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## Mental resilience of adolescents at the threshold of adulthood during the pandemic

### Prężność psychiczna młodzieży wchodzącej w dorosłość w dobie pandemii<sup>1</sup>

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**Abstract:** Mental resilience is a relatively fixed personality trait which enables the initiation of adaptation processes through the activation of personal resources. It helps people maintain good functioning despite adversity and the struggles of everyday life. The emergence of resilience is influenced by personal factors and other elements related to the characteristics of the family environment and non-family social landscape. The degree of resilience influences the course of one's development in adolescence, while its formation is a function of developmental processes.

The aim of the research presented here was to determine levels of resilience among first-year undergraduate students, who experienced negative effects of the COVID-19 pandemic in 2020, and to compare this with the results of measurements carried out on adolescents at the same stage of development in 2014 and 2016. The analyses were based on the results of the researcher's own studies, conducted in 2016 and 2020, and on the existing data published in 2014. The Resilience Assessment Scale (SPP-25) (Nina Ogińska-Bulik, Zygryd Juczyński) was used in each measurement. In the statistical analyses the Student's t-test for one sample and the Student's t-test for independent samples were used.

The results demonstrate a statistically significant drop in the strength of resilience and its dimensions among the respondents surveyed in 2020, compared to the scores of their peers in 2014 and 2016. With regard to the results of standardization studies, the average overall resilience score among students, who lived through the negative effects of the pandemic, was in the low range. The most significant drop in the level of resilience occurred in two dimensions: *optimistic attitude to life and the ability to summon resources in difficult situations* and *personal coping skills and tolerance of negative emotions*. The decrease of resilience in all its dimensions in the youth surveyed in 2020 can hardly be explained only by their recent negative experiences; its causes should also be sought in the family conditions and non-family influences during the process of the formation of resilience in childhood and adolescence.

**Keywords:** youth, mental resilience, pandemic, resilient person

**Abstrakt:** Traktowanie prężności psychicznej jako cechy wiąże się z ujmowaniem jej jako względnie trwałej właściwości osobowości, która poprzez aktywowanie podmiotowych zasobów umożliwia człowiekowi uruchamianie procesów adaptacyjnych służących utrzymaniu dobrego funkcjonowania pomimo przeciwności losu, w sytuacjach trudnych oraz wobec uciążliwościami codziennego życia. Jej kształtowanie się podlega oddziaływaniu czynników indywidualnych oraz czynników związanych z cechami środowiska rodzinnego i pozarodzinnego środowiska społecznego. Poziom prężności ma wpływ na przebieg rozwoju w okresie adolescencji, a jej kształtowanie stanowi funkcję procesów rozwojowych.

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<sup>1</sup> Polska wersja: <https://stowarzyszeniefidesetratio.pl/Presentations0/2021-3-Gawe.pdf>

Celem zaprezentowanych badań było określenie poziomu prężności studentów I roku studiów, którzy w 2020 roku doświadczali negatywnych skutków pandemii zakażeń wirusem Sars-Cov-2 oraz porównanie uzyskanych wyników do wyników pomiarów przeprowadzonych na grupach młodzieży będącej na tym samym etapie rozwoju w roku 2014 i 2016. Analizy oparto na wynikach badań własnych przeprowadzonych w roku 2016 i 2020 oraz na danych zastanych opublikowanych w roku 2014. W każdym pomiarze została wykorzystana Skala Pomiaru Prężności (SPP-25) autorstwa N. Ogińskiej-Bulik i Z. Juczyńskiego. W analizach statystycznych zastosowano test t-Studenta dla jednej próby oraz test t-Studenta dla prób niezależnych. Uzyskane wyniki wskazują na statystycznie istotny spadek nasilenia prężności i jej wymiarów wśród respondentów badanych w roku 2020 w stosunku do wyników uzyskanych u ich rówieśników z roku 2014 i 2016. W odniesieniu do wyników badań normalizacyjnych średni wynik ogólny prężności wśród studentów, którzy mierzyli się z negatywnymi skutkami pandemii mieścił się w przedziale wartości niskich. Najbardziej znaczący spadek odnotowano w wymiarach „optymistyczne nastawienie do życia i zdolność mobilizowania się w trudnych sytuacjach” oraz „kompetencje osobiste do radzenia sobie i tolerancja negatywnych emocji”. Spadek poziomu prężności we wszystkich jej wymiarach u młodzieży badanej w roku 2020 trudno wytłumaczyć jedynie negatywnymi skutkami doświadczanej pandemii. Przyczyn zjawiska należy poszukiwać w rodzinnych i pozarodzinnych uwarunkowaniach procesu jej kształtowania się w okresie dzieciństwa i młodości.

**Słowa kluczowe:** młodzież, osoba prężna, pandemia, prężność psychiczna

## 1. Introduction

The term *psychological resilience* is used in the Polish literature alongside other, interchangeably used words such as *resilience*, *springiness*, *flexibility*, *ego resilience*, *personal resilience* and *positive adaptation* to define the construct referred to by the English term ‘resilience,’ which derives from the Latin words *salire* and *resilire* and is translated as to ‘leap/jump’, to ‘bounce back’, to return to the previous state (Smulczyk, 2017; Turkiewicz-Maligranda, 2014).

The concept of *resilience* appeared in the psychological literature in the 1950s, its first uses being associated with the application of the *ego-resiliency* and *ego-control* constructs as proposed by Jeanne Humphrey Block and Jack Block in a two-dimensional model of personality types. The authors related the concept of ego-resiliency to the dynamic ability to flexibly modify the level of control (*ego-control*), that is to adjust the level of impulsivity or emotional expression to the demands of a situation, and to restore the balance of the system to the level it was at prior to the occurrence of the disturbance (Ogińska-Bulik & Juczyński, 2010). In this approach, ego-resiliency was treated as a relatively fixed, structural aspect of personality and, at the same time, as a function of a specific situational context. More recently, the term *resiliency* began to be used broadly in a less formal, descriptive sense, without the preceding ‘ego’ prefix (Block & Kremen, 1996).

An increased interest in the concept of resilience can be observed with the emergence and dissemination of Aaron Antonovsky’s theory of salutogenesis in health psychology, with which it corresponds at certain points, and also the development of research on stress. Moreover, a significant increase in the number of theoretical studies and empirical research in this area is associated mostly with positive psychology and its concept of positive

development. With the progress of research and the formation of different ways of conceptualizing the phenomenon of resilience, the psychological perspective is complemented by approaches emerging in medicine, health sciences and other social science disciplines, including pedagogy (Windle, 2011). The implementation of the concept of resilience in the areas of interest to pedagogy is discernible especially in the issues related to the formation and development of resilience in the process of child-rearing and education, social prophylactics and resocialization/social rehabilitation (Kwiatkowski, 2016).

Three basic approaches to understanding the concept of resilience can be found in the literature: it is treated as a trait, a process or as a result of the process. Treating resilience as a trait is connected with interpreting it as a relatively fixed personality disposition, which - through activating processes of effective struggle with adversities - ensures that a person maintains good functioning and, in the case of its collapse, bounces back relatively quickly to the state experienced prior to the disorganization. Resilience seen in terms of a process, on the other hand, refers to the phenomenon of activating the process of dynamic adaptation in response to emerging pressures, which at the same time helps an individual maintain good overall performance. The adversities that trigger the processes of flexible adaptation can be traumatic events associated with direct threats to life and health, highly stressful events and situations, unfavorable developmental conditions, life circumstances associated with a difficult family situation, as well as other problems and difficulties of everyday life. The processes of positive adaptation understood this way require the summoning of personal resources in the form of specific personality traits, and also environmental resources adequate to the experienced tension or adversities. The essence of resilience is illustrated quite clearly in its definition, according to which it is the process of using personal resources to maintain well-being (Panter-Brick & Leckman, 2013). In the English-speaking psychological literature the terms *resiliency* and *resilience* are used in order to distinguish resilience as a trait from resilience as a process (Luthar et al., 2000; Ogińska-Bulik & Juczyński, 2011).

Treating resilience as a personality trait directs research towards looking for the characteristics of resilient people. Based on the literature reviews in this area, it can be argued that resilience is a subjective personal resource with a special regulatory power which, by revealing itself through adaptation processes, activates a number of resources that are important for their effective course, including sense of control, emotional stability, optimism, self-efficacy, self-esteem, or a sense of meaningfulness as part of a sense of coherence. For example, it is suggested that a resilient person is characterized by persistence in action, a high degree of optimism and inner peace, openness to new experiences, agreeability, high self-esteem and self-efficacy, an inner sense of control, approaching stressful events as challenges, effective coping with stress, giving positive meaning to everyday life events, a tendency to interpret the surroundings as generally favorable, and

treating difficulty as an opportunity to gain new experiences for self-development (Levine et al., 2009; Ogińska-Bulik & Juczyński, 2010; Ogińska-Bulik & Zadworna-Cieślak, 2014; Turkiewicz-Maligranda, 2014).

This view can be completed by referring to the four resilience patterns and the resilient person's traits, as ascribed to them on the basis of the meta-analysis of the research on the attributes of resilient people (Polk, 1997). The dispositional pattern is expressed through a set of traits including positive characteristics of temperament, personality traits, and cognitive competence, as well as a sense of well-being and good physical health. Other sets of characteristics are included in the relational domain (e.g. close and trusting relationships, adequate communication skills, broad social networks) as well as situational (e.g. task-focused coping style, goal setting, adaptability), and philosophical patterns (e.g. belief in the value of life, finding positive meaning in experienced events) (Polk, 1997).

Some approaches propose that resilience can be seen as a continuum, on which its level can take on different values in different areas of an individual's life (Pietrzak & Southwick, 2011). Thus, it could be expected that psychological resilience will be revealed with differing degrees of strength across the life course, depending on situational context.

Identifying the importance of resilience for effective functioning the aftermath of traumatic events, in the face of adversity, or in everyday stressful situations has long inspired researchers to investigate the causes and determinants of this phenomenon. In the consecutive stages of targeted research on resilience, it has been shown that the development of psychological resilience as a trait capable of activating protective and adaptive mechanisms, is subject to the influence of individual and environmental factors, related to the characteristics of family circumstances and the social environment beyond the family. Individual factors include positive temperament, cognitive competence, reflexivity, positive self-esteem, problem-solving ability, self-acceptance, and commitment to a religion. Among the features of family environment that favor the formation of resilience are, mostly, support, warm family relationships, and being cared for by at least one parent but also getting support from other family members, and an upbringing style that promotes the development of autonomy, responsibility, and self-esteem. On the other hand, the factors of non-family social environment include emotional support from other adults, having at least one friend and peers ready to help in a crisis, supportive and competent teachers, good social atmosphere at school, involvement in extracurricular activities, socioeconomic conditions, and a local environment conducive to having one's needs met, e.g. for feeling safe, getting a rest etc. (Borge et al., 2016; Garmezy, 1993; Luthar et al., 2015; Masten, 2004; Rutter, 2013; Ryś & Trzęsowska-Greszta, 2018; Werner, 1994; Zolkoski, Bullock, 2012).

The turn towards integrative approaches to resilience observed in recent years allows for the treatment of it as a personality trait developed throughout life, under the influence of various experiences, as well as the process which helps us effectively cope with the

difficulties and adversities of life (Turkiewicz-Maligranda, 2014). Considered from a developmental perspective (Cutuli & Herbers, 2018), the degree of resilience that individuals have at their disposal undoubtedly affects the course of their development, while on the other hand the acquisition of psychological resilience can be treated as a function of developmental processes (Masten, 2004; Masten, 2014). Focusing on the developmental aspects of resilience encourages us to search for an answer to questions about the role of subjective and environmental factors in its formation, especially when it comes to protective factors and the ways in which they actually work. Attention should be drawn at this point to the potential instability of an individual's level of resilience as a trait and its variability over time, resulting from the coupling of developmental processes and interactions with factors inherent in the person's life environment (Bonanno & Diminich, 2013; Kim-Cohen & Turkewitz, 2012), among which the importance of cultural factors, related to the immediate social environment and the availability of resources with which to cope with difficult situations, is stressed (Sherrieb et al., 2010).

## **2. Research objectives**

The literature review allows us to assume that the level of resilience as a trait is one of the most significant factors that affect coping effectiveness, psychosocial functioning and the feeling of well-being when confronted with difficulty and adversity. In 2020, the SARS-CoV-2 pandemic confronted people in all parts of the world. In addition to the consequences of the unprecedented spread of the virus, reflected through the increase in the number of infections, hospitalizations and deaths, depletion of health care resources, economic slowdown, loss of jobs, and reduced income and living standards for many families, as well as in the reduction of physical and social contacts, the risk of mental health disorders (post-traumatic stress disorder, anxiety, depression) and problem behaviors (alcohol abuse, substance abuse, aggression, domestic violence, etc.) are indicated as negative consequences of the pandemic (Holmes et al, 2020). In this context, it is reasonable to argue that 2020 was an exceptionally challenging time for young people who took the high school exit exam and entered college. They stood at the threshold of adult life with a package of personal resources that determined the degree of their personal resilience as a subjective meta-source that triggered adaptation processes, formed on the basis of the dynamics of their psychosocial experience' in synergy with their personal biography and developmental processes.

The purpose of the research presented was to determine the degree of psychological resilience of adolescents who entered college during the 2020 pandemic and to examine whether, and if so how, the strength of this trait changed relative to the levels observed in their predecessors in 2014 and 2016.



## 2.1. Sample

The research was conducted on two groups of first-year undergraduate students of pedagogy. The interval between the two examinations was 4 years. The first group, which included 166 students (N=166), was surveyed in the first quarter of 2016. The second group of 163 students (N=163) was surveyed in the fourth quarter of 2020. Both samples were predominantly female (86% and 90% females respectively), which fully reflects the gender structure prevailing among students of pedagogy in Poland.

It should be mentioned that, due to the pandemic, the students in the group examined in 2020 began their studies in the remote education system. Prior to that, they were also forced to take up distance learning in the few weeks preceding their high school exams, when they already experienced many negative effects of the pandemic, which was already spreading at that time.

Otherwise, the researchers used the 2014 published foundational data from a study on the mental resilience of high school graduates, conducted 3 months prior to the high school exit exam, with a sample size of N=82 (Ogińska-Bulik & Zadworna-Cieślak, 2014).

## 2.2. Materials and method

The Resilience Assessment Scale (SPP-25), authored by Ogińska-Bulik and Juczyński (Ogińska-Bulik & Juczyński, 2008), was used to measure the level of resilience in our own research as well as in the research that provided the earlier data sourced. The scale is a self-reporting tool that allows for the measurement of resilience as a personality trait. It consists of 25 items that help researchers determine the overall level of resilience as well as five of its component factors/dimensions: perseverance and determination in action, openness to new experiences and sense of humor, personal competence and tolerance for negative emotions, tolerance for failure and treating life as a challenge and an optimistic attitude, and ability to summon resources in difficult situations. Respondents give answers to the items on a 5-point Likert-type scale (from 0 - definitely no, to 4 - definitely yes). The maximum possible score for each factor/dimension is 20 points. The SPP-25 total score is the sum of the scores reached on the five factors/dimensions and can be up to 100. The higher the score, the higher the level of resilience. The SPP-25 scale was validated by its authors in Poland and obtained satisfactory psychometric properties (Ogińska-Bulik & Juczyński, 2008; Ogińska-Bulik & Zadworna-Cieślak, 2014).

Two types of statistical analyses were used in this study: the t-Student's test for one sample and the Student's t-test for independent samples (Bedyńska & Brzezicka, 2007).

The Student's t-test for one sample was used in the analysis of data from the 2014 study on a group of high school graduates (foundational data) and the 2016 study on a group of college students (the researchers' own work). The t-Student's test for two independent

samples was applied to the analysis of data from the researchers' own study conducted on groups of students in 2016 and in 2020.

The statistical analyses were performed using PS Imago Pro 7 (formerly SPSS) version 26 software.

### 3.Results

In the first step of our analysis, the strength of resilience in the group of first-year students from 2016 was determined on the basis of the mean total score then and the averages in all factors/dimensions of resilience obtained with the SPP-25 scale. The results showed that the mean values in terms of resilience and its dimensions were similar to the results obtained in the normalization studies (Ogińska-Bulik & Juczynski, 2008) and corresponded to the value of sten 5, i.e. fell within the range of average values (Table 1).

Table 1. Means and standard deviations for resilience and its dimensions in the 2016 student sample

Variables	M	SD	Min	Max
Resilience - overall score	69.40	15.22	22	100
Persistence and determination	13.61	3.84	2	20
Openness to new experiences and sense of humor	15.65	2.91	7	20
Personal coping skills and tolerance of negative emotions	13.43	3.77	2	20
Tolerance of failure and treating life as a challenge	14.20	2.93	5	20
Optimistic attitude to life and ability to summon resources in difficult situations	12.52	3.86	2	20

Source: own research

The second step was aimed at comparing the 2016 results with those from the high school graduates in the 2014 measurement (existing data) and checking whether the adolescents surveyed in 2016 were statistically significantly different in terms of the trait of resilience from their peers in 2014. For this purpose, a one-sample Student's t-test was applied. The results demonstrated that there was no significant difference in the strength of resilience between the two groups. The observed differences were statistically insignificant both for the mean total score of SPP-25 and for the mean scores for individual factors/dimensions of resilience. Thus, it can be assumed that the strength of resilience among adolescents from the 2014 measurement and adolescents from the 2016 measurement was at the same level. The details of the analysis are summarized in Table 2.

Table 2. Overall resilience score and resilience scores for each dimension in two samples of respondents: 2014 high school graduates and 2016 first-year students.

SPP-25 subscales	M <sup>a)</sup>	M <sup>b)</sup>	t (df)	p	Δ M	95% confidence interval for the difference between the two means	
						Lower end	Upper end
Resilience - overall score	68.97	69.40	0.367 (165)	0.714	0.43	-1.899	2.766
Persistence and determination	13.74	13.61	-0.432 (165)	0.659	-0.13	-0.719	0.456
Openness to new experiences and sense of humor	15.34	15.65	1.376 (165)	0.171	0.31	-0.135	0.756
Personal coping skills and tolerance of negative emotions	13.41	13.43	0.061 (165)	0.952	0.02	-0.560	0.596
Tolerance of failure and treating life as a challenge	14.23	14.20	-0.137 (165)	0.891	-0.03	-0.479	0.417
Optimistic attitude to life and ability to summon resources in difficult situations	12.25	12.52	0.895 (165)	0.372	0.27	-0.323	0.859

a) existing data (Ogińska-Bulik & Zadworna-Cieślak, 2014)

b) own research, 2016

In the next step of the analysis, the strength of resilience was determined in the group of first-year students surveyed in the fourth quarter of 2020, when the respondents, like the rest of the population in Poland and many other regions of the world, struggled with the effects of the COVID-19 pandemic. The mean total score of SPP-25 resilience reached the value of M=62.02, which corresponds to the values obtained in standardization studies at the level of sten score of 4 (Ogińska-Bulik & Juczynski, 2008). This means that it is at the upper end of low values (Table 3).

Table 3. Means and standard deviations for resilience and its dimensions in the 2020 student sample

Variables	M	SD	Min	Max
Resilience - overall score	62.02	14.32	27	99
Persistence and determination	12.27	3.50	3	20
Openness to new experiences and sense of humor	14.90	2.97	5	20
Personal coping skills and tolerance of negative emotions	11.58	3.56	3	20
Tolerance of failure and treating life as a challenge	13.03	3.43	4	20
Optimistic attitude to life and ability to summon resources in difficult situations	10.25	3.79	1	19

Source: own research



In order to determine changes in the level of the resilience as a trait between 2016 and 2020 in adolescents approaching adulthood, the final step of the analysis was undertaken to compare the mean SPP-25 total score and mean scores for individual resilience factors/ dimensions from the 2016 and 2020 measurements (Table 4).

Table 4. Overall resilience score and resilience scores by dimension for 2016 and 2020 student samples

SPP-25 subscales	Year	M	SD	F (p)	t (df)	p	ES
Persistence and determination Openness to new experiences and sense of humor	2020	12.27	3.50	2.12	-3.306 (327)	0.001	0.37
	2016	13.61	3.84				
Personal coping skills and tolerance of negative emotions Tolerance of failure and treating life as a challenge	2020	14.90	2.97	0.00	-2.328 (327)	0.021	0.26
	2016	15.65	2.91				
Optimistic attitude to life and ability to summon resources in difficult situations Persistence and determination	2020	11.58	3.56	0.14	-4.560 (327)	0.000	1.15
	2016	13.43	3.77				
Openness to new experiences and sense of humor Personal coping skills and tolerance of negative emotions	2020	13.03	3.43	3.06	-3.327 (327)	0.001	0.61
	2016	14.20	2.93				
Tolerance of failure and treating life as a challenge	2020	10.25	3.79	0.15	-5.389 (327)	0.000	1.61
	2016	12.52	3.86				
Resilience - overall score	2020	62.02	14.32	0.35	-4.526 (327)	0.000	1.13
	2016	69.40	15.22				

Source: own research

An analysis of the mean SPP-25 overall scores using the Student's t-test for independent samples clearly showed that the level of resilience was higher among students measured in 2016 (M=69.40) compared to those tested in 2020 (M=62.02). The difference was statistically significant at  $p < 0.000$ .

The higher strength of resilience in the 2016 student group was also evident with respect to the individual factors/ dimensions of the scale.

The analysis with the Student's t-test for independent samples revealed that the level of *persistence and self-determination* in the group of students from 2016 measurement (M=13.61; SD=3.85) was statistically significantly higher than among those from 2020 sample (M=12.27; SD=3.50), although the d-Cohen effect size indicated a weak relationship.

Students from the 2016 study also scored higher on *openness to new experiences and sense of humor* (M=15.65; SD=2.91) compared to 2020 respondents (M=14.90; SD=2.97). The difference was observed to be statistically significant, but the strength of the association (d-Cohen) was found to be weak.

The level of *personal coping skills and tolerance of negative emotions* were significantly higher among students surveyed in 2016 (M=13.43; SD=3.77) compared to students surveyed in 2020 (M=11.58; SD=3.56). The analysis conducted with the Student's t-test showed that the result is statistically significant, and the effect size (ES=1.15) indicated a strong relationship between the results obtained.

Also, the scores for the next factor/resilience dimension, which is *tolerance of failure and treating life as a challenge*, indicated a higher strength of resilience in the group of students from the 2016 study (M=14.20, SD= 2.93) than among the those surveyed in 2020 (M=13.03; SD=3.43). The result was found to be statistically significant and the d-Cohen effect size was at the mean level.

The results obtained in the last subscale of SPP-25, i.e. *optimistic attitude towards life and ability to summon resources in difficult situations*, clearly show that the 2016 students demonstrated a statistically significantly higher strength of resilience (M=12.52; SD=3.86) than the students surveyed in 2020 (M=10.25; SD=3.79). The strength of the relationship was found to be very strong in this case (d=1.61).

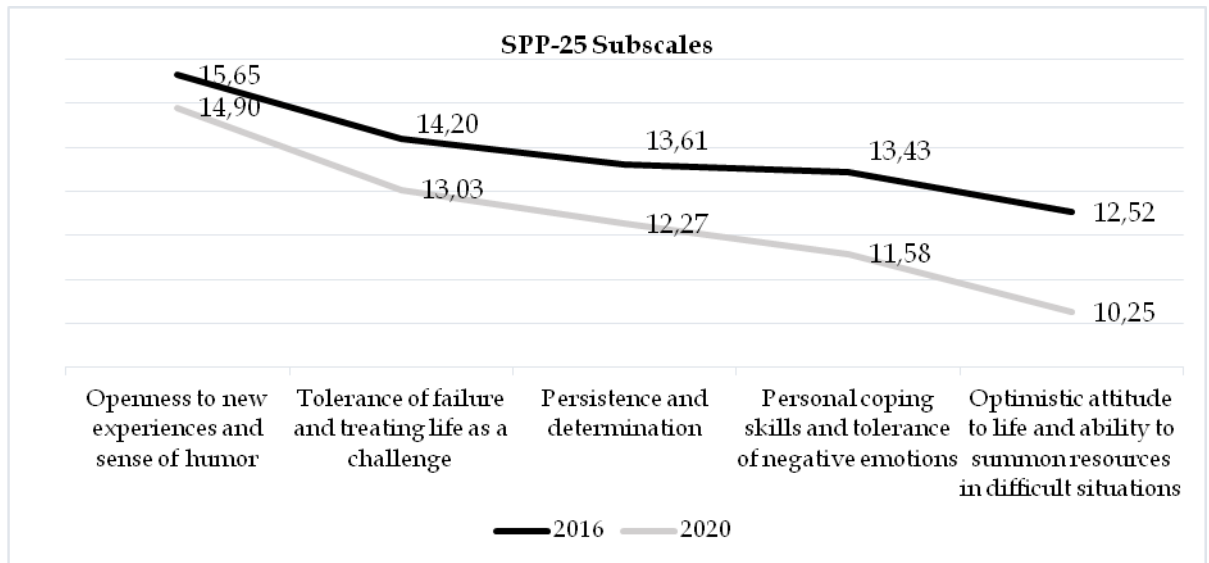
Referring to the common (by age and gender) provisional standards in the sten scores determined by the authors of the SPP-25 scale (Ogińska-Bulik & Juczynski, 2008) allowed us to visualize the overall resilience scores obtained in the 2016 and 2020 measurements on an ordinal scale. It turned out that more than 30% of the students surveyed in 2016 showed a high level of resilience, while in the group surveyed in 2020 a high level was recorded in fewer than 15% of the respondents. Significant disparities could also be observed in the low-level results obtained by more than 60% of the students surveyed in 2020, and the fewer than 40% of students from the 2016 measurement (Table 5).

Table 5. distribution of descriptive trait for resilience and results of chi<sup>2</sup> test

Resilience levels	Student samples				Test chi <sup>2</sup>
	2020		2016		
	n	%	n	%	
Low	102	62.6%	63	38.0%	chi <sup>2</sup> =21.736, (df=2), p<0.000, V Cramera =0.257
Medium	37	22.7%	51	30.7%	
High	24	14.7%	52	31.3%	
Total	163	100.0%	166	100.0%	

Source: own research

As each subscale had the same number of items, it was possible to list/visualize the scores from highest to lowest. Figure 1 presents the distribution of the trait of resilience from highest to lowest value in each factor/dimension of SPP-25. The highest level of resilience was reported in the dimension *openness to new experiences and sense of humor* among both 2016 and 2020 students, and the lowest in the dimension *optimistic attitude towards life and ability to summon resources in difficult situations*. Interestingly, the ranking of the resilience subdimensions was the same in both groups of students.



Source: own research

Figure 1. Mean scores obtained on the scales of each SPP-25 dimension among students from the 2016 and 2020 rounds

## Conclusions

Mental resilience, understood as a personal disposition, allows for the maintaining of psychological well-being and good functioning in the face of traumatic events, demanding situations or the struggles of everyday life, as it plays the role of a particular regulator that activates the personal resources necessary to processes of adaptation. The effectiveness of these processes is associated with the understanding of such resources, which are specific to each individual, as formed in the course of personal development on the basis of biological determinants and in conjunction with the impact of factors inherent in the family and also in the non-family environment. Taking into account the developmental perspective, which highlights the special role of childhood and adolescent experiences, let us assume that we can talk about certain dynamics, both with reference to the effectiveness of adaptive processes, as well as resilience in terms of personality traits (Ogińska-Bulik & Juczyński, 2011).

In the research presented, we inquired into the level of psychological resilience as a trait in a group of adolescents on the threshold of adulthood in the years 2014 - 2020. Achieving a six-year perspective was possible thanks to the comparison of the results of our own research on psychological resilience, performed among students of the first year of pedagogical faculties in 2016 and in 2020 with the use of the SPP-25 scale, with the results of the previous research of 2014, which was conducted with the use of the same research tool among high school graduates. Although each round of research involved respondents at the same stage of physical and psychosocial development, those who were surveyed at the end of 2020 constituted a particular group, due to the fact that at the time of research they had already been experiencing the social and health effects of the spreading COVID-19 pandemic for several months, with many difficult - and for some even traumatic - situations emerging in many areas of their daily functioning. These young people lived in an atmosphere of threat, uncertainty, and fears of whether they would manage to accomplish the important tasks of this stage of their lives, i.e. obtaining a high school diploma and going to college. Then again, this group of respondents were first-year university students who faced the task of performing the new social role of students also in the situation of a continued pandemic, and while being confronted with many limitations. In this context, it was interesting to observe their level of resilience as a trait.

The results of the study do not give rise to optimism. Referring to the outcome of the normalization studies, it turned out that the average overall score of resilience in the group of students, who had faced the negative effects of the pandemic for several months, was located at the higher end of low score, while both the results obtained in our own research in 2016 and the results taken from the pertinent research in 2014 were in the range of medium scores.

At the same time, the difference in the strength of resilience among adolescents surveyed in 2016 and 2020 turned out to be statistically significant. Moreover, in the group studied in 2020, as many as 60% of the respondents scored low in resilience, and high levels of resilience were found in only 15% of the students, which was twice less than among the respondents in 2016. The scores of the students struggling with the pandemic were also statistically lower in individual dimensions/factors of resilience in comparison to their 2016 predecessors. It is worth noting in this context the large Cohen *d* effect size for two dimensions of resilience, i.e. the *optimistic attitude towards life and the ability to summon resources in difficult situations*, as well the level of *personal coping skills and tolerance of negative emotions*. This indicates that the level of resilience in these dimensions was significantly lower in students surveyed during the pandemic compared to the results obtained in 2016.

The manifestation of psychological resilience in situations that cause excessive mental burden, which is a threat to the fulfilment of needs and may interfere with goal achievement, requires the summoning of subjective resources that can be used in adaptation processes.

The decreased level of these resources in the examined group of students presented in this study begs the question of what its possible causes may be. With reference to the concepts mentioned in the literature review that explain the process of the formation of psychological resilience as a trait, it can be assumed that one of the reasons for the reduced level of resilience is the experience of the negative effects of the ongoing pandemic. This can be associated primarily with a lower level of optimism among young people, which was undoubtedly influenced by the threat to economic security felt by a significant portion of the population, concerns about the course of professional and educational careers, reduced social contacts, and a general decline in social mood. However, taking into account the fact that the drop in the strength of resilience in students surveyed in 2020 was recorded in all its dimensions, these causes should be considered in a broader perspective. Within this framework, we can refer to the concept of *generation*, considered in the context of social change (Sztompka, 2005), which has been observed in Poland in recent years at many levels. The sources of low resilience among these young people should also be sought in the conditions of the process of the formation of the personal resources necessary for adaptation processes, in childhood and adolescence, which are linked to the condition and the child-rearing effectiveness of the family as well as that of the educational and preventive role of schools. This direction of analysis would, however, require more, representative, research on psychological resilience as a characteristic of Polish adolescents on the threshold of adulthood.

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