

PSYCHOLOGICAL MODELS OF FEMALE TEACHERS' FUNCTIONING IN THEIR PROFESSIONAL ROLE

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Abstract

Objectives: The research was aimed at searching for diversified models of female teachers' functioning that could be determined by their individual traits, psychological variables, and professional adaptation factors. **Material and Methods:** Three hundred eleven female teachers aged from 26 to 60 were examined. The following tools were used in the research: The Hope Scale, NEO-FFI Inventory, IPSA Inventory, Work Description Inventory and Maslach Burnout Inventory. **Results:** Models of psychological functioning of female teachers were distinguished by means of cluster analysis. The classification was based upon similarities and differences in the obtained results. Three groups of female teachers characterised by distinct traits were identified and named according to the research results: 'passive teachers', 'frustrated teachers', and 'adapted teachers'. The first group (93 persons) included women who were not distinctive in any way. The second group (74 persons) comprised women characterised by very unfavourable traits. The third group consisted of women with favourable characteristics, women who are full of energy and enthusiasm for work, those who are satisfied with their job. **Conclusions:** Psychological models of female teachers' functioning are determined by their individual psychological traits. These traits constitute their important personal resources that influence their professional adaptation and the levels of job and life satisfaction.

Key words:

Female teachers, Individual differences, Professional adaptation, Burnout

INTRODUCTION

One of the facts in individual differences psychology is that there are some traits which control human behaviour and decide about the specificity of professional roles we play [1]. Thus, it seems justified to build models of functioning that include varied individual characteristics, psychological variables and resultant behaviours. This trend in researches renders it possible to analyse a selected group of people in a very wide perspective. Knowledge gathered within this field may appear extremely useful in selection to a job and in planning the future career.

Interest in the professional group of teachers and diagnosis of its condition present an important task. This profession belongs to the most prevalent ones — teachers constitute almost a mass professional group, which carries out the mission focused on stimulating their students' development. The task is not easy and it requires both high

professionalism and some specific personal dispositions. Not so long ago it has been claimed that being a teacher is a profession for one's whole life. This profession used to be characterised by very high stability of employment. Moreover, the social status of the profession was also firm. Nowadays, crisis of professional identity, escape from the profession and burnout are more frequent. Studies and reports show poor condition of this professional group and numerous problems with which it is burdened [2–7].

The teacher's profession is dominated by women. In this job, they may function in cooperation and also experience social and personal satisfaction they search for [8]. Schools, which are women's organisational environment, become less and less attractive workplace for men. They constitute a significant minority at schools, though their role becomes more important when school appears to be the only institution to support or supersede parents in the process

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of upbringing children. Besides, in many instances, teachers become an important, sometimes the only one, model of social and cultural behaviours, including also that of female and male gender roles. This represents an extremely responsible task in the process of forming a young personality. In psychological literature there are some data on differences in personality traits of women and men in the teacher's profession, yet there is no explicit information whether sex affects their professional adaptation and efficiency [8,9]. Feminisation of the teacher's profession leads, however, to some social consequences, perceived by both students and female teachers themselves. In the research by Kurzēpa [9], female teachers have confessed that a teachers' council composed solely of women usually tends to be: talkative, dependent on authority, inefficient in making decisions, and in conflict situations it seeks fault in others, never in itself. They have also been aware of their own tendency to antagonise the environment.

It has been assumed that there exist some characteristics which determine behaviours of female teachers and define the level of their professional adaptation. To meet the needs of the presented research, a theoretical model with multidimensional structure has been used. It is made of two groups of variables. The first group consists of selected psychological variables: hope for success, personality traits, and aggression syndrome. The variables have served to classify the study participants according to similarity of their psychological traits. The second group of variables comprises those that define professional adaptation, including evaluation of work factors, evaluation of job satisfaction and the level of job burnout syndrome. In the characteristics of the examined female teachers it has been attempted to include some additional individual variables, such as: workplace, duration of work experience, and the level of professional promotion. An attempt has been made to verify the following partial hypotheses:

1. The examined female teachers differ among themselves in their psychological characteristics, including personality traits, hope for success and the level of aggression syndrome.
2. Individual psychological characteristics of the participants affect their professional adaptation.

3. Duration of work experience modifies professional adaptation of the examined women.

Hope for success is a psychic disposition which regulates effectiveness of one's behaviours. It is a conscious thinking process that accompanies activity, and its role grows when the goals are vague and when they prove to be difficult to attain. It is composed of two dimensions: the strength of will and the ability to find solutions. They reflect one's conviction about possessing competencies to achieve success. They play an important role in individuals' education and they determine their psychological and professional adaptation [11,12]. Persons with low level of hope for success present passive and avoiding attitudes and they are not able to learn lessons from their own mistakes. In the teacher's job, this may constitute a significant obstacle in properly performing the teacher's role.

Teachers exert influence by means of their personalities, continue to improve their competencies and personal skills to ensure high quality of work with their students. Various researches based on the Great Five theory prove that effectiveness and occupational success are to a large extent determined by personality traits. The most important ones are the following: conscientiousness, extraversion, and emotional stability [13–15]. It is expected that these traits will be significant also in the teacher's job.

Aggression is usually defined as human activities that present a threat to, or cause damages in, others' physical, psychological or social well-being [16]. Teachers' aggression constitutes one of the most important pathogenic components of school life [17–22]. It leads to instrumentalisation of didactic processes and it makes students apprehensive about their low status in school hierarchy [23,24]. Its serious consequences are reflected also in students' poorer accomplishments [25,26].

Professional adaptation includes evaluation of job factors and the level of job satisfaction. According to the concept by Brief, job satisfaction represents the attitude reflecting the extent to which a job is favourable or unfavourable to the individual [27]. Job satisfaction is especially important in the teacher's profession. Lack of job satisfaction lowers effectiveness, life quality, and it constitutes a serious health risk. It is assumed that satisfaction with teacher's

job is doubtful. It is connected with overmuch intensive pressure for school accomplishments which are dependent not only on teachers [28]. Yet, for those interested in this job, satisfaction is achievable due to acknowledgement from the school headmaster, perspectives of promotion, and possibilities of group work [29]. This is also confirmed in studies by Kretschmann, who identified a large group of teachers who were burdened with their duties, yet due to their effectiveness they could experience satisfaction with their work at school [30].

Job burnout is related to stress that results from excessive involvement in one's work and lack of skills for coping with problems. The burnout model includes the three subsequent phases: emotional exhaustion, depersonalisation, and low personal accomplishment [31]. Excessive workload leads to stress, irritation, and fatigue. Individuals who experience burnout feel emotionally exhausted. They have lower mood and poorer immunity, they report varied pain complaints. They distance themselves from occupational tasks and problems. They start to experience apathy, lack of flexibility, and reluctant attitude to tasks. Their mental abilities deteriorate and their attitudes to environment become negative. What follows is the process of depersonalisation, which results in dehumanising relations with others. The sense of professional effectiveness abates, to be replaced with the feeling of disappointment. The effects of poor job satisfaction increase the sense of being overburdened. The individual re-experiences the subsequent phases of burnout, yet each next time the symptoms are deeper and it is more difficult to provide effective help. This justifies the need of diagnosing the problem in the socially important professional group of teachers.

Research results show that unacceptable behaviours of students confronted with teachers' inability to cope with them constitute the most important predictor of teachers' stress [32,33]. Burnout is favoured by lack of mutuality in relations with students, when a teacher's enthusiasm and effort meets resistance, passiveness, lack of respect [34]. Personality variables, and neuroticism in particular, constitute another factor responsible for development of burnout symptoms. Burnout may be prevented by conscientiousness and extraversion [35]. Some support

for burnout teachers may be obtained from their families [36,37]. Other major sources of support include also school, colleagues, superiors [38,39]; burnout may be also alleviated by professional effectiveness of the affected person [40].

MATERIALS AND METHODS

The following tools were used to categorise the examined female teachers: the Hope Scale by Snyder, NEO-FFI Inventory by Costa and McCrae, IPSA Inventory by Gaś. Professional adaptation of the teachers was described by means of scores on: Work Description Inventory by Neuberger and Allerbeck, Maslach Burnout Inventory, and a demographic survey.

The Hope Scale by Snyder is used to measure hope as a relatively constant disposition [40]. It includes two basic components: conviction about one's own knowledge and competencies that help reaching one's aims (Pathways) and conviction about having strong will (Agency). The sum of the two elements represents the indicator of the general level of hope for success.

The NEO-FFI Inventory by Costa and McCrae is based upon the idea of personality meant as a set of traits [41]. The model of personality proposed by the authors consists of five major personality dimensions. Neuroticism describes susceptibility to experience negative emotions. Extraversion refers to quality and quantity of social interactions. Openness to experience expresses tendency to seek life experiences and to value them in a positive way. Agreeableness describes attitude towards other people. Conscientiousness characterises attitude to work and one's will to focus activities upon a particular aim.

The IPSA Inventory by Gaś is used to measure intensity of aggressive symptoms in adults [42]. The theoretical background for construction of the scale lies in a very broad understanding of aggression as aggressive tendencies that may be conscious or unconscious, displayed but also experienced, and directed towards oneself or to one's environment. The aggression syndrome is defined by: self-aggression, hidden aggression, externally directed aggression, revenge aggression, and unaccepted behaviours control.

Work Description Inventory by Neuberger and Allerbeck is a technique which renders it possible to measure job satisfaction by means of assessing several job components: colleagues, supervisor, work contents, conditions, organisation and management, development, salary [27]. Two additional questions relate to satisfaction with work-time and risk of losing the job. At the same time it is possible to assess general job satisfaction and also life satisfaction. Maslach Burnout Inventory (MBI) is aimed at diagnosing job burnout [43]. It is composed of three scales: emotional exhaustion, depersonalisation, and personal accomplishment. Emotional exhaustion develops as a result of subjective sense of being excessively burdened with work. Depersonalisation appears when a person copes with exhaustion symptoms by means of indifference to demands and people. Personal accomplishment, or in fact lack of it, is a result of both emotional exhaustion and depersonalisation. They lead to lowering professional effectiveness and to its negative evaluation.

The research was conducted in 2007–2008. Schools participating in the study were random selected from among the schools in Lodz. Three hundred eleven female teachers from 62 various schools, aged 26 to 60 were examined. All of them had university-level education and suitable formal qualifications to perform as teachers. Their work experience ranged from 1 year to 35 years (the average was 14.42, standard deviation 8.14). They represented all levels of professional promotion except for a small group of 4 probationary teachers who were excluded from the analysis.

In the statistical analysis of the obtained empirical data, the SPSS 12.0. package was used. Nonparametrical chi-square test, analysis of variance, and cluster analysis were performed.

RESULTS

Empirical results obtained in the research were applied to select varied models of psychological functioning of female teachers. The intended basis for the categorisation comprised only similarities and differences in results. The groups were selected using cluster analysis according

to the k-means method [44]. Only those psychological characteristics of female teachers were used which were considered in the research as independent variables: personality traits, i.e. neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness; hope for success described in terms of will power and the ability to find solutions; and the aggression syndrome, which included: self-aggression, hidden aggression, externally directed aggression, revenge aggression, and also unaccepted behaviours control.

The statistical analysis performed to ensure maximum similarity of persons within each group has resulted in establishment of three very distinct groups of female teachers largely differing in their psychological characteristics. They were given symbolic names according to the research results. The first group, representing 30% of the participants, is made of 'passive teachers' who have average results in the applied diagnostic tests and who are not distinctive in any way. The second group, 24% of female teachers, has been named 'frustrated teachers', as they display the tendency to experience negative emotions. They have presented the least favourable psychological traits. They have pessimistic attitude toward people and the world. They do not trust others and they keep distance in their relations with people. They lack energy to act and believe in their own efficiency in acting. Yet, they also have tendencies to aggressive reactions. The third group, 46% of the examinees, consists of 'adapted teachers' with marked favourable characteristics. They are socially and emotionally well-adapted. They possess high capabilities of building social relations. They are characterised by optimism and trust to people. They have high energy to act and are convinced about their own abilities to perform and achieve successes. Precise characteristics of professional adaptation of the groups will be subjected to further analyses.

Individual traits of the participants

According to the known concepts of professional development cycle in teachers [45], the following stages of work experience were distinguished: 1–5, 6–19, and 20–35 years. The first stage may be described as starting the role, learning to be a teacher, the time of getting help from others.

The second stage is related to professional stabilisation of a teacher. Prucha [6] claims that this is possible only after at least 5-year period of adaptation to the job. The third stage of work experience is named the expert stage, as it applies to experienced and effective specialists. They are self-confident, aware of their own development and objectives. They present strong job identity. The suggested classification is obviously symbolic. It has been adopted mainly because of the needs of quantitative analysis of the empirical data. With such a wide range of work experience in the examined teachers, it should be acknowledged as fully justified to look for its relations with teachers' behaviours. Yet, one ought to remember that professional development is flexible and it is sometimes difficult to define its sharp boundaries. Moreover, as it has been postulated by Kwaśnica [45] and probably shared by others, there are teachers who do not reach the expert stage and continue to perform their job in a totally non-creative way.

The relation between duration of work experience and inclusion into one of the specified groups was analysed. The results are contained in Table 1.

The largest group in the whole examined population is the one comprising female teachers in the period of professional stabilisation, the smallest group is that of women who start their functioning in the teacher's role. The statistical analysis has shown that there is no dependence between duration of work experience and the groups (one-way ANOVA: $F = 0.713$; $p = 0.491$). It means that each of the three groups of teachers consists of persons with varied work experience.

Table 2 gives results with regard to the workplace of the examinees. The largest group comprises secondary school

female teachers, the smallest one includes female teachers from post-secondary schools. We can see that there is no dependence between the type of school and belonging to individual groups (chi-square = 3.221; $p = 0.522$). Thus, 'passive', 'frustrated' and 'well adapted' female teachers may be found at all levels of the educational system, i.e. in primary schools, secondary schools, and in post-secondary schools.

The most numerous group of the examined female teachers reached the second level of professional promotion (Table 3). The smallest group included women at the first level of promotion. Again, a precise statistical analysis has not revealed any dependencies between the level of professional promotion and the groups (chi-square = 3.331; $p = 0.504$).

The data presented above indicate that psychological functioning of the examined female teachers, which is determined by their being included into the individual groups based on their psychological traits, is not related to the time span of their work experience, workplace, or the level of professional promotion.

Professional adaptation of female teachers in the individual groups

Another step was to analyse the empirical data that characterised professional adaptation of the examined women in the three groups. Scores of job evaluation, job satisfaction, and burnout were analysed. Results of the analysis are shown in Table 4. Table 5 shows precise intergroup comparisons.

Comparison of mean values shows that the individual groups of female teachers display high similarity only in

Table 1. Time span of work experience vs. groups

Time span of work experience (years)	Groups of female teachers							
	passive		frustrated		adapted		total	
	n	%	n	%	n	%	n	%
1-5	13	14.0	13	17.6	26	18.1	52	16.7
6-19	47	50.5	40	54.1	77	53.5	164	52.7
20-35	33	35.5	21	28.4	41	28.5	95	30.5
Total	93	100.0	74	100.0	144	100.0	311	100.0

Table 2. Workplace vs. groups

Workplace	Groups of female teachers							
	passive		frustrated		adapted		total	
	n	%	n	%	n	%	n	%
Primary school	32	34.4	25	33.8	51	35.4	108	34.7
Secondary school	31	33.3	24	32.4	58	40.3	113	36.3
Post-secondary school	30	32.3	25	33.8	35	24.3	90	28.9
Total	93	100.0	74	100.0	144	100.0	311	100.0

Chi-square = 3.221; df = 4; p = 0.522.

Table 3. Professional promotion vs. groups

Professional promotion	Groups of female teachers							
	passive		frustrated		adapted		total	
	n	%	n	%	n	%	n	%
1st level	13	14.1	10	13.9	25	17.5	48	15.6
2nd level	43	46.7	42	58.3	70	49.0	155	50.5
3rd level	36	39.1	20	27.8	48	33.6	104	33.9
Total	92	100.0	72	100.0	143	100.0	307	100.0

Chi-square = 3.331; df = 4; p = 0.504

Table 4. Differences in variables that characterise professional adaptation of teachers in the three groups

Professional adaptation	Passive teachers (N = 93)		Frustrated teachers (N = 74)		Adapted teachers (N = 144)		ANOVA	
	M	SD	M	SD	M	SD	F	p
Work evaluation								
Colleagues	25.09	3.57	23.92	2.83	26.75	3.62	18.02	0.001**
Supervisor	38.11	6.52	37.36	6.11	39.39	6.14	2.86	0.059
Work contents	39.23	4.59	36.32	5.30	40.73	4.65	20.63	0.001**
Conditions	30.81	5.96	27.28	5.79	30.42	5.69	9.20	0.001**
Organisation and management	37.28	5.99	36.09	6.50	39.40	5.98	7.99	0.001**
Development	28.42	4.36	26.11	5.26	29.80	4.67	14.90	0.001**
Salary	12.81	4.43	12.05	4.67	13.51	4.50	2.59	0.076
Work time	3.10	0.81	2.91	0.69	3.23	0.62	5.30	0.005**
Certainty of employment	2.71	0.88	2.64	0.77	2.90	0.77	3.04	0.049*
Job satisfaction	4.90	0.96	4.50	0.86	5.08	1.08	8.22	0.001**
Life satisfaction	4.83	1.39	4.35	1.20	5.28	1.08	14.80	0.001**
Maslach burnout inventory								
Emotional exhaustion	11.59	6.67	15.05	6.38	8.92	5.18	26.33	0.001**
Depersonalisation	10.12	5.14	14.32	6.70	8.65	4.80	27.21	0.001**
Personal accomplishment	24.71	6.39	23.81	6.50	27.40	6.05	9.81	0.001**

M — mean.

SD — standard deviation.

* p < 0.05; ** p < 0.01

Table 5. Precise intergroup differences in variables that characterise professional adaptation

Professional adaptation	Compared groups of female teachers		
	passive and frustrated	passive and adapted	frustrated and adapted
Colleagues	0.075	0.001**	0.001**
Work contents	0.001**	0.050*	0.001**
Conditions	0.001**	0.873	0.001**
Organisation and management	0.428	0.026*	0.001**
Development	0.005**	0.074	0.001**
Work time	0.185	0.329	0.004**
Certainty of employment	0.823	0.193	0.050*
Job satisfaction	0.026*	0.391	0.001**
Life satisfaction	0.032*	0.015*	0.001**
Emotional exhaustion	0.001**	0.002**	0.001**
Depersonalisation	0.001**	0.103	0.001**
Personal accomplishment	0.627	0.004**	0.001**

* $p < 0.05$; ** $p < 0.01$.

their attitudes to supervisor ($p = 0.059$) and to salary ($p = 0.076$). Other indicators of adaptation differ in a statistically significant way and considerable differences are visible in intergroup comparisons (Table 5). Evidently differing scores on professional adaptation were obtained by the 'frustrated' and 'adapted' teachers. They differ in the levels of all the examined variables, i.e. evaluation of colleagues ($p = 0.001$), work conditions ($p = 0.001$), organisation and management ($p = 0.001$), their own development ($p = 0.001$), work-time ($p = 0.004$), and also employment security ($p = 0.050$). Highly significant statistical differences were found also for job satisfaction ($p = 0.001$) and life satisfaction ($p = 0.001$). Similar differences among the two groups relate to the dimensions of burnout: emotional exhaustion ($p = 0.001$), depersonalisation ($p = 0.001$), and personal accomplishment ($p = 0.001$). Burnout is experienced mainly by 'frustrated teachers', who feel most severely exhausted with occupational tasks. They attempt to alleviate the symptoms by keeping themselves at a distance from their students and tasks, and they experience the feeling of being the least effective in their work.

'Adapted' and 'passive' teachers displayed high similarity in some of the variables that described their professional adaptation. They made similar evaluations of work conditions ($p = 0.873$) and chances for self-development ($p = 0.074$),

they also had similar indicators of depersonalisation ($p = 0.103$). There were no significant differences between them as far as the levels of general job satisfaction were concerned ($p = 0.391$). However, there are differences, with more negative scores in the passive group, in evaluations of: colleagues ($p = 0.001$), work content ($p = 0.050$), organisation and management ($p = 0.026$), work-time ($p = 0.329$), and security of employment ($p = 0.193$). 'Adapted' teachers turned out to be more efficient at work ($p = 0.004$), more satisfied with life ($p = 0.015$), and at the same time less emotionally exhausted with their work ($p = 0.002$) than 'passive' teachers.

Some similarities were found also between 'passive' and 'frustrated' teachers. They displayed high similarities in evaluations of: colleagues ($p = 0.075$), organisation and management ($p = 0.428$), work-time ($p = 0.185$), security of employment ($p = 0.823$) and their own professional efficiency ($p = 0.627$). However, there are differences, with more negative scores in the frustrated group, in the remaining variables: evaluation of work and its conditions, emotional exhaustion with work and the level of depersonalisation (in each case the level of significance $p = 0.001$). They also differ in evaluation of chances for self-development at work ($p = 0.005$), general job satisfaction ($p = 0.026$), and life satisfaction ($p = 0.032$).

Dynamics of professional adaptation in the examined teachers

While describing psychological models of teachers it is worth examining whether their traits and behaviours undergo some modifications in the course of their professional career. School is a very difficult workplace. Burdened with pressure for students' success, supervision by authorities and enormous reporting, growing liberalism in upbringing of children, school pathologies, and conflicts with parents, it creates conditions that contribute to the development of occupational stress in teachers. On the other hand, there appears subjective susceptibility to perceive and evaluate the job as filled with burdens and menaces which give rise to burnout and other effects that adversely affect the teachers' job. Therefore, since as early as the 70s of the previous century, the teachers' profession has been included in the group of jobs associated with the risk of

developing burnout [7,29–31]. Nonetheless, many school teachers have never experienced burnout symptoms, while working with students, though difficult, is a source of their happiness and satisfaction.

It has been assumed that those characteristics which are referred to as relatively constant, determined biologically or by early experiences, like hope for success or personality traits, are not likely to undergo any significant changes in the course of work experience. Numerous other variables have been thoroughly analysed, for which it is characteristic that they may undergo various modifications resulting from individual experiences. Two-way ANOVA showed a relationship between independent variables like type of group and time span of work experience and dependent variables like professional adaptation, general job and life satisfaction and also burnout dimensions. A very powerful relationship has been found to occur between professional

Table 6. Type of group and time span of work experience vs. characteristics of professional adaptation of the examined female teachers

Source of variability	Dependent variables	F	p
Groups of women	colleagues	0.896	0.466
Time span of work experience	supervisor	1.223	0.301
	work contents	2.159	0.074
	conditions	1.927	0.106
	organisation and management	2.265	0.062
	development	0.668	0.615
	salary	1.694	0.151
	work time	0.921	0.452
	certainty of employment	0.436	0.783
	job satisfaction	2.075	0.084
	life satisfaction	0.637	0.636
	total score on aggression	0.566	0.687
	self-aggression	0.971	0.424
	hidden aggression	1.246	0.292
	externally directed aggression	0.515	0.725
	revenge aggression	1.300	0.270
	control	0.699	0.593
	emotional exhaustion	3.069	0.017*
depersonalisation	2.220	0.067	
personal accomplishment	1.614	0.171	

* $p < 0.05$.

Table 7. Emotional exhaustion and time span of work experience in female teachers from the analysed groups

Group	Time span of work experience	Emotional exhaustion			ANOVA	
		N	M	SD	F	p
Passive teachers	1–5	13	7.85	4.32	5.91	0.004**
	6–19	47	10.68	6.36		
	20–35	33	14.36	6.91		
Frustrated teachers	1–5	13	14.38	5.49	0.09	0.918
	6–19	40	15.18	6.24		
	20–35	21	15.24	7.38		
Adapted teachers	1–5	26	8.69	4.78	1.01	0.365
	6–19	77	9.45	5.23		
	20–35	41	8.05	5.32		

M — mean.
SD — standard deviation.

adaptation and type of group. However, no relationship was found between time span of work experience and the analysed variables. When both type of group and time span of work experience were the source of variability, differences in scores were noted only for emotional exhaustion with work ($p = 0.017$) (Table 6).

The empirical data presented above show clearly that, apart from its influence upon emotional exhaustion, the time span of work experience does not play any significant

role in professional adaptation of the ‘adapted’, ‘passive’ and ‘frustrated’ female teachers. Thus, indicators of emotional exhaustion in the three individual stages of work experience were analysed in each group. Table 7 gives the results.

It became evident that only in the group of ‘passive’ teachers there were differences in scores on emotional exhaustion in particular periods of work experience ($p = 0.004$). Indicators which characterize the analysed variable grow

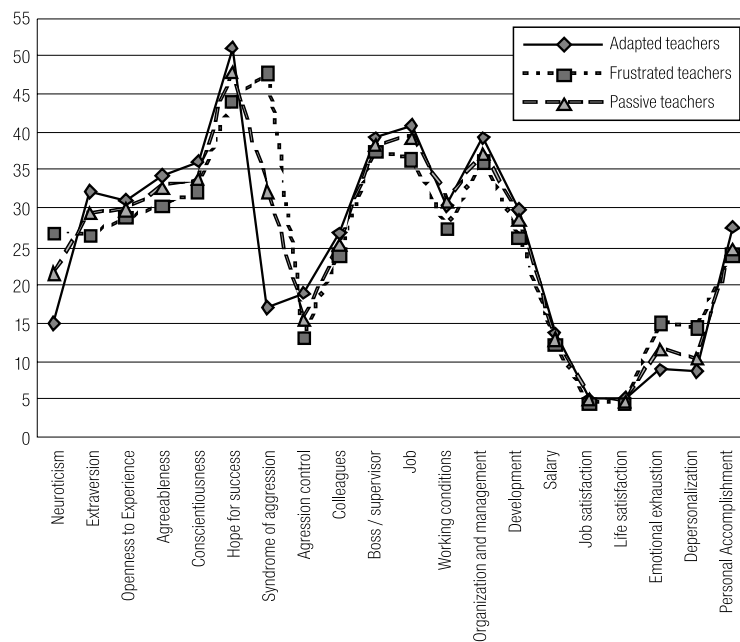


Fig. 1. Models of the examined female teachers.

markedly: in the first period of work experience the mean for the group is 7.85, in the next one it equals 10.68, and in the last period it reaches the level of 14.36. This means that in this group of examinees the feeling of emotional exhaustion with professional duties grows systematically with age and time span of work experience. Such dependence is not valid for the group of 'adapted' teachers. At each period of work experience they obtained indicators of emotional exhaustion that were significantly lower than the results in the other groups, and there was no statistically significant difference between these indicators in particular periods of their work experience ($p = 0.365$). A similar pattern of scores on emotional exhaustion is observed in 'frustrated' teachers. Mean results obtained by them at the three analysed periods of work experience do not differ in a statistically significant way ($p = 0.918$). Teachers from this group had the highest levels of emotional exhaustion among the examined groups.

Figure 1 is a graphic illustration of the described models of the examined female teachers.

DISCUSSION AND CONCLUSIONS

The conducted research was aimed at searching for models of female teachers' functioning in the professional role. The selection of the research group was based on statistics which show that women predominate in this job and such a tendency is observed in majority of countries [6]. Moreover, women are claimed to have some specific characteristics that determine their behaviours in a workplace [10]. Cluster analysis, which was applied to analyse the empirical data, confirmed the impact of individual differences on female teachers' functioning. It was possible to distinguish three clearly distinct models that include psychological traits of the participants. It has become evident that the groups differ significantly as far as characteristics that affect their professional adaptation are concerned. Furthermore, it has been confirmed that the models encompass relatively constant characteristics which do not undergo any significant changes in the course of professional career. Such a result of the research increases the importance of the regularities that have been found. It should be

also stressed that the assignment of each examined women to one of the three models is not related to the time span of their work experience, their workplace, nor to the level of their professional promotion.

Only one model, namely the 'adapted' female teachers, displays favourable characteristics and bodes well for pedagogical work. It includes the largest number of teachers, as many as 46% of the study participants, and it shows regularities that contribute to good psychic health and also provide personal resources that are significant for good professional functioning. This group comprises female teachers who are characterised by mature personality and emotional balance. They trust themselves and the surrounding they live in. They are sure about their own competencies that allow them to be effective and successful at work. They show optimistic attitude to people and social environment. They do not avoid challenges and they cope well in new situations. The described psychological traits are accompanied by the most positive attitude towards work, which is connected with their highest professional effectiveness. They are unaffected by work-related stress and they cope effectively with problems. As a result, they have high job and life satisfaction. It is beyond any doubt that the characteristics of this group that are presented above constitute significant determinants of effectiveness in teacher's job. According to numerous researchers who deal with teachers' professional group, persons with such traits build good atmosphere at work with students, motivate them to learn, and effectively encourage their development [46–49]. They may also be successful in modelling students' behaviours by acting as a personal model which is worth to be followed. In the study on this group of female teachers it has been also revealed that, in spite of working in difficult conditions for years, they have relatively low subjective feeling of being burdened with work and this feeling does not tend to grow. This indicates good adaptation to the professional role.

The other model selected for detailed analysis consists of 'frustrated' female teachers, who account for 24% of the total number of the examinees. They display the least favourable characteristics that may prevent them from

performing as teachers properly. They experience difficulties with adaptation, lack of emotional balance, and a clear tendency to feel negative emotions. 'Frustrated' female teachers do not expect success. They do not trust in their competencies, they lack appropriate energy and strong will to be active. They do not cope with problems at work, they also do not trust other people. Teachers in this group are characterised by high neuroticism, high level of aggression syndrome, and lack of capacity of controlling their own undesired behaviours, which bodes ill for their work at school [12,21,27,29]. Their effectiveness in the job is low and they experience burnout to the extent greater than all the other participants. They do not experience satisfaction with their work and their chances to find self-realisation in the chosen job are low [29,30]. The fact that they work at school is unfavourable both for their students and for themselves.

Another model, i.e. 'passive teachers', accounting for 30% of the participants, describes characteristics that do not necessarily limit professional effectiveness, yet may do so in some specific conditions. These are women who are not distinctive in any way. They display neither such desired characteristics as those of 'adapted' teachers nor such undesired ones as those of the 'frustrated' teachers. The majority of their traits present an average level and it is even difficult to describe them. This situation is very unfavourable for working with students, where acting as a personal model is one of sources of influence. Teachers who present little involvement and no enthusiasm for their work will not be able to evoke in their students a motivation to act. The professional identity of these teachers may be seriously handicapped [5].

The presented groups of female teachers have appeared very consistent internally and relatively constant, as the time span of their work experience does not modify their traits and behaviours in a significant way.

'Frustrated' female teachers experience evident emotional exhaustion as early as in the first years of their work and this situation continues till the end of their career. Experience and competencies which should grow in subsequent years of work, neither increase professional efficiency nor lower the subjective feeling of being burdened with duties

in this group of examinees. This indicates severe disturbances in professional development of these persons.

Great similarity in the dimensions of professional adaptation in subsequent periods of work experience is maintained also in 'passive' female teachers. Unfortunately, work at school results also in systematic growth of their emotional exhaustion. Thus, they are seriously at the risk of burnout [30,31,35] and decrease in job satisfaction.

Stability of the 'adapted' female teachers is, on the other hand, their great advantage. In the course of years their enthusiasm and strength of will to work do not change. They do not experience burnout and they continue to be satisfied with their job. They maintain good and close relations with their students, which — according to researchers of school environment — is a perfect basis for students' optimal development. According to Nias [50], school ought to be seen from the angle of interpersonal relations, and teaching and learning have an emotional dimension. Emotions are involved in teachers' successes, their students' successes, building professional identity and attachment to the job. Classroom and school are the major places of realising them [51].

PRACTICAL IMPLICATIONS

The studies described above have confirmed the existence of diversified models of psychological functioning in female teachers, which define also distinct characteristics of their professional adaptation. Only one of the models is optimal for professional self-realisation in teachers and positive results in development and education of their students. The results show the need of further research on this issue. Cluster analysis procedure has been shown to be highly useful in diagnosing the professional group of teachers. First and foremost, it allows for multidimensional approach to functioning in the job.

The need of positive selection to the teacher's job has been clearly confirmed. This job is not for everyone. School is an aggressogenic workplace and thus it needs teachers who are endowed with mature and balanced personality, high and adequate self-esteem, awareness of their own competencies and predispositions, enthusiasm

and energy for work. The process of qualifying to work at school should comprise many stages so as to minimise the risk of admitting to the profession persons who will not be able to communicate with students effectively and will not create optimal chances for them to succeed in development and education. Common character of pedagogical faculties in higher schools renders it possible to prepare a vast group of young people to this job. However, their formal qualifications do not present a sufficient criterion for successes in this job.

It has become clear that they must be accompanied by suitable predispositions and psychological traits. The first selection of candidates to work at school should be done while recruiting students to pedagogical faculties. In the process of evaluating candidates, it seems advisable to make use of the psychological dimensions that appear crucial for the future candidates' chance of becoming well adapted teachers. Verification of candidates for the teacher job should be continued in the course of studies and during realisation of practical placement. And finally, it ought to be an important element of probation period, when young teachers are offered the chance to confront school reality with their own predispositions and capabilities. It is obvious that proper selection to the job cannot be achieved without suitable pay regulations in the educational system. This job is too important from the social point of view to let it be performed by poorly adapted or even misadapted people. Good teachers will bring measurable advantages for students.

REFERENCES

1. Strelau J, Zawadzki B. *Individual Differences Psychology*. In: Strelau J, Doliński D, editors. *Psychology. A University Handbook*. Gdańsk: GWP; 2008. p. 765–47 [in Polish].
2. Cudak H. *An Attempt at Evaluating Professional Condition of Contemporary Teachers*. In: Ochmański M., editor. *Educating Teachers in the Context of European Integration*. Lublin: UMCS; 1997. p. 261–69 [in Polish].
3. Goodman G. *How Competent Are They for Evaluating Teacher Competence*. *J Teach Educ* 2008;59(1):24–39.
4. Grossman P. *From Crisis to Opportunity in Research on Teacher Education*. *J Teach Educ* 2008;59(1):10–23.
5. Kwiatkowska H. *Teachers' Identity. Between Anomy and Autonomy*. Gdańsk: GWP; 2005 [in Polish].
6. Průcha J. *Pedeutology*. In: Śliwerski B, editor. *Pedagoggy*. Gdańsk: GWP; 2006. p. 293–316 [in Polish].
7. Wilkomirska A. *Evaluation of Educating Teachers in Poland*. Warszawa: Instytut Spraw Publicznych; 2005 [in Polish].
8. Moir A, Jessel D. *Brain Sex*. Warszawa: Państwowy Instytut Wydawniczy; 1995 [in Polish].
9. Poraj G. *From Passion to Frustration. Models of Teachers' Psychological Functioning*. Łódź: Wydawnictwo UŁ, 2009 [In Polish].
10. Kurzępa J. *Feminisation of the Teacher's Job and Its Socialisation Consequences*. In: Fudali R, Kowalski M, editor. *A Woman and a Man in the Teacher's Job*. Kraków: Oficyna Wydawnicza Impuls; 2006. p. 43–67 [in Polish].
11. Snyder CR. *Handbook of Hope. Theory, Measures and Applications*. London: Academic Press; 2000.
12. Snyder CR. *Hope theory: Rainbows in the Mind*. *Psychol Inq* 2002;13(4):249–75.
13. McCrae RR, Costa PT. *Personality of an Adult*. Kraków: Wydawnictwo WAM; 2005 [in Polish].
14. Salgado JF. *The Five Factor Model of Personality and Job Performance in the European Community*. *J Appl Psychol* 1997;82:30–43.
15. Peeters MA, Van Tuijl HF, Rutte CG, Reymen IM. *Personality and Team Performance: A Meta-analysis*. *Eur J Pers* 2006;20:377–96.
16. Frączek A. *Studies on Determinants and Regulation of Interpersonal Aggression*. Wrocław–Warszawa–Kraków–Gdańsk–Łódź: Ossolineum; 1986 [in Polish].
17. Dąbrowska-Bąk M. *Aggression and Educational Relations at School*. In: Frączek A, Pufal-Struzik I, editors. *Aggression in Children and Youth. Psychoeducational Perspective*. Kielce: Wydawnictwo Pedagogiczne ZNP; 1996. p. 109–26 [in Polish].
18. Poraj G. *Selected Determinants of Aggression in Teachers*. In: Rostowska T, Rostowski J, editors. *Family — Development — Work. Selected Issues*. Łódź: Wyższa Szkoła Informatyki w Łodzi; 2002. p. 179–95 [in Polish].

19. Poraj G. *Aggression in Teachers — Determinants and Practical Implications*. In: Sołtysiak T, Sudar-Malukiewicz J, editors. *Phenomenal Forms of Social Pathology, Prevention and Rehabilitation in Youth*. Bydgoszcz: Wydawnictwo Akademii Bydgoskiej; 2003. p. 445–57 [in Polish].
20. Poraj G. *Directive Style of Teachers' Work — Aggressive Behaviours in Professional Tutors*. In: Golińska L, Dudek B, editors. *Family and Work from the Perspective of Challenges and Menaces*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego; p. 145–57 [in Polish].
21. Pufal-Struzik I. *Conflicts and Aggression in Interpersonal Relations between Teachers and Students*. In: Frączek A, Pufal-Struzik I, editors. *Aggression in Children and Youth. Psychoeducational Perspective*. Kielce: Wydawnictwo Pedagogiczne ZNP; 1996. p. 100–9 [in Polish].
22. Ratajek Z. *Authoritarianism and Repressiveness in Educational Work of Teachers*. In: Frączek A, Pufal-Struzik I, editors. *Aggression in Children and Youth. Psychoeducational Perspective*. Kielce: Wydawnictwo Pedagogiczne ZNP; 1996. p. 150–8 [in Polish].
23. Fong RS, Vogel BL, Vogel RE. *The Correlates of School Violence: An Examination of Factors Linked to Assaultive Behavior in a Rural Middle School with a Large Migrant Population*. *J Sch Violence* 2008;7(3):24–47.
24. Williams SC, Lochman JE, Philips NC, Barry TD. *Aggressive and Nonaggressive Boys' Physiology and Cognitive Processes in Response to Peer Provocations*. *J Clin Child Adolesc Psychol* 2003;32(4):568–76.
25. Justicia FJL, Benitez MC, Pichardo E, Fernandez T, Fernandez M. *Towards a New Explicative Model of Antisocial Behavior*. *Electron J Res Educ Psychol* 2006;4(9):131–50.
26. Stipek D, Miles S. *Effects of Aggression on Achievement: Does Conflict with the Teacher Make it Worse*. *Child Dev* 2008;79(6):1721–35.
27. Zalewska A. *Work Description Inventory by O. Neuberg and A. Allerbeck — Polish Adaptation*. *Stud Psychol* 2002;39: 197–217 [in Polish].
28. Block AA. *Why Should I Be a Teacher?* *J Teach Educ* 2008;59(5):416–27.
29. Fazlagić AJ. *Marketing School Management*. Warszawa: Wydawnictwo CODN; 2003 [in Polish].
30. Kretschmann R. *Stress in the Teacher's Job*. Gdańsk: GWP; 2004 [in Polish].
31. Maslach Ch, Schaufeli WB, Leiter MP. *Job Burnout*. *Ann Rev Psychol* 2001;52:397–422.
32. Evers WJG, Tomic W, Brouwers A. *Burnout among Teachers: Students' and Teachers' Perceptions Compared*. *Sch Psychol Int* 2004;25:131–48.
33. Hastings RP, Bham MS. *The Relationships between Student Behavior Patterns and Teacher Burnout*. *Sch Psychol Int* 2003;24:115–27.
34. Melamed S, Shirom A, Toker S, Berliner S, Shapira I. *Burnout and Risk of Cardiovascular Disease: Evidence, Possible Casual Paths, and Promising Research Directions*. *Psychol Bull* 2006;132:327–53.
35. Schaufeli WB, Enzman D. *The Burnout Companion to Study and Practice: A Critical Analysis*. London: Taylor and Francis; 1998.
36. Cutrona C. *Social Support in Couples: Marriage as a Resource in Times of Stress*. California: SAGE Publ, Thousand Oaks; 1996.
37. Duxbury L, Higgins Ch. *Work-Life Balance in the New Millennium: Where Are We? Where Do We Need to Go? Work Network*. Ottawa: Canadian Policy Research Networks; 2001.
38. Bakker AB, Demerouti E. *The Job Demands-Resources Model: State of the Art*. *J Managerial Psychol* 2007;22: 309–28.
39. Bakker AB, Demerouti E, Verbeke W. *Using the Job Demands-Resources Model to Predict Burnout and Performance*. *Hum Resour Manage* 2004;43:83–104.
40. Łaguna M, Trzebiński J, Zięba M. *The Hope for Success Questionnaire. A Manual*. Warszawa: Pracownia Psychologiczna PTP; 2005 [in Polish].
41. Zawadzki B, Strelau J, Szczepaniak P, Śliwińska M. *NEO-FFI Personality Inventory by Costa and McCrae. Polish Adaptation*. Warszawa: Pracownia Testów Psychologicznych PTP; 1998 [in Polish].
42. Gaś ZB. *Psychological Inventory of Aggression Syndrome*. *Przeł Psychol* 1980;1:143–58 [in Polish].
43. Maslach Ch, Jackson SE, Leiter MP. *Maslach Burnout Inventory Manual. Third Edition*. California: Consulting Psychologists Press, Inc., Palo Alto; 1996.

44. Marek T. *Cluster Analysis in Empirical Research. SAHN Methods*. Warszawa: PWN; 1989 [in Polish].
45. Kwaśnica R. *Introduction to Thinking about a Teacher*. In: Kwieciński Z, Śliwerski B, editors. *Pedagogy. A University Handbook*. Vol. 2. Warszawa: PWN; 2003 [in Polish].
46. Barrick MR, Mount MK, Judge TA. *Personality and Performance at the Beginning of the New Millennium: What Do We Know and Where Do We Go Next?* Int J Sel Assess 200;9: 9–30.
47. Lyubomirsky S, King L, Diner E. *The Benefits of Frequent Positive Affect: Does Happiness Lead to Success?* Psychol Bull 2005;131(6):803–55.
48. McInerney P. *From Naive Optimism to Robust Hope: Sustaining a Commitment to Social Justice in Schools and Teacher Education in Neoliberal Times*. Asia-Pacific J Teach Educ 2007;35(3):257–72.
49. Sagor R. *Cultivating Optimism In The Classroom*. Educ Leadersh 2008;65(6):6–31.
50. Nias J. *Thinking about Feeling: The Emotions in Teaching*. Camb J Educ 1996;26(3):293–306.
51. Brief AP, Weiss HM. *Organizational Behavior: Affect In the Workplace*. Annu Rev Psychol 2002;53:279–307.