of work, remuneration, and showing workers respect), and values (the agreement of values with which employees identify with organizational values). The sense of a match in these areas is strongly linked with the perceived psychological contract in the organization understood as a system of convictions regarding the performance of obligations (compare with Rousseau, 1995; Ratajczak, 2007).

In summary, role conflict occurs when the worker feels pressure to undertake action that is contradictory with respect to his or her internal system of values, potential, or other requirements.

Role Ambiguity

Role Ambiguity occurs in situations in which the employee does not have sufficient information regarding the expectations of the givers of roles, regarding actions leading to the meeting of these expectations, regarding ways of measuring the results of work, and regarding the consequences of meeting or failing to meet such expectations (Kahn et al., 1964; Rizzo et al., 1970). Role ambiguity is also tied with

a lack of precise definitions as to the scope of requirements facing the worker (Cooper and Marshall, 1987). The formal source of requirements expected of employees is primarily the job description and less frequently the employee periodic assessment form. A successively less formal and more direct source of requirements consists of expectations as expressed by superiors, coworkers, and customers. Formal documents containing a description of role often fail to fulfill their function in the organization. They tend to be too general or out-of-date. Moreover, a frequent cause of role ambiguity is errors in the process of delegating tasks and a lack of precision and constructive running feedback on the work being performed. Ultimately, the reason behind perceived role ambiguity may be poor work organization, dispersed responsibility, the duplication of tasks, and an unclear structure of official relations.

Role Overload

Role Overload occurs with a worker is encumbered with requirements that he or she is incapable of meeting in the defined period of time. In literature, there exists a subdivision into quantitative role overload (too much work) and qualitative role overload (work that is too difficult) (Cooper and Marshall, 1987). Quantitative overload is present when excessive hours are spent at work and the quantity of assigned obligations and tasks is too great. Qualitative overload is linked with tasks that the worker is simply incapable of performing in a satisfactory manner. What is interesting is that the research results show that compared with role conflict or ambiguity, role overload remains in a weaker relation to work satisfaction, attachment to the organization, and emotional exhaustion (Örtqvist and Wincent, 2006; Fried et al., 2008). S. Gilboa et al. (2008) suggests that the difference is the result of an assessment of role overload as performed by workers. It is the view of the authors that workers assess stress situations in two dimensions: threat to the achievement of goals (hindrance) and challenges that are an opportunity to achieve goals (challenge). Role overload, when compared with role ambiguity and conflict, is assessed as being the highest in the challenge category, which may be caused by mobilization and the relatively small load of negative emotions tied to the occurrence of this type of stressor.

Low Role Prestige

The last category of stressors stemming from a role was not defined within the framework of the classic concept. This type of stressor primarily includes the low social prestige of the occupation, lack of recognition for work performed (both

on the part of superiors and customers as well as the broadly understood environment), low remuneration, and lack of perspectives for professional development, including promotion. The specified indicators of low role prestige are mutually related—e.g., the value of work performed for relatively low pay is clearly lower as perceived by observers. Moreover, low professional position, including a lack of possibilities of advancement, reinforces a sense of work uncertainty (Orlak, 2014). The prestige of the role also remains related to the share in decision-making with respect to direction and manner of performing the work. Work characterized by responsibility for its outcome with no participation in decisions relating to how the effects should be achieved is exceptionally frustrating.

The Consequences of Role Stress

The meta-analysis of research results as conducted by D. Örtqvist and J. Wincent (2006) relating to the consequences of stress as stemming from role demonstrated a significant association between an increase in intensity of stressors at work and several phenomena that are unfavorable for the organization and the workers it employs. The authors of the meta-analysis quote data that indicate the following consequences of role-derived stress: emotional exhaustion, a lowering of the sense of one's achievements, depersonalization, low work satisfaction, lowered attachment to the organization, lowered quality of work performance, an intention to resign, and the sensing of negative tension at work.

From the perspective of managing worker efficiency, it is the link between organizational stress and the level of performance of jobs entrusted to workers that mainly lies at the center of interest. This relationship is well documented in literature (Fried et al., 2008; Gilboa et al., 2008). As observed, role ambiguity has a negative impact on the level of task performance because workers are uncertain as to how they are to complete the task. Role ambiguity is primarily assessed by workers as being a barrier and only to a much lesser extent as a challenge. It results in frustration and for this reason is a major impediment to achieving expected effects (LePine et al., 2005). The results of the meta-analysis performed by Y. Fried et al. (2008) points to the intermediary role of work satisfaction and the intention to leave the organization in the relationship between the stress derived from a role and the assessment of level of task completion. However, research by N. Podsakoff, J. A. LePine, and M. A. LePine (2007) indicates the intermediary role of attachment to the organization in relations among stressors perceived as barriers and staff fluctuation as well as the withdrawal of workers from actions for the organization (withdrawal behavior).

An equally important area of research is the identification of the associations between the frequency of role-derived stressors and worker behavior increasing organization productivity (Eatough et al., 2011). The more workers perceive role conflict and ambiguity in working conditions the less they are ready to undertake additional effort for the organization—i.e. organizational citizenship behavior. At the same time, research results show that each organizational stressor translates into a lowered level of work performance and citizenship behavior in a slightly different way. Among other things, it has been demonstrated that role ambiguity remains in a stronger relation with the level of task performance than with citizenship behavior, while the opposite is true in the case of role conflict. For its part, role overload is not directly tied to both task performance and citizenship behavior, which is confirmed by the dualistic character of this stressor. On the one hand, it is linked to negative tension, while on the other, it mobilizes workers to undertake increased efforts aimed at achieving the identified targets (Eatough et al., 2011).

Organizational Role Stressor Index: The Tool Structure

The Organizational Role Stressor Index was created to meet the needs of worker opinion poles aimed at identifying barriers to efficiency in the organization. The ultimate version of the Organizational Role Stressor Index consists of thirty-four descriptions of situations that workers may experience in the workplace.

The task of the worker asked about his or her opinion on working conditions was to rate the frequency of a given situation as observed in the organization for which he or she works on a five-point scale. Individual levels of the answer scale correspond to: 1 = never, 2 = rarely, 3 = sometimes, 4 = often, and 5 = always. The descriptions of situations make reference to one of the four groups of stressors as stemming from role: (1) Role overload (eleven items, e.g., “Too large a number of tasks for the designated time”); (2) Role conflict (ten items, e.g., “Requirements set by the superior that are mutually exclusive”); (3) Role ambiguity (seven items, e.g., “Lack of clarity as to how the work is to be performed”); (4) Low role prestige (six items, e.g., “Lack of recognition for work performed”).

Organizational Role Stressor Index: Structure of Factors

A statistical analysis was performed on the results accumulated from a series of studies in order to verify the structure of factors and to check the reliability of Organizational Role Stressor Index subscales. In these studies, the total number

of participating workers was $N=771$ aged 19–61 ($M=34.19$; $SD=9.46$), where 492 were women and 279 men. Among the respondents, 443 were employed by companies, while 328 worked for organizations in the public sector. A little more than 79% of respondents occupied non-managerial positions. The average job seniority of study participants amounted to $M=12.61$ years ($SD=10.85$). Prerequisite to participation in the study was work at the present job position for the same organization for a period of at least half of a year.

In constructing an Organizational Role Stressor Index, it was assumed that this tool consists of four mutually positively correlated subscales. The accuracy of the factors of a so-defined tool structure was verified using Confirmatory Factor Analysis (CFA) applying the Diagonally Weighed Least Squares (DWL) estimator in the R program in its 2.15.2 version (R Development Core Team, 2012) using the lavaan package (Rosseel, 2012). The four-factor model was tested and compared to the single-factor model. The match indexes for data for both tested models are found in Table No. 1.

Table No. 1. Data Measures of Matching for the Four- and One-Factor Models

Model	χ^2	df	p<	CFI	TLI	RMSEA
1-factor	2641.11	527	0.01	0.936	0.932	0.072 (0.069–0.075)
4-factor	2162.66	521	0.01	0.951	0.947	0.064 (0.061–0.067)

Annotations: $N = 771$, χ^2 – DWLS estimator, CFI –Comparative Fit Index, TLI –Tucker–Lewis Index, RMSEA –Root Mean Square Error of Approximation.

Source: Own study.

The results point to a better match of the four-factor model. Both models are marked by good CFI and TLI indexes. However, the four-factor model meets the $RMSEA < 0.07$ criterion to a greater degree (Konarski, 2010). It is on the basis of results that the four-factor solution was also assumed as best reflecting the theoretical model. Table No. 2 presents factor loads for individual items associated with the four subscales.

Table No. 2. Confirmatory Factor Analysis Results: The Organizational Role Stressor Index Four-Factor Structure

Number and item content		Factor			
		RC	RA	RO	LR
21	Lack of possibility of receiving assistance for difficult tasks	0.743			
16	Lack of support from superiors	0.722			
33	Receiving mutually exclusive requirements from superiors	0.695			
6	Expectations of superiors that are unrealistic	0.686			
34	Conflict of interests stemming from the filling of various functions in the organization	0.521			
32	Conflict between work and private life	0.464			
23	Conflicts with coworkers	0.439			
2	No opportunity for using one's knowledge and skills	0.437			
3	Dull tasks	0.424			
1	Lack of predispositions for performing entrusted tasks	0.328			
30	Lack of clarity as to scope of responsibilities and expected outcomes		0.773		
31	Contradictory expectations on the part of various people		0.745		
28	Lack of precise information on ways of assessing work		0.744		
29	Lack of current feedback regarding work performance		0.700		
27	Lack of clarity as to how a job should be performed		0.657		
25	Uncertainty as to the consequences of not performing work in line with expectations		0.657		
19	An uncertain future regarding work		0.682		
7	Number of tasks too great for the time allotted			0.682	
4	Time for performing tasks that is too short or unrealistic or deadlines that are too rigid			0.630	
9	Insufficiently long and/or too few breaks			0.600	
10	Unforeseen crisis situations during task execution			0.569	
8	Receiving tasks and responsibilities that are too difficult, new, unknown			0.548	
17	Inadequately equipped work station			0.515	
24	Unfavorable physical working conditions (noise, temperature)			0.454	
26	Difficulties in communicating with customers or partners			0.442	
5	Being encumbered with full responsibility for tasks			0.404	
12	Overtime			0.328	
11	Necessity for quick decision-making and action			0.268	
18	Lack of recognition for performed work				0.800

Number and item content		Factor			
		RC	RA	RO	LR
14	Lack of influence over decisions relating to work goals and course				0.654
13	Lack of influence over the course of tasks and achieved effects				0.613
20	Low remuneration with respect to effort expended				0.529
22	Low prestige of performed occupation				0.512
15	No possibilities for promotion				0.507

Annotation: RC – role conflict, RA – role ambiguity, RO – role overload, LR – low role prestige. The table presents standardized load values. Covariances: RC-RA = 0.88; RC-RO = 0.83; RC-LR = 0.79; RA-RO = 0.69; RA-LR = 0.75; RO-LR = 0.63.

Source: Own study.

Reliability and Descriptive Statistics

Descriptive statistics, reliability indexes (Cronbach alpha), and correlation coefficients between the four Organizational Role Stressor Index scales were subsequently calculated.

Table No. 3. Descriptive Statistics, Reliability Indexes, and the Correlation Matrix for the Organizational Role Stressor Index Scales

Stressor category		<i>N</i>	α	<i>M</i>	<i>SD</i>	1	2	3	4
1	Role conflict	10	0.81	2.14	0.59				
2	Role ambiguity	7	0.85	2.47	0.76	0.74**			
3	Role overload	11	0.79	2.67	0.59	0.65**	0.56**		
4	Low role prestige	6	0.77	2.83	0.78	0.62**	0.61**	0.47**	
5	Organizational Role Stressor Index	34	0.92	2.50	0.55	0.90**	0.86**	0.82**	0.78**

Annotation: *N* = 771, ** Significant correlation at level 0.01.

Source: Own study.

The reliability analysis results make it possible to assume that the Organizational Role Stressor Index reliably measures the frequency of role stressor occurrence. The internal cohesion coefficient (Cronbach alpha) takes on a value no lower than 0.7 for all subscale cases.

A comparison of the average results for individual subscales indicates that the people examined most often perceive stressors in connection with the low prestige of performed work. Descriptive statistical analysis of the answers to specific items of the scale make possible the statement that workers most often perceive low remuneration with respect to effort expended ($M = 3.40$; $SD = 1.18$), lack of possibility of promotion ($M = 3.17$; $SD = 1.18$), and lack of influence over decisions relating to the goals and course of work ($M = 2.77$; $SD = 0.98$) in their work. The next source of organizational stress in terms of frequency is role overload. Respondents most often indicated the need for quick decision-making and action ($M = 3.56$; $SD = 0.95$), being encumbered by full responsibility for a task ($M = 3.37$; $SD = 1.19$), and an excessive number of tasks for the given amount of time ($M = 2.91$; $SD = 1.03$). The first two items obviously make reference to stressors from the category that LePine et al. (2005) defined as challenges. Role conflict has the lowest frequency of organizational stressors occurring in the examined sample. It was with the least frequency that respondents pointed to conflict of interests as stemming from the serving of various roles in the organization ($M = 1.74$; $SD = 0.90$), lack of predispositions to perform the entrusted tasks ($M = 1.75$; $SD = 0.75$), and conflicts with coworkers ($M = 1.88$; $SD = 0.80$).

An analysis of the correlation of the four subscales calculated by averaging responses to individual items of the index shows a significant positive association among individual categories of organizational stress sources, while simultaneously allowing for the assumption that the categories are relatively isolated. It was only the correlation between role conflict and role ambiguity that came out high. However, this remains in agreement with the theoretical basis of the tool (Kahn et al., 1964; Rizzo et al., 1970).

Test 1. Organizational stress as derived from role and the emotional attitude of employees with respect to the organization.

Theoretical Introduction

In connection with the concept of a feeling of well-being in the organization, relations between the employee and the organization should be looked at independently in categories of positive and negative emotions (Schaufeli et al., 2002). Presently, researchers are interested not only in the negative reactions of employees to pressure, requirements, and difficulties, but also to the positive feelings linked with motivation and commitment. An emotionally positive mindset with respect to an organization is defined as identifying the workplace with a feeling of pride and gratitude for the opportunity to prove oneself as well as the possibility of further

development and is combined with a sense of being inspired and mobilized to put in efforts for the employer. An emotionally negative mindset with respect to the organization is defined not only as something opposite to the positive attitude, but primarily as the identifying of the workplace with discomfort stemming from working conditions, frustration, disappointment, and feeling tension in connection with the employer as well as other negative consequences such as exhaustion, irritability with thinking about work, and somatic afflictions—e.g., nausea or insomnia (Jurek and Adamska, 2016). The research predicted that *the more often employees perceive organizational stressors derived from their role the more negative and less positive is their emotional attitude with respect to the organization* (Hypothesis No. 1).

Persons Subject to Research

A total of $N = 482$ workers aged 19–61 ($M = 33.70$; $SD = 9.48$), including 278 women, took part in the research. Among the respondents, 357 were employed in companies, while the remaining 105 were people working for organizations in the public services sector. A total of 18.4% of those studied worked for organizations employing up to fifty workers, the rest were employed by larger businesses and institutions. A little over 73% of respondents held non-managerial posts. The average total job seniority of research participants was $M = 11.51$ years ($SD = 9.46$).

Applied Tools and Research Procedures

Respondents were invited to take part in an anonymous study and received a login and password allowing them one-time access to the Internet study platform where there was a survey consisting of demographic and Organizational Role Stressor Index related questions, and a questionnaire measuring attitude with respect to the organization. The description of applied tools may be found below.

The Organizational Role Stressor Index

A scale for measuring the frequency of the occurrence at work of factors impeding the performance of tasks and that are a cause for stress, as described in this article.

The Emotional Attitude Scale with Respect to an Organization

An expanded version of the scale, consisting of twenty-two items (Jurek and Adamska, 2016), assigned to two subscales—the positive emotional attitude, PEA, with respect to the organization (eleven statements such as “I like to work for my organization,” “I feel proud because I’m working for my organization,” and “Going to work I feel I will succeed at everything”) and the negative emotional attitude,

NEA (eleven statements such as “I feel bad when at work,” “I am ashamed of where I work,” and “When at work I only dream of getting out”). People completing the scale familiarize themselves with a brief instruction explaining that the scale contains statements describing attitudes they may have with respect to the organization where they work. The task before the respondents is to estimate to what degree they agree with the individual statements on a five-point scale (1 = I totally disagree; 5 = I totally agree). The expanded two-factor version of the Emotional Attitude Scale with Respect to an Organization, consisting of twenty-two items, has good test model matching coefficients using CFA: $\chi^2(df = 208; p < 0.01) = 620.51$; CFI = 0.98; TLI = 0.98; RMSEA = 0.052 (Jurek and Adamska, 2016). The reliability of the positive and negative attitude with respect to the organization measurement achieved a Cronbach alpha = 0.93 and 0.84, respectively.

Results

Descriptive statistics and the results of analysis of correlation among the examined variables are presented in Table No. 4. The results of the correlation analysis confirm *Hypothesis No. 1: The more often the studied persons perceive organizational stressors in their work environment that stem from overload, ambiguity, conflict, and low role prestige, the more negative and less positive will be their emotional attitude with respect to the organization.*

Table No. 4. Descriptive Statistics and the Correlation Matrix for the Studied Variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1 Role overload	2.71	0.57						
2 Role conflict	2.15	0.59	0.650*					
3 Role ambiguity	2.53	0.77	0.533*	0.737*				
4 Low role prestige	2.85	0.78	0.413*	0.652*	0.643*			
5 General organizational stress	2.53	0.55	0.799*	0.909*	0.862*	0.778*		
6 Positive emotional attitude with respect to the organization	3.34	0.80	-0.286*	-0.564*	-0.480*	-0.672*	-0.581*	
7 Negative emotional attitude with respect to the organization	2.21	0.67	0.474*	0.616*	0.519*	0.496*	0.628*	-0.636*

Annotation: N = 462, * Significant correlation at level 0.01.

Source: Own study.

The next step involved the performance of linear regression analysis on the positive and negative emotional attitude with respect to the organization as a dependent variable and the frequency of experiencing the four types of organizational role stressors as predictors. The goal of the analysis was estimating the total impact of organizational stressors on shaping emotional attitude with respect to the organization. Analysis results are presented in Table No. 5.

Table No. 5. Results of Regressive Analysis for the Relationship between the Frequency of Occurrence of Organizational Stressors with Positive and Negative Emotional Attitude with Respect to an Organization

Dependent variable	Predictor	Standardized β coefficients	t	p	VIF
Positive emotional attitude with respect to an organization (PEA)	Role overload	0.13	2.99	0.00	1.75
	Role conflict	-0.34	-5.82	0.00	3.03
	Role ambiguity	0.05	0.85	0.40	2.48
	Low role prestige	-0.54	-11.70	0.00	1.91
Negative emotional attitude with respect to an organization (NEA)	Role overload	0.12	2.54	0.01	1.75
	Role conflict	0.39	6.75	0.00	3.03
	Role ambiguity	0.07	1.20	0.20	2.48
	Low role prestige	0.15	3.03	0.00	1.91

Annotations: N = 462; F (461,4) = 110.99; $p < 0,01$; Adjusted $R^2_{PEA} = 0.49$; F (461.4) = 78.81; $p < 0.01$; Adjusted $R^2_{NEA} = 0.40$; VIF – Variance Inflation Factor

Source: Own study.

In line with expectations, the more rarely employees perceive role conflict and low role prestige in their work, the more strongly they present a positive attitude with respect to the organization. However, perceiving role ambiguity, while taking into account the remaining sources of organizational stress, did not prove to be a significant predictor in foreseeing a positive attitude with respect to the organization. In this case a high variance inflation factor (VIF = 2; Konarski, 2010) was noted, which may mean that what is tied to attitude with respect to the organization is explained by the remaining categories of stress. The negative association of role overload with a positive attitude with respect to the organization also failed to find confirmation in taking into account all sources of stress in a single model. The regression analysis results indicate that what is specific in role overload has a positive correlation with a positive attitude with respect to the workplace. In line with the

forwarded hypothesis, the variance for the negative emotional attitude with respect to the organization is indeed explained by the three categories of stressors as stemming from occupational role—role overload, role conflict, and low role prestige. Role ambiguity, when compared with the remaining sources of stress, proved to be an insignificant predictor of negative attitude with respect to the organization. As in the case of the PEA scale, lack of significance for role ambiguity may also be explained by the high covariance inflation factor.

Test 2: Organizational stress stemming from role and professional burnout.

Theoretical Introduction

Professional burnout, defined as a state of emotional exhaustion and distancing oneself from work (Demerouti et al., 2003) that occurs as a result of the ineffective management of strong and long-term organizational stress, mainly in connection with the application of passive strategies aimed at emotion (Demerouti et al., 2002; Schaufeli and Bakker, 2004). This is also tied with emotional attitude with respect to work. Research results prove that there is a negative correlation between professional burnout and a positive emotional attitude with respect to work as well as a positive correlation with a negative emotional attitude (Barbier et al., 2009). It should be expected that *the more frequently employees perceive organizational stressors stemming from role, the more they feel professional burnout* (Hypothesis No. 2). Moreover, it may be predicted that role overload and ambiguity are predictors of emotional exhaustion, while role conflict and low role prestige of depersonalization.

Persons Subject to Research

A total of $N = 60$ nurses from four different healthcare institutions in the Pomeranian Voviodeship took part in the study. The average total job seniority for the studied women was $M = 25.17$ ($SD = 8.86$).

Applied Tools and Research Procedures

The respondents received printed out questionnaires consisting of the Organizational Role Stressor Index as well as tools for measuring the level of professional burnout. The description of applied tools may be found below.

The Organizational Role Stressor Index

A scale for measuring the frequency of the occurrence at work of factors impeding the performance of tasks and that are a cause for stress, as described in this article.

The Maslach Burnout Inventory

The Maslach Burnout Inventory (MBI) was developed by C. Maslach and S. Jackson. The Polish adaptation is by T. Pasikowski (2004). The questionnaire consisted of twenty-two statements allowing the measurement of three dimensions making up the professional burnout syndrome: depersonalization (e.g., “I get the impression that I treat some customers as if they were mere objects”), exhaustion (e.g., “My work makes me feel exhausted”), a sense of achievement (e.g., “I’ve achieved many significant goals at work”). The task before the studied individuals was to judge each of the statements on a scale of 0 = I never experience such feelings, to 6 = I experience them daily. A high level of burnout is seen in high scores in the exhaustion and depersonalization subscales, and a low score in the sense of achievement subscale.

Results

Descriptive statistics and the results of analysis of correlation among the examined variables are presented in Table No. 6. The results of the correlation analysis confirm *Hypothesis No. 2: The more often the studied persons perceive organizational stressors in their work environment that stem from overload, ambiguity, conflict, and low role prestige, the greater the intensity of professional burnout.* Moreover, an analysis of correlation coefficient between the four sources of organizational stress and the individual dimensions of professional burnout indicate that role-derived stress is clearly correlated to depersonalization and emotional exhaustion, whereas to a lesser degree or not at all—on an insignificant level—with sense of achievement.

Table No. 6. Descriptive Statistics and the Correlation Matrix for the Studied Variables

Variable	<i>M</i>	<i>SD</i>	6	7	8	9
1 Role overload	2.95	0.52	0.46**	0.48**	0.01	0.45**
2 Role conflict	2.30	0.48	0.44**	0.38**	-0.29*	0.52**
3 Role ambiguity	2.64	0.61	0.43**	0.46**	-0.27*	0.56**
4 Low role prestige	3.41	0.63	0.47**	0.36**	-0.10	0.45**
5 General organizational stress	2.78	0.44	0.54**	0.53**	-0.19	0.61**
6 Depersonalization	11.25	7.85	—	0.55**	-0.21	0.84**
7 Exhaustion	25.05	9.92	0.55**	—	-0.03	0.79**
8 Sense of achievement	28.62	7.02	-0.21	0.03	—	-0.47**
9 Professional burnout	55.68	17.72	0.84**	0.79**	-0.47**	—

Annotation: N = 60, ** Significant correlation at level 0.01, * Significant correlation at level 0.05.

Source: Own study.

The next step involved the performance of linear regression analysis with emotional exhaustion and depersonalization as dependent variables and selected categories of role-derived stress as predictors. In the case of exhaustion, identified predictors were role overload and ambiguity, while for depersonalization it was role conflict and low role prestige. The goal of the analysis was estimating the total impact of defined organizational stressors on shaping the two dimensions of professional burnout. Analysis results are presented in Table No. 7.

Table No. 7. Results of Regressive Analysis for Professional Burnout Components as Dependent Variables

Dependent variable	Predictor	Standardized β coefficients	t	p	VIF
Exhaustion	Role overload	0.33	2.39	0.00	1.47
	Role ambiguity	0.28	2.04	0.05	1.47
Depersonalization	Role conflict	0.31	2.57	0.00	1.16
	Low role prestige	0.35	2.94	0.00	1.16

Annotations: $N = 60$; $F_{\text{exhaustion}}(59.2) = 11.36$; $p < 0,01$; Adjusted $R^2 = 0.26$; $F_{\text{depersonalization}}(59.2) = 12.15$; $p < 0.01$; Adjusted $R^2 = 0.27$; VIF – Variance Inflation Factor

Source: Own study.

In line with expectations, role overload and ambiguity predict emotional exhaustion, while role conflict and low role prestige are significant predictors of depersonalization. In both dimensions of professional burnout the frequency of occurrence of stressors in the indicated category allows the predicting of over 1/4 variances.

Discussion

The presented research confirmed the four-factor structure of the new tool for measuring the frequency of occurrence of organizational role stressors. Standardized tests proved the high reliability of the Organizational Role Stressor Index subscales. The distinctiveness of role overload, ambiguity, and conflict as well as low role prestige that was demonstrated in the factor analysis was also reflected in further results relating to the accuracy of the tool. Experiencing role conflict and low role prestige is negatively correlated with positive emotional attitude with respect to an organization. Role overload with a simultaneous taking into account of other

sources of stress is, however, a significant positive predictor of a positive attitude with respect to the workplace. Challenge stressors, which include the category of role overload, are ambivalent in character. Although they force a need for significant commitment, when such effort is undertaken there is satisfaction, a high assessment of own value, and an overall positive assessment of the work environment (Widmer et al., 2012). The ambivalent character of role overload is also confirmed by the result of the regression analysis, where in addition to role conflict and low role prestige, it is also an important positive predictor of an emotionally negative attitude with respect to the organization. The tying together of the frequency of experience of organizational stressors with emotional attitude with respect to the organization also brings with it practical implications. R. I. Vance (2006), like R. McBain (2007), identifies a positive attitude of workers with respect to the organization with commitment. In light of the data received, role conflict and low role prestige experienced by employees lowers enthusiasm and initiative. Emotion caused by organizational stress also has an impact on the process of uncovering the sense behind organizational occurrences and their interpretation, especially when they are unexpected or ambiguous (Jones and Skarlicki, 2013). Moreover, research results have confirmed that role overload and ambiguity are significant predictors of emotional exhaustion. For their part, role conflict and low role prestige allow the prediction of intensification of depersonalization. Both dimensions are key components of the professional burnout syndrome, which brings with it many negative consequences to both workers and the organization (Maslach and Leiter, 2011).

A limitation of the presented research is that it did not take into account the link between the frequency of experiencing organizational stressors and competent action as well as efficiency, especially when measured using objective indicators. Such research could play a significant role in raising the theoretical accuracy of the tool as well as increasing its practical value. At the same time, the presented Organizational Role Stressor Index provides support for the stream of research underscoring the role of organizational stress in organizational behavior. The tool was designed with not only scientific research in mind, but also for studying employee opinion as undertaken to meet the needs of a specific organization. The identification of barriers to building employee commitment in the form of the four basic categories of stressors may provide the organization with indicators relating to directions for development action whose result will not only be improved atmosphere at work, but primarily an increase in effectiveness defined as the level of achievement of intended goals juxtapositioned with the broadly understood outlay incurred on work.

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**Indeks Stresorów Organizacyjnych wynikających
z Roli Zawodowej (ISO-RZ) – nowe narzędzie do badania barier
w budowaniu zaangażowania pracowników**

Streszczenie

Celem niniejszego artykułu jest zaprezentowanie nowego, stworzonego w polskich warunkach rynkowych, narzędzia do oceny częstotliwości stresorów wynikających z organizacji roli zawodowej. W opracowaniu nowego narzędzia skoncentrowano się na czterech kategoriach związanych z rolą zawodową: konflikcie roli, wieloznaczności roli, przeciążeniu roli oraz niskim prestiżu roli. Artykuł prezentuje wyniki przeprowadzonych badań standaryzacyjnych, w których łącznie wzięło udział $N = 771$ pracowników różnych organizacji. Wyniki badań potwierdzają czteroczynnikową strukturę narzędzia, wysoką rzetelność pomiaru oraz jego trafność. Narzędzie może być stosowane zarówno w badaniach naukowych, jak i badaniach opinii pracowników w konkretnych organizacjach.

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