

Resiliency in mainstream school teachers vs. special school teachers

Authors' Contribution:

- A Study Design
- B Data Collection
- C Statistical Analysis
- D Data Interpretation
- E Manuscript Preparation
- F Literature Search
- G Funds Collection

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abstract

Background: The aim of this study was to identify and evaluate significant differences in the resiliency level in investigated mainstream school teachers and special school teachers with particular regard to physical education teachers.

Material/Methods: The study was conducted among 198 teachers from Lower Silesia and Silesia provinces, including 26 physical education teachers from special schools, 62 teachers of other subjects from special schools, 44 physical education teachers from mainstream schools and 65 teachers of other subjects from mainstream schools. A diagnostic survey was the research method, a survey was the technique, and the Resiliency Questionnaire in a Polish adaptation of Ego Resiliency Scale was the tool (Kaczmarek, 2011).

Results: The highest level of resiliency was demonstrated by physical education teachers from special schools. They differ significantly statistically in terms of a higher level of resiliency from teachers of other subjects from special schools and physical education teachers from mainstream schools.

Conclusions: It is supposed that a higher level of resiliency may be an extremely helpful trait of personality, especially in teachers working with persons with intellectual disabilities, owing to which the negative impact of the difficult working conditions can be reduced.

Key words: resiliency, physical education, special physical education, teachers.

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INTRODUCTION

The teacher, whose teaching work is determined by intellectual, philosophical or aesthetic and moral values [1], is a manager and an organiser of the educational process. To take up the role of a teacher, you have to possess knowledge, accept diversity, be flexible to respond to educational situations and have abilities enabling you to achieve your goals. It is a set of competences used to communicate knowledge that are the basis for specific scientific areas, developing opportunities for an individual, forming one's character, bringing up one's potential and enriching students' personalities [2]. What makes the teaching profession special is a specific contact with other people, often still young, with not yet clear beliefs and worldview, who are easily influenced by the environment.

All of this allows you to qualify teaching as a people-oriented profession, characterised by a specific relationship between the person providing assistance and the one receiving it [3]. This relation is largely based upon the process of involvement and the emotional exchange that leads to close interpersonal relations [4]. Any professional group of teachers is subject to constant observation by society as a result of high requirements posed in relation to those who educate. These high requirements and often unrealistic expectations are placed by both students and their families and that results from the perception of teaching as a "missionary" profession, where, as seen by society, teachers must not be anxious, tired or less involved [5]. Furthermore, the teaching profession involves high legal and ethical liability, thus the pressure on the teacher is higher as compared to other professions [6]. The role of emotions which have a direct effect on the effectiveness of educational activities as well as the quality of work should also be noted. Therefore, emotions constitute an integral part of the majority of the educational activities [7]. Also, in human-oriented professions you are bound to apply the principle based on the control of one's own emotions and their adaptation to the requirements and specific needs of perception - in this relationship - the needs of a student [8].

Teachers face a difficult task due to their role of a performer on the one hand, who transmit the content of prepared syllabuses, but on the other hand are expected to develop innovative solutions through their own creativity [1]. It is believed that the teachers' success lies in their students' achievements, and often this is the way teachers struggle with their students' improper behaviours, including aggression towards other schoolmates or even the teacher, and with students' activity or passivity in their behaviours that violate discipline [9].

An increasing group of teachers has symptoms of growing fatigue due to aggravating situations and unfavourable working conditions. The level of mental exhaustion largely depends on the intensity of stressors, resiliency and subjective sensitivity [10]. Any burdens teachers cope with may also be associated with the specific situation of pupils and their special educational needs that may result from, for example, their intellectual disabilities. This is a specific area of pedagogical activity that differs in terms of its organizational form and characteristics of the students as compared to the specific nature of mainstream schools. In special school teachers, in addition to high qualifications, also the ability to self-reflect and to look critically at the taken actions is positively valued. With the start of a professional

career, young teachers must understand the importance of their role in a special school, e.g. through understanding various forms of special education, familiarization with its resources, curricula and, above all, adapt them to the individual needs of children [1]. The main objective of persons teaching students with disabilities is to bring them to their optimum development and prepare them for their life in society. Special school students are often not as successful educationally as their peers from mainstream schools. In addition to working with pupils, also collaboration with parents who also expect support and advice in education and care of their children is more intense [11].

Research on stress and occupational burnout among special education teachers shows very high requirements for teachers, their hardship and a high level of stress associated with the profession, at the same time underestimation of teachers in special schools and their classification in the last position in the hierarchy of prestige among all teaching specialities [12]. Professionals working with persons with intellectual disabilities are constantly ready to cope with difficult behaviours demonstrated by their students. These include self-inflicted injuries, screaming, playing with waste, destroying objects, aggression, which are referred to as “challenging behaviours” (difficult, abnormal behaviours), and are often also directed against other persons [13].

But it is not only the characteristics of students that causes stress among teachers in special schools but also socio-economic and political changes which present risks for a high level job retention. All bureaucratic requirements can also destroy the willingness and motivation to work. Teachers can feel that they are controlled by a group of individuals for whom teachers’ life and work as well as their students’ well-being are not important. Not always can educationalists count on the support of their supervisors or colleagues. Often members of teaching teams indeed compete with each other, and there are conflicts between allied groups. Another problem is also the lack of funding for activities of educational establishments, shortage of teaching aids, expectations pertaining to continuous education by teachers without any warranty of any financial support or funding for their personal development [11]. The study by Devereux et al. [14] shows that as many as 1/3 persons working with persons with intellectual disabilities sustain occupational stress, which consequently may lead to occupational burnout.

Effective stress management, however, is achievable. This practice requires self-regulatory competence which consists of checking the incentives and releasing them depending on the requirements and possibilities of the situation. It is captured in a kind of adaptive flexibility that is described by the theory of resiliency [15]. Two close concepts must be separated from one another: resiliency, translated as psychological elasticity and resilience. Despite their lexical similarities, they pertain to different processes and psychological theories. According to the concept of Block and Kremen (16) resiliency is a personality trait, while the term resilience is the result of the process of optimum adaptation to difficult environmental conditions. Considered as special personality trait, it may be present both in the context of crisis situations and everyday stress [17]. Owing to resiliency, positive emotions are stirred up in difficult situations and effective isolation from the negative experiences takes place (bounce-back) [16]. Persons with a high level of resiliency are more self-confident, show better adaptation to the requirements of life, are happy,

have a broad range of interests, high interpersonal skills, high aspirations; they are also socially sustainable and assertive. It helps us to find the positive meaning of negative events with their parallel inhibition and replacement with processes that promote positive emotions [18].

Ogińska-Bulik [19] showed in her studies that resiliency acts as a factor protecting against adverse effects of the experienced occupational stress. This author's view seems not to be unique, as similar conclusions were also reached by Becky [20]. This scholar further claims that teachers should have a high level of resiliency, due to the large mental strain experienced by them at work. Teachers who use the resources of their resiliency are not afraid of challenges posed before them in the process of education and consider their profession a calling. A similar presumption in their study was adopted by Sadziak et al. [21], who stated in their conclusions that a high level of resiliency is a desired personality trait in the physical education teaching profession, especially when working with persons with intellectual disabilities.

In the context of the above considerations, the question could be explored whether the level of resiliency differentiates between teachers of mainstream and special schools. It would seem that resiliency may ensure greater satisfaction with the work performed, increase satisfaction with the achieved teaching effects, even if they are small and remote in time, as it often happens in the group of students in special schools. It is hard not to consider physical education teachers as a separate study group that represents traits characteristic only of its specialization. According to Bronikowski and Muszkieta [22], the teacher of physical education should be both an example, an authority, a role model, but above all a leader showing children appropriate life paths based on a healthy lifestyle, enjoyment, kindness, resistance and the desire to strive for perfection. In addition, according to Demel, the teacher should be a good and wise adviser to young people [23]. Is a professionally burnt out teacher of physical education able to meet the above challenges? To transmit even the principle of care for mental hygiene discussed by Demel [23], one must refer it to oneself and be an example of perfect mental health. It seems necessary to consider resiliency in representatives of people-oriented professions, the high level of which may ensure professional performance of one's obligations and permanent function at a high level of the above mentioned mental health, which seems to be an extremely valuable characteristic in teachers of special schools but also in physical education teachers.

In order to verify the undertaken research problem, the following questions were formulated:

1. How do average levels of resiliency differentiate between the investigated teachers of mainstream and special schools?
2. To what extent is gender a variable differentiating the level of resiliency in the investigated teachers?
3. Are there any differences in terms of the investigated variables between teachers of physical education and teachers of other subjects? If so, what are these differences?

MATERIAL AND METHODS

The study was conducted among 198 teachers from the Lower Silesian and Silesian provinces, including: 26 physical education teachers from special schools, 62 teachers of other subjects from special schools (specialists of all subjects with the exception of physical education, e.g. speech therapists, music therapists, art therapists and class tutors), 44 physical education teachers from mainstream schools and 65 teachers of other subjects from mainstream schools (teachers of various subjects with the exception of physical education teachers, e.g. teachers of English, biology, mathematics). The subjects' average age was 41.70 years (SD = 10.72), while the length of service in the profession of a teacher was 15.98 years (SD = 10.58) (Tab. 1). All subjects had professional experience in the domain of working with people with intellectual disabilities. At the time of study, 85.23% of them worked with students with intellectual disabilities, whereas 14.77% taught persons with motor or sensory disabilities.

Table 1. Characteristics of the study group

Teachers	Sex [number]	Age [years]		Length of service in the profession of teacher [years]		
		M	SD	M	SD	
of other subjects from special schools	women	53	43.25	10.51	17.51	9.58
	men	9	42.22	15.78	17.36	10.96
of physical education from special schools	women	19	36.84	8.89	10.52	7.19
	men	7	37.14	8.3	10.28	8.56
of other subjects from mainstream schools	women	58	46.52	9.21	20.6	11.06
	men	7	47.57	6.08	20.14	5.7
of physical education from mainstream schools	women	26	35.18	9.64	11.42	9.13
	men	18	34.82	9.23	9.78	10.3

A diagnostic survey was the research method; a survey was the technique, and the Resiliency Questionnaire in a Polish adaptation of Ego Resiliency Scale by Kaczmarek (2011) was the tool. The Ego Resiliency Scale (ER 89) in the original version was constructed by the authors of the concept of resiliency - Block and Kremen (1996) and consists of fourteen items, originating from the tool intended to describe personality traits - California Adult Q-sort. Based on a 4-grade scale, subjects estimate the extent to which a given item refers to them [15].

The data obtained in the research process were subjected to a two-factor variance analysis based on the formula: ANOVA 2 (sex: women vs. men) x 4 (teachers: of other subjects in special schools vs. of physical education in special schools vs. of other subjects in mainstream schools vs. of physical education in mainstream schools) for the dependent variable of the resiliency level. The condition of variance homogeneity was met (Levene's test $p > 0.05$). To perform statistical calculations, Statistica Software data analysis system was applied.

RESULTS

The analysis of ANOVA results showed a statistically significant main effect $F(3,189) = 4.1284$; $p = 0.007$; $\eta^2 = 0.06$, which indicates that the average level of resiliency differentiates between the subjects depending on the workplace and the nature of the work of teachers. The post-hoc analysis with the use of NIR test showed statistically significant differences of certain mean values in the compared groups of teachers. The highest level of resiliency was found in teachers of physical education from special schools ($M = 43.23$; $SD = 4.61$) and their mean value is statistically significantly higher than that of physical education teachers from mainstream schools ($M = 40.09$; $SD = 5.43$) (who have the lowest level of resiliency) and than that of teachers of other subjects from special schools ($M = 40.27$; $SD = 5.39$) and does not differ significantly from teachers of other subjects from mainstream schools ($M = 41.83$; $SD = 4.78$). The differences between other groups were not statistically significant (Fig. 1).

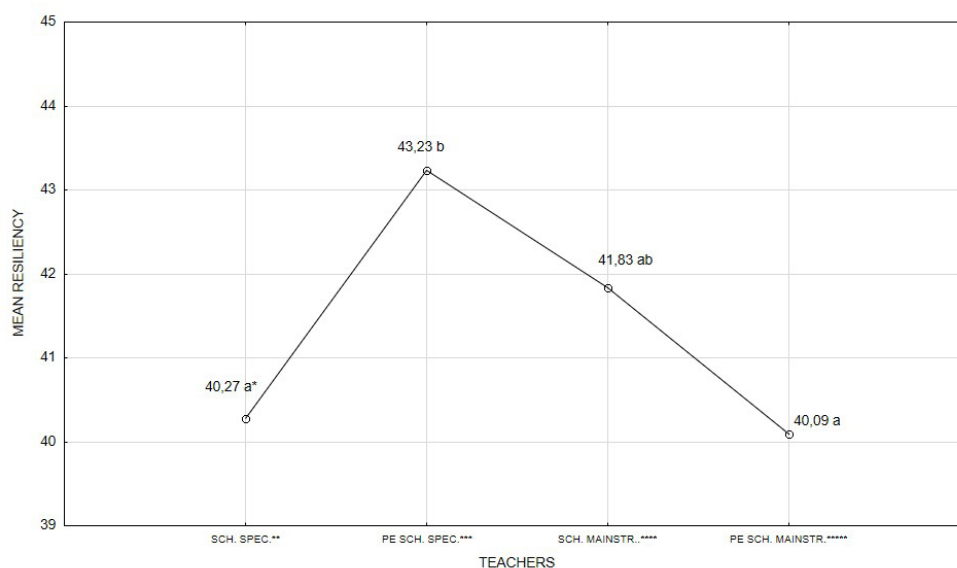


Fig. 1. Resiliency level in investigated teachers depending on the workplace and specialization

*Mean values not having a common letter marking are statistically significant at least at the level of 0.05 (NIR test post-hoc analysis)

**SCH. SPEC. - teachers of other subjects from special schools

***PE SCH. SPEC. teachers of physical education from special schools

****SCH. MAINSTR. - teachers of other subjects from mainstream schools

*****PE SCH. MAINSTR. - teachers of physical education from mainstream schools

Sex (women vs. men) of the investigated teachers does not differentiate between them in terms of the resiliency level: $F(1, 189) = 0.07658$; $p = 0.782$; $\eta^2 = 0.0004$.

The interaction of two independent variables (teachers of other subjects in special schools vs. teachers of physical education teachers in special schools vs. teachers of other subjects in public schools vs. teachers of physical education in mainstream schools) and sex (women vs. men) proved to be statistically insignificant: $F(3, 189) = 1.3494$; $p = 0.26$; $\eta^2 = 0.02$ for the resiliency level.

DISCUSSION

Analysis of the results showed that the investigated group of PE teachers from special schools has the highest level of resiliency among the other investigated groups of teachers and at the same time significantly differs from teachers of other subjects from special schools and physical education teachers from mainstream schools. Therefore, the above mentioned group with the highest level of resiliency may also simultaneously show mental toughness, resourcefulness in life and effectiveness when dealing with negative emotions and stress [24]. But it is worth noting that all subjects represent a profession oriented towards direct cooperation with other people, which, according to Zbyrad [25], involves a high risk of occupational burnout. It also means that all investigated teachers show excessive involvement in their work, high expectations in relation to themselves, denial of their strain limits, voluntary acceptance of additional tasks and implementation of their own needs only later. It seems that resiliency is a supporting personality trait in the profession of a teacher. Sekułowicz [11] emphasizes the fact that teachers employed in special establishments, working with persons with intellectual disabilities are vulnerable to extremely heavy mental strain which is the cause of chronic stress and consequently may lead to occupational burnout.

It can be assumed that a high level of resiliency is the desired personality trait, yet, irrespective of their workplace, as Ogińska-Bulik [24] argues – individuals with a high level of this characteristic experience more positive emotions that help them to cope with stressful events. The emerging positive emotions allow searching for solutions in a difficult situation, thus having a favourable influence on human mental health. In this context, the low level of resiliency among teachers working in special schools (educators, specialist teachers with the exception of physical education teachers), at a place with specific requirements in relation to the employed teachers who according to Okoń [26] must be patient and understanding, seems to be curious. Patience appears to be crucial, as at the same time special education teachers wait for a long time for the results of their work and must be non-judgmental and understanding in view of the difficult behaviours of students especially those with intellectual disabilities. Therefore, the obtained result is particularly interesting. It indicates the low level of resiliency among other teachers of special schools (teachers-educators and specialists e.g. speech therapists, psychologists), who successfully do their work in the same environment as teachers of physical education from special schools. It seems that the lower level of resiliency registered in teachers of other subjects from special schools does not give them the maximum possibilities of self-control depending on the teaching and educational situation, while the high level of resiliency probably helps teachers of physical education in the efficient conduct of dynamic classes that can cause severe emotional reactions in students with intellectual disabilities. Sadziak et al. [21] in their research even highlighted the need for verification of natural personality resources among the candidates for selected fields of study and specialities in the framework of the studies at the University School of Physical Education in Wrocław (AWF). In particular, they stressed the beneficial impact of resiliency, which is likely to predispose teachers-to-be to select the speciality of physical education of persons with intellectual disabilities and to succeed in professional life.

Taking into account the difference in the level of resiliency between groups of physical education teachers in special schools and teachers of other subjects

in special schools, one should focus on what the underlying cause of this difference is. It is likely that taking up education in physical culture and teaching persons with intellectual disabilities may be conditioned by the specific type of personality offering a high level of resiliency. Physical activity is considered a factor that positively influences the processes of learning as well as the development of soft skills (e.g. emotional intelligence, communication skills) including resiliency useful during the implementation of the challenging curriculum [27].

Also, protective factors that may be revealed by active involvement in sport and physical activity may be identified. For example, Sikorska [28] lists the following: feeling of causation, increased self-assessment, but also emphasizes the fact that regular exercises reduce the level of anxiety and stress. Thus, involvement in the activities in the area of physical culture can be closely linked to mental health and good functioning in the conditions that require an ability to act in a flexible way.

A study by Litwic-Kamińska et al. [29] shows that athletes most frequently apply positive assessment of stressful situations and cope with stress through the task-oriented strategy, or try to understand the reasons for the situation and take the effort that is supposed to resolve the situation. It seems to be an interesting fact that in interpersonal contacts resilient athletes also select people with a high level of resiliency and mutually benefit from each other based on the advice given [29]. The effect of participation in physical culture may also make teachers of physical education apply the remedial strategies used by the investigated athletes. The authors of the present paper also note that this phenomenon is growing if the level of resiliency is also higher [29]. Hüseyin et al. came to similar conclusions [30]. They studied resiliency in physical education teachers, additionally identifying the diversity for the discussed personality trait, according to whether teachers worked in a primary or a secondary school. Physical education teachers working with younger pupils have a significantly higher level of resiliency than teachers of secondary school [30]. What is more interesting, these results correspond to those which were obtained by Kuśnierz [31] in the Polish context. He found that the lowest level of occupational burnout is present in physical education teachers of primary schools in comparison to teachers working in secondary schools and tertiary [high] schools.

Having compared the above studies, it can be assumed that the higher level of resiliency may be the protective factor against occupational burnout among physical education teachers. Therefore, one can suspect that there is a relationship between physical activity and resiliency, although it was not a directly controlled variable in the present study. But still the lack of a possible relationship among teachers of physical education from mainstream schools and a significant difference in the level of resiliency compared to physical education teachers from special schools is surprising. It is supposed that this results from a combination of two specializations: a teacher for persons with intellectual disabilities with a graduate of the speciality of physical culture, owing to which teachers of physical education in special schools represent a higher level of resiliency. This may be due to different working conditions, in particular to the specific nature of the group to which the investigated teachers address their educational and teaching activities. With regard to education, teachers of physical education are prepared to carry out professional tasks resulting from their role as a promoter of physical culture. The problem occurs

when the group that the teacher of physical education takes care of and applies his/her teaching activities to consists of students with special educational needs. Although teachers of physical education for persons with intellectual disabilities have knowledge regarding the application of adequate measures, forms and methods leading to the development of students' personality, the need for permanent adaptation to their capabilities and needs (often for each student in the class individually) can be very cumbersome and demand a high level of concentration from teachers and modification of their activities during the educational and teaching process. Wang et al. [32] note that teaching physical education in special schools carries a risk of significant difficulties and conflicts which include e.g. difficulty in planning lessons, poor adjustment of gymnastic equipment, concerns related to pupils' safety, a high number of students in class and insufficient vocational training. Therefore, teachers of physical education in a special school have to show creativity, ability to work in varying conditions, acceptance of professional defeats, when despite educational efforts the intended effects often are not achieved within the expected time and scope. The study by Nurwidowo et al. [33] showed that better functioning and also the ability to adapt to the demanding working conditions in teachers can ensure an appropriately high level of resiliency. Also Ellison [34] claims that a high level of resiliency is responsible for professional success in physical education teachers from special schools and is also of the view that resiliency is not a permanent trait and its level may be increased by introducing specially developed training programs. A similar opportunity to develop a relatively permanent personality trait, such as resiliency [35], was recognised by Vulpe et al. [36], who claim that maintaining positive emotions in the face of a difficult situation fosters resiliency.

The above considerations may explain why teachers of physical education in special schools are a group of people representing a high level of resiliency which, as a personality trait, may determine the taking of educational and teaching measures in demanding and unpredictable working conditions. The continuation of research on resiliency seems advisable among teachers of mainstream and special schools, but taking into account the next variable that would characterize how often teachers are forced to adapt the conditions of teaching during class or to focus on the modification of behaviours in difficult students with intellectual disabilities.

CONCLUSIONS

1. Teachers of physical education from special schools have a significantly higher level of resiliency than teachers of other subjects from special schools (educators, specialists with the exception of physical education teachers) and physical education teachers from mainstream schools and have a similar level of resiliency as teachers of other subjects from mainstream schools (with the exception of physical education teachers).
2. It is supposed that a higher level of resiliency may be an extremely helpful personality trait, especially in teachers working with persons with intellectual disabilities, owing to which the negative impact of difficult working conditions can be reduced.

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